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iSeries

Operating System/400 Commands
Starting with APYPTF (Apply Program Temporary Fix)

Version 5 Release 3

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> **Note**
>
> Before using this information and the product it supports, be sure to read the information in
> "Notices," on page 705.

Contents

Apply Program Temporary Fix (APYPTF)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Apply Program Temporary Fix (APYPTF) command applies program temporary fixes (PTF) to a specified product. Before a PTF can be applied, it must first be loaded by the Load Program Temporary Fix (LODPTF) command.

When a PTF is applied, it completely replaces the affected objects in the product. PTFs can be applied temporarily or permanently. If they are applied temporarily, the replaced objects are saved by the system and can later be restored to the product by the Remove Program Temporary Fix (RMVPTF) command. If PTFs are applied permanently, the replaced objects are deleted from the system.

The APYPTF command is used to apply immediate PTFs at the time the command is run, or to request PTFs to be applied during the next unattended initial program load (IPL). During an attended IPL, the Work with PTFs display is used to apply PTFs at the time the system is started.

Some IPLs may take longer than others when PTFs are being applied. More information about applying PTFs is in the Basic System Operation, Administration, Problem Handling information in Information Center at http://www.iseries.ibm.com/infocenter.

Restriction: To use this command, you must be signed on as QSRV, or have *ALLOBJ authority.

Parameters

Keyword	Description	Choices	Notes
LICPGM	Product	*Character value*, *ALL	Required, Positional 1
RLS	Release	*Character value*, ***ONLY**, *ALL	Optional
SELECT	PTF numbers to select	Single values: ***ALL** Other values (up to 300 repetitions): *Character value*	Optional
OMIT	PTF numbers to omit	Values (up to 300 repetitions): *Character value*	Optional
APY	Extent of change	***TEMP**, *PERM	Optional
DELAYED	Delayed PTFs	***NO**, *YES, *IMMDLY	Optional
IPLAPY	IPL apply options	Single values: *NO Other values: *Element list*	Optional
	Element 1: Apply at unattended IPL	***YES**	
	Element 2: Prerequisite lic int code	***APYPERM**, *NOAPY	
APYREQ	Apply requisite PTFs	***NO**, *YES	Optional

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Product (LICPGM)

Specifies the 7-character identifier of the product for which the PTFs are to be applied.

Note: LICPGM(*ALL) is valid only if SELECT(*ALL) is specified, and OMIT is not specified on this command.

This is a required parameter.

The possible values are:

*ALL   PTFs are applied to all products installed on the system.

licensed-program
>   Specify the 7-character product identifier to which PTFs are applied.

Release (RLS)

Specifies the release level of the software product. If multiple releases are installed, the release is required.

The possible values are:

*ONLY
>   This value is only valid when one release of the product's base option is installed on the system. PTFs for all installed options of the product are applied regardless of the release-level of the option.

release-level
>   Specify the release level in VxRyMz format where Vx is the version number, Ry is the release number, and Mz is the modification level. The variables x and y can be a number from 0 through 9, and the variable z can be a number from 0 through 9 or a letter from A through Z.

PTF numbers to select (SELECT)

Specifies the previously loaded PTFs that are to be applied to the specified product. The **PTF numbers to omit** prompt (OMIT parameter) cannot be specified if single PTF numbers are specified on the SELECT parameter.

You can enter multiple values for this parameter.

The possible values are:

*ALL   All the PTFs that were loaded are to be applied to the product. If all PTFs cannot be applied, messages are sent indicating the PTFs that were not applied and the reasons (for example, required PTFs were not yet applied).

PTF-number
>   Specify the identification number of each PTF to apply. A maximum of 300 PTF numbers can be specified.

PTF numbers to omit (OMIT)

Specifies the PTF numbers that are not applied. Up to 300 PTF numbers can be specified. The OMIT parameter cannot be specified if single PTF numbers are specified in the **PTF numbers to select** prompt (SELECT parameter).

You can enter multiple values for this parameter.

Extent of change (APY)

Specifies whether the PTFs are applied on a temporary or permanent basis. Permanently applied PTFs cannot be removed; temporarily applied PTFs can be removed by the Remove Program Temporary Fix (RMVPTF) command.

The possible values are:

*TEMP
The PTFs are applied as temporary PTFs.

*PERM
The PTFs are applied permanently.

Delayed PTFs (DELAYED)

Specifies whether immediate PTFs are applied at the time the command is processed or whether immediate and delayed PTFs are applied during the next unattended IPL.

*NO   Immediate PTFs that are identified are applied at the time the command is processed. Delayed PTFs and immediate PTFs with delayed prerequisite or corequisite PTFs are ignored during the APYPTF request and are not applied. Immediate PTFs which have preconditions that are not satisfied are not applied. A message is sent for each PTF that is not applied.

*YES   The PTFs identified, regardless of whether they are defined as delayed or immediate, are applied during the next unattended IPL. The **Apply on unattended IPL** (IPLAPY) parameter determines whether the PTFs are applied during the next unattended IPL, or whether a previous request to apply the PTFs during the next unattended IPL is canceled.

*IMMDLY
All the immediate PTFs are applied and the delayed PTFs or PTFs with delayed prerequisites or corequisites are set to be applied at the next unattended IPL. Any immediate PTFs which have preconditions that are not satisfied are set to be applied at the next unattended IPL.

IPL apply options (IPLAPY)

Specifies the action that is done for delayed or immediate PTFs at the next unattended IPL.

The possible PTFs Applied at IPL values are:

These values are valid only if DELAYED(*YES) is also specified.

*YES   The identified PTFs are applied at the next unattended IPL. The **Extent of change** (APY) parameter determines whether the apply operation is temporary or permanent.

*NO   Previous requests to apply the identified PTFs at the next unattended IPL are canceled.

The possible Prerequisite Licensed Internal Code values are:

The Licensed Internal Code prerequisites are applied immediately or at the next IPL depending on the values specified on the DELAYED parameter.

*APYPERM

If LICPGM(*ALL) is specified or APYREQ(*YES) is specified and a product's PTFs have prerequisite Licensed Internal Code fixes, then the required Licensed Internal Code fixes are also identified to be permanently applied.

*NOAPY

Prerequisite Licensed Internal Code fixes are not identified to be applied during the next unattended IPL. If prerequisite Licensed Internal Code fixes exist that are not permanently applied, this command stops.

Apply requisite PTFs (APYREQ)

Specifies whether the prerequisite and corequisite PTFs of the PTFs specified on the SELECT parameter, that are within the same product and release, are applied with the PTFs specified on the SELECT parameter list.

This parameter is valid only when *ALL is not specified in the SELECT parameter.

The possible values are:

*NO   The corequisite and prerequisite PTFs are not applied with the SELECT parameter list. No PTFs are applied if any PTF specified in the list has requisite PTFs not also in the list or already applied. Messages identify the missing requisite PTFs and the PTFs that require them.

*YES   The PTFs are applied with the SELECT parameter list.

Examples

Example 1: Applying PTFs Temporarily

```
APYPTF   LICPGM(5722SS1)  DELAYED(*YES)
```

This command applies all the programming fixes that affect the Operating System/400* product (5722SS1). The fixes are temporarily applied at the next IPL.

Example 2: Applying PTFs Permanently

```
APYPTF   LICPGM(5722SS1)  SELECT(SI00003 SI00008 SI00012)
         APY(*PERM)  DELAYED(*YES)
```

This command permanently applies PTFs SI00003, SI00008, and SI00012 to the Operating System/400 product in library QSYS at the next IPL.

Example 3: Applying All Loaded PTFs

```
APYPTF   LICPGM(*ALL)  DELAYED(*IMMDLY)
```

This command permanently applies all PTFs that can be applied immediately and sets the rest to be applied at the next IPL.

Example 4: Applying Immediate PTFs and their Immediate Corequisites and Prerequisites at the Time the Command is Run

```
APYPTF   LICPGM(5722SS1)  SELECT(SI00003 SI00008 SI00012)
         APYREQ(*YES)
```

This command applies the identified PTFs and their corequisites and prerequisites at the time the command is run if the PTFs and their corequisites and prerequisites are defined as immediate. PTFs defined as delayed or defined with corequisites or prerequisites defined as delayed are ignored along with the delayed requisites.

Example 5: Applying PTFs and their corequisites and prerequisites at the next IPL

```
APYPTF   LICPGM(5722SS1)  SELECT(SI00003 SI00008 SI00012)
         DELAYED(*YES)  APYREQ(*YES)
```

This command applies the identified PTFs and their corequisites and prerequisites at the next IPL regardless of whether they are defined as delayed or immediate.

Example 6: Applying PTFs and their corequisites and prerequisites as soon as possible

```
APYPTF   LICPGM(5722SS1)  SELECT(SI00003 SI00008 SI00012)
         DELAYED(*IMMDLY)  APYREQ(*YES)
```

This command applies the identified PTFs and their corequisites and prerequisites at the time the command is run if the PTFs and their corequisites and prerequisites are defined as immediate. PTFs defined as delayed or defined with corequisites or prerequisites defined as delayed are applied during the next IPL along with the delayed requisites.

Error messages

*ESCAPE Messages

CPF0C4B
> Product availability object &2/&1 recovery required.

CPF0C4C
> Cannot allocate object &1 in library &2.

CPF0C4D
> Error occurred while processing object &1 in library &2.

CPF2150
> Object information function failed.

CPF2151
> Operation failed for &2 in &1 type *&3.

CPF35AA
> Licensed internal code PTF &2 already applied.

CPF35AB
> Licensed Internal Code fix &2 not applied.

CPF35A0
> Cannot allocate library &1.

CPF35A1

   Wrong copy of Licensed Internal Code in use.

CPF35A2

   Required hardware changes not installed for PTF &2.

CPF35A3

   Licensed Internal Code fix &2 not temporarily applied.

CPF35A5

   Licensed Internal Code fix &2 not permanently applied.

CPF35A9

   Error occurred while processing Licensed Internal Code fix.

CPF35CF

   PTF &1-&2 not applied.

CPF35D0

   Licensed Internal Code fix &1-&2 &3 not set to be removed permanently.

CPF35EB

   Multiple releases of product &1 installed.

CPF35E3

   Interface error detected.

CPF35E4

   Information for PTF &1-&2 &3 not complete.

CPF35FA

   PTF &1-&2 not applied.

CPF3544

   Apply IPL action cannot be removed for PTF &1-&2 &3.

CPF3558

   Cannot allocate &1 in &3 type *&2.

CPF3564

   PTF &1-&2 damaged.

CPF3583

   PTF not applied because error occurred.

CPF3576

   Error occurred while applying PTFs for product &1.

CPF3596

   PTF numbers in select/omit list not permitted.

CPF3598

   PTF function already in process.

CPF3602

   PTF &2 not removed because it is permanently applied.

CPF3606

   Product &1 &2 not installed.

CPF361D

   Apply order of PTFs cannot be determined.

CPF3612

   Library &1 not found.

CPF362C

        Insufficient storage for Licensed Internal Code fix.

CPF362D

        PTF apply completed successfully, but some PTFs need additional actions.

CPF3640

        No immediate PTFs applied.

CPF3660

        No program temporary fixes identified.

CPF3693

        Service function ended because error occurred.

CPF3931

        Required programs not found. PTF incomplete.

CPF3945

        Records of PTF activity for licensed program are deleted.

CPF8191

        Product definition &4 in &9 damaged.

CPF8193

        Product load object &4 in &9 damaged.

CPF9845

        Error occurred while opening file &1.

CPF9846

        Error while processing file &1 in library &2.

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Run Remote Command (AREXEC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Run Remote Command (RUNRMTCMD) command, also known as AREXEC when an SNA address is specified for the remote location name, allows AS/400 users to run a command on a remote system that is running the target portion of this function, AREXECD (APPC remote executing) daemon.

When the command is sent to the remote system, the local system waits for the command to complete and the output from the remote command will be placed in a spooled file.

Parameters

Keyword	Description	Choices	Notes
CMD	Command	*Character value*	Required, Positional 1
RMTLOCNAME	Remote location	*Character value*	Required, Positional 2
RMTUSER	Remote user ID	*Character value*, ***NONE**, *CURRENT	Optional
RMTPWD	Remote password	*Character value*, ***NONE**	Optional
MODE	Mode	*Communications name*, ***NETATR**	Optional
CCSID	Coded character set ID	1-65533, ***CALC**	Optional
WAITTIME	Wait time (in seconds)	2-3600, ***NOMAX**, *NOWAIT	Optional

Command (CMD)

Specifies a character string of up to 2000 characters that represents a command that is run on the target system. The maximum length supported by the target system may be less than 2000 characters. If you specify a command string that exceeds the maximum length supported by the target system, the command will fail.

The command must be enclosed in apostrophes if it contains embedded blanks or special characters.

Note: The normal rule of pairing apostrophes in quoted strings on the local system must be doubled when the same string is submitted to a remote system on this CMD parameter; this is required because the user is coding a quoted string within another quoted string. Therefore, when this parameter is being coded, wherever a single apostrophe would normally be paired with another apostrophe, each occurrence in the inside set of apostrophes must be doubled to produce the same results at the target system.

Remote location (RMTLOCNAME)

Specifies the remote location to connect with. Specify the remote location name using the format nnnnnnnn.cccccccc, where nnnnnnnn is the network identifier (ID) and cccccccc is the remote location name. If only the remote location name is specified, the local network ID (LCLNETID) network attribute is used as the value of the network identifier (ID).

Remote user ID (RMTUSER)

Specifies the user identifier (ID) for the target system. If a user ID is specified for this parameter and password security is active on the target system, RMTPWD(*NONE) is not valid.

The possible values are:

*NONE
   No user ID is sent. If security on the target system is configured to require a user ID, the command will fail.

*CURRENT
   The user ID of the job (signed-on user) using this command is sent.

remote-user-identifier
   Specify a user ID to use that exists on the target system. If a user ID is specified and password security is active on the target system, a password must be specified.

Remote password (RMTPWD)

Specifies the password sent to the target system.

The possible values are:

*NONE
   The system does not send a password. If a user identifier (ID) is specified on the RMTUSER parameter and password security is active on the target system, the command will fail.

password
   Specify a password sent to the target system to verify the sign-on of the user ID specified in the RMTUSER parameter. The password may or may not be substituted across the communication line depending on whether the remote system supports password substitution.

Mode (MODE)

Specifies the name of the mode to be used for the APPC conversation.

The possible values are:

*NETATR
   The mode in the network attributes is used.

mode-name
   Specify a mode name. Specify BLANK for a mode name consisting of eight blank characters.

Note: SNASVCMG and CPSVCMG are reserved names and cannot be specified.

Coded character set ID (CCSID)

Specifies the coded character set identifier (CCSID) that will be used for conversions. When data is sent to the remote system, the data is converted using the CCSID of the job to the CCSID specified on the CCSID parameter. Similarly, when data is received from the remote system, the data is converted from the CCSID that was specified on the CCSID parameter to the CCSID of the job.

Restrictions:

1. If the CCSID of the job is 65535 (indicating no conversion), the default CCSID of the job will be used.
2. This command uses the round-trip conversion method when converting data from the source CCSID to the target CCSID and back. For more information about CCSID conversion methods, see the National Language Support book.

The possible values are:

*CALC
> The CCSID value sent from the target system is used if it is available. If a value is not provided from the target system, a default value of 00819 (ISO 8859-1 8-bit ASCII) will be used.

coded-character-set-identifier
> The requested CCSID value is used. This value is validated to ensure a valid CCSID has been requested.

Wait time (in seconds) (WAITTIME)

Specifies the time in seconds to wait for the return (echo) before declaring the remote location to be unreachable.

The possible values are:

*NOMAX
> The system waits forever.

*NOWAIT
> The system returns immediately if there is a connection ready and available.

time-to-wait-for-reply
> Specify the length of time in seconds. Valid values range from 2 through 3600 seconds.

Examples

Example 1: Run Remote Command (RUNRMTCMD) Using SNA Address Type

```
RUNRMTCMD   CMD('dir')   RMTLOCNAME((APPN.RMTSYS *SNA))
```

This command runs the 'dir' command on the system specified by 'RMTLOCNAME' using an SNA address type.

Example 2: Run Remote Command (AREXEC) Using SNA Address Type

```
AREXEC   CMD('dir')   RMTLOCNAME(APPN.RMTSYS)
```

This command is equivalent to the command in example 1.

Example 3: Run Remote Command Using IP Address Type and Host Name to Specify Target System
```
RUNRMTCMD   CMD('ls')   RMTLOCNAME((MYSYS.NET1.LOCAL *IP))
```

This command runs the 'ls' command on the system specified by host name MYSYS.NET1.LOCAL.

Example 4: Run Remote Command Using IP Address Type and Internet Address to Specify Target System
```
RUNRMTCMD   CMD('ls')   RMTLOCNAME(('9.5.1.94' *IP))
```

This command runs the 'ls' command on the system specified by internet address '9.5.1.94'.

Example 5: Run Remote Command With Multiple Commands Using IP Address Type and Internet Address to Specify Target System
```
RUNRMTCMD   CMD('ls; cat myfile; date')   RMTLOCNAME(('9.5.1.94' *IP))
```

This command runs multiple commands, first 'ls', then 'cat myfile', then 'date' on system specified by internet address '9.5.1.94'.

Example 6: Run Remote Command With a Wait Time Expiration Value
```
RUNRMTCMD   CMD('dir')   RMTLOCNAME((APPN.RMTSYS *SNA))   WAITTIME(15)
```

This command runs the 'dir' command on the specified system. The maximum wait time for the remote location to respond is 15 seconds. A wait time is only allowed when using *SNA address type value.

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Error messages

ESCAPE Messages

CPF91CB
> Problems occurred on the command, but the command completed.

CPF91CC
> Command did not complete successfully.

CPF91CF
> Command failed on remote system.

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Ask Question (ASKQST)

Where allowed to run: Interactive environments (*INTERACT
*IPGM *IREXX *EXEC)
Threadsafe: No

Parameters
Examples
Error messages

The Ask Questions (ASKQST) command shows the Search for Answers display; from this display you can search for an answer to a question. You must first search the database to determine if an answer exists before a question can be asked. More information is available in the Basic System Operation information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

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Parameters

Keyword	Description	Choices	Notes
QSTDB	Q/A database	*Name*, ***SELECT**	Optional, Positional 1
LIB	Lib containing Q/A database	*Name*, ***QSTLIB**	Optional, Positional 2

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Q/A database (QSTDB)

Specifies the Question and Answer database in which to ask a question.

The possible values are:

*SELECT
You are asked to specify a Q & A database. If only one Q & A database exists on the system, it is the default.

question-database
Specify the name of the Q & A database in which to ask a question.

Top

Lib containing Q/A database (LIB)

Specifies the name of the library that contains the Q & A database.

The name of the Q & A database can be qualified by one of the following library values:

*QSTLIB
The library containing the specified Q & A database is searched. If *SELECT is specified on the QSTDB parameter, any Q & A database in any library to which you are authorized can be selected.

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library-name
>   Specify the name of the library to be searched. If *SELECT is specified on the QSTDB parameter, any Q & A database in the library to which you are authorized can be selected.

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Examples

ASKQST

This command shows the Search for Answers display.

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Error messages

None

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Batch Job (BCHJOB)

Where allowed to run:
* Batch job (*BATCH)

Threadsafe: No

The Batch Job (BCHJOB) command indicates the beginning of a batch job in a batch input stream. It can also specify different values for the attributes for the job instead of the ones specified in the job description or user profile for this job. The values contained in the job description or in the user profile named in that job description are used for most parameters not coded in the BCHJOB command.

Restrictions:

The user that issues the Start Data Base Reader (STRDBRDR), Submit Data Base Jobs (SBMDBJOB), Start Diskette Reader (STRDKTRDR), or Submit Diskette Jobs (SBMDKTJOB) command is considered the user issuing the the BCHJOB command.

1. To use this command, the user that issues the BCHJOB command must have:
   * use (*USE) authority to the job description (JOBD) and execute (*EXECUTE) authority to the library that contains that job description.
   * use (*USE) authority to the job queue (JOBQ) and execute (*EXECUTE) authority to the library that contains that job queue.
   * execute (*EXECUTE) authority to the library that contains the specified output queue (OUTQ).
   * use (*USE) authority to all libraries specified for the system value QSYSLIBL, the **Current library (CURLIB)** parameter, and the **Initial library list (INLLIBL)** parameter.
   * use (*USE) and add (*ADD) authority to the message queue (MSGQ) and execute (*EXECUTE) authority to the library. that contains that message queue.
   * use (*USE) authority to the user profile in the job description.
   * execute (*EXECUTE) authority to the library that contains the sort sequence table (SRTSEQ).
   * execute (*EXECUTE) authority to all of the device descriptions in the auxiliary storage pool (ASP) group of the job's name space.
2. The user specified in the job description of the submitted job must have:
   * use (*USE) authority to the job description (JOBD).
   * read (*READ) authority to the output queue (OUTQ) and execute (*EXECUTE) authority to the library that contains that output queue.
   * use (*USE) authority to all libraries specified for the system value QSYSLIBL, the **Current library (CURLIB)** parameter, and the **Initial library list (INLLIBL)** parameter.
   * use (*USE) authority to the sort sequence table (SRTSEQ) and execute (*EXECUTE) authority to the library that contains that sort sequence table.
   * use (*USE) authority to all of the device descriptions in the **Initial ASP group (INLASPGRP)** of the job description.
3. The BCHJOB command cannot be used from a work station.
4. Two slashes must precede this command name when entering it in the data record: //BCHJOB or // BCHJOB. (The user can separate the slashes from the command name with blank spaces).
5. The current value of the auxiliary storage pool (ASP) group for the thread issuing the Submit Data Base Jobs (SBMDBJOB) or Submit Diskette Jobs (SBMDKTJOB) command is used for the initial ASP group parameter of the submitted batch job. Similarly, the current value of the ASP group for the thread issuing the Start Data Base Reader (STRDBRDR) or Start Diskette Reader (STRDKTRDR) command is used for the initial ASP group parameter of the spool reader job and is used for the

initial ASP group parameter of the submitted batch job. The initial ASP group value in the job description is ignored. The processing of the BCHJOB command and the processing of spool reader functions such as syntax checking must operate in the name space used by the batch job.

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Parameters

Keyword	Description	Choices	Notes
JOB	Job name	*Name*, ***JOBD**	Optional, Positional 1
JOBD	Job description	*Qualified object name*	Optional, Positional 2
	Qualifier 1: Job description	*Name*, **QBATCH**	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
JOBQ	Job queue	Single values: ***RDR**, *JOBD Other values: *Qualified object name*	Optional, Positional 3
	Qualifier 1: Job queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PRTDEV	Print device	*Name*, ***USRPRF**, *SYSVAL, *JOBD	Optional
OUTQ	Output queue	Single values: ***USRPRF**, *DEV, *JOBD Other values: *Qualified object name*	Optional
	Qualifier 1: Output queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
JOBPTY	Job priority (on JOBQ)	1-9, ***JOBD**	Optional, Positional 4
OUTPTY	Output priority (on OUTQ)	1-9, ***JOBD**	Optional, Positional 5
PRTTXT	Print text	*Character value*, ***JOBD**, *BLANK, *SYSVAL	Optional
RTGDTA	Routing data	*Character value*, **QCMDB**, *JOBD, *RQSDTA	Optional
RQSDTA	Request data or command	*Character value*, *****, *JOBD, *NONE, *RTGDTA	Optional
SYNTAX	CL syntax check	0-99, ***JOBD**, *NOCHK	Optional
CURLIB	Current library	*Name*, ***USRPRF**, *CRTDFT	Optional
INLLIBL	Initial library list	Single values: ***JOBD**, *SYSVAL, *NONE Other values (up to 25 repetitions): *Name*	Optional
ENDSEV	End severity	0-99, ***JOBD**	Optional
LOG	Message logging	*Element list*	Optional
	Element 1: Level	0-4, ***JOBD**	
	Element 2: Severity	0-99, ***JOBD**	
	Element 3: Text	***JOBD**, *MSG, *SECLVL, *NOLIST	
LOGCLPGM	Log CL program commands	***JOBD**, *NO, *YES	Optional
INQMSGRPY	Inquiry message reply	***JOBD**, *RQD, *DFT, *SYSRPYL	Optional
HOLD	Hold on job queue	***JOBD**, *NO, *YES	Optional
DATE	Job date	*Date*, ***JOBD**, *SYSVAL	Optional
SWS	Job switches	*Character value*, ***JOBD**	Optional
MSGQ	Message queue	Single values: ***NONE**, *USRPRF Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

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Keyword	Description	Choices		Notes
SRTSEQ	Sort sequence	Single values: ***USRPRF**, *SYSVAL, *HEX, *LANGIDUNQ, *LANGIDSHR Other values: *Qualified object name*		Optional
	Qualifier 1: Sort sequence	*Name*		
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB		
LANGID	Language ID	*Character value*, ***USRPRF**, *SYSVAL		Optional
CNTRYID	Country or region ID	*Character value*, ***USRPRF**, *SYSVAL		Optional
CCSID	Coded character set ID	1-65535, ***USRPRF**, *SYSVAL, *HEX		Optional
JOBMSGQMX	Job message queue maximum size	2-64, ***JOBD**, *SYSVAL		Optional
JOBMSGQFL	Job message queue full action	***JOBD**, *SYSVAL, *NOWRAP, *WRAP, *PRTWRAP		Optional

Job name (JOB)

Specifies the name that is associated with the job when it is processed by the system.

*JOBD
> The simple name of the job description used with this job is the name of the job itself.

name Specify the simple name of the job used while it is being processed by the system.

Job description (JOBD)

Specifies the job description used with the job.

Qualifier 1: Job description

QBATCH
> The IBM-supplied job description QBATCH in library QGPL is used for the job. (The QGPL library must be in the library list used by the spooling reader that reads the job's input.)

name Specify the name of the job description.

Qualifier 2: Library

*LIBL All libraries in the library list are searched until a match is found. If the **Initial library list (INLLIBL)** parameter specifies *JOBD, the library list used to find the job description is the library list for the thread in which the BCHJOB command processing is done. If the INLLIBL parameter specifies a value other than *JOBD, the library list used to find the job description consists of the libraries named in the QSYSLIBL system value and the libraries specified by the INLLIBL parameter.

*CURLIB
> If the INLLIBL parameter specifies *JOBD, the library list used to find the job description is the library list for the thread in which the BCHJOB command processing is done. The current library for the library list is searched. If no library is specified as the current library for the library list, the QGPL library is used. If the INLLIBL parameter specifies a value other than *JOBD, the QGPL library is used because the library list used to find the job description does not have a current library.

name Specify the library where the job description is located.

Job queue (JOBQ)

Specifies the job queue in which this job is placed.

Single values

*RDR The job queue specified in the Start Data Base Reader (STRDBRDR), Submit Data Base Jobs
(SBMDBJOB), Start Diskette Reader (STRDKTRDR), or Submit Diskette Jobs (SBMDKTJOB)
command that reads this job, is used.

*JOBD
The job queue named in the job description used with this job is used.

Qualifier 1: Job queue

name Specify the name of the job queue.

Qualifier 2: Library

*LIBL All libraries in the new job's library list are searched until the first match is found.

*CURLIB
The current library for the new job is used to locate the queue. If no library is specified as the
current library for the job, QGPL is used.

name Specify the library where the job queue is located.

Print device (PRTDEV)

Specifies the name of the default printer device for this job.

*USRPRF
The printer device name specified for the job's user profile is used. The user profile is specified in
the job description, which is specified on the **Job description (JOBD)** parameter. The printer
device name is taken from the profile when this command is run.

*SYSVAL
The printer device specified in the system value, QPRTDEV, when this command is run is used.

*JOBD
The printer device specified in the job description is used.

name Specify the name of the printer device used for this job.

Output queue (OUTQ)

Specifies the name of the default output queue that is used for spooled output produced by this job. This
parameter only applies to spooled printer files that specify *JOB for the output queue.

Single values

*USRPRF
The output queue specified for the job's user profile is used. The user profile is specified in the

job description, which is specified on the **Job description (JOBD)** parameter. The output queue name is taken from the profile when this command is run.

*DEV   The output queue associated with the printer device for the spooled file is used.

*JOBD
> The output queue named in the job description used with this job is used.

Qualifier 1: Output queue

name   Specify the name of the output queue.

Qualifier 2: Library

*LIBL   All libraries in the new job's library list are searched until the first match is found.

*CURLIB
> The current library for the new job is used to locate the queue. If no library is specified as the current library for the job, QGPL is used.

name   Specify the library where the output queue is located.

Job priority (on JOBQ) (JOBPTY)

Specifies the job queue scheduling priority. The highest priority is 1 and the lowest priority is 9.

*JOBD
> The scheduling priority specified in the job description is used.

1-9   Specify the scheduling priority.

Output priority (on OUTQ) (OUTPTY)

Specifies the output priority for spooled output files that are produced by this job. Valid values range from 1 through 9, where the highest priority is 1 and the lowest priority is 9.

*JOBD
> The output priority specified in the job description is used.

1-9   Specify the priority of this job's output files.

Print text (PRTTXT)

Specifies the text that is printed at the bottom of each page of printed output and on separator pages.

*JOBD
> The value specified in the job description is used.

*BLANK
> No text is printed.

*SYSVAL
> The print text is obtained from the system value, QPRTTXT.

character-value
> Specify the character string that is printed at the bottom of each page. A maximum of 30 characters can be entered, enclosed in apostrophes if necessary.

Routing data (RTGDTA)

Specifies the routing data used to start the next routing step in the job. The routing data is used to determine the routing entry that identifies the program that the job runs.

QCMDB
> The routing data used by the IBM-supplied batch subsystem to route batch jobs to the IBM-supplied control language processor QCMD is used.

*JOBD
> The routing data used to start the first routing step is in the job description.

*RQSDTA
> The first 80 characters of the request data specified in the **Request data or command (RQSDTA)** parameter of this command are also used as the routing data.

character-value
> Specify the character string that is used as the routing data for starting the first routing step. A maximum of 80 characters can be entered, enclosed in apostrophes if necessary.

Request data or command (RQSDTA)

Specifies the request data that is placed as the last entry in this job's message queue. The request data can be a CL command to be run or a string of characters used by another program.

*
> The data following this command is inserted into this job's message queue as request data. For example, the request data may be a group of CL commands that constitute the job.

*JOBD
> The request data specified in the job description used by this job is placed as the last entry in this job's message queue.

*NONE
> No request data is placed in the job's message queue.

*RTGDTA
> The routing data in the **Routing data (RTGDTA)** parameter of this command is placed as the last entry in the job's message queue.

character-value
> Specify the character string that is placed as the last entry in the job's message queue. A maximum of 256 characters can be entered, enclosed in apostrophes if necessary.

CL syntax check (SYNTAX)

Specifies whether requests placed on the job's message queue are checked for syntax as CL commands. When checking for syntax is specified, the commands are checked for syntax when they are submitted instead of when the job is run, providing an earlier diagnosis of syntax errors. This parameter is used only if an asterisk (*) is specified for the **Request data or command (RQSDTA)** parameter.

Restrictions:

- The Start Data Base Reader (STRDBRDR) and Start Diskette Reader (STRDKTRDR) commands support syntax checking. This provides the ability to check authorizations to commands.
- The user must have use (*USE) authority to the command and execute (*EXECUTE) authority to the library that contains that command.

*JOBD

The value in the job description used with this job determines whether the request data is checked for syntax and the message severity that is used.

*NOCHK

The request data for this job is not checked for syntax as CL commands.

0-99   Specify the lowest message severity that causes the running of the job to be suppressed. The request data is checked for syntax as CL commands. If a syntax error occurs with a severity that is equal to or greater than the error message severity specified, the running of the job that contains the command with errors is suppressed.

Current library (CURLIB)

Specifies the name of the current library associated with the job being run.

*USRPRF

The current library in the user profile, under which the batch job runs, is the current library for the batch job. The user profile is specified in the job description, which is specified on the **Job description (JOBD)** parameter.

*CRTDFT

There is no current library for the batch job. If objects are created in the current library, QGPL is used as the default current library.

name   Specify the library that is used as the current library of the batch job.

Initial library list (INLLIBL)

Specifies the initial user part of the library list that is used to search for any object names that were specified without a library qualifier.

Note: Duplication of library names in the library list is not allowed.

Single values

*JOBD

The user library list in the job description used with this job is used as the initial user part of the library list.

*SYSVAL

The system default user library list is used. It contains the library names that were specified in the system value QUSRLIBL at the time that the job is started.

*NONE

The user portion of the initial library list is empty.

Other values (up to 25 repetitions)

name Specify the names of one or more libraries that are the user portion of the library list and are used by this job. The libraries are searched in the same order as they are listed.

End severity (ENDSEV)

Specifies the message severity level of escape messages that can cause a batch job to end. The batch job is ended when a request in the batch input stream sends to the request processing program an escape message whose severity code is equal to or greater than that specified.

*JOBD
The severity limit specified in the job description used with this batch job determines when the job is ended.

0-99 Specify the message severity of an escape message that results from a request in the batch input stream and that causes the job to end. Because escape messages sent to users typically have a maximum severity level of 50, a value of 50 or lower must be specified for a job being ended as a result of an escape message. An escape message whose severity is equal to or greater than the value specified that is not handled causes the job to end.

Message logging (LOG)

Specifies the message logging values used to determine the amount and type of information sent to the job log by this job. This parameter has three elements: the message (or logging) level, the message severity, and the level of message text.

Element 1: Level

*JOBD
The value specified for message logging level in the job description is used.

0-4 Specifies the message logging level used for this job's messages. The possible logging levels are:

0 No messages are logged.

1 All messages sent to the job's external message queue with a severity greater than or equal to the message logging severity are logged. This includes the indications of job start, job end, and job completion status.

2 The following information is logged:
- Logging level 1 information
- Request messages which result in a high-level message with a severity code greater than or equal to the message logging severity. Both the request message and all associated messages are logged.

  Note: A high-level message is one that is sent to the program message queue of the program that receives the request message. For example, QCMD is an IBM-supplied request processing program that receives request messages.

3 The following information is logged:
- Logging level 1 and 2 information
- All request messages
- Commands run by a CL program are logged if it is allowed by the logging of CL programs job attribute and the log attribute of the CL program.

4   The following information is logged:
- All request messages and all messages with a severity greater than or equal to the message logging severity, including trace messages.
- Commands run by a CL program are logged if it is allowed by the logging of CL programs job attribute and the log attribute of the CL program.

Element 2: Severity

*JOBD
> The value specified for message logging severity in the job description is used.

0-99   Specify the message severity that is used in conjunction with the logging level to determine which error messages are logged in the job log.

Element 3: Text

*JOBD
> The value specified for message logging text in the job description is used.

*MSG Only the message text is written to the job log.

*SECLVL
> Both the message text and the message help (cause and recovery) of the error message are written to the job log.

*NOLIST
> If the job ends normally, no job log is produced. If the job ends abnormally (if the job end code is 20 or higher), a job log is produced. The messages that appear in the job log contain both the message text and the message help.

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Log CL program commands (LOGCLPGM)

Specifies whether the commands that are run in a control language program are logged to the job log by way of the CL program's message queue. This parameter sets the status of the job's logging flag. If *JOB has been specified for the **Message logging (LOG)** parameter in the Create CL Program (CRTCLPGM) command, the flag set in the **Log CL program commands (LOGCLPGM)** parameter is used. Other values for the **Message logging (LOG)** parameter override the **Log CL program commands (LOGCLPGM)** parameter. The commands are logged in the same manner as the requests.

*JOBD
> The value in the job description is used.

*NO   The commands in a CL program are not logged to the job log.

*YES   The commands in a CL program are logged to the job log.

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Inquiry message reply (INQMSGRPY)

Specifies the way that predefined messages that are sent as a result of running this job are answered. You can specify that the inquiry message reply control is taken from the job description, or that all inquiry messages require a reply, or that a default reply is issued, or that the system reply list is checked for a matching reply as each predefined inquiry message is sent.

*JOBD
> The inquiry message reply control specified in the job description used with this job is started.

*RQD A reply is required by the receiver of the inquiry message for all inquiry messages that occur during the running of this job.

*DFT The default message reply is used to answer any inquiry messages issued during the running of this job.

*SYSRPYL
> The system reply list is checked to see if there is an entry for any inquiry message issued as a result of running this job that has a message identifier and any comparison data that match the inquiry message identifier and message data. If a match occurs, the reply value in that entry is used. If no entry exists for that message, a reply is required.

Hold on job queue (HOLD)

Specifies whether this job is held at the time that it is put on the job queue. A job placed on the job queue in the hold state is held until it is released by the Release Job (RLSJOB) command or ended, either by the End Job (ENDJOB) command or by the Clear Job Queue (CLRJOBQ) command.

*JOBD
> The value specified in the job description determines whether this job is held when it is put on the job queue.

*NO The job is not held when it is put on the job queue.

*YES The job is held when it is put on the job queue until it is released or ended.

Job date (DATE)

Specifies the date that is assigned to the job when it is started.

*JOBD
> The date specified in the job description is used.

*SYSVAL
> The value in the QDATE system value at the time the job is started is used.

date Specify the value that is used as the job date when the job is started. The value must be entered using the date format specified by the DATFMT job attribute.

Job switches (SWS)

Specifies the first settings for a group of eight job switches used with this job. These switches can be set or tested in a CL program and used to control the flow of the program. Only 0's (off) and 1's (on) can be specified in the 8-digit character string.

*JOBD
> The value specified in the job description is the first settings for this job's switches.

character-value
> Specify any combination of eight zeros and ones that is used as the first switch setting for this job.

Message queue (MSGQ)

Specifies the message queue to which a completion message is sent when the submitted job has completed running, either normally or abnormally. If an abnormal ending occurs, the help information for the completion message specifies the possible causes.

Single values

*NONE
>No completion message is sent.

*USRPRF
>The message queue specified on the user profile of the user submitting this job is used.

Qualifier 1: Message queue

name	Specify the name of the message queue where the completion message is sent.

Qualifier 2: Library

*LIBL	All libraries in the new job's library list are searched until the first match is found.

*CURLIB
>The current library for the new job is used to locate the queue. If no library is specified as the current library for the job, the QGPL library is used.

name	Specify the library where the message queue is located.

Sort sequence (SRTSEQ)

Specifies the sort sequence table to be used for string comparisons for this job.

Single values

*USRPRF
>The sort sequence table specified for the job's user profile is used. The user profile is specified in the job description, which is specified on the **Job description (JOBD)** parameter.

*SYSVAL
>The system value QSRTSEQ is used.

*HEX	A sort sequence table is not used. The hexadecimal values of the characters are used to determine the sort sequence.

*LANGIDUNQ
>A unique-weight sort table is used.

*LANGIDSHR
>A shared-weight sort table is used.

Qualifier 1: Sort sequence

name	Specify the name of the sort sequence table.

Qualifier 2: Library

*LIBL	All libraries in the new job's library list are searched until the first match is found.

*CURLIB
> The current library for the new job is searched. If no library is specified as the current library for the job, the QGPL library is used.

name Specify the library where the sort sequence table is located.

Language ID (LANGID)

Specifies the language identifier to be associated with this job. The language identifier is used when *LANGIDUNQ or *LANGIDSHR is specified on the **Sort sequence** (SRTSEQ) parameter. If the job CCSID is 65535, this parameter is also used to determine the value of the job default CCSID (DFTCCSID).

*USRPRF
> The language ID specified for the job's user profile is used. The user profile is specified in the job description, which is specified on the **Job description (JOBD)** parameter.

*SYSVAL
> The system value QLANGID is used.

character-value
> Specify the language identifier to be used by the job.

Country or region ID (CNTRYID)

Specifies the country or region identifier to be used by the job.

*USRPRF
> The country or region ID specified for the job's user profile is used. The user profile is specified in the job description, which is specified on the **Job description (JOBD)** parameter.

*SYSVAL
> The system value QCNTRYID is used.

character-value
> Specify the country or region identifier to be used by the job.

Coded character set ID (CCSID)

Specifies the coded character set identifier (CCSID) to be used for the job.

*USRPRF
> The CCSID specified for the job's user profile is used. The user profile is specified in the job description, which is specified on the **Job description (JOBD)** parameter.

*SYSVAL
> The CCSID specified for the system value QCCSID is used.

*HEX The CCSID 65535 is used.

1-65535
> Specify the CCSID.

Job message queue maximum size (JOBMSGQMX)

Specifies the maximum size of the job message queue.

*JOBD
>The value specified in the job description determines the maximum size of the job message queue.

SYSVAL
>The value in system value QJOBMSGQMX, at the time the job is started determines the maximum size of the job message queue.

2-64 Specify the maximum size, in megabytes, of the job message queue.

Job message queue full action (JOBMSGQFL)

Specifies the action that should be taken when the job message queue is full.

*JOBD
>The value specified in the job description determines the action that should be taken.

*SYSVAL
>The value specified for the system value QJOBMSGQFL is used.

*NOWRAP
>The message queue does not wrap when it is full. This action ends the job.

*WRAP
>The message queue wraps to the start of the message queue when full and starts filling the message queue again.

*PRTWRAP
>The message queue wraps the job message queue when full and prints the messages that are being overlaid because of wrapping.

Examples

Example 1: Checking System Reply List for Inquiry Message Entries

```
BCHJOB   JOBD(PAYROLL)   INQMSGRPY(*SYSRPYL)
```

This command begins the batch job called PAYROLL. An inquiry message that is sent (as a result of running this job) that has an entry in the system reply list is answered according to the reply in that reply list entry. For any inquiry message not represented in the reply list, a reply is required.

The job name is the same as the name of the job description used with the job. The library search list of the thread in which the BCHJOB command is processed determines where the job description PAYROLL is found. The auxiliary storage pool (ASP) group of the thread in which the BCHJOB command is processed is used as the initial ASP group of the new job. Values for other job attributes are taken from the job description PAYROLL or from the user profile named in the job description PAYROLL.

Example 2: Setting Job Switches

```
BCHJOB   JOBD(QGPL/QBATCH)   JOB(PAYROLL)   JOBQ(BATCH2)
         INLLIBL(PAYLIB)  SWS(00101100)   DATE(010188)
```

This command begins a batch job called PAYROLL, which is run using attributes from the IBM-supplied job description for batch jobs, QBATCH. The job is placed on the job queue BATCH2. The library PAYLIB is the only library in the user portion of the library list. Switches are set for use in the job, and the date is set at January 1, 1988.

Example 3: Specifying Severity Levels
```
BCHJOB   JOBD(COMPILE)  JOBPTY(5)  SYNTAX(10)
         INLLIBL(MYCMDS)  ENDSEV(40)
```

This command begins a batch job called COMPILE. The job is run using all of the attributes described in the job description also named COMPILE, except for the initial ASP group and the parameters that are specified by this command. The library MYCMDS is the only library in the user portion of the library list to be used when the commands are checked for syntax or run. Syntax errors with a value equal to or greater than 10 end processing of the job. The job is assigned a scheduling priority of 5 and is run as long as no errors are encountered that cause an escape message to be sent that has a severity level of 40 or higher.

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Error messages

*ESCAPE Messages

CPF1374
> BCHJOB command not valid in current environment.

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Call Program (CALL)

Where allowed to run: All environments (*ALL)
Threadsafe: Yes

The Call (CALL) command calls the program named in the command, and passes control to it. Optionally, the program or user issuing the CALL command can pass parameters to the called program. The CALL command can be used in batch jobs, in interactive jobs, and in both compiled and interpreted control language (CL). When the called program finishes processing, it can return control to the calling program using the RETURN command.

If the CALL command is issued by a CL procedure, each parameter value passed to the called program can be a character string constant, a numeric constant, a logical constant, a floating-point constant, or a CL variable. If a floating-point constant is specified, the value is converted to double-precision format and passed to the called program. If parameters are passed, the value of the constant or variable is available to the program that is called. Parameters cannot be passed in any of the following forms: lists of values, qualified names, expressions, null parameters (that is, a parameter whose value is null, specified by *N), or keyword parameters. Up to 255 parameters can be passed to the called program.

If parameters are passed to a program using the CALL command, the values of the parameters are passed in the order in which they appear on the CALL command; this order must match the order in which they appear in the parameter list in the calling program.

Parameters in a called program can be used in place of its variables. However, no storage in the called program is associated with the variables it receives. Instead, if a variable is passed, the storage for the variable is in the program in which it was originally declared. If a constant is passed, a copy of the constant is made in the calling program and that copy is passed to the called program.

The result is that if a variable is passed, the called program can change its value and the change is reflected in the calling program. If a constant is passed, and its value is changed by the called program, the changed value is not known to the calling program. Therefore, if the calling program calls the same program again, the values of constants will be to their original values.

Information on passing variable parameters using the CALL command within a Submit Job (SBMJOB) command is in the Work Management information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:
- You must have object operational (*OBJOPR) and execute (*EXECUTE) authorities to the program to be called, and *EXECUTE authority to the library where the program is located.
- The CALL command is threadsafe, meaning that it can be used to call a program when the CALL command is run in a job with multiple threads. No checking is done whether or not the program to be called is threadsafe.

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Parameters

Keyword	Description	Choices	Notes
PGM	Program	*Qualified object name*	Required, Positional 1
	Qualifier 1: Program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PARM	Parameters	Values (up to 255 repetitions): *Not restricted*	Optional, Positional 2

Program (PGM)

Specifies the program to be called.

This is a required parameter.

Qualifier 1: Program

name   Specify the name of the program to call.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
The current library for the thread is used to locate the program. If no library is specified as the current library for the thread, the QGPL library is used.

name   Specify the name of the library where the program is located.

Parameters (PARM)

Specifies one or more parameter values that are passed to the called program. A maximum of 255 parameter values can be passed.

Each of the values can be specified only in one of the following forms: a character string constant, a numeric constant, a logical constant, double-precision floating point constant, or a program variable.

The type and length of each parameter must be the same in both the calling and receiving programs. The number of parameters and the order in which they are sent and received must also be the same. If the CALL command is entered interactively or in a noncompiled batch environment, the type and length expected by the called program must match that of each parameter to be passed on the command.

Parameters can be passed and received as follows:

- Character string constants of 32 bytes or less are *always* passed with a length of *32* bytes (padded on the right with blanks). If a character constant is longer than 32 bytes, the whole length of the constant is passed. If the parameter is defined to contain more than 32 bytes, the calling program must pass a constant that contains exactly that number of bytes. Constants longer than 32 characters are *not* padded to the length expected by the receiving program.

The receiving program can receive less than the number of bytes passed (in this case, no message is sent). For example, if a program specifies that 4 characters are to be received and ABCDEF is passed (padded with blanks in 26 positions), only ABCD is accepted and used by the program. Quoted character strings can also be passed.

- Decimal constants are passed in packed form and with a length of (15 5), where the value is 15 digits long, of which 5 digits are decimal positions. If a parameter of 12345 is passed, the receiving program must declare the decimal field as (15 5); the parameter is received as 1234500000 (which is 12,345.00000).
- Logical constants are passed as 1 byte with a logical value of '1' or '0'.
- Floating-point literals and floating-point special values (*NAN, *INF, and *NEGINF) are passed as double-precision floating-point numbers, which occupy 8 bytes and are specified in the form sn.nEsn; where s is a plus sign (+) or a minus sign(-); for example, -2.47E+3 or 3.653E24. A single-precision floating-point number cannot be passed to a called program.
- A program variable can be passed if the call is made from a CL program, in which case the receiving program must declare the field to match the variable defined in the calling CL procedure. For example, if a CL procedure defines a decimal variable named &CHKNUM as (5 0), the receiving program must declare the field as packed with 5 digits total, with no decimal positions.

  If either a decimal constant or a program variable can be passed to the called program, the parameter should be defined as (15 5), and any calling program must adhere to that definition. If the type, number, order, and length of the parameters do not match between the calling and receiving programs (other than the length exception noted previously for character constants), unpredictable results will occur.

  The value *N cannot be used to specify a null value because a null value cannot be passed to another program.

Note: If a parameter value is to be changed by a CL procedure or specified as a variable on a CL command, it must be in writeable storage. For example, in C/400, strings may be read only. If a read only string is passed as a parameter to a CL procedure, and the CL procedure attempts to change the value of the variable or uses the variable on a CL command, the CL procedure will fail.

Examples

Example 1: Calling a Program

```
CALL   PGM(PAYROLL)
```

The program named PAYROLL is called with no parameters being passed to it. The library list is used to locate the called program.

Example 2: Passing a Character Constant

```
CALL   PGM(PAYROLL)  PARM('1')
```

The program named PAYROLL is called with a character constant passed as a quoted string. The program must declare a field of up to 32 characters to receive the constant. The library list is used to locate the called program.

Example 3: Passing Parameters

```
CALL   PGM(LIB1/PAYROLL)  PARM(CHICAGO 1234 &VAR1)
```

The program named PAYROLL located in library LIB1 is called. The calling program passes three parameters: a character string (CHICAGO), a decimal value (1234.00000), and the contents of the CL variable &VAR1. The attributes of the variable determine the attributes of the third parameter.

Example 4: Calling Program with Floating-Point Values

```
CALL   PGM(PGM1)  PARM(1.5E3 *INF)
```

The program named PGM1 is called with two double-precision floating-point values being passed to it.

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Error messages

*ESCAPE Messages

CPD0783

      Variable &3 for parameter &2 must be TYPE(*DEC), LEN(&4,&5).

CPF0005

      Returned command string exceeds variable provided length.

CPF0006

      Errors occurred in command.

CPF0805

      Error found when program &1 in &2 started.

CPF0806

      Error found when procedure started.

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Call Bound Procedure (CALLPRC)

Where allowed to run:
- Batch ILE CL module (*BMOD)
- Interactive ILE CL module (*IMOD)

Threadsafe: Yes

The Call Bound Procedure (CALLPRC) command calls a bound procedure named on the command, and passes control to it. Optionally, the procedure issuing the CALLPRC command can pass parameters to the called procedure. The CALLPRC command can be used in compiled ILE control language (CL) programs and modules. If the called procedure returns a value, such as an error code, the returned value can be stored into a CL variable by specifying the CL variable name for the **CL variable for returned value (RTNVAL)** parameter.

Each parameter value passed to the called procedure can be a character string constant, a numeric constant, a logical constant, a floating-point constant, or a CL variable. If a floating-point constant is specified, the value is converted to double-precision format and passed to the called program. If parameters are passed, the value of the constant or variable is available to the program that is called. Parameters cannot be passed in any of the following forms: lists of values, qualified names, expressions, or keyword parameters. Up to 300 parameters can be passed to the called procedure.

Note: Although the CALLPRC command will allow up to 300 parameters to be passed, the number that the called procedure can accept will depend on the language of the called procedure. For example, a CL procedure cannot accept more than 255 parameters.

If parameters are passed to a procedure using the CALLPRC command, the values of the parameters are passed in the order in which they appear on the CALLPRC command; this order must match the order in which they appear in the parameter list in the called procedure.

Parameters may be passed **by reference** or passed **by value**.

Restrictions:
- The CALLPRC command is valid only within an ILE CL module.

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Parameters

Keyword	Description	Choices	Notes
PRC	Procedure	*Character value*	Required, Positional 1
PARM	Parameters	Values (up to 300 repetitions): *Element list*	Optional, Positional 2
	Element 1: Parameter	*Not restricted*	
	Element 2: Passed	***BYREF**, *BYVAL	
RTNVAL	CL variable for returned value	*CL variable name*, ***NONE**	Optional, Positional 3

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Procedure (PRC)

Specifies the name of the procedure to be called.

name   Specify the name of the procedure to be called. The procedure must be in the same program as the calling procedure or in a service program specified at the time the calling program was created. The procedure name may be up to 256 bytes long. The procedure name will be case sensitive. A CL variable cannot be specified for the procedure name.

Parameters (PARM)

Specifies parameter values that are to be passed to the called procedure. Passing parameters is optional; if no parameters are specified, no parameters will be passed to the called procedure. Up to 300 parameters can be specified.

Element 1: Parameter

*OMIT
   The parameter is omitted. A null pointer is to be passed to the called procedure. When *OMIT is specified for element 1, you cannot specify *BYVAL for element 2.

parameter-value
   Specify a value that is to be passed to the called procedure as a parameter. The parameter value can be specified as a character string constant, a numeric constant, a logical constant, a double-precision floating point constant, or a CL variable.

   The type and length of each parameter must be the same in both the calling and called procedures. The order in which parameters are sent and received must also be the same. The number of parameters specified by the calling procedure does not have to match the number of parameters specified by the called procedure. If the calling procedure specifies more parameters than are defined in the called procedure, the extra parameters are ignored. If the calling procedure specifies fewer parameters than are defined in the called procedure, and the called procedure references the missing parameters, runtime results will be unpredictable.

   Parameters can be passed and received as follows:

   - Character string constants are neither padded with blanks or null terminated. The operational descriptor for the parameter will have the length of the string.

     The called procedure can receive less than the number of bytes passed (in this case, no message is sent). For example, if a called procedure specifies that 4 characters are to be received and ABCDEF is passed, only ABCD is accepted and used by the called procedure. Quoted character strings can also be passed.

   - Decimal constants are passed in packed form and with a length of (15 5), where the value is 15 digits long, of which 5 digits are decimal positions. If a parameter of 12345 is passed, the called procedure must declare the decimal field as (15 5); the parameter is received as 1234500000 (which is 12,345.00000).

   - Logical constants are passed as 1 byte with a logical value of 'F1'X or 'F0'X.

   - Floating-point literals and floating-point special values (*NAN, *INF, and *NEGINF) are passed as double-precision floating-point numbers in IEEE format, which occupy 8 bytes and are specified in the form sn.nEsn; where s is a plus sign (+) or a minus sign(-); for example, -2.47E+3 or 3.653E24. A single-precision floating-point number cannot be passed to a called procedure.

   - A CL variable can be passed, in which case the called procedure must declare the field to match the variable defined in the calling procedure. For example, if a CL procedure defines a

decimal variable named &CHKNUM as (5 0), the called procedure must declare the field as packed with 5 digits total, with no decimal positions.

If either a decimal constant or a program variable can be passed to the called procedure, the parameter should be defined as (15 5), and any calling procedure must adhere to that definition. If the type, number, order, and length of the parameters do not match between the calling and called procedures (other than the length exception noted previously for character constants), unpredictable results will occur.

- Operational descriptors will always be built for character arguments passed on the PARM keyword. The called procedure can use the information in the descriptor to determine the length of the argument. For character string constants, the length will be the actual length of the constant. For character variables, the length will be the declared length of the variable.

Element 2: Passed

*BYREF

The parameter is to be passed **by reference**. Passing a parameter by reference means that the actual parameter is a pointer which points to storage in the calling procedure which contains the CL variable or constant value. If the called procedure is a CL procedure, all parameters must be passed by reference. If a CL variable is passed by reference, the called procedure can change its value and the change is reflected in the calling procedure. If a constant is passed by reference, a copy of the constant is made in the calling procedure and a pointer to that copy is passed to the called procedure.

*BYVAL

The parameter is to be passed **by value**. Passing a parameter by value means that the called procedure receives a copy of the parameter. If the parameter is a CL variable, changes made to the parameter by the called procedure do not change the CL variable in the calling procedure. The called procedure must be defined to receive a parameter that is passed by value.

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CL variable for returned value (RTNVAL)

Specifies the variable to contain the return value from the called procedure. If the value returned by the called procedure is a binary number (types **int** or **short** in ILE C or ILE C++), you must either specify an integer CL variable (specified as TYPE(*INT) or TYPE(*UINT) on the DCL statement) or use the %BINARY or %BIN built-in function on a character CL variable (specified as TYPE(*CHAR) on the DCL statement) used for the return value parameter.

*NONE

The called procedure does not return a value.

CL-variable-name

Specify the name of the CL variable that is to contain the return value from the called procedure. This may be a decimal, integer, or character CL variable. Variables used as return variables will automatically be aligned on a 16-byte boundary.

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Examples

Example 1: Calling a Procedure

```
CALLPRC   PRC(PAYROLL)
```

The procedure named PAYROLL is called with no parameters being passed to it. The PAYROLL procedure does not return a value.

Example 2: Passing a Character Constant

```
CALLPRC   PRC(PAYROLL)   PARM('1')
```

The procedure named PAYROLL is called with a character constant passed as a quoted string. The PAYROLL procedure does not return a value.

Example 3: Passing Parameters

```
CALLPRC   PRC(PAYROLL)   PARM(CHICAGO 1234 &VAR1)
          RTNVAL(*NONE)
```

The procedure named PAYROLL. The calling procedure passes three parameters: a character string (CHICAGO), a decimal value (1234.00000), and the contents of the CL variable &VAR1. The attributes of the variable determine the attributes of the third parameter. The PAYROLL procedure does not return a value.

Example 4: Calling Procedure with Floating-Point Values

```
CALLPRC   PRC(PRC1)   PARM(1.5E3 *INF)   RTNVAL(&RVAL)
```

The procedure named PRC1 is called with two double-precision floating-point values being passed to it. The returned value is stored in variable &RVAL.

Example 5: Ignoring the Return Value of a Procedure

```
CALLPRC   PRC(PRC1)   PARM(1.5E3 *INF)   RTNVAL(*NONE)
```

The procedure named PRC1 is called with two double-precision floating-point values being passed to it. The returned value is ignored and therefore unavailable to the calling procedure.

Example 6: Calling a Procedure that Returns a Binary Number Using %BIN

```
CALLPRC   PRC(RTNINT)   RTNVAL(%BIN(&RTNV 1 4))
```

The procedure named RTNINT returns a 4-byte binary value. It is stored in the first four bytes of variable &RTNV. Variable &RTNV is of type *CHAR and has a length of at least 4.

Example 7: Calling a Procedure that Returns a Binary Number Using an Integer CL Variable

```
DCL   VAR(&VAR2)   TYPE(*INT)   LEN(4)
 :
CALLPRC   PRC(RTNINT)   RTNVAL(&VAR2)
```

The procedure named RTNINT returns a 4-byte binary value, which is stored in the 4-byte signed integer CL variable &VAR2.

Example 8: Calling a Procedure Passing a Parameter By Value

```
DCL   VAR(&POS)   TYPE(*INT)   LEN(2)
 :
CALLPRC   PRC(SCAN_STRING)   PARM((&STR1 *BYREF) (' ' *BYVAL))
          RTNVAL(&POS)
```

The procedure named SCAN_STRING is called with two parameters. The CL variable &STR1 is passed **by reference** and the constant character string ' ' (one blank) is passed **by value** to SCAN_STRING. Procedure SCAN_STRING must be defined to receive the first parameter as a pointer to a character string and the second parameter as a one-byte character string. The SCAN_STRING procedure returns a 2-byte binary value, which is stored in the 2-byte signed integer CL variable &POS.

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Error messages

CPF0806

Error found when procedure started.

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Change Current Directory (CD)

The Change Current Directory (CD) command changes a specified directory to the current working directory. The current directory can be a directory, library, folder, or database file. The current directory is used to locate objects used by the commands.

This command is an alias for the Change Current Directory (CHGCURDIR) command and can also be issued using the following alternative command names:

- CHDIR
- CHGCURDIR

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

1. This command works on only one object. If a pattern is specified on the **Directory (DIR)** parameter and more than one object matches the pattern, the user can select the object from a list in an interactive job. If this is a batch job, the command fails with error message CPFA08E, "More than one name matches pattern.".

2. The current directory and current library are separate and distinct entities. The current library and current directory can be set to the same library, but a change to either the current library or current directory does not affect the other.

   The current directory, set with this command, affects the integrated file system commands and APIs. The current library, set with the Change Current Library (CHGCURLIB) command, affects commands such as the Create Display File (CRTDSPF) command, that uses the value *CURLIB as a library qualifier.

3. The user must have read (*R) authority to the directory.
4. The user must have execute (*X) authority to each directory in the path.

Parameters

Keyword	Description	Choices	Notes
DIR	Directory	*Path name*	Required, Positional 1

Directory (DIR)

Specifies the path name of the directory that replaces the current working directory of the job.

For more information on specifying path names, refer to "Object naming rules" in "CL concepts and reference" in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

This is a required parameter.

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Examples

The alternative command name for CD is CHGCURDIR. The following examples use the alternative command name, but CD can be replaced directly for CHGCURDIR in all of them.

Example 1: Changing a Current Directory

```
CHGCURDIR   DIR(/DIRECTORY2)
```

This command changes the current directory to the directory named DIRECTORY2.

Example 2: Changing a Current Directory to the Parent of the Current Directory

```
CHGCURDIR   DIR('..')
```

This command changes the current directory to the parent directory of the directory that contains the current directory before this command is run.

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Error messages

*ESCAPE Messages

CPFA085
> Home directory not found for user &1.

CPFA08E
> More than one name matches pattern.

CPFA093
> Name matching pattern not found.

CPFA09C
> Not authorized to object. Object is &1.

CPFA09D
> Error occurred in program &1.

CPFA0A1
> An input or output error occurred.

CPFA0A3
> Path name resolution causes looping.

CPFA0A7
> Path name too long.

CPFA0A9
> Object not found. Object is &1.

CPFA0AB
> Operation failed for object. Object is &1.

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Configure Device Media Library (CFGDEVMLB)

The Configure Device Media Library (CFGDEVMLB) command connects the media library device description with the communication interface for media library devices that require a communication interface. The CFGDEVMLB command will configure the necessary communication information based on the input to the command, will update the necessary information in the device description specified, and will attempt to vary on the media library device description. Refer to the Automated Tape Library Planning and Management information in iSeries Information Center at http://www.iseries.ibm.com/infocenter for more information about configuring media library devices.

For a LAN-attached media library device, the information on the Library Manager console must also be updated. To determine the necessary information for the Library Manager, use the Display LAN Media Library (DSPLANMLB) command.

This command must be issued once for each media library device description that uses a communication interface.

User *PUBLIC will be given *USE authority to any objects that this command creates: controller, device, and so on. The objects that the CFGDEVMLB command creates will be named the same as the resource name specified on the command for ADPTTYPE(*RS232) and same as the remote location name for ADPTTYPE(*LAN). The owner of the objects will be the user profile of the user executing the command.

Restrictions

1. *IOSYSCFG authority is required to execute this command.
2. *USE authority is also required for the following CL commands: CRTDEVAPPC, CRTCTLAPPC, CRTDEVASC, CRTCTLASC, CRTLINASC, CHGDEVMLB, and VRYCFG.

Parameters

Keyword	Description	Choices	Notes
DEV	Library device	*Name*	Required, Positional 1
ADPTTYPE	Adapter type	***RS232**, *LAN	Optional, Positional 2
RSRCNAME	Communication resource name	*Name*	Optional
PROTOCOL	Protocol	***APPC**, *TCP	Optional
LIND	Line description	Values (up to 2 repetitions): *Name*	Optional
RMTLOCNAME	Remote location	Values (up to 2 repetitions): *Character value*	Optional
ADPTADR	LAN remote adapter address	Values (up to 2 repetitions): X'000000000001'-X'FFFFFFFFFFFF'	Optional
ROBOTHOST	Robot host	Values (up to 2 repetitions): *Character value*	Optional
LCLINTNETA	Local internet address	*Character value*	Optional

Library device (DEV)

Specifies the name of the media library device. The device description must exist on the system whether it was autoconfigured, or it was created with the Create Device Media Library (CRTDEVMLB) command.

Adapter type (ADPTTYPE)

Adapter type

The possible values are:

*RS232
Indicates that the media library device is attached with a RS-232 port.

*LAN Indicates that the media library device is attached with a token-ring or ethernet local area network line.

Communication resource name (RSRCNAME)

Specifies the resource name of the RS-232 port. Use the Work with Hardware Resources (WRKHDWRSC) command with TYPE(*CMN) to determine what resources exist on the system.

This parameter is required when ADPTTYPE(*RS232) is specified.

Protocol (PROTOCOL)

Specifies the communication protocol to use to communicate with the robot.

This parameter is required when ADPTTYPE(*LAN) is specified.

The possible values are:

*APPC
Indicates the APPC protocol will be used to communicate with the robot.

*TCP Indicates the TCP/IP protocol will be used to communicate with the robot.

Line description (LIND)

Specifies the line description name to which the media library device is attached. The line description must already exist on the system. Use the Work with Configuration Status (WRKCFGSTS) command, with CFGTYPE(*LIN), to display a list of line descriptions that are configured on the system.

This parameter is required when ADPTTYPE(*LAN) and PROTOCOL(*APPC) are specified. A maximum of 2 line descriptions can be specified.

Remote location (RMTLOCNAME)

Specifies the name of the Library Manager to which the media library device will communicate using the format nnnnnnnn.cccccccc, where nnnnnnnn is the remote network identifier (ID) and cccccccc is the remote location name. If no network ID is specified, the network attributes are used to determine the default network ID.

This parameter information should be obtained from the Library Manager console. To determine the remote location name on the Library Manager, select COMMANDS from the action bar of the MAIN MENU. From the COMMANDS pull-down, select LM LAN Options, and then select LM LAN Information. The LM LAN Information panel will display the correct location name and network identifier for this media library device.

This parameter is required when ADPTTYPE(*LAN) and PROTOCOL(*APPC) are specified. A maximum of 2 remote location names can be specified.

LAN remote adapter address (ADPTADR)

Specifies the LAN adapter address of the remote controller from the Library Manager.

This parameter information should be obtained from the Library Manager console. To determine the adapter address on the Library Manager, select COMMANDS from the action bar of the MAIN MENU. From the COMMANDS pull-down, select LM LAN Options, and then select LM LAN Information. The LM LAN Information panel will display the correct adapter address for this media library device.

This parameter is required when ADPTTYPE(*LAN) and PROTOCOL(*APPC) are specified. A maximum of 2 adapter addresses can be specified.

Robot host (ROBOTHOST)

Specifies the TCP/IP host name or internet address of the robotic library manager.

The possible values are:

robot-host-name
> The specified name of the robotic library manager. The user may enter the host name by entering the robot host name or the domain qualified robot host name. The domain qualified robot host name allows input of 255 bytes.

robot-internet-address
> The specified address of the TCP/IP interface.
>
> The robot host internet address must be of the form ddd.ddd.ddd.ddd where ddd is a decimal number ranging from 0 to 255 and should not contain leading zeroes.
>
> This parameter is required when ADPTTYPE(*LAN) and PROTOCOL(*TCP) are specified. A maximum of 2 robot host names or robot internet addresses can be specified.

Local internet address (LCLINTNETA)

Specifies the local internet address of the interface that is connecting to the robot library manager. This is the interface the operating system will start when TCP/IP needs to be started to use the media tape library.

The possible values are:

local-IP-address

> Specify the local internet address to be started.

> The internet address must be of the form ddd.ddd.ddd.ddd where ddd is a decimal number ranging from 0 to 255 and should not contain leading zeroes.

> This parameter may only be specified when ADPTTYPE(*LAN) and PROTOCOL(*TCP) are specified.

Examples

Example 1: Configuring a RS232-attached Media Library Device

```
CFGDEVMLB   MLB(TAPLIB01)  ADPTTYPE(*RS232)  RSRCNAME(CMN01)
```

This command will create the necessary RS-232 communication line, controller, and device and change the necessary parameters in the media library device description. It will also attempt to vary on the media library device. The command does this in the following order:

- Create Line Description (Async) - CRTLINASC CMN01 with a resource name of CMN01.
- Create Controller Description (Async) - CRTCTLASC CMN01.
- Create Device Description (Async) - CRTDEVASC CMN01.
- Change Device Description - CHGDEVMLB TAPLIB01 to change the parameter robot device to ROBOTDEV(CMN01) and to change the parameter online at IPL to ONLINE(*YES).
- Vary Configuration - VRYCFG TAPLIB01 to vary on the media library device.

If any of these commands is not successful, the CFGDEVMLB command will not be successful. Note that multiple media library device descriptions could have the same communication line. In this case, the line description, controller, and device will not be recreated, but the CHGDEVMLB and VRYCFG commands will still be used.

Example 2: Configuring a LAN-attached Media Library Device

```
CFGDEVMLB   DEV(TAPLIB02)  ADPTTYPE(*LAN)  LIND(TRNLINE)
            RMTLOCNAME(APPN.MLD01)  ADPTADR(0123456789AB)
```

This command will create the necessary LAN communication controller and device and change the necessary parameters in the media library device description. It will also attempt to vary on the media library device. Note that the line description must exist prior to using the CFGDEVMLB command. The command does this in the following order:

- Create Controller Description (APPC) - CRTCTLAPPC MLD01 with ONLINE(*YES).
- Create Device Description (APPC) - CRTDEVAPPC MLD01.
- Vary Configuration - VRYCFG MLD01 to vary on MLD01 APPC controller that was created.
- Change Device Description - CHGDEVMLB TAPLIB02 to change the parameter robot device to ROBOTDEV(MLD01) and to change the parameter online at IPL to ONLINE(*YES).
- Vary Configuration -VRYCFG TAPLIB02 to vary on the media library device.

If any of these commands is not successful, the CFGDEVMLB command will not be successful. Note that multiple media library device descriptions could have the same communication line. In this case, the controller description, and device will not be recreated, but the CHGDEVMLB and VRYCFG commands will still be used.

Example 3: Configuring a LAN-attached Media Library Device with Two Remote Locations

```
CFGDEVMLB   DEV(TAPLIB02)  ADPTTYPE(*LAN)  PROTOCOL(*APPC)
            LIND(TRNLINE)
            RMTLOCNAME(APPN.MLD01A APPN.MLD01B)
            ADPTADR(0123456789AB 0123456789CD)
```

This command will create the necessary LAN communication controllers and devices and change the necessary parameters in the media library device description. It will also attempt to vary on the media library device. Note that the line description must exist prior to using the CFGDEVMLB command. The command does this in the following order:

- Create Controller Description (APPC) - CRTCTLAPPC MLD01A with ONLINE(*YES).
- Create Device Description (APPC) - CRTDEVAPPC MLD01A.
- Vary Configuration -VRYCFG MLD01A to vary on MLD01A APPC controller that was created.
- Create Controller Description (APPC) - CRTCTLAPPC MLD01B with ONLINE(*YES).
- Create Device Description (APPC) - CRTDEVAPPC MLD01B.
- Vary Configuration -VRYCFG MLD01B to vary on MLD01B APPC controller that was created.
- Change Device Description - CHGDEVMLB TAPLIB02 to change the parameter robot device to ROBOTDEV(MLD01A MLD01B) and to change the parameter online at IPL to ONLINE(*YES).
- Vary Configuration -VRYCFG TAPLIB02 to vary on the media library device.

If any of these commands is not successful, the CFGDEVMLB command will not be successful. Note that multiple media library device descriptions could have the same communication line. In this case, the controller description, and device will not be recreated, but the CHGDEVMLB and VRYCFG commands will still be used.

Example 4: Configuring a LAN-attached Media Library Device to Communicate Using TCP/IP

```
CFGDEVMLB   DEV(TAPLIB02)  ADPTTYPE(*LAN)  PROTOCOL(*TCP)
            ROBOTHOST(MLD01A)  LCLINTNETA(10.1.2.3)
```

This command will change the robot information in the device description to the TCP/IP information provided. It will also attempt to vary on the media library device. Note that TCP/IP should be configured prior to using the CFGDEVMLB command. The command does this in the following order:

- Change Device Description - CHGDEVMLB TAPLIB02 to change the parameter robot host to ROBOTHOST(MLD01A) and the internet address to LCLINTNETA(10.1.2.3).
- Vary Configuration - VRYCFG TAPLIB02 to vary on the media library device.

If any of these commands is not successful, the CFGDEVMLB command will not be successful.

Error messages

*ESCAPE Messages

CPF222E
&1 special authority is required.

CPF6708
Command ended due to error.

CPF672B

> Resource &1 not valid.

CPF672C

> Device &1 not allowed.

CPF672D

> Network ID &1 not in correct format.

CPF672E

> Line description &2 wrong type.

CPF672F

> Resource &1 not found.

CPF6745

> Device &1 not a media library device.

CPF67E5

> Local area network information not valid.

CPF9814

> Device &1 not found.

CPF9825

> Not authorized to device &1.

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Configure Distribution Service (CFGDSTSRV)

The Configure Distribution Services (CFGDSTSRV) command changes the configuration of the distribution network. The user can add, change, remove, and display entries from the distribution queues table, the routing table, and the secondary system name table. A detailed description of configuring a distribution network is in the SNA Distribution Services book, SC41-5410.

Restrictions:

1. This command is shipped with public *EXCLUDE authority and the QPGMR and QSYSOPR user profiles have private authorities to use the command.

2. Before this command is run for the first time, the QSNADS subsystem must be started to create the internal systems network architecture distribution services (SNADS) objects that this command uses.

3. Messages that report errors about system names or distribution queues may show or print different characters than the user entered because of internal system transformations. The internal value for a system name or distribution queue may differ from the characters shown by the CFGDSTSRV command depending on the language being used for the work station.

Parameters

Keyword	Description	Choices	Notes
OPTION	Menu option	*SELECT, 1, 2, 3	Optional, Positional 1

Menu option (OPTION)

Specifies an option from the Configure Distribution Services menu that bypasses the initial menu and goes directly to the secondary displays. You can specify the distribution queues, the routing table, or the secondary system name table to be specified showing the Configure Distribution Services menu.

The possible values are:

*SELECT
      The menu is not bypassed. The option is selected from the Configure Distribution Services menu.

1   The distribution queues function is selected. This function identifies all the distribution queues for systems adjacent to your system.

2   The routing table function is selected. This function describes explicit or default entries for the destination systems in the SNADS network to which distribution queue entries can be routed.

3   The secondary system name table function is selected. This function lists all the names by which your system is known.

Examples

```
CFGDSTSRV   OPTION(1)
```

This command shows the distribution queues' table entries.

Configuration changes may be made to existing distribution queues, or additional distribution queues may be configured.

Error messages

*ESCAPE Messages

CPF8802

Distribution queue &1 was not found.

CPF8805

Special value for System name/Group not permitted or not used correctly.

CPF8806

Value &1 not valid for system name or system group.

CPF8807

Error occurred while using QSNADS journal.

CPF8809

Errors detected on SNADS internal queues.

CPF8814

Queue &1 not found.

CPF9845

Error occurred while opening file &1.

CPF9846

Error while processing file &1 in library &2.

CPF9847

Error occurred while closing file &1 in library &2.

CPF9850

Override of printer file &1 not allowed.

CPI8854

DSNX error while journaling.

Configure IP over SNA (CFGIPS)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Configure IP over SNA Interface (CFGIPS) command displays a menu that allows you to define or change the AF_INET sockets over SNA configuration.

There are no parameters for this command.

Parameters

None

Examples

Error messages

None

Configure Perf Collection (CFGPFRCOL)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Configure Performance Collection (CFGPFRCOL) command changes the Collection Services properties. These properties define certain collection attributes and determine how Collection Services will manage data collection. Some attributes changed with this command will take effect immediately, while others will take effect the next time a collection object is created. See the parameter help to determine how each attribute will be handled. The Collection Services server job (QYPSPFRCOL) can be started or cycled by using the Start Performance Collection (STRPFRCOL) command.

Parameters

Keyword	Description	Choices	Notes
INTERVAL	Default interval	***SAME**, 0.25, 0.5, 1.0, 5.0, 15.0, 30.0, 60.0	Optional, Positional 1
LIB	Collection library	*Name*, ***SAME**	Optional
DFTCOLPRF	Default collection profile	***SAME**, *MINIMUM, *STANDARD, *STANDARDP, *ENHCPCPLN, *CUSTOM	Optional
CYCTIME	Cycle time	*Time*, ***SAME**	Optional
CYCITV	Cycle interval	1-24, ***SAME**	Optional
RETPERIOD	Collection retention period	Single values: ***SAME**, *PERM Other values: *Element list*	Optional
	Element 1: Number of units	1-720	
	Element 2: Unit of time	*HOURS, *DAYS	
CRTDBF	Create database files	***SAME**, *YES, *NO	Optional
CHGPMLIB	Change PM/400 library	***NO**, *YES	Optional

Default interval (INTERVAL)

The default collection interval (in minutes). This value is used by most data categories as the collection sample interval. Although some I/O categories are set up to use a specific interval time, this value will determine the collection sample interval for most data. This change will take effect immediately.

*SAME
> The value does not change. If the configured value has never been modified, the interval will be 15 minutes.

0.25 The default collection interval will be 15 seconds.

0.5 The default collection interval will be 30 seconds.

1.0 The default collection interval will be 1 minute.

5.0 The default collection interval will be 5 minutes.

15.0 The default collection interval will be 15 minutes.

30.0   The default collection interval will be 30 minutes.

60.0   The default collection interval will be 60 minutes.

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Collection library (LIB)

The library where the management collection object (*MGTCOL) will reside. This change will take effect the next time a collection object is created.

*SAME
> The value does not change. If the configured value has never been modified, the library will be QPFRDATA.

name   Specify the name of the library where the management collection object should be created.

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Default collection profile (DFTCOLPRF)

Specifies the default collection profile. This determines which categories will be included in the system-level collection. This change will take effect the next time a collection object is created.

*SAME
> The value does not change. If the configured value has never been modified, the default collection profile will be *STANDARDP.

*MINIMUM
> The minimum data collection recommended. Includes the following categories: *SYSBUS, *POOL, *HDWCFG, *SYSCPU, *SYSLVL, *JOBMI, *JOBOS, *DISK, and *IOPBASE.

*STANDARD
> The standard profile includes all categories which are typically needed by the Performance Tools for iSeries, with the exception of communications data. It includes all categories in the *MINIMUM profile, as well as the following categories: *POOLTUNE, *SUBSYSTEM, *SNADS, *LCLRSP, *APPN, *SNA, *TCPBASE, *USRTNS and *LPAR. The category *DOMINO will be included if the product Domino for iSeries has been installed on the system. The category *HTTP will be included if the product IBM HTTP Server for iSeries (powered by Apache) has been installed on the system.

*STANDARDP
> The standard plus profile includes all categories which are typically needed by the Performance Tools for iSeries, including communications data. It includes all categories in the *STANDARD profile, as well as the following categories: *IPCS, *CMNBASE, *CMNSTN, *CMNSAP, *TCPIFC, and *DPS.

*ENHCPCPLN
> The enhanced capacity planner profile includes all categories in the *STANDARDP profile, with the addition *INTPEX.

*CUSTOM
> The custom profile includes categories as defined by the user. This profile must be defined using the Collection Services function in iSeries Navigator.

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Cycle time (CYCTIME)

The base time at which the Collection Services server job (QYPSPFRCOL) will end the current collection and begin collecting data in a new management collection object (*MGTCOL). This change will take effect immediately.

*SAME
> The value does not change. If the configured value has never been modified, the cycle time will be midnight.

time   Specify the time of day at which the collector will cycle.

Cycle interval (CYCITV)

The time period after which the Collection Services server job (QYPSPFRCOL) will end the current collection and begin collecting data in a new management collection object (*MGTCOL). This parameter controls the maximum amount of data (based on time) that will be stored in a single collection object. This value will take effect immediately.

*SAME
> The value does not change. If the configured value has never been modified, the cycle interval will be 24 hours.

1-24   Specify the number of hours after which the collection will be cycled.

Collection retention period (RETPERIOD)

Specifies how long the management collection object (*MGTCOL) should be retained on the system. After the retention period has expired, the object will be automatically deleted by the Collection Services server job (QYPSPFRCOL). Expired collections are removed from the system each time a collection starts or cycles. This change will take effect immediately and will apply to the current and future collection objects.

Single values

*SAME
> The value does not change. If the configured value has never been modified, the retention period will be 24 hours.

*PERM
> The object will not be automatically deleted.

Element 1: Number of units

retention-time
> Specify how long the management collection object should be retained in hours or days. The collection object may be retained for up to 30 days.

Element 2: Unit of time

Specify whether the retention-time value specified for the Number of units element should be treated as a number of hours or a number of days.

*HOURS
> The retention period is specified in hours. The valid time period range is 1 through 720.

*DAYS
> The retention period is specified in days. The valid time period range is 1 through 30.

Create database files (CRTDBF)

This option will submit the Create Performance Data (CRTPFRDTA) job. This job will create the performance database files and process the data in the current management collection object as it is collected. The CRTPFRDTA job will end when the Collection Services server job (QYPSPFRCOL) ends or cycles. If this option is set to *YES, a new CRTPFRDTA job will be submitted for every management collection object (*MGTCOL) created. This change will take effect the next time a collection object is created.

*SAME
> The value does not change. If the configured value has never been modified, this option will be *NO.

*YES The CRTPFRDTA job is submitted.

*NO The CRTPFRDTA job is not submitted.

Change PM/400 library (CHGPMLIB)

This option will change the PM/400 library to match the library used by Collection Services.

PM/400 has its own configuration. When PM/400 is running it will change the Collection Services configuration (on an hourly basis) so that the data it requires is collected and stored in the PM/400 configured library. If you specify *YES, the PM/400 collection library will be changed to the Collection Services collection library. If the Collection Services server job is running when this option is specified, the collection will be cycled so that the change to both libraries will take effect simultaneously.

If the PM/400 library is changed, you should be aware of the following: PM/400 will not be able to process any data which was collected in the previous library. In addition, PM/400 will automatically remove data in the new library based on the PM/400 setting Performance data purge days. To change the number of days performance data is retained, type GO PM/400 and select the Work with PM/400 Customization option.

*NO The PM/400 library name will not be changed.

*YES The PM/400 library name will be changed to match the library used by Collection Services.

Examples

Example 1: Configuring Default Interval and Collection Library

```
CFGPFRCOL INTERVAL(5) LIB(QMPGDATA)
```

This command will cause the default interval at which most sample data is collected to be changed immediately to 5 minutes. In addition, the library where data is collected will change to QMPGDATA the next time a management collection object (*MGTCOL) is created.

Example 2: Configuring Cycle Time and Cycle Interval

```
CFGPFRCOL CYCTIME(030000) CYCITV(6)
```

This command will change the cycle time and cycle interval of the collection. The base cycle time will be 3:00 a.m. and the collection will cycle every six hours from the base time. New management collection objects (*MGTCOL) will be created at the following times: 3:00, 9:00, 15:00, 21:00, 3:00, 9:00, and so on.

Example 3: Configuring Retention Period

CFGPFRCOL RETPERIOD(25 *DAYS)

This command will cause the current and future collection objects to be retained on the system for 25 days before being automatically deleted by the Collection Services server job (QYPSPFRCOL).

Example 4: Configuring Default Collection Profile and Create Database Files

CFGPFRCOL DFTCOLPRF(*STANDARD) CRTDBF(*YES)

This command causes changes that will take effect the next time a management collection object (*MGTCOL) is created. At that time, the collection profile will change to *STANDARD and the Create Performance Data (CRTPFRDTA) job will be submitted.

Example 5: Changing the PM/400 Library

CFGPFRCOL LIB(QPFRDATA) CHGPMLIB(*YES)

This command will change both the Collection Services collection library and the PM/400 configured library to QPFRDATA. If the Collection Services server job is running, it will be cycled and the change will take effect immediately.

Top

Error messages

*ESCAPE Messages

CPF3CF2

Error(s) occurred during running of &1 API.

CPF9810

Library &1 not found.

CPF9820

Not authorized to use library &1.

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Configure PM eServer iSeries (CFGPM400)

Where allowed to run:
- Interactive job (*INTERACT)
- Using QCMDEXEC, QCAEXEC, or QCAPCMD API (*EXEC)

Threadsafe: No

The Configure PM eServer iSeries display asks you a series of questions about how you want to set up your iSeries systems to send and receive PM eServer iSeries performance data. How you want to use your systems will dictate how you respond to the questions.

You can configure your iSeries system or systems in any of the following ways:
- As a host system, which means that you want your system to receive performance data from other iSeries systems (remote systems) and then forward the data to IBM. The host system cannot be at a release level that is earlier than other systems. In other words, the host system must be at the same release level or later than other systems.
- As a remote system, which means you send performance data to a host system. You identify from this display that you need a remote system, and then use option 5 (Work with remote iSeries systems) from the PM eServer iSeries menu to define your remote systems.
- As a single iSeries system that sends its data directly to IBM.

These values are valid for the Send performance data to IBM field:

*YES Specifies that this iSeries system sends the necessary PM eServer iSeries performance data to IBM. The system sends the data by using an electronic customer support modem or equivalent. If your iSeries system has a modem, you should use this option. *YES is the default value. Use this value if you are configuring a host system or a single iSeries system that sends data directly to IBM.

*NO Specifies that this iSeries system does not send PM eServer iSeries performance data to IBM. Use this option if your iSeries system does not have an electronic customer support modem or equivalent. If you specify *NO, you must have another iSeries system in your network that does have a modem. The iSeries system with the modem (or host system) sends the data to IBM on behalf of the iSeries system without the modem. The iSeries system with the modem must be configured to collect the data from the iSeries system without the modem. Use this value if you are configuring a remote system.

These values are valid for the Receive performance data field:

*NO Specifies that this iSeries system does not receive the PM eServer iSeries performance data. *NO is the default value. Specify this value if any of the following are true:
  - You have only one iSeries system.
  - You are configuring a remote system.
  - This iSeries system does not have an electronic customer support modem.
  - All your iSeries systems have their own electronic customer support modems.
  - Your iSeries systems that do not have an electronic customer support modem will not use this iSeries system to send their data to IBM.

*YES Specifies that this iSeries system receives the PM eServer iSeries performance data from other iSeries systems for transmission to IBM. Specify this value:
  - If this iSeries system has an electronic customer support modem and there are other iSeries systems in your network that do not have electronic customer support modems.
  - If you are configuring a host system.

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For the Performance data library field, specify the name of the library where the PM eServer iSeries data is stored. The default value is QMPGDATA. The library must exist on your system auxiliary storage pool (ASP) or on a basic ASP. It cannot exist on an independent ASP.

If you specify *YES for Send performance data to IBM , you see additional information that indicates whether the appropriate communications objects exist. PM eServer iSeries creates the communications objects for you for transmission. A value of Found indicates that PM eServer iSeries uses existing objects. If the objects are not found, PM eServer iSeries creates new communications objects. If you press F6 (Create/Recreate), PM eServer iSeries deletes the existing objects and creates new objects.

After you verify your objects, press Enter to continue.

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Parameters

None

<div align="right">Top</div>

Examples

None

<div align="right">Top</div>

Error messages

Unknown

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Configure System Security (CFGSYSSEC)

Where allowed to run: All environments (*ALL)	Parameters
Threadsafe: No	Examples
	Error messages

The Configure System Security (CFGSYSSEC) command activates security features of the system by turning on security auditing, changing system values, and modifying system supplied user profiles. To determine what features are turned on, issue the Retrieve CL Source (RTVCLSRC) command against the program QSECCFGS and examine the source file created by the RTVCLSRC command.

Restriction: You must have *ALLOBJ, *SECADM, and *AUDIT special authorities to use this command.

This command can be customized by the security administrator by following the steps below:

1. Issue the Retrieve CL Source (RTVCLSRC) command against the program QSECCFGS.
2. Edit the source code produced from the RTVCLSRC command and compile the new program. Make sure that the program is given a new name, is created into a library other than QSYS, and that the *PUBLIC authority is set to *EXCLUDE.
3. Issue the Change Command (CHGCMD) against the Configure System Security command and specify your new program for the **PGM** parameter. An example is listed below:

   `CHGCMD CMD(QSYS/CFGSYSSEC) PGM(library_name/new_pgm_name)`
   Note: If a product upgrade is done, the CFGSYSSEC command is reinstalled, or maintenance is applied to the CFGSYSSEC command, the CHGCMD will have to be issued again to customize the command.

DISCLAIMER: IBM cannot guarantee or imply reliability, serviceability, performance or function of the retrieved QSECCFGS source code and any programs. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

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Parameters

None

Top

Examples

`CFGSYSSEC`

This command allows you to configure the security features of your system.

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Error messages

*ESCAPE Messages

CPFB304

      User does not have required special authorities.

Configure TCP/IP (CFGTCP)

Where allowed to run: Interactive environments (*INTERACT
*IPGM *IREXX *EXEC)
Threadsafe: No

Parameters
Examples
Error messages

The Configure TCP/IP (CFGTCP) command is used to display a menu that allows a user to define or change the Transmission Control Protocol/Internet Protocol (TCP/IP) configuration.

Top

Parameters

None

Top

Examples

CFGTCP

This command displays the Configure TCP/IP menu.

Top

Error messages

*ESCAPE Messages

TCP1D03
&1 member record length not correct.

TCP1D04
Error occurred processing member &1 of &2/&3.

TCP9999
Internal system error in program &1.

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Configure TCP/IP Applications (CFGTCPAPP)

Where allowed to run: Interactive environments (*INTERACT
*IPGM *IREXX *EXEC)
Threadsafe: No

The Configure TCP/IP Applications (CFGTCPAPP) command is used to define or change the application configuration for Transmission Control Protocol/Internet Protocol (TCP/IP).

Parameters

Keyword	Description	Choices	Notes
APP	Application	***SELECT**, *SNMP, *ROUTED, *TFTP, *BOOTP, *DDM, *DHCP, *TELNET, *FTP, *SMTP, *LPD, *HTTP, *POP, *REXEC, *DNS, *NTP	Optional, Positional 1

Application (APP)

Specifies the application being configured.

*SELECT

Displays the Configure TCP/IP Applications selection menu. From this menu you can select which of the TCP/IP applications you want to configure. If the TCP/IP Licensed Program Product is installed, all application configuration options are displayed. Otherwise, only the SNMP configuration option is displayed.

*SNMP

Configure the Simple Network Management Protocol (SNMP) Agent application. This directly calls the Configure TCP/IP SNMP (CFGTCPSNMP) command.

*BOOTP

Configure bootstrap protocol (BOOTP). This directly calls the Configure TCP/IP BOOTP (CFGTCPBP) command.

*DDM

Change Distributed Data Management (DDM). This directly calls the Change DDM TCP/IP Attributes (CHGDDMTCPA) command.

*DHCP

Change Dynamic Host Configuration Protocol (DHCP). This directly calls the Change DHCP Attributes (CHGDHCPA) command.

*DNS Change Domain Name System (DNS). This directly calls the Change DNS Attributes (CHGDNSA) command.

*FTP Change File Transfer Protocol (FTP) attributes. This directly calls the Change FTP Attributes (CHGFTPA) command. This value is valid only if the TCP/IP Licensed Program product has been installed.

*HTTP

Configure the World Wide Web HyperText Transfer Protocol (HTTP) server. (This server is also

known as the IBM HTTP Server for OS/400). This directly calls the Configure TCP/IP HTTP (CFGTCPHTTP) command. This value is valid only if the TCP/IP Licensed Program product is installed.

*LPD   Change line printer daemon (LPD) attributes. This directly calls the Change LPD Attributes (CHGLPDA) command. This value is valid only if the TCP/IP Licensed Program product has been installed.

*NTP   Change Simple Network Time Protocol (SNTP) attributes. This directly calls the Change SNTP Attributes (CHGNTPA) command.

*POP   Configure the Post Office Protocol (POP) Version 3 mail server. This value is valid only if the TCP/IP Licensed Program product is installed.

*REXEC

Change TCP/IP Remote Execution (REXEC) server attributes. This directly calls the Change REXEC Attributes (CHGRXCA) command. This value is valid only if the TCP/IP Licensed Program product is installed.

*ROUTED

Configure the RouteD server. This directly calls the Configure TCP/IP RouteD (CFGTCPRTD) command.

*SMTP

Configure the Simple Mail Transfer Protocol (SMTP) application. This directly calls the Configure TCP/IP SMTP (CFGTCPSMTP) command. This value is valid only if the TCP/IP Licensed Program product has been installed.

*TELNET

Configure the TELNET application. This directly calls the Configure TCP/IP TELNET (CFGTCPTELN) command. This value is valid only if the TCP/IP Licensed Program product has been installed.

*TFTP   Change Trivial File Transfer Protocol (TFTP) attributes. This directly calls the Change TFTP Attributes (CHGTFTPA) command.

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Examples

Example 1: Configuring TCP/IP Applications

CFGTCPAPP

This command displays the Configure TCP/IP Applications menu.

Example 2: Configuring TCP/IP TELNET Applications

CFGTCPAPP   APP(*TELNET)

This command displays the Configure TCP/IP TELNET Applications menu.

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Error messages

*ESCAPE Messages

TCP9999

Internal system error in program &1.

Configure TCP/IP BOOTP (CFGTCPBP)

The Configure TCP/IP BOOTP (CFGTCPBP) command allows you to work with bootstrap protocol (BOOTP) configuration commands.

There are no parameters for this command.

Parameters

None

Examples

CFGTCPBP

This command displays the Configure TCP/IP BOOTP menu.

Error messages

Unknown

Configure Point-to-Point TCPIP (CFGTCPPTP)

Where allowed to run: Interactive environments (*INTERACT *IPGM *IMOD *IREXX *EXEC)
Threadsafe: No

The Configure Point-to-Point TCP/IP (CFGTCPPTP) command is used to display a menu that allows you to define, change, or display the TCP/IP point-to-point configuration.

The following options cannot be used with *PPP line type profiles:
- Change
- Copy
- Remove
- Display details

The following options can be used with *PPP linetype profiles:
- Start
- End
- Work with line status
- Work with session job

Use the iSeries Navigator interface for Configuration of *PPP Slip or Point to Point profiles.

There are no parameters for this command.

Parameters

None

Examples

CFGTCPPTP

This command displays the Configure Point-to-Point TCP/IP menu.

Error messages

<u>*ESCAPE Messages</u>

TCP1A1F
  Cannot process request while &3/&2/&1 using &6.

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Configure TCP/IP RouteD (CFGTCPRTD)

Where allowed to run: Interactive environments (*INTERACT
*IPGM *IREXX *EXEC)
Threadsafe: No

The Configure TCP/IP RouteD (CFGTCPRTD) command is used to display a menu that allows a user to define or change the RouteD configuration.

There are no parameters for this command.

Restrictions:

You must have *IOSYSCFG special authority to use this command.

Parameters

None

Examples

CFGTCPRTD

This command shows the Configure TCP/IP RouteD menu.

Error messages

ESCAPE Messages

CPF6A50
> Error was found during display file or printer file operation.

Configure TCP/IP SNMP (CFGTCPSNMP)

Where allowed to run: Interactive environments (*INTERACT *IPGM *IREXX *EXEC)
Threadsafe: No

Parameters
Examples
Error messages

The Configure TCP/IP SNMP (CFGTCPSNMP) command is used to display a menu that allows a user to define or change the Simple Network Management Protocol (SNMP) configuration. The menu options include:

- Change SNMP attributes
- Work with communities for SNMP

It is not necessary to run the CFGTCPSNMP command before using the SNMP agent. The SNMP agent is shipped with a community that has the following characteristics:

Community Name
    public

ASCIICOM
    *YES

INTNETADR
    *ANY

OBJACC
    *READ

LOGSET
    *NO

LOGGET
    *NO

See the help for the Change SNMP Attributes (CHGSNMPA) command for the default values for SNMP attributes.

There are no parameters for this command.

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Parameters

None

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Examples

CFGTCPSNMP

This command displays the Configure TCP/IP SNMP menu.

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Error messages

TCP4001

Error occurred accessing SNMP configuration information.

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Change Current Directory (CHDIR)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Current Directory (CHDIR) command changes a specified directory to the current working directory. The current directory can be a directory, library, folder, or database file. The current directory is used to locate objects used by the commands.

This command is an alias for the Change Current Directory (CHGCURDIR) command and can also be issued using the following alternative command names:

- CD
- CHGCURDIR

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

1. This command works on only one object. If a pattern is specified on the **Directory (DIR)** parameter and more than one object matches the pattern, the user can select the object from a list in an interactive job. If this is a batch job, the command fails with error message CPFA08E, "More than one name matches pattern.".
2. The current directory and current library are separate and distinct entities. The current library and current directory can be set to the same library, but a change to either the current library or current directory does not affect the other.

   The current directory, set with this command, affects the integrated file system commands and APIs. The current library, set with the Change Current Library (CHGCURLIB) command, affects commands such as the Create Display File (CRTDSPF) command, that uses the value *CURLIB as a library qualifier.
3. The user must have read (*R) authority to the directory.
4. The user must have execute (*X) authority to each directory in the path.

Parameters

Keyword	Description	Choices	Notes
DIR	Directory	*Path name*	Required, Positional 1

Directory (DIR)

Specifies the path name of the directory that replaces the current working directory of the job.

For more information on specifying path names, refer to "Object naming rules" in "CL concepts and reference" in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

This is a required parameter.

Examples

The alternative command name for CHDIR is CHGCURDIR. The following examples use the alternative command name, but CHDIR can be replaced directly for CHGCURDIR in all of them.

Example 1: Changing a Current Directory

```
CHGCURDIR   DIR(/DIRECTORY2)
```

This command changes the current directory to the directory named DIRECTORY2.

Example 2: Changing a Current Directory to the Parent of the Current Directory

```
CHGCURDIR   DIR('..')
```

This command changes the current directory to the parent directory of the directory that contains the current directory before this command is run.

Error messages

*ESCAPE Messages

CPFA085
    Home directory not found for user &1.

CPFA08E
    More than one name matches pattern.

CPFA093
    Name matching pattern not found.

CPFA09C
    Not authorized to object. Object is &1.

CPFA09D
    Error occurred in program &1.

CPFA0A1
    An input or output error occurred.

CPFA0A3
    Path name resolution causes looping.

CPFA0A7
    Path name too long.

CPFA0A9
    Object not found. Object is &1.

CPFA0AB
    Operation failed for object. Object is &1.

Change Accounting Code (CHGACGCDE)

Where allowed to run: All environments (*ALL)
Threadsafe: Conditional

The Change Accounting Code (CHGACGCDE) command changes the accounting code of a job. The job can be on a job queue, or it can be active in a subsystem. This command has no effect if the job is on an output queue. If the command is entered when system value QACGLVL indicated that job accounting (*JOB) should be performed when the job entered the system, accounting information is journaled and a new accounting segment is started for the job. If the command is entered when the system value QACGLVL did not indicate job accounting should be performed, the accounting code is changed, but no journal entry is made. More information is in the Work Management information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

1. The command must be issued from within the job being changed, or the issuer of the command must be running under a user profile which is the same as the job user identity of the job being changed, or the issuer of the command must be running under a user profile which has job control (*JOBCTL) special authority.

   The job user identity is the name of the user profile by which a job is known to other jobs. More information about the job user identity is in the Work Management information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

2. This command is conditionally thread safe. Access will be denied if the job being changed has secondary threads active. This command may be issued from either the initial thread or a secondary thread of a multi-threaded job if the target job is single threaded.

Parameters

Keyword	Description	Choices	Notes
JOB	Job name	Single values: * Other values: *Qualified job name*	Optional, Positional 1
	Qualifier 1: Job name	*Name*	
	Qualifier 2: User	*Name*	
	Qualifier 3: Number	000000-999999	
ACGCDE	Accounting code	*Character value*, **<u>*SAME</u>, *BLANK	Optional, Positional 2
DUPJOBOPT	Duplicate job option	**<u>*SELECT</u>, *MSG	Optional

Job name (JOB)

Specifies the name of the job whose accounting code is changed.

Single values

*   The job whose accounting code is changed is the job where this command is issued.

Qualifier 1: Job name

name   Specify the name of the job whose accounting code is changed.

Qualifier 2: User

name   Specify the user name that identifies the user profile under which the job is started.

Qualifier 3: Number

000000-999999
        Specify the system-assigned job number.

Note: If no user name or job number is specified, all jobs currently in the system are searched for the job name. If more than one occurrence of the specified name is found, a qualified job name must be specified.

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Accounting code (ACGCDE)

Specifies the accounting code used for the job.

*SAME
        The accounting code is not changed; accounting information is recorded in a journal and a new accounting segment is started.

*BLANK
        The accounting code is changed to all blanks.

character-value
        Specify the 15-character accounting code used for the next accounting segment. The accounting code may contain alphabetic or numeric characters. Blanks may also be used if the accounting code is enclosed in apostrophes.

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Duplicate job option (DUPJOBOPT)

Specifies the action taken when duplicate jobs are found by this command.

*SELECT
        The selection display is shown when duplicate jobs are found during an interactive session. Otherwise, a message is issued.

*MSG   A message is issued when duplicate jobs are found.

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Examples

```
CHGACGCDE   JOB(123581/USER47/WS1)   ACGCDE(123456789)
```

This command changes the accounting code for job WS1, with user profile USER47, and job number 123581, to accounting code 123456789 for the next accounting segment. A job resource usage journal entry is written to the system accounting journal QSYS/QACGJRN.

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Error messages

CPF1314

Value &1 for parameter &2 not allowed.

CPF1317

No response from subsystem for job &3/&2/&1.

CPF1321

Job &1 user &2 job number &3 not found.

CPF1332

End of duplicate job names.

CPF1334

Must be an interactive job for requested change.

CPF1336

Errors on CHGJOB command for job &3/&2/&1.

CPF1337

&3/&2/&1 not authorized to change parameters.

CPF1340

Job control function not performed.

CPF1341

Reader or writer &3/&2/&1 not allowed as job name.

CPF1343

Job &3/&2/&1 not valid job type for function.

CPF1344

Not authorized to control job &3/&2/&1.

CPF1351

Function check occurred in subsystem for job &3/&2/&1.

CPF1352

Function not done. &3/&2/&1 in transition condition.

CPF180B

Function &1 not allowed.

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Change Active Profile List (CHGACTPRFL)

The Change Active Profile List (CHGACTPRFL) command adds or removes users from the list of profiles that will always be considered active by the Analyze Profile Activity (ANZPRFACT) command. These profiles will never be disabled even if they have been inactive for the specified number of days.

It is recommended that you add to this list any profiles that have been created to own application objects and are not used to sign on. You will also want to add any other IBM (″Q″) profiles to this list that you do not want disabled. It is not necessary to add any of the profiles in the following list since they will not be considered inactive.

The following user profiles will never be considered inactive:
- QAUTPROF
- QCLUMGT
- QCLUSTER
- QCOLSRV
- QDBSHR
- QDBSHRDO
- QDFTOWN
- QDIRSRV
- QDLFM
- QDOC
- QDSNX
- QEJB
- QEJBSVR
- QFNC
- QGATE
- QIPP
- QLPAUTO
- QLPINSTALL
- QMGTC
- QMSF
- QNETSPLF
- QNFSANON
- QNTP
- QPEX
- QPM400
- QSECOFR
- QSNADS
- QSPL
- QSPLJOB
- QSRV

- QSRVAGT
- QSRVBAS
- QSYS
- QTCM
- QTCP
- QTFTP
- QTMHHTTP
- QTMHHTP1
- QTSTRQS
- QYCMCIMOM
- QYPSJSVR

Profiles are automatically removed from the active profile list when they are deleted through the Delete User Profile (DLTUSRPRF) command.

This information can be displayed with the Display Active Profile List (DSPACTPRFL) command.

Restriction: You must have *ALLOBJ special authority to use this command.

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Parameters

Keyword	Description	Choices	Notes
USRPRF	User profile	Values (up to 10 repetitions): *Simple name*	Required, Positional 1
ACTION	Action	***ADD**, *REMOVE	Optional, Positional 2

Top

User profile (USRPRF)

This is a required parameter.

The name of the user profile to be added to or removed from the list of active users.

You can enter multiple values for this parameter.

Top

Action (ACTION)

Specifies if the user profile is to be added to or removed from the file containing the list of users who will always be considered active and therefore will not be disabled by the Analyze Profile Activity (ANZPRFACT) command function.

*ADD The profile is to be added to the list. It will never be considered inactive.

*REMOVE

> The profile will be removed from the list. It will now be considered inactive after the specified number of days.

Examples

```
CHGACTPRFL   USRPRF(JMBLOCK GARRY)  ACTION(*ADD)
```

This commands changes the list of user profiles considered to always be active. The user profiles JMBLOCK and GARRY will be added to the list of profiles that are always considered active by the Analyze Profile Activity (ANZPRFACT) command.

Error messages

*ESCAPE Messages

CPDB305
    User &1 not found in list.

CPFB304
    User does not have required special authorities.

Change Activation Scd Entry (CHGACTSCDE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Activation Schedule Entry (CHGACTSCDE) command allows you to make a user profile available for sign on only for a specific period of time on specific days.

If you specify a new schedule for a user profile (use the CHGACTSCDE again for that user), the system replaces that profile's existing schedule with the new information.

When a profile is enabled or disabled, a message will be sent to the message queue of the user who issued the CHGACTSCDE command.

The enable and disable times are set up to occur on the same day. For example, if you specify an enable time of 07:00, a disable time of 18:00, and *MON for the days, the profile is enabled on Monday at 7:00 and disabled on Monday at 18:00. If you wish to span days such that a profile should be enabled Monday at 23:00 and disabled Tuesday at 07:00, you need to specify *ALL for the days. (The profile will be enabled from 23:00 to 07:00 every day.)

To remove a user profile from the file so that it will no longer be enabled and disabled specify ENBTIME(*NONE) DSBTIME(*NONE).

The activation schedule can be displayed with the Display Activation Schedule (DSPACTSCD) command.

Restriction: You must have *ALLOBJ, *SECADM, and *JOBCTL special authorities to use this command.

Parameters

Keyword	Description	Choices	Notes
USRPRF	User profile	*Name*	Required, Positional 1
ENBTIME	Enable time	*Time*, *NONE	Required, Positional 2
DSBTIME	Disable time	*Time*, *NONE	Required, Positional 3
DAYS	Days	Single values: ***ALL** Other values (up to 7 repetitions): *MON, *TUE, *WED, *THU, *FRI, *SAT, *SUN	Optional

User profile (USRPRF)

This is a required parameter.

The name of the user profile to be activated for a period of time.

Enable time (ENBTIME)

This is a required parameter.

The time on the specified days at which the job to enable the user profile will be submitted.

A profile will not be enabled at its specified time if it has reached the maximum number of not valid sign-on attempts.

Note: Although the time can be specified to the second, the activity involved in submitting a job and the load on the system may affect the exact time at which the job is submitted.

*NONE
   The profile is not to be enabled.

enable-time
   The time of day that the user profile will be enabled.

Disable time (DSBTIME)

This is a required parameter.

The time on the specified days at which the job to disable the user profile will be submitted.

Note: Although the time can be specified to the second, the activity involved in submitting a job and the load on the system may affect the exact time at which the job is submitted.

*NONE
   The profile is not to be disabled.

disable-time
   The time of day that the user profile will be disabled.

Days (DAYS)

The days of the week on which the job to enable and/or disable the user profile will be submitted.

*ALL The job is submitted every day.

*MON
   The job is submitted on Monday.

*TUE The job is submitted on Tuesday.

*WED The job is submitted on Wednesday.

*THU The job is submitted on Thursday.

*FRI The job is submitted on Friday.

*SAT The job is submitted on Saturday.

*SUN The job is submitted on Sunday.

You can enter multiple values for this parameter.

Examples

```
CHGACTSCDE   USRPRF(GARRY)  ENBTIME('07:00:00')
             DSBTIME('18:00:00')
             DAYS(*MON,*TUE,*WED,*THU,*FRI)
```

This command changes the activation schedule for user profile GARRY. The user profile GARRY will be enabled at 7:00 AM on every Monday, Tuesday, Wednesday, Thursday and Friday, and disabled at 6:00 PM on every Monday, Tuesday, Wednesday, Thursday, and Friday. The user profile will remain disabled over the weekend.

Error messages

*ESCAPE Messages

CPDB305
    User &1 not found in list.

CPFB304
    User does not have required special authorities.

Change Autostart Job Entry (CHGAJE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Autostart Job Entry (CHGAJE) command is used to specify a different job description for a previously defined autostart job entry in the specified subsystem description.

Restrictions:

1. To use this command, you must have:
   - object operational (*OBJOPR), object management (*OBJMGT), and read (*READ) authority to the specified subsystem description and execute (*EXECUTE) authority to the library containing that subsystem description.
   - object operational (*OBJOPR) and read (*READ) authority to the job description and execute (*EXECUTE) authority to the library containing that job description.

Parameters

Keyword	Description	Choices	Notes
SBSD	Subsystem description	*Qualified object name*	Required, Positional 1
	Qualifier 1: Subsystem description	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
JOB	Job name	*Name*	Required, Positional 2
JOBD	Job description	Single values: ***SAME**, *SBSD Other values: *Qualified object name*	Optional
	Qualifier 1: Job description	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

Subsystem description (SBSD)

Specifies the name and library of the subsystem description containing the autostart job entry being changed.

This is a required parameter.

Qualifier 1: Subsystem description

name Specify the name of the subsystem description where the autostart job entry is being changed.
p.**Note:** The following IBM-supplied objects are not valid on this parameter:
- QSYSSBSD

Qualifier 2: Library

*LIBL All libraries in the thread's library list are searched until a match is found.

*CURLIB
> The current library for the thread is used to locate the object. If no library is specified as the current library for the thread, the QGPL library is used.

name Specify the library where the subsystem description is located.

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Job name (JOB)

Specifies the simple name of the job that is automatically started when a subsystem is started using the subsystem description specified on the **Subsystem description (SBSD)** parameter.

This is a required parameter.

name Specify the simple name of the job that is automatically started.

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Job description (JOBD)

Specifies the name of the job description used for the job that is started by this autostart job entry. If the job description does not exist when the entry is added or changed, a library qualifier must be specified because the qualified job description name is kept in the subsystem description.

Note: Only a user with all object (*ALLOBJ) special authority is allowed to add or change an entry for which the job description does not exist.

Single values

*SAME
> The job description specified in the existing autostart job entry is used.

*SBSD
> The job description having the same qualified name as the subsystem description, specified on the **Subsystem description (SBSD)** parameter, is used for the job that is being started.

Qualifier 1: Job description

name Specify the name of the job description used for the job started by this autostart job entry.

Qualifier 2: Library

*LIBL All libraries in the thread's library list are searched until a match is found.

*CURLIB
> The current library for the thread is used to locate the object. If no library is specified as the current library for the thread, the QGPL library is used.

name Specify the library where the job description is located.

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Examples

```
CHGAJE   SBSD(QGPL/PAYROLL)  JOB(INIT)  JOBD(MANAGER)
```

This command changes autostart job entry for the job INIT to use the job description MANAGER. The autostart job entry is in the PAYROLL subsystem description in the QGPL library. The library list is used to locate the job description MANAGER. When the correct library is determined, the qualified job description name is placed in the subsystem description for this autostart job entry.

Error messages

*ESCAPE Messages

CPF1619

Subsystem description &1 in library &2 damaged.

CPF1697

Subsystem description &1 not changed.

Change Alert Action Entry (CHGALRACNE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Alert Action Entry (CHGALRACNE) command allows the user to change an action entry in the specified alert filter. More information on alerts is in the Alerts Support book, SC41-5413.

Parameters

Keyword	Description	Choices	Notes
FILTER	Filter	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Filter	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
GROUP	Group	*Name*, *DEFAULT	Required, Key, Positional 2
LOG	Log alert	*YES, *NO, *NETATR, ***SAME**	Optional
ASNUSER	User assigned	*Character value*, *NONE, ***SAME**	Optional
SEND	Send to system	Single values: *NONE, ***SAME** Other values (up to 5 repetitions): *Element list*	Optional
	Element 1: Network identifier	*Communications name*, *NETATR, *FOCALPT	
	Element 2: Control point	*Communications name*	
SNDDTAQ	Send to data queue	Single values: *NONE, ***SAME** Other values (up to 5 repetitions): *Element list*	Optional
	Element 1: Data queue	*Qualified object name*	
	Qualifier 1: Data queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
	Element 2: Data queue key	*Character value*, ***NONE**, X''	
GENTRAP	Generate SNMP trap	***SAME**, *NO, *YES	Optional

Filter (FILTER)

Specifies the filter which contains the action entry being changed.

This is a required parameter.

Qualifier 1: Filter

name   Specify the name of the filter.

Qualifier 2: Library

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the filter. If no library is specified as the current library for the job, the QGPL library is used.

name   Specify the name of the library where the filter is located.

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Group (GROUP)

Specifies the group of actions being changed.

*DEFAULT
> The default action entry that was automatically added when the filter was created is changed.

name   Specify the name of the group to which the defined actions are to be applied.

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Log alert (LOG)

Specifies whether to log the alert.

*SAME
> The LOG action is not changed.

*NETATR
> The ALRLOGSTS network attribute controls the logging of this alert.

*YES   The alert is logged.

*NO   The alert is not logged.

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User assigned (ASNUSER)

Specifies the user assigned to the alert.

*SAME
> The ASNUSER action is not changed.

*NONE
> No user is assigned to the alert.

character-value
> Specify a user name.

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Send to system (SEND)

Specifies the destination to which the alert is sent.

Single values

*SAME
> The destination does not change.

*NONE
> The alert is not sent.

Other values (up to 5 repetitions)

Element 1: Network identifier

*NETATR
> The network attribute for the local network ID is used.

*FOCALPT
> The alert is sent to the system focal point. The focal point system is determined at send time.

communications-name
> Specify the network ID of the destination system.

Element 2: Control point

communications-name
> Specify the control point name of the destination system.

Send to data queue (SNDDTAQ)

Specifies the data queue in which the alert notification record is placed. Keyed data queues are supported.

Single values

*SAME
> The data queue does not change.

*NONE
> No data queue is used.

Other values (up to 5 repetitions)

Element 1: Data queue

Qualifier 1: Data queue

name　Specify the name of the data queue.

Qualifier 2: Library

*LIBL　All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the data queue. If no library is specified as the current library for the job, the QGPL library is used.

name　Specify the name of the library where the data queue is located.

Element 2: Data queue key

*NONE

>No key is used on the data queue.

character-value

>Specify the data queue key.

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Generate SNMP trap (GENTRAP)

Specifies whether the alert generates an SNMP trap.

*SAME

>The GENTRAP action is not changed.

*NO   An SNMP trap is not generated from this alert.

*YES   An SNMP trap is generated from this alert.

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Examples

```
CHGALRACNE   FILTER(MYLIB/MYFILTER)  GROUP(CHICAGO)
             LOG(*SAME)  ASNUSER(CHICAGOOPR)
             SEND((*FOCALPT) (*NETATR.MILWKEE))  SNDDTAQ(*SAME)
```

This command changes actions for group CHICAGO to the following:

1. Use the same LOG action.
2. Send the alert to this system's focal point.
3. Send the alert to the system with control point name MILWKEE and a network id based on the LCLNETID value specified in the system network attributes.
4. Use the same SNDDTAQ action.
5. Assign the alert to user CHICAGOOPR.

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Error messages

*ESCAPE Messages

CPF812F

>Filter damaged.

CPF91DD

>Action entry for group &4 not found.

CPF91DE

>Filter &1/&2 at maximum size.

CPF91EB

>Filter type &3 not correct for this operation.

CPF91EC

>Internal processing error occurred.

CPF91E8

>Internal processing error occurred.

<div></div>

CPF9802

> Not authorized to object &2 in &3.

CPF9803

> Cannot allocate object &2 in library &3.

CPF9807

> One or more libraries in library list deleted.

CPF9808

> Cannot allocate one or more libraries on library list.

CPF9830

> Cannot assign library &1.

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Change Alert Description (CHGALRD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Alert Description (CHGALRD) command allows the user to change an alert description added previously by the add alert description command. More information on alerts is in the Alerts Support book, SC41-5413.

Parameters

Keyword	Description	Choices	Notes
MSGID	Message identifier	*Name*	Required, Key, Positional 1
ALRTBL	Alert table	*Qualified object name*	Required, Key, Positional 2
	Qualifier 1: Alert table	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
ALRTYPE	Alert type	X'00'-0, ***SAME**, *NONE	Optional
ALRD	Alert description code point	X'0000'-X'FFF0', ***SAME**, *NONE	Optional
PBLCAUSE	Probable cause code point	Single values: ***SAME**, *NONE Other values (up to 99 repetitions): X'0000'-X'FFF0'	Optional
CAUSE	Cause	Single values: ***SAME**, *NONE Other values (up to 99 repetitions): *Element list*	Optional
	Element 1: Cause type	*USER, *INSTALL, *FAILURE	
	Element 2: Cause code point	*Hexadecimal value*	
	Element 3: Detail data ID 1	*Hexadecimal value*, ***NONE**	
	Element 4: Detail data 1	*Character value*, ***NODATA**	
	Element 5: Detail data ID 2	*Hexadecimal value*, ***NONE**	
	Element 6: Detail data 2	*Character value*, ***NODATA**	
	Element 7: Detail data ID 3	*Hexadecimal value*, ***NONE**	
	Element 8: Detail data 3	*Character value*, ***NODATA**	
	Element 9: Product identifier	***NONE**, *SNDHDW, *SNDSFW, *RSCHDW	
ACTION	Recommended action	Single values: ***SAME**, *NONE Other values (up to 99 repetitions): *Element list*	Optional
	Element 1: Action type	*USER, *INSTALL, *FAILURE, *UNKNOWN	
	Element 2: Action code point	*Hexadecimal value*	
	Element 3: Detail data ID 1	*Hexadecimal value*, ***NONE**	
	Element 4: Detail data 1	*Character value*, ***NODATA**	
	Element 5: Detail data ID 2	*Hexadecimal value*, ***NONE**	
	Element 6: Detail data 2	*Character value*, ***NODATA**	
	Element 7: Detail data ID 3	*Hexadecimal value*, ***NONE**	
	Element 8: Detail data 3	*Character value*, ***NODATA**	
	Element 9: Product identifier	***NONE**, *SNDHDW, *SNDSFW, *RSCHDW	

Message identifier (MSGID)

Specifies the message ID to which this alert description corresponds.

This is a required parameter.

name   Specify the message identifier.

Alert table (ALRTBL)

Specifies the alert table in which this alert description exists.

This is a required parameter.

Qualifier 1: Alert table

name   Specify the name of the alert table to be used.

Qualifier 2: Library

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
   The current library is searched for the alert table. If no library is specified as the current library
   for the job, the QGPL library is used.

name   Specify the name of the library that is searched for the alert table.

Alert type (ALRTYPE)

Specifies the code point for the alert type.

*SAME
   The alert type code point does not change.

*NONE
   There is no alert type code point for this alert description.

X'00'-X'F0'
   Specify the alert type code point.

Alert description code point (ALRD)

Specifies the code point for the alert description.

*SAME
   The alert description code point does not change.

*NONE
   There is no alert description code point for this alert description.

X'0000'-X'FFF0'
> Specify the alert description code point that is used.

Probable cause code point (PBLCAUSE)

Specifies a maximum of 99 code points for probable causes, which are listed in order of decreasing probability.

Single values

*SAME
> The probable cause code point does not change.

*NONE
> There are no probable cause code points for this alert description.

Other values (up to 99 repetitions)

X'0000'-X'FFF0'
> Specify the probable cause code point.

Cause (CAUSE)

Specifies whether this is a user, install, or failure cause. A maximum of 99 causes can be specified.

Up to three detailed data qualifiers or one product identifier qualifier can be specified for a code point, depending on the code point. For a detailed data qualifier, specify the detailed data ID and the detailed data.

Single values

*SAME
> The cause code point does not change.

*NONE
> There are no cause code points for this alert description.

Other values (up to 99 repetitions)

Element 1: Cause type

*USER
> A user cause code point follows.

*INSTALL
> An install cause code point follows.

*FAILURE
> A failure cause code point follows.

Element 2: Cause code point

hexadecimal-value
> Specify the cause code point.

Element 3: Detail data ID 1

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 4: Detail data 1

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 5: Detail data ID 2

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 6: Detail data 2

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 7: Detail data ID 3

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 8: Detail data 3

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 9: Product identifier

*NONE

There is no product identifier for this code point.

*SNDHDW

Indicates the sender hardware (always iSeries).

*SNDSFW

Indicates the sender software code responsible for the alert. This is from the LICPGM value from the Create Alert Table (CRTALRTBL) command.

*RSCHDW

Indicates the failing resource hardware, which is determined by the resource hierarchy in the message description.

Recommended action (ACTION)

Specifies a recommended action for a user, install, or failure cause. A maximum of 99 actions can be listed.

Single values

*SAME

The recommended action code point does not change.

*NONE

There are no recommended action code points for this alert description.

Other values (up to 99 repetitions)

Element 1: Action type

*USER

A user cause code point follows.

*INSTALL

An install cause recommended action code point follows.

*FAILURE

A failure cause recommended action code point follows.

*UNKNOWN

A code point for a recommended action for a 'cause undetermined' error follows.

Element 2: Action code point

hexadecimal-value

Specify the recommended action code point.

Up to three detailed data qualifiers or one product identifier qualifier can be specified for a code point, depending on the code point. For a detailed data qualifier, specify the detailed data ID and the detailed data.

Element 3: Detail data ID 1

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 4: Detail data 1

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 5: Detail data ID 2

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 6: Detail data 2

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 7: Detail data ID 3

*NONE

There is no detailed-data-ID code point for this code point.

hexadecimal-value

Specify the detailed data identifier code point used to identify the data. Detailed data identifiers can be specified up to three times in each session.

Element 8: Detail data 3

*NODATA

There is no detailed data for this code point.

character-value

Specify up to 40 characters of detailed data. A substitution variable from the corresponding message description can be specified, in which case the message data is substituted into the alert description when the alert is created.

Element 9: Product identifier

*NONE

There is no product identifier for this code point.

*SNDHDW

Indicates the sender hardware (always iSeries).

*SNDSFW

Indicates the sender software code responsible for the alert. This is from the LICPGM value from the Create Alert Table (CRTALRTBL) command.

*RSCHDW

Indicates the failing resource hardware, which is determined by the resource hierarchy in the message description.

Examples

```
CHGALRD   MSGID(USR1234)  ALRTBL(USER/USRMSGS)
          ALRTYPE(*SAME)  ALRD(*SAME)  PBLCAUSE(1000 3121 6302)
          CAUSE(*SAME)  ACTION(*SAME)
```

This command adds probable cause 6302 to the alert description illustrated in the Add Alert Description (ADDALRD) command example.

Error messages

*ESCAPE Messages

CPF1A01
> Alert table &1 in &2 cannot be extended.

CPF1A02
> Alert code &1 already in alert table &2.

CPF1A03
> Alert identifier &1 already in alert table &2.

CPF1A05
> Alert table &1 in &2 damaged.

CPF2499
> Message identifier &1 not allowed.

CPF7BB1
> Alert description not found.

CPF7BB5
> Alert description &1 could not be added to alert table &2 in library &3.

CPF9801
> Object &2 in library &3 not found.

CPF9802
> Not authorized to object &2 in &3.

CPF9803
> Cannot allocate object &2 in library &3.

CPF9807
> One or more libraries in library list deleted.

CPF9808
> Cannot allocate one or more libraries on library list.

CPF9810
> Library &1 not found.

CPF9811
> Program &1 in library &2 not found.

CPF9812
> File &1 in library &2 not found.

CPF9814

      Device &1 not found.

CPF9820

      Not authorized to use library &1.

CPF9821

      Not authorized to program &1 in library &2.

CPF9822

      Not authorized to file &1 in library &2.

CPF9825

      Not authorized to device &1.

CPF9830

      Cannot assign library &1.

CPF9831

      Cannot assign device &1.

CPF9899

      Error occurred during processing of command.

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Change Alert Selection Entry (CHGALRSLTE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Alert Selection Entry (CHGALRSLTE) command allows the user to change an alert selection entry that was added previously using the Add Alert Selection Entry (ADDALRSLTE) command. More information on alerts is in the Alerts Support book, SC41-5413.

Parameters

Keyword	Description	Choices	Notes
FILTER	Filter	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Filter	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
SEQNBR	Sequence number	1-9999, *LAST	Required, Key, Positional 2
SELECT	Selection data	Single values: ***SAME**, *ANY Other values (up to 10 repetitions): *Element list*	Optional
	Element 1: Relationship	*IF, *AND, *OR	
	Element 2: Attribute	*ORIGIN, *RSCNAME, *RSCTYPE, *HIERNAME, *HIERTYPE, *MSGID, *MSGSEV, *ALRID, *ALRTYPE, *ALRDSC, *PBLCSE, *USRCSE, *INSCSE, *FLRCSE, *RSCHDW, *SNDHDW, *RSCSFW, *SNDSFW	
	Element 3: Relational operator	*EQ, *GT, *LT, *NE, *GE, *LE, *CT	
	Element 4: Value	*Character value*	
GROUP	Group	*Name*, ***SAME**, *DEFAULT	Optional

Filter (FILTER)

Specifies the qualified name of the filter in which the selection entry being changed.

This is a required parameter.

Qualifier 1: Filter

name   Specify the name of the filter.

Qualifier 2: Library

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB

> The current library for the job is used to locate the filter. If no library is specified as the current library for the job, the QGPL library is used.

name   Specify the name of the library where the filter is located.

Sequence number (SEQNBR)

Specifies the sequence number of the alert selection entry. Selection entries are evaluated in order by sequence number.

*LAST

Allows the user to change the last selection. This entry is added automatically when the filter is created and will match any alert.

1-9999 Specify the sequence number to be used.

Selection data (SELECT)

Specifies the comparisons to be made to determine if the alert belongs in the specified group. The selection entry results in a successful match with an alert when the data in the alert satisfies the relationships specified on the SELECT parameter. Up to 10 attribute values can be compared to the alert.

Single values

*SAME

The value does not change.

*ANY   Any alert matches this selection record.

Other values (up to 10 repetitions)

Specify the conditions under which an alert matches the selection entry. Each condition must contain the following four elements:

1. One of the logical operators *IF, *AND, or *OR
2. The attribute compared
3. One of the relational operators
4. The attribute value

Element 1: Relationship

*IF   Identifies the first condition that must be satisfied.

*AND The conditions on both sides of the *AND must be satisfied.

*OR   One of the conditions on each side of the *OR must be satisfied.

If there is one set or several sets of conditions, the *IF value must be specified as the first value in the first set of comparison values. If more than one set of conditions are specified, *AND or *OR must be specified as the first value in each set after the first. Each condition must be enclosed in parentheses. *AND is evaluated before *OR.

Element 2: Attribute

*ORIGIN

Specifies whether the alert is generated or received. The valid values for this attribute are L (Locally generated) or R (Received).

*RSCNAME

> Specifies the name of the failing resource. The value for this attribute must be a 8-character name.

*RSCTYPE

> Specifies the type of the failing resource. The value for this attribute must be a 3-character resource type (for example, TAP or DKT).

*HIERNAME

> Specifies all of the resources in the alert resource hierarchy. The alert resource hierarchy is the list of resources, separated by blanks, displayed on the Work with Alerts (WRKALR) command detailed data displays. The value for this attribute can be a list of up to 5 resource names separated by a blank, unless the value is used with the *CT relational operator. If the *CT value is used, the selection relationship can test to see if the given resource name is found anywhere within the hierarchy. This attribute contains the resource names from the hierarchy only.

*HIERTYPE

> Specifies all of the resource types in the alert resource hierarchy. The resource types match the resource names specified on the *HIERNAME attribute. The value for this attribute can be a list of up to 5 resource types 1 to 3 characters in length separated by a blank, unless the value is used with the *CT relational operator. If the *CT value is used, the selection relationship can test to see if the given resource type is found anywhere within the hierarchy.

*MSGID

> Specifies the message identifier.

*MSGSEV

> Specifies the message severity. This value, 00 through 99, represents the severity level of the message (99 is the highest severity level).

*ALRID

> Specifies the alert identifier. The alert identifier is displayed on the Work with Alerts (WRKALR) command detailed data display. The value for this attribute must be an 8-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 8. The alert ID may not be a valid comparison for iSeries alerts created after problem analysis.

*ALRTYPE

> Specifies the alert type code point that is in the alert. The value for this attribute is a 2 digit hexadecimal number.

*ALRDSC

> Specifies the alert description code point that is in the alert. The value for this attribute must be an 4-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 4.

*PBLCSE

> Specifies the probable cause code point that is in the alert. The value for this attribute must be an 4-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 4.

*USRCSE

> Specifies the first user cause code point that is in the alert. The value for this attribute must be an 4-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 4.

*INSCSE

> Specifies the first install cause code point that is in the alert. The value for this attribute must be

an 4-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 4.

*FLRCSE

Specifies the first failure cause code point that is in the alert. The value for this attribute must be an 4-digit hexadecimal number unless it is used with the *CT relational operator. If the *CT operator or a wildcard character is used, the attribute must have an even number of digits up to a maximum of 4.

*RSCHDW

Specifies the failing hardware resource information in the alert. This information is displayed on the Work with Alerts (WRKALR) command detailed data displays. Specify a value for this attribute using the following form:

```
'tttt mmm ss-sssssss'
'tttt mmm ss-sssss'
'tttt mmm sssssss'
'tttt mmm sssss'
```

where *tttt* is the machine type, *mmm* is the model number, and *sssssssss* is the serial number. Use this format to match a particular hardware resource or use a part of the hardware value with the *CT relational operator to provide a partial match.

*SNDHDW

Specifies the sending hardware resource information in the alert. This information is displayed on the Work with Alerts (WRKALR) command detailed data displays. Specify a value for this attribute using the following form:

```
'tttt mmm ss-sssssss'
'tttt mmm ss-sssss'
'tttt mmm sssssss'
'tttt mmm sssss'
```

where *tttt* is the machine type, *mmm* is the model number, and *sssssssss* is the serial number. Use this format to match a particular hardware resource or use a part of the hardware value with the *CT relational operator to provide a partial match.

*RSCSFW

Specifies the failing software resource information in the alert. This information is displayed on the Work with Alerts (WRKALR) command detailed data displays. Specify a value for this attribute using the following form:

```
'ppppppp vv rr mm'
```

where *ppppppp* is the licensed program identifier, *vv* is the version number, *rr* is the release number, and *mm* is the modification level. Use this format to match a particular software resource or use a part of the software value with the *CT relational operator to provide a partial match.

*SNDSFW

Specifies the sending software resource information in the alert. This information is displayed on the Work with Alerts (WRKALR) command detailed data displays. Specify a value for this attribute using the following form:

```
'ppppppp vv rr mm'
```

where *ppppppp* is the licensed program identifier, *vv* is the version number, *rr* is the release number, and *mm* is the modification level. Use this format to match a particular software resource or use a part of the software value with the *CT relational operator to provide a partial match.

Element 3: Relational operator

*EQ   The attribute in **Attribute** must be equal to the value specified in **Attribute Value**.

*GT   The attribute in **Attribute** must be greater than the value specified in **Attribute Value**.

*LT   The attribute in **Attribute** must be less than the value specified in **Attribute Value**.

*NE   The attribute in **Attribute** must not be equal to the value specified in **Attribute Value**.

*GE   The attribute in **Attribute** must be greater than or equal to the value specified in **Attribute Value**.

*LE   The attribute in **Attribute** must be less than or equal to the value specified in **Attribute Value**.

*CT   The attribute in **Attribute** must contain the value specified in **Attribute Value**.

Element 4: Value

attribute-value
> Specify the value (a maximum of 60 characters) to be compared with the contents of the specified attribute. The value must be specified in apostrophes if it contains blanks or special characters and must be in character format. If a CL variable is specified for the value, it must be a character variable.

generic*-attribute-value
> Specify the generic attribute value. A generic value is a character string of one or more characters followed by an asterisk (*); for example, ABC*. If a generic name is specified, all values that begin with the generic value are matches. If an asterisk is not included with the generic (prefix) value, the system assumes it to be the complete value. Generic attribute values are only allowed with the *EQ and *NE operator.

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Group (GROUP)

Specifies the group that an alert is assigned to if the alert matches the criteria specified on the SELECT parameter.

*SAME
> The value does not change.

*DEFAULT
> The alert is assigned to the *DEFAULT group. The *DEFAULT group is added automatically when a filter is created.

name   Specify a group name to which the alert is assigned.

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Examples

```
CHGALRSLTE   FILTER(MYLIB/MYFILTER)  SEQNBR(10)
             SELECT(*SAME)  GROUP(NEWSTUFF)
```

This command changes the GROUP to NEWSTUFF for selection entry 10 in the filter MYFILTER in library MYLIB.

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Error messages

*ESCAPE Messages

CPD91CB
> *CT not allowed with numeric values.

CPF2150
> Object information function failed.

CPF2151

Operation failed for &2 in &1 type *&3.

CPF812F

Filter damaged.

CPF91DC

Selection entry with sequence number &4 not found.

CPF91DE

Filter &1/&2 at maximum size.

CPF91DF

The SELECT keyword cannot be changed for *LAST entry.

CPF91EA

*IF relationship not in correct position.

CPF91EB

Filter type &3 not correct for this operation.

CPF91EC

Internal processing error occurred.

CPF91E6

Generic values only allowed with *EQ or *NE.

CPF91E7

Character in position &4 not valid in value specified.

CPF91E8

Internal processing error occurred.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

CPF9807

One or more libraries in library list deleted.

CPF9808

Cannot allocate one or more libraries on library list.

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Change Alert Table (CHGALRTBL)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Alert Table (CHGALRTBL) command is used to change one of the values defined by the Create Alert Table (CRTALRTBL) command. Alert tables define alerts, which are problem notifications in a network. The CHGALRTBL command can be used to change the product identification, product text, or object text for an alert table. The typical user of the CHGALRTBL command is the system or network programmer or operator responsible for network management. More information on alerts is in the Alerts Support book, SC41-5413.

Note: The user must have CHANGE authority for the alert table.

Parameters

Keyword	Description	Choices	Notes
ALRTBL	Alert table	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Alert table	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
LICPGM	Product	*Character value*, ***SAME**, *NONE	Optional
LICPGMTXT	Licensed program text	*Character value*, ***SAME**, *BLANK	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Alert table (ALRTBL)

Specifies the qualified name of the alert table that is changed. Each alert table contains alert descriptions that are used to create alerts.

This is a required parameter.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
The current library for the job is used to locate the alert table. If no current library entry exists in the library list, QGPL is used.

library-name
Specify the library where the alert table is located. Only the library named is searched. The user must have READ authority for the specified library.

Product (LICPGM)

Specifies the licensed program associated with this alert table. This program is included in the alert as software product identification for the alert sender.

*SAME
The LICPGM value does not change.

*NONE
A licensed program is not specified.

licensed-program
Specify a seven character product identifier for the licensed program. The Alert Manager uses this identifier to access the software resource management database for release and level information.

Note: This parameter does not have to be an IBM Licensed Program. Any 7-character ID that is meaningful to the use of the Work with Alerts command can be specified. If the value given for the LICPGM parameter is defined to the system, the ID and release and level information are included in the alert.

Licensed program text (LICPGMTXT)

Specifies descriptive text for the alert table licensed program parameter (for example, 'OS/400'). The text is included in the alert as product identification for the alert sender.

*SAME
The text does not change.

*NONE
No text is specified.

'licensed-program-text'
Specify up to 30 characters of text describing the licensed program.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
The text does not change.

*BLANK
No text is specified.

'description'
Specify no more than 50 characters enclosed in apostrophes.

Examples

```
CHGALRTBL   ALRTBL(ALRTBLLIB/ALRTBLNBR1)
            LICPGMTXT('OS/400--customer defined')
```

This command changes the licensed program for the alert table in library ALRTBLLIB called ALRTBLNBR1.

Error messages

*ESCAPE Messages

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

CPF9810

Library &1 not found.

CPF9820

Not authorized to use library &1.

Change ASP Attribute (CHGASPA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Auxiliary Storage Pool Attributes (CHGASPA) command allows the user to change attributes that control the behavior of an auxiliary storage pool (ASP).

Restrictions:

- You must have all object (*ALLOBJ) special authority to run this command.

Parameters

Keyword	Description	Choices	Notes
ASP	ASP number	Single values: *ALLUSR Other values (up to 31 repetitions): 2-32	Optional, Positional 1
ASPDEV	ASP device	Single values: *ALLAVL Other values (up to 32 repetitions): *Name*	Optional
CPRRCYPCY	Compression recovery policy	***SAME**, *OVERFLOW, *RETRY, *WAIT	Optional

ASP number (ASP)

Specifies the auxiliary storage pool (ASP) for which the ASP attributes are to be changed.

Note: A value must be specified for either the **ASP number (ASP)** parameter or the **ASP device (ASPDEV)** parameter.

Single values

*ALLUSR
> The specified attributes will be changed for all basic ASPs (ASP numbers 2-32) defined. The system ASP (ASP number 1) will not be changed.

Other values (up to 31 repetitions)

2-32   Specify the number of the basic ASP for which the specified attribute is to be changed.

ASP device (ASPDEV)

Specifies the name of the auxiliary storage pool (ASP) device for which the attributes are to be changed.

Note: A value must be specified for either the **ASP number (ASP)** parameter or the **ASP device (ASPDEV)** parameter.

Single values

*ALLAVL

The specified attributes will be changed for all ASP devices that currently have a state of 'Available'.

Other values (up to 32 repetitions)

name   Specify the name of the independent ASP device for which the specific attribute is to be changed.

Compression recovery policy (CPRRCYPCY)

Specifies what the compression recovery policy for the auxiliary storage pool (ASP) will be. This policy is how the system will handle ASP overflow situations when the ASP contains compressed units. See the Backup and Recovery book, SC41-5304 for more information about the compression recovery policy.

*SAME

The compression recovery policy does not change.

*OVERFLOW

When the system detects a condition where the ASP capacity is about to be exceeded, data will immediately overflow into the system ASP. The system default compression recovery policy is *OVERFLOW.

Note: This parameter value cannot be specified for ASP devices.

*RETRY

When the system detects a condition where the ASP capacity is about to be exceeded, the system posts system reference code (SRC) **A6xx 0277** in the system control panel and waits for space to become available in the ASP. Once space becomes available, the SRC is removed from the system control panel and normal operation will resume for that ASP.

If space cannot be made available in the ASP and the ASP is a basic user ASP (ASP numbers 2-32), the SRC is removed from the system control panel, the data overflows into the system ASP (ASP number 1), and normal operation resumes. For an ASP device, the operation fails if space cannot be made available.

*WAIT

When the system detects a condition where the ASP capacity is about to be exceeded, the system posts an SRC **A6xx 0277** in the system control panel and will wait indefinitely for space to become available. Normal operations against this ASP will not resume until the user takes action. Some possible actions that the user could take will include changing the compression recovery policy to allow the ASP to overflow or deleting objects in the ASP.

Examples

Example 1: Change All User ASPs

```
CHGASPA    ASP(*ALLUSR)  CPRRCYPCY(*WAIT)
```

This command changes the compression recovery policy for all user auxiliary storage pools to *WAIT.

Example 2: Change Specific ASPs

```
CHGASPA   ASP(2 5)  CPRRCYPCY(*RETRY)
```

This command changes the compression recovery policy for auxiliary storage pools 2 and 5 to *RETRY.

Example 3: Change Specific ASP Devices
```
CHGASPA   ASPDEV(MYASP1)  CPRRCYPCY(*RETRY)
```

This command changes the compression recovery policy for auxiliary storage pool ASP device MYASP1.

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Error messages

<u>*ESCAPE Messages</u>

CPF9829
>   Auxiliary storage pool &1 not found.

CPF1890
>   *ALLOBJ authority required for requested operation.

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Change Attribute (CHGATR)

The Change Attribute (CHGATR) command allows a single attribute to be changed for a single object or a group of objects. An object name pattern can be used to change a single attribute for a group of related objects.

The CHGATR command can also be used to change an attribute of a directory tree where the directory, its contents, and the contents of all of its subdirectories have the attribute changed. A subtree change attribute will attempt to change the attribute for as many objects as possible. A diagnostic message will be sent for each object that could not have its attribute changed and when all of the objects have been attempted, an escape message will be sent. If all of the objects had the attribute changed with no errors, then a completion message will be sent.

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

1. The user must have execute (*X) authority to the directories in the path name prefixes.
2. When doing subtree processing, the user must have read (*R) and *X authorities to the path name and all subdirectories within that path.
3. For all file systems, except QSYS.LIB, independent ASP QSYS.LIB, and QDLS, the user must have object management (*OBJMGT) authority to the object when changing the *ALWCKPWRT, *ALWSAV, *USECOUNT, *DISKSTGOPT or *MAINSTGOPT attributes.
4. For all file systems, except QSYS.LIB, independent ASP QSYS.LIB, and QDLS, the user must have write (*W) authority to the object when changing any attribute, except the *ALWCKPWRT, *ALWSAV, *USECOUNT *DISKSTGOPT or *MAINSTGOPT attributes.
5. The user must either own the object or have all object (*ALLOBJ) special authority in order to set the *RSTDRNMUNL, *SETUID, and *SETGID attributes for that object.
6. Changing attribute *ALWCKPWRT for a directory object fails and returns error messages CPFA0AD and CPFB414.
7. QSYS.LIB and independent ASP QSYS.LIB file systems require the user to have object operational (*OBJOPR) and object management (*OBJMGT) authorities to change the *USECOUNT attribute if the object type is *FILE, to have *X and *OBJMGT authorities to change *USECOUNT if the object is a database file member, and to have *OBJMGT authority to change *USECOUNT if the object is neither a *FILE or database file member.
8. QDLS file system requires the user to have *W and *OBJMGT authorities to change the *USECOUNT attribute.
9. This command is conditionally threadsafe. The following restriction applies:

   This command is not threadsafe if the object on which this function is operating resides in a file system that is not threadsafe. Only the following file systems are threadsafe for this function:
   - "Root" (/)
   - QOpenSys
   - User-defined
   - QNTC
   - QSYS.LIB

- Independent ASP QSYS.LIB
- QOPT
- Network File System
- QFileSvr.400

"Root" (/), QOpenSys, and User-Defined File System Differences
- The *USECOUNT attribute is supported for objects of type *STMF only. Attempts to set them on other objects will result in the operation failing.
- The *YES value cannot be specified for the *ALWSAV attribute for /dev/null, /dev/zero or objects of type *SOCKET. Attempts to set it on these objects will result in the operation failing.
- The *SETGID attribute of the directory affects what the group ID (GID) is for objects that are created in the directory. If the *SETGID attribute of the parent directory is off, the GID is set to the effective GID of the thread creating the object. If the *SETGID attribute of the parent directory is on, the GID of the new object is set to the GID of the parent directory. For all other file systems, the GID of the new object is set to the GID of the parent directory.
- When setting the *RSTDRNMUNL, *SETUID, or *SETGID attributes on an object that has a primary group, it must match the primary group ID or one of the supplemental group IDs of the caller of this command; otherwise, the *SETGID attribute is set to *NO.

QSYS.LIB and Independent ASP QSYS.LIB File System Differences
- The *USECOUNT attribute may be set on objects in this file system.

  When the *USECOUNT attribute of a database file is set, all members in that file will have their days used count reset to 0 also.
- QSYS.LIB and Independent ASP QSYS.LIB do not support setting the *SETUID or *SETGID attributes. They will be ignored if specified.
- Attempting to set any other attribute will result in the operation failing.

Network File System Differences
- When the following attributes are specified for objects in the Network File System, the operation will fail if the attribute is not set to the following attribute value.
  - If set, *READONLY must be set to an attribute value of *NO.
  - If set, *HIDDEN must be set to an attribute value of *NO.
  - If set, *PCSYSTEM must be set to an attribute value of *NO.
  - If set, *PCARCHIVE must be set to an attribute value of *NO; however, if the object is of type *STMF, the attribute value must be *YES.
  - If set, *SYSARCHIVE must be set to an attribute value of *NO.
  - If set, *ALWSAV must be set to an attribute value of *NO.

  The *USECOUNT, *CCSID attributes cannot be set on objects within the Network File System or they will result in the operation failing.
- The NFS client supports the *SETUID, *SETGID, and *RSTDRNMUNL attributes by passing them to the server over the network and surfacing them to the caller. Whether a particular network file system supports the setting of these attributes depends on the server. Most servers have the capability of masking off the *SETUID and *SETGID attributes if the NOSUID option is specified on the export. The default, however, is to support these attributes.

QNetWare File System Differences
- The QNetWare File System does not support setting *SYSARCHIVE or *USECOUNT. If any attribute is specified for a NetWare Directory Services (NDS) object, the operation will fail.
- QNetWare supports the *SETUID and *SETGID attributes by passing them to the server and surfacing them to the caller. Some versions of NetWare may support the attributes and others may not.

- QNetWare does not support setting the *RSTDRNMUNL attribute. The operation will fail if this attribute is specified.

QOPT File System Differences
- If *YES is specified for the *ALWSAV attribute, the operation will fail.
- QOPT does not support setting the *SETUID, *SETGID, and *RSTDRNMUNL attributes for any optical media format. If any of these attributes are specified, the operation will fail.

QDLS File System Differences:
- The following attributes may be set on objects in this file system:
  - *CCSID
  - *HIDDEN
  - *PCARCHIVE
  - *READONLY
  - *SYSARCHIVE
  - *USECOUNT (for documents only)

  Attempting to set any other attribute other than the *SETUID or *SETGID attributes will result in the operation failing.
- QDLS does not support setting the *SETUID or *SETGID attributes. They will be ignored if specified.

QFileSvr.400 Differences
- QFileSvr.400 supports the *SETUID, *SETGID, and *RSTDRNMUNL attributes by passing them to the server and surfacing them to the caller.
- QFileSvr.400 does not support setting the *ALWSAV attribute. The operation will fail if this attribute is specified.

QNTC Differences
- QNTC does not support setting the *SETUID or *SETGID attributes. They will be ignored if specified.
- QNTC does not support setting the *RSTDRNMUNL attribute. The operation will fail if this attribute is specified.

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Parameters

Keyword	Description	Choices	Notes
OBJ	Object	*Path name*	Required, Positional 1
ATR	Attribute	*READONLY, *HIDDEN, *PCSYSTEM, *PCARCHIVE, *SYSARCHIVE, *CCSID, *ALWCKPWRT, *USECOUNT, *DISKSTGOPT, *MAINSTGOPT, *CRTOBJSCAN, *SCAN, *ALWSAV, *RSTDRNMUNL, *SETUID, *SETGID	Required, Positional 2
VALUE	New value	1-65533, *YES, *NO, *RESET, *NORMAL, *MINIMIZE, *DYNAMIC, *CHGONLY	Required, Positional 3
SUBTREE	Directory subtree	***NONE**, *ALL	Optional
SYMLNK	Symbolic link	***NO**, *YES	Optional

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Object (OBJ)

Specifies the path name of the object or a pattern to match the name of the objects to have the attribute changed. The object path name can be either a simple name or a name that is qualified with the name of the directory in which the object is located. A pattern can be specified in the last part of the path name. An asterisk (*) matches any number of characters and a question mark (?) matches a single character. If the path name is qualified or contains a pattern, it must be enclosed in apostrophes.

For more information on specifying path names, refer to "Object naming rules" in "CL concepts and reference" in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Attribute (ATR)

Specifies the attribute to be changed.

*READONLY
> Whether the object can be written to or deleted, have its extended attributes changed or deleted, or have its size changed.
>
> Allowed values for the **New value (VALUE)** parameter are:
>
> ***YES**   The object cannot be changed or deleted.
>
> ***NO**   The object can be changed or deleted.

*HIDDEN
> Whether the object can be displayed using an ordinary directory list.
>
> Allowed values for the VALUE parameter are:
>
> ***YES**   The object is hidden and cannot be displayed using an ordinary directory listing.
>
> ***NO**   The object is not hidden and can be displayed using an ordinary directory listing.

*PCSYSTEM
> Whether the object is a PC system file and is excluded from normal directory searches.
>
> Allowed values for the VALUE parameter are:
>
> ***YES**   The object is a PC system file.
>
> ***NO**   The object is not a PC system file.

*PCARCHIVE
> Whether the object has changed since the last time the file was saved or reset by a PC client.
>
> Allowed values for the VALUE parameter are:
>
> ***YES**   The object has changed.
>
> ***NO**   The object has not changed.

*SYSARCHIVE
> Whether the object has changed and needs to be saved. It is set on when an object's change time is updated, and set off when the object has been saved.

Allowed values for the VALUE parameter are:

*YES   The object has changed and does need to be saved.

*NO   The object has not changed and does not need to be saved.

*CCSID

The coded character set identifier (CCSID) of the data and extended attributes of the object.

Note: Changing the CCSID does not convert the data or the extended attributes. Changing the CCSID only changes the value associated with the object. This also applies to the data contained in the extended attributes associated with the object.

Allowed values for the VALUE parameter are:

1-65533
The CCSID of the data and extended attributes of the object.

*ALWCKPWRT

Whether the stream file (*STMF) can be shared with readers and writers during the save-while-active checkpoint processing. Changing this attribute's current value may cause unexpected results. Please refer to the Backup and Recovery book, SC41-5304 for details on this attribute.

Allowed values for the VALUE parameter are:

*YES   The object can be shared with readers and writers.

*NO   The object can be shared with readers only.

*USECOUNT

The count of the number of days an object has been used. Usage has different meanings according to the file system and according to the individual object types supported within a file system. Usage can indicate opening or closing of a file or can refer to adding links, renaming, restoring, or checking out of an object. When this attribute is changed, the count of the number of days used will be reset to zero and the use count date will be set to the current date.

Allowed value for the VALUE parameter is:

*RESET
The count of the number of days used will be reset to zero and the use count date will be set to the current date.

*DISKSTGOPT

This determines how auxiliary storage is allocated by the system for the specified object. The option will take effect immediately and be part of the next auxiliary storage allocation for the object. This option can only be specified for stream files in the "root" (/), QOpenSys and user-defined file systems. This option will be ignored for *TYPE1 byte stream files.

Allowed values for the VALUE parameter are:

*NORMAL
The auxiliary storage will be allocated normally. That is, as additional auxiliary storage is required, it will be allocated in logically sized extents to accommodate the current space requirement, and anticipated future requirements, while minimizing the number of disk input/output (I/O) operations. If the *DISKSTGOPT attribute has not been specified for an object, this value is the default.

*MINIMIZE

The auxiliary storage will be allocated to minimize the space used by the object. That is, as additional auxiliary storage is required, it will be allocated in small sized extents to accommodate the current space requirement. Accessing an object composed of many small extents may increase the number of disk I/O operations for that object.

*DYNAMIC

The system will dynamically determine the optimum auxiliary storage allocation for the object, balancing space used versus disk I/O operations. For example, if a file has many small extents, yet is frequently being read and written, then future auxiliary storage allocations will be larger extents to minimize the number of disk I/O operations. Or, if a file is frequently truncated, then future auxiliary storage allocations will be small extents to minimize the space used. Additionally, information will be maintained on the stream file sizes for this system and its activity. This file size information will also be used to help determine the optimum auxiliary storage allocations for this object as it relates to the other objects sizes.

*MAINSTGOPT

This determines how main storage is allocated and used by the system for the specified object. The option will take effect the next time the specified object is opened. This option can only be specified for stream files in the "root" (/), QOpenSys and user-defined file systems.

Allowed values for the VALUE parameter are:

*NORMAL

The main storage will be allocated normally. That is, as much main storage as possible will be allocated and used. This minimizes the number of disk I/O operations since the information is cached in main storage. If the *MAINSTGOPT attribute has not been specified for an object, this value is the default.

*MINIMIZE

The main storage will be allocated to minimize the space used by the object. That is, as little main storage as possible will be allocated and used. This minimizes main storage usage while increasing the number of disk I/O operations since less information is cached in main storage.

*DYNAMIC

The system will dynamically determine the optimum main storage allocation for the object depending on other system activity and main storage contention. That is, when there is little main storage contention, as much storage as possible will be allocated and used to minimize the number of disk I/O operations. And when there is significant main storage contention, less main storage will be allocated and used to minimize the main storage contention. This option only has an effect when the storage pool's paging option is *CALC. When the storage pool's paging option is *FIXED, the behavior is the same as *NORMAL. When the object is accessed thru a file server, this option has no effect. Instead, its behavior is the same as *NORMAL.

*CRTOBJSCAN

Specifies whether the objects created in a directory will be scanned when exit programs are registered with any of the integrated file system scan-related exit points.

The integrated file system scan-related exit points are:

- QIBM_QP0L_SCAN_OPEN - Integrated File System Scan on Open Exit Program
- QIBM_QP0L_SCAN_CLOSE - Integrated File System Scan on Close Exit Program

For details on these exit points, see the System API Reference information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

This option can only be specified for directories in the "root" (/), QOpenSys and user-defined file systems. Even though this attribute can be set for *TYPE1 and *TYPE2 directories, only objects which are in *TYPE2 directories will actually be scanned, no matter what value is set for this attribute.

Allowed values for the VALUE parameter are:

*YES After an object is created in the directory, the object will be scanned according to the rules described in the scan related exit programs if the object has been modified or if the scanning software has been updated since the last time the object was scanned. If the *CRTOBJSCAN attribute has not been specified for a directory, this value is the default.

*NO After an object is created in the directory, the object will not be scanned by the scan-related exit programs.

Note: If the Scan file systems control (QSCANFSCTL) value *NOPOSTRST is not specified when an object with this attribute is restored, the object will be scanned at least once after the restore.

*CHGONLY

After an object is created in the directory, the object will be scanned according to the rules described in the scan-related exit programs only if the object has been modified since the last time the object was scanned. It will not be scanned if the scanning software has been updated. This attribute only takes effect if the Scan file systems control (QSCANFSCTL) system value has *USEOCOATR specified. Otherwise, it will be treated as if the attribute is *YES.

Note: If the Scan file systems control (QSCANFSCTL) value *NOPOSTRST is not specified when an object with this attribute is restored, the object will be scanned at least once after the restore.

*SCAN

Specifies whether the object will be scanned when exit programs are registered with any of the integrated file system scan-related exit points.

The integrated file system scan-related exit points are:
- QIBM_QP0L_SCAN_OPEN - Integrated File System Scan on Open Exit Program
- QIBM_QP0L_SCAN_CLOSE - Integrated File System Scan on Close Exit Program

For details on these exit points, see the System API Reference information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

This option can only be specified for stream files in the "root" (/), QOpenSys and user-defined file systems. Even though this attribute can be set for *TYPE1 and *TYPE2 directories, only objects which are in *TYPE2 directories will actually be scanned, no matter what value is set for this attribute.

Allowed values for the VALUE parameter are:

*YES The object will be scanned according to the rules described in the scan related exit programs if the object has been modified or if the scanning software has been updated since the last time the object was scanned. If the *SCAN attribute has not been specified for an object, this value is the default.

*NO The object will not be scanned by the scan-related exit programs.

Note: If the Scan file systems control (QSCANFSCTL) value *NOPOSTRST is not specified when an object with this attribute is restored, the object will be scanned at least once after the restore.

*CHGONLY

The object will be scanned according to the rules described in the scan-related exit programs only if the object has been modified since the last time the object was scanned. It will not be scanned if the scanning software has been updated. This attribute only takes effect if the Scan file systems control (QSCANFSCTL) system value has *USEOCOATR specified. Otherwise, it will be treated as if the attribute is *YES.

Note: If the Scan file systems control (QSCANFSCTL) value *NOPOSTRST is not specified when an object with this attribute is restored, the object will be scanned at least once after the restore.

*ALWSAV

Specifies whether the object can be saved or not.

Note: It is highly recommended that this attribute not be changed for any system created objects.

Allowed values for the VALUE parameter are:

*YES This object will be saved when using the Save Object (SAV) command or the QsrSave() API. If the *ALWSAV attribute has not been specified for an object, this value is the default.

*NO This object will not be saved when using the SAV command or the QsrSave() API.

Additionally, if this object is a directory, none of the objects in the directory's subtree will be saved unless they were explicitly specified as an object to be saved. The subtree includes all subdirectories and the objects within those subdirectories.

Note: If this attribute is chosen for an object that has private authorities associated with it, or is chosen for the directory of an object that has private authorities associated with it, then the following consideration applies. When the private authorities are saved, the fact that an object has the *ALWSAV attribute as No is not taken into consideration. (Private authorities can be saved using either the Save System (SAVSYS) or Save Security Data (SAVSECDTA) command or the Save Object List (QSRSAVO) API.) Therefore, when a private authority is restored using the Restore Authority (RSTAUT) command, message CPD3776 will be seen for each object that was not saved either because it had the *ALWSAV attribute specified as No, or because the object was not specified on the save and it was in a directory that had the *ALWSAV attribute specified as No.

*RSTDRNMUNL

Restricted renames and unlinks for objects within a directory. Objects can be linked into a directory that has this attribute set on, but cannot be renamed or unlinked from it unless one or more of the following are true for the user performing the operation:

1. The user is the owner of the object.
2. The user is the owner of the directory.
3. The user has all object (*ALLOBJ) special authority.

This restriction only applies to directories. Other types of object can have this attribute set on, however, it will be ignored. In addition, this attribute can only be specified for objects within the Network File System (NFS), QFileSvr.400, root ('/'), QOpenSys, or user-defined file systems. Both the NFS and QFileSvr.400 file systems support this attribute by passing it to the server and surfacing it to the caller. This attribute is also equivalent to the S_ISVTX mode bit for an object.

Allowed values for the VALUE parameter are:

*YES   Additional restrictions for rename and unlink operations.

*NO   No additional restrictions for rename and unlink operations.

*SETUID

Set effective user ID (UID) at execution time. This value is ignored if the specified object is a directory.

Allowed values for the VALUE parameter are:

*YES   The object owner is the effective UID at execution time.

*NO   The UID is not set at execution time.

*SETGID

Set effective group ID (GID) at execution time.

Allowed values for the VALUE parameter are:

*YES   If the object is a file, the GID is set at execution time. If the object is a directory, the GID of objects created in the directory is set to the GID of the parent directory.

*NO   If the object is a file, the GID is not set at execution time. If the object is a directory in the "root" (/), QOpenSys, and user-defined file systems, the GID of objects created in the directory is set to the effective GID of the thread creating the object.

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New value (VALUE)

The value used to change the attribute for the specified objects.

*YES   Allowed for the *READONLY, *HIDDEN, *PCSYSTEM, *PCARCHIVE, *SYSARCHIVE, *ALWCKPWRT, *ALWSAV, *CRTOBJSCAN, *SCAN, *RSTDRNMUNL, *SETUID, and *SETGID attributes. See the corresponding attribute in the **Attribute (ATR)** parameter for a description of what this value means for each of the attributes.

*NO   Allowed for the *READONLY, *HIDDEN, *PCSYSTEM, *PCARCHIVE, *SYSARCHIVE, *ALWCKPWRT, *ALWSAV, *CRTOBJSCAN, *SCAN, *RSTDRNMUNL, *SETUID, and *SETGID attributes. See the corresponding attribute in the ATR parameter for a description of what this value means for each of the attributes.

*RESET

Allowed for the *USECOUNT attribute. The count of the number of days used will be reset to zero and the use count date will be set to the current date.

*NORMAL

Allowed for the *DISKSTGOPT and *MAINSTGOPT attributes. See the corresponding attribute in the ATR parameter for a description of what this value means for each of the attributes.

*MINIMIZE

Allowed for the *DISKSTGOPT and *MAINSTGOPT attributes. See the corresponding attribute in the ATR parameter for a description of what this value means for each of the attributes.

*DYNAMIC

Allowed for the *DISKSTGOPT and *MAINSTGOPT attributes. See the corresponding attribute in the ATR parameter for a description of what this value means for each of the attributes.

*CHGONLY

Allowed for the *CRTOBJSCAN and *SCAN attributes. See the corresponding attribute in the ATR parameter for a description of what this value means for each of the attributes.

1-65533

Allowed for the *CCSID attribute. Specify the coded character set identifier (CCSID) of the data and extended attributes of the object.

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Directory subtree (SUBTREE)

Specifies whether or not to change the specified attribute of the objects within the subtree if the object specified by the **Object (OBJ)** is a directory.

*NONE

The objects specified by OBJ have the attribute changed. If the object is a directory, it has the attribute changed, but its contents do not have the attribute changed.

*ALL   The objects specified by OBJ have the attribute changed. If the object is a directory, its contents as well as the contents of all of its subdirectories have the attribute changed.

Note: Pattern matching from the OBJ parameter only applies to the first level objects. If the first level object is a directory, the pattern matching does not apply to its contents or the contents of its subdirectories.

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Symbolic link (SYMLNK)

If the last component in the path name is a symbolic link, specifies whether or not to change the attribute of the symbolic link or of the object pointed to by the symbolic link.

*NO   The attribute of the symbolic link object is not changed. The attribute of the object pointed to by the symbolic link is changed.

*YES   If the object is a symbolic link, the attribute of the symbolic link is changed. The attribute of the object pointed to by the symbolic link is not changed.

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Examples

Example 1: Change Attribute for a Directory Subtree

```
CHGATR OBJ('/MYINFO') ATR(*HIDDEN) VALUE(*YES) SUBTREE(*ALL)
```

The object MYINFO will have its *HIDDEN attribute changed so it is a hidden object. If MYINFO is a directory, then all of the objects this directory contains as well as all of the objects contained in the subdirectories will have their PC hidden attribute changed because *ALL is specified for the SUBTREE parameter.

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Error messages

*ESCAPE Messages

CPFA0AD

Function not supported by file system.

CPFB414

Attributes changed for &1 objects. &2 objects not changed.

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Change Auditing Value (CHGAUD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Auditing Value (CHGAUD) command sets up or changes auditing on an object if you have *AUDIT special authority. Users with *AUDIT special authority can turn auditing on or off for an object regardless of whether they have authority to the object.

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Parameters

Keyword	Description	Choices	Notes
OBJ	Object	*Path name*	Required, Positional 1
OBJAUD	Object auditing value	***NONE**, *USRPRF, *CHANGE, *ALL	Optional, Positional 2

Object (OBJ)

This is a required parameter.

The path name of the objects for which auditing values are being changed.

For more information on specifying path names, refer to ″Object naming rules″ in ″CL concepts and reference″ in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Object auditing value (OBJAUD)

This is a required parameter.

The object auditing value for this object.

*NONE
   Using or changing this object does not cause an audit entry to be sent to the security journal.

*USRPRF
   The user profile of the user accessing this object is used to determine if an audit record is sent for this access. The OBJAUD parameter of the Change User Audit (CHGUSRAUD) command is used to turn auditing on for a specific user.

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*CHANGE
> All change accesses to this object by all users are logged.

*ALL   All change or read accesses to this object by all users are logged.

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Examples

```
CHGAUD   OBJ('/QSYS.LIB/PAYROLL.LIB/PAYFILE.FILE')
         OBJAUD(*CHANGE)
```

This command changes the object auditing value of the PAYFILE file in the PAYROLL library. The auditing value of the PAYFILE file is changed so that all change access to the file by all users is logged by the system.

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Error messages

*ESCAPE Messages

CPDA080
> User profile name too long.

CPE3526
> Journal damaged.

CPE3527
> Journal inactive.

CPE3528
> Journal space or system storage error.

CPE3529
> Journal is remote.

CPE3530
> New journal receiver is needed.

CPE3531
> New journal is needed.

CPE3532
> Object already journaled.

CPE3450
> Descriptor not valid.

CPFA0AA
> Error occurred while attempting to obtain space.

CPFA0AB
> Operation failed for object. Object is &1.

CPFA0AC
> Request cannot be completed. Directory contains objects.

CPFA0AD
> Function not supported by file system.

CPFA0A0
> Object already exists. Object is &1.

CPFA0A1

An input or output error occurred.

CPFA0A2

Information passed to this operation was not valid.

CPFA0A3

Path name resolution causes looping.

CPFA0A4

Too many open files for process.

CPFA0A5

Too many open files.

CPFA0A6

Number of links exceeds maximum allowed for the file system.

CPFA0A7

Path name too long.

CPFA0A9

Object not found. Object is &1.

CPFA0B0

Request not allowed to operate from one file system to another.

CPFA0B1

Requested operation not allowed. Access problem.

CPFA0C0

Buffer overflow occurred.

CPFA0DA

Object is a directory. Object is &1.

CPFA0DD

Function was interrupted.

CPFA0DE

Object type not valid for request. Object is &1.

CPFA0D4

File system error occurred. Error number &1.

CPFA0D9

Character string not converted.

CPFA0E0

File ID conversion of a directory failed.

CPFA0E1

The file ID table is damaged.

CPFA0E2

System unable to establish a communications connection to a file server.

CPFA0E2

System unable to establish a communications connection to a file server.

CPFA0E4

The communications connection with the file server was abnormally ended.

CPFA0E5

The communications connection with the file server was abnormally ended.

CPFA0E6

        Object handle rejected by file server.

CPFA0E7

        System cannot establish a communications connection with a file server.

CPFA08B

        Path name cannot begin with *.

CPFA08C

        Pattern not allowed in path name directory.

CPFA085

        Home directory not found for user &1.

CPFA086

        Matching quote not found in path name.

CPFA087

        Path name contains null character.

CPFA088

        Path name pattern not valid.

CPFA09C

        Not authorized to object. Object is &1.

CPFA09D

        Error occurred in program &1.

CPFA09E

        Object in use. Object is &1.

CPFA09F

        Object damaged. Object is &1.

CPFA091

        Pattern not allowed in user name.

CPFA092

        Path name not converted.

CPFA093

        Name matching pattern not found.

CPFA094

        Path name not specified.

CPF1F05

        Directory handle not valid.

CPF1F41

        Severe error occurred while addressing parameter list.

CPF1F4A

        Value for number of directory entries not valid.

CPF1F53

        Value for length of data buffer not valid.

CPF22B0

        Not authorized to change the auditing value.

CPF2203

        User profile &1 not correct.

CPF2225

Not able to allocate internal system object.

CPF2227

One or more errors occurred during processing of command.

CPF223A

Not all objects changed.

CPF22F0

Unexpected errors occurred during processing.

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

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Change Authority (CHGAUT)

The Change Authority (CHGAUT) command is used to change a user's authority for the object named in this command.

Authority can be given to:

- Named users
- PUBLIC users who do not have authority specifically given to them either for the object or for the authorization list
- The NetWare Inherited Rights Filter for the file (used only by the QNetWare file system).
- Groups of users who do not have any authority to the object or are not on the authorization list that secures the object
- Users on an established authorization list

The AUTL value on the DTAAUT parameter specifies the authority for the following users:

- Users who do not have authority specifically given to them for an object.
- Users who are not on the authorization list that secures the object.
- Users whose groups do not have authority specifically given to it.
- Users whose groups are not on the authorization list that secures the object.

DTAAUT (*AUTL) is allowed only with USER(*PUBLIC). User profiles cannot be secured by an authorization list.

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

If changing authority for an object in the QSYS.LIB or independent ASP QSYS.LIB file system:

1. A user must either be the owner of the object or have *ALLOBJ special authority to use this command on an object.
2. This command must get an exclusive lock on a database file before read or object operational authority can be given to a user.
3. If a user requests authority for another specified user to a device currently in use by another authorized user, authority to the device is not given.
4. This command should not be used to change the authority for an authorization list object (/QSYS.LIB/authorization-list-name.AUTL).
5. DTAAUT(*AUTL) is valid only with USER(*PUBLIC).
6. Before you give authorities to use a device, controller, or line description, its associated device, controller, or line must be varied on.
7. For display stations or for work station message queues associated with the display station you can either: (1) enter this command at the device for which authorities are being granted or (2) precede this command with the Allocate Object (ALCOBJ) command and follow this command with the Deallocate Object (DLCOBJ) command.

Parameters

Keyword	Description	Choices	Notes
OBJ	Object	*Path name*	Required, Positional 1
USER	User	Single values: *PUBLIC, *NTWIRF Other values (up to 50 repetitions): *Name*	Optional, Positional 2
DTAAUT	New data authorities	***SAME**, *NONE, *RWX, *RX, *RW, *WX, *R, *W, *X, *EXCLUDE, *AUTL	Optional, Positional 3
OBJAUT	New object authorities	Single values: ***SAME**, *NONE, *ALL Other values (up to 4 repetitions): *OBJEXIST, *OBJMGT, *OBJALTER, *OBJREF	Optional, Positional 4
AUTL	Authorization list	*Name*, *NONE	Optional

Object (OBJ)

This is a required parameter.

The path name of the objects for which specific authorities are given to one or more users or to an authorization list.

For more information on specifying path names, refer to "Object naming rules" in "CL concepts and reference" in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

User (USER)

This is a required parameter.

The user names of one or more users to whom authorities for the named object are being given. If user names are specified, the authorities are given specifically to those users.

*PUBLIC

All users who do not have authority specifically given to them for the object, who are not on the authorization list, whose user group does not have any authority, or whose user group is not on the authorization list, are authorized to use the object as specified in the DTAAUT and OBJAUT parameters.

*NTWIRF

The NetWare Inherited Rights Filter for the file is authorized to use the object as specified in the DTAAUT and OBJAUT parameters.

Note: This value is used only by the QNetWare file system.

user-profile-name

The user names of one or more users who have specific authority for the object. Up to 50 user profile names can be specified.

New data authorities (DTAAUT)

This is a required parameter.

The data authorities being given to the users specified in the user parameter. If a value other than *SAME is specified, the value replaces any data authorities (*OBJOPR, *READ, *ADD, *UPD, *DLT, and *EXECUTE) that the users currently have to the objects.

*SAME

The users' data authorities to the objects do not change.

*NONE

The users do not have any of the data authorities to the objects.

*RWX The users are given *RWX authority to the objects. The users are given *RWX authority to perform all operations on the object except those limited to the owner or controlled by object existence, object management, object alter, and object reference authority. The user can change the object and perform basic functions on the object. *RWX authority provides object operational authority and all the data authorities.

*RX The users are given *RX authority to perform basic operations on the object, such as run a program or display the contents of a file. The user is prevented from changing the object. *RX authority provides object operational authority and read and execute authorities.

*RW The users are given *RW authority to view the contents of an object and change the contents of an object. *RW authority provides object operational authority and data read, add, update, and delete authorities.

*WX The users are given *WX authority to change the contents of an object and run a program or search a library or directory. *WX authority provides object operational authority and data add, update, delete, and execute authorities.

*R The users are given *R authority to view the contents of an object. *R authority provides object operational authority and data read authority.

*W The users are given *W authority to change the contents of an object. *W authority provides object operational authority and data add, update, and delete authorities.

*X The users are given *X authority to run a program or search a library or directory. *X authority provides object operational authority and data execute authority.

*EXCLUDE

Exclude authority prevents the user from accessing the object.

*AUTL

The public authority of the authorization list specified in the AUTL parameter is used for the public authority for the object.

New object authorities (OBJAUT)

This is a required parameter.

The object authorities being given to the users specified in the user parameter. If a value other than *SAME is specified, the value replaces any object authorities (*OBJEXIST, *OBJMGT, *OBJALTER, and *OBJREF) that the users currently have to the objects.

*SAME

The users' object authorities to the objects do not change.

*NONE
        The users do not have any other object authorities (existence, management, alter, or reference). If
        *EXCLUDE or *AUTL is specified for the DTAAUT parameter, this value must be specified.

*ALL   All of the other object authorities (existence, management, alter, and reference) are given to the
        users.

Or specify up to four (4) of the following values:

*OBJEXIST
        The users are given object existence authority to the object.

*OBJMGT
        The users are given object management authority to the object.

*OBJALTER
        The users are given object alter authority to the object.

*OBJREF
        The users are given object reference authority to the object.

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Authorization list (AUTL)

This is a required parameter.

The name of the authorization list whose users are given authority for the object specified in the OBJ
parameter.

*NONE
        The current authorization list is removed from the object.

authorization-list-name
        The name of the authorization list to secure this object.

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Examples

Example 1: Changing Authority to All Users

```
CHGAUT   OBJ('/QSYS.LIB/USERLIB.LIB/PROGRAM1.PGM')
         USER(*PUBLIC)  DTAAUT(*RW)
```

This command gives authority to use and change the object named PROGRAM1 to all users of the
system who do not have authorities specifically given to them, who are not on an authorization list,
whose user groups do not have authority to the object, or whose user groups are not on the authorization
list. The object is a program (*PGM) located in the library named USERLIB. Because the OBJAUT
parameter is not specified, any object authorities *PUBLIC already has remain.

Example 2: Changing Authority to Users on Authorization List

```
CHGAUT   OBJ('/QSYS.LIB/MYLIB.LIB/PRGM3.PGM')  AUTL(KLIST)
```

This command gives to users the authority specified for them on authorization list KLIST for the object
named PRGM3. The object is a program located in library MYLIB.

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Error messages

CPDA080

       User profile name too long.

CPE3101

       A non-recoverable I/O error occurred.

CPE3408

       The address used for an argument was not correct.

CPE3418

       Possible APAR condition or hardware failure.

CPE3474

       Unknown system state.

CPFA0AA

       Error occurred while attempting to obtain space.

CPFA0AB

       Operation failed for object. Object is &1.

CPFA0AD

       Function not supported by file system.

CPFA0A1

       An input or output error occurred.

CPFA0A2

       Information passed to this operation was not valid.

CPFA0A3

       Path name resolution causes looping.

CPFA0A4

       Too many open files for process.

CPFA0A5

       Too many open files.

CPFA0A7

       Path name too long.

CPFA0A9

       Object not found. Object is &1.

CPFA0B1

       Requested operation not allowed. Access problem.

CPFA0C0

       Buffer overflow occurred.

CPFA0C1

       CCSID &1 not valid.

CPFA0CE

       Error occurred with path name parameter specified.

CPFA0DD

       Function was interrupted.

CPFA08B

       Path name cannot begin with *.

CPFA08C

　　　　Pattern not allowed in path name directory.

CPFA085

　　　　Home directory not found for user &1.

CPFA086

　　　　Matching quote not found in path name.

CPFA087

　　　　Path name contains null character.

CPFA088

　　　　Path name pattern not valid.

CPFA09C

　　　　Not authorized to object. Object is &1.

CPFA09D

　　　　Error occurred in program &1.

CPFA09E

　　　　Object in use. Object is &1.

CPFA09F

　　　　Object damaged. Object is &1.

CPFA091

　　　　Pattern not allowed in user name.

CPFA092

　　　　Path name not converted.

CPFA093

　　　　Name matching pattern not found.

CPFA094

　　　　Path name not specified.

CPF1F05

　　　　Directory handle not valid.

CPF1F41

　　　　Severe error occurred while addressing parameter list.

CPF1F4A

　　　　Value for number of directory entries not valid.

CPF1F53

　　　　Value for length of data buffer not valid.

CPF2203

　　　　User profile &1 not correct.

CPF2225

　　　　Not able to allocate internal system object.

CPF223A

　　　　Not all objects changed.

CPF22F0

　　　　Unexpected errors occurred during processing.

CPF3BF6

　　　　Path Type value is not valid.

CPF9801

Object &2 in library &3 not found.

CPF9802

Not authorized to object &2 in &3.

CPF9803

Cannot allocate object &2 in library &3.

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Change Auth List Entry (CHGAUTLE)

The Change Authorization List Entry (CHGAUTLE) command changes the authorities for users on authorization lists. The authorities that the users have on the authorization list are replaced with the authorities specified on the command. The authorization list must already exist and the users must be on the list. If the user specified is not on the list, a message is issued.

The users who can use this command to change the authorization list are: the owner of the authorization list, a user with authorization list management authorities on the list, or a user with all object authority.

When the CHGAUTLE command is used to change a user's authorities, the user must The name of the authorization list, a list of users, and a list of authorities. All users specified in the list are given the same authorities. The authorities of each user on the list given to the command are changed to the authorities specified on the command. Authority can be specified for all users who do not have specific authority, who are not on the authorization list, and whose groups have no authority, by giving a user profile name of *PUBLIC.

Restrictions:

1. Only the owner of the list, or a user with all object (*ALLOBJ) special authority, can add a user with authorization list management authority.
2. A user with *AUTLMGT authority can change a user's authority. They must also have the specific authority being added or removed.

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Parameters

Keyword	Description	Choices	Notes
AUTL	Authorization list	*Generic name, name*	Required, Positional 1
USER	User	Single values: *PUBLIC Other values (up to 50 repetitions): *Name*	Required, Positional 2
AUT	Authority	Single values: *EXCLUDE Other values (up to 11 repetitions): ***CHANGE**, *ALL, *USE, *OBJALTER, *OBJEXIST, *OBJMGT, *OBJOPR, *OBJREF, *ADD, *DLT, *EXECUTE, *READ, *UPD, *AUTLMGT	Optional, Positional 3

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Authorization list (AUTL)

This is a required parameter.

The name, or generic name, of the authorization list for which users' authorities are being changed. The authorization list must already exist.

authorization list name
>The name of the authorization list used.

generic*-authorization-list-name
>The generic name of the authorization list.
>
>A generic name is a character string of one or more characters followed by an asterisk (*); for example ABC*. The asterisk substitutes for any valid characters. A generic name specifies all objects with names that begin with the generic prefix for which the user has authority. If an asterisk is not included with the generic (prefix) name, the system assumes it to be the complete object name. For more information, see the *Generic object names* topic in the iSeries Information Center at http://www.iseries.ibm.com/infocenter.

User (USER)

This is a required parameter.

A list of user profile names whose authorities on the authorization list are changed. Up to 50 user profile names can be specified. If a user profile name is not on the authorization list, a message is issued.

You can enter multiple values for this parameter.

*PUBLIC
>Authority is given to all users who have no specific authority, are not on the authorization list, and whose group profile does not have any authority.

user-ID
>A list of user profile names whose authorities are changed.

Authority (AUT)

The authority given to the users specified on the **User** prompt (USER parameter). A maximum of 11 authorities can be specified.

You can enter multiple values for this parameter.

*CHANGE
>The user can perform all operations on the object except those limited to the owner or controlled by object existence (*OBJEXIST) and object management (*OBJMGT) authorities. The user can change and perform basic functions on the object. *CHANGE authority provides object operational (*OBJOPR) authority and all data authority. If the object is an authorization list, the user cannot add, change, or remove users.

*ALL The user can perform all operations except those limited to the owner or controlled by authorization list management (*AUTLMGT) authority. The user can control the object's existence, specify the security for the object, change the object, and perform basic functions on the object. The user also can change ownership of the object.

*USE The user can perform basic operations on the object, such as running a program or reading a file. The user cannot change the object. Use (*USE) authority provides object operational (*OBJOPR), read (*READ), and execute (*EXECUTE) authorities.

*AUTLMGT
>Authorization list management authority provides the authority to add users to the authorization

list, to change users' authorities on the authorization list, to remove user names from the authorization list, or to remove users from the authorization list, to rename an authorization list, or to create a duplicate authorization list.

*OBJALTER
Object alter authority provides the authority needed to alter the attributes of an object. If the user has this authority on a database file, the user can add and remove triggers, add and remove referential and unique constraints, and change the attributes of the database file. If the user has this authority on an SQL package, the user can change the attributes of the SQL package. This authority is currently only used for database files and SQL packages.

*OBJEXIST
Object existence authority provides the authority to control the object's existence and ownership. These authorities are necessary for users who want to delete an object, free storage for an object, perform save and restore operations for an object, or transfer ownership of an object. A user with special save system (*SAVSYS) authority does not need existence authority to save or restore objects. Object existence authority is required to create an object that has an existing authority holder.

*OBJMGT
Object management authority provides the authority to The security for the object, move or rename the object, and add members to database files.

*OBJOPR
Object operational authority provides authority to look at the description of an object and to use the object as determined by the user's data authority to the object.

*OBJREF
Object reference authority provides the authority needed to reference an object from another object such that operations on that object may be restricted by the other object. If the user has this authority on a physical file, the user can add referential constraints in which the physical file is the parent. This authority is currently only used for database files.

The possible data authorities are:

*ADD Add authority provides the authority to add entries to an object (for example, job entries to an queue or records to a file).

*DLT Delete authority allows the user to remove entries from an object (for example, remove messages from a message queue or records from a file.)

*EXECUTE
Execute authority provides the authority needed to run a program or locate an object in a library or directory.

*READ
Read authority provides the authority needed to show the contents of an object.

*UPD Update authority provides the authority to change the entries in an object.

The possible Single Value is:

*EXCLUDE
The user cannot access the object.

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Examples

```
CHGAUTLE   AUTL(DEPT48X)  USER(KARENG KARENS JEFF JULIE DARL)
           AUT(*CHANGE)
```

This command changes the authority that users KARENG, KARENS, JEFF, JULIE, and DARL have on the authorization list to *CHANGE. *CHANGE gives the users object operational authority and all data authorities to the objects secured by the authorization list.

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Error messages

*ESCAPE Messages

CPF22AA
>
> Only *AUTLMGT authority can be specified with *ALL authority.

CPF22AB
>
> Only *AUTLMGT can be specified with *CHANGE authority.

CPF22AC
>
> Only *AUTLMGT authority can be specified with *USE authority.

CPF2253
>
> No objects found for &1 in library &2.

CPF2281
>
> The users specified do not exist on the system.

CPF2283
>
> Authorization list &1 does not exist.

CPF2284
>
> Not authorized to change authorization list &1.

CPF2286
>
> *PUBLIC cannot be given *AUTLMGT authority.

CPF2287
>
> &1 errors changing users, &2 authorization lists processed.

CPF2289
>
> Unable to allocate authorization list &1.

CPF2290
>
> *EXCLUDE cannot be specified with another authority.

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Change Backup Options (CHGBCKUP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Backup Options (CHGBCKUP) command allows the user to change the options in one of the predefined backups. More information on backup is in the Backup and Recovery book, SC41-5304.

Parameters

Keyword	Description	Choices	Notes
BCKUPOPT	Backup options	*DAILY, *WEEKLY, *MONTHLY	Required, Key, Positional 1
DEV	Device	Single values: ***SAME** Other values (up to 4 repetitions): *Name*	Optional
TAPSET	Tape set	Single values: ***SAME**, *ANY Other values (up to 7 repetitions): *Character value*	Optional
CLRTAP	Clear the tape	***SAME**, *YES, *NO	Optional
SBMJOB	Submit to batch	***SAME**, *YES, *NO	Optional
CHGONLY	Changed objects only	***SAME**, *YES, *NO	Optional
PRTRPT	Print detailed report	***SAME**, *YES, *NO	Optional
LIB	Library	***SAME**, *ALLUSR, *FROMLIST, *NONE	Optional
FLR	Folder	***SAME**, *ALL, *FROMLIST, *NONE	Optional
DIR	Directory	***SAME**, *ALLUSR, *NONE	Optional
SECDTA	Save security data	***SAME**, *YES, *NO	Optional
CFG	Save configuration data	***SAME**, *YES, *NO	Optional
MAIL	Save mail	***SAME**, *YES, *NO	Optional
CAL	Save calendar data	***SAME**, *YES, *NO	Optional
EXITPGM	User exit program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: User exit program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

Backup options (BCKUPOPT)

Specifies the backup options to be changed.

This is a required parameter.

*DAILY
> The options for the daily backup are changed.

*WEEKLY
> The options for the weekly backup are changed.

*MONTHLY
> The options for the monthly backup are changed.

Device (DEV)

Specifies the tape device to use for the backup.

Single values

*SAME
> The tape device name stored in the specified options is not changed.

Other values (up to 4 repetitions)

name   Specify a list of tape device names to use with the specified backup options.

Tape set (TAPSET)

Specifies the name of the tape set to be used.

Single values

*SAME
> The tape set name stored in the specified options is not changed.

*ANY   The tapes mounted on the backup devices are used for the backup. Tape volume IDs are not checked.

Other values (up to 7 repetitions)

character-value
> Specify a list of 4-character names of tape volume sets to be rotated for the backup. The tape volume IDs for the backup are generated by concatenating sequential numbers starting with '01' to the specified prefix.

Clear the tape (CLRTAP)

Specifies whether to clear the tape and start the save at sequence number 1.

*SAME
> The Clear Tape indicator stored in the specified options is not changed.

*YES   The tape is cleared and the save starts at sequence number 1 (equivalent to CLEAR(*ALL) SEQNBR(1) on the SAVxxx commands).

*NO   The tape is not cleared and the save starts after the last active file on the tape (equivalent to CLEAR(*NONE) SEQNBR(*END) on the SAVxxx commands).

Submit to batch (SBMJOB)

Specifies whether to submit the backup as a batch job when the RUNBCKUP menu is used to run a backup using these options.

Note: This parameter is ignored when the RUNBCKUP command is used to run a backup.

*SAME
> The Submit Job indicator stored in the specified options is not changed.

*YES The backup is submitted as a batch job when the menu is used to perform the backup.

*NO The backup is run interactively when the menu is used to perform the backup.

Changed objects only (CHGONLY)

Specifies whether to save only changed objects in the libraries and folders to be backed up.

*SAME
> The Save Changed Only indicator stored in the specified options is not changed.

*YES Only objects changed since the last backup are saved.

*NO All of the objects in the requested libraries and folders are backed up.

Print detailed report (PRTRPT)

Specifies whether a detailed list of saved objects is printed. A summary report is always printed.

*SAME
> The Print Report indicator stored in the specified options is not changed.

*YES A detailed list of saved objects and a summary report are printed.

*NO A summary report is printed.

Library (LIB)

Specifies which libraries are backed up.

*SAME
> The libraries specified in the options are not changed.

*ALLUSR
> Performs a backup of all user libraries. All libraries with names that do not begin with the letter Q are backed up except for the following:

```
#CGULIB      #DSULIB     #SEULIB
#COBLIB      #RPGLIB
#DFULIB      #SDALIB
```

> Although the following Qxxx libraries are provided by IBM, they typically contain user data that changes frequently. Therefore, these libraries are considered "user libraries", and are also backed up:

```
QDSNX       QRCLxxxxx   QUSRIJS     QUSRVxRxMx
QGPL        QSRVAGT     QUSRINFSKR
QGPL38      QSYS2       QUSRNOTES
QMGTC       QSYS2xxxxx  QUSROND
QMGTC2      QS36F       QUSRPOSGS
QMPGDATA    QUSER38     QUSRPOSSA
QMQMDATA    QUSRADSM    QUSRPYMSVR
QMQMPROC    QUSRBRM     QUSRRDARS
QPFRDATA    QUSRDIRCL   QUSRRSYS
QRCL        QUSRDIRDB   QUSRVI
```

> **Note:** A different library name, in the format QUSRVxRxMx, can be created by the user for each previous release supported by IBM to contain any user commands to be compiled in a CL program for the previous release. For the QUSRVxRxMx user library, VxRxMx is the version, release, and modification level of a previous release that IBM continues to support.

*FROMLIST

> The libraries selected for backup in the library backup list are backed up.

*NONE

> No libraries are backed up.

Folder (FLR)

Specifies which folders are backed up.

*SAME

> The folders specified in the options are not changed.

*ALL All folders are backed up.

*FROMLIST

> The folders selected for backup in the folder backup list are backed up.

*NONE

> No folders are backed up.

Directory (DIR)

Specifies which user directories are backed up.

*SAME

> The directories specified in the options are not changed.

*ALLUSR

> All user directories are backed up.

*NONE

> No directories are backed up.

Save security data (SECDTA)

Specifies whether to save the system security data.

*SAME

> The Security Data indicator stored in the specified options is not changed.

*YES Security data is saved when this backup is run.

*NO Security data is not saved.

Save configuration data (CFG)

Specifies whether to save the system configuration data.

*SAME
The Configuration Data indicator stored in the specified options is not changed.

*YES Configuration data is saved when this backup is run.

*NO Configuration data is not saved.

Save mail (MAIL)

Specifies whether to save OfficeVision for AS/400 mail. This parameter is ignored if FLR(*ALL) is specified.

*SAME
The Mail indicator stored in the specified options is not changed.

*YES Mail is saved when this backup is run.

*NO Mail is not saved.

Save calendar data (CAL)

Specifies whether to save OfficeVision for AS/400 calendar data. OfficeVision for AS/400 calendars are also saved when QUSRSYS is saved.

*SAME
The calendar indicator stored in the specified options is not changed.

*YES Calendars are saved when this backup is run.

*NO Calendars are not saved.

User exit program (EXITPGM)

Specifies the user program to call before the backup begins and again after the backup is complete.

Single values

*SAME
The program name stored in the specified options is not changed.

*NONE
No exit program is called.

Qualifier 1: User exit program

name Specify the name of the program to call before and after the backup.

Qualifier 2: Library

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the program. If no library is specified as the current library for the job, the QGPL library is used.

name Specify the name of the library where the program is located.

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Examples

Example 1: Changing the Daily Backup Options

```
CHGBCKUP   BCKUPOPT(*DAILY)  MAIL(*YES)  CAL(*YES)
```

This command changes the daily backup to save the OfficeVision mail and calendar data.

Example 2: Changing the Monthly Backup Options

```
CHGBCKUP   BCKUPOPT(*MONTHLY)  DEV(TAP01 TAP02)
           TAPSET(RED GRN BLU)
```

This command changes the monthly backup to use tape devices TAP01 and TAP02 and tape sets RED, GRN, and BLU.

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Error messages

*ESCAPE Messages

CPF1EEA
> Not authorized to library backup list.

CPF1EEB
> Not authorized to folder backup list.

CPF1EE0
> Device &1 specified more than once.

CPF1EE1
> Tape set name &1 specified more than once.

CPF1EE2
> Cannot specify *ANY and a tape set name.

CPF1EE3
> Not authorized to backup options.

CPF1EE4
> Not authorized to run backup.

CPF1EE5
> Device &1 not a tape device.

CPF1E6C
> Backup options in use.

CPF1E6E

Nothing selected for backup.

CPF1E6F

Tape set name &1 is not valid.

CPF1E67

Backup options and library backup list damaged.

CPF1E99

Unexpected error occurred.

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Change BOOTP Attributes (CHGBPA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change BOOTP Server Attributes (CHGBPA) command is used to change the Bootstrap Protocol (BOOTP) attributes. The changes take effect the next time the BOOTP server is started either by the Start TCP/IP (STRTCP) command or by the Start TCP/IP Server (STRTCPSVR) command.

Restrictions:

You must have *IOSYSCFG special authority to use this command.

Parameters

Keyword	Description	Choices	Notes
AUTOSTART	Autostart server	*YES, *NO, ***SAME**	Optional, Positional 1

Autostart server (AUTOSTART)

The AUTOSTART attribute determines whether or not the BOOTP server starts automatically when TCP/IP is started using the STRTCP command, or when the STRTCPSVR SERVER(*AUTOSTART) command is issued.

This attribute is only used by the STRTCPSVR command if STRTCPSVR *AUTOSTART is specified. STRTCPSVR *BOOTP or STRTCPSVR *ALL will attempt to start the BOOTP server regardless of the value of the AUTOSTART attribute.

Note: You cannot set the BOOTP AUTOSTART attribute to *YES if the DHCP AUTOSTART value is set to *YES. A BOOTP and DHCP server cannot run simultaneously on the same machine. You will get an error message if you attempt to set both the BOOTP and DHCP AUTOSTART values to *YES.

The possible values are:

*SAME
> The AUTOSTART value does not change if it was previously set. Otherwise, *NO is used.

*YES Specify a value of *YES if you want the BOOTP server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

*NO Specify *NO if you do not want the BOOTP server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

> When the value is set to *NO, only the STRTCPSVR *BOOTP command or the STRTCPSVR *ALL command will start the BOOTP server.

If you do not intend to use the BOOTP server, set AUTOSTART to *NO.

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Examples

```
CHGBPA    AUTOSTART(*YES)
```

This command indicates that the next time the STRTCP command is issued to start up TCP/IP and to automatically start the TCP/IP applications, the BOOTP server will be automatically started.

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Change Coded Font (CHGCDEFNT)

The Change Coded Font (CHGCDEFNT) command allows the user to mark font character set and code page pairs referenced in the coded font as resident in the printer. Refer to Printer Device Programming, SC41-5713 for information on marking font character set and code pages as resident in the 3130 printer.

Restrictions:

- The Print Services Facility (PSF) feature is required to use this command.
- Font character set and code page pairs that are marked as resident will be downloaded to printers that do not support resident DBCS raster fonts.
- When marking fonts, the print writer must be stopped and re-started If fonts are marked while the writer is active, the changes may not take effect until the next time the writer is started. To be guaranteed that PSF uses the changed coded font, you must first end the print writer.

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Parameters

Keyword	Description	Choices	Notes
CDEFNT	Coded font	*Qualified object name*	Required, Positional 1
	Qualifier 1: Coded font	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
FNTCHRSET	Font character set	*Generic name, name*, *ALL	Required, Positional 2
RESFNT	Resident font	*YES, ***NO**	Optional

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Coded font (CDEFNT)

Specifies the coded font to be marked.

Qualifier 1: Coded font

name   Specify the name of the coded font to be marked.

Qualifier 2: Library

*LIBL   Search all libraries in the job's library list until the first match is found.

*CURLIB
      Search only the current library for the job. If no library is specified as the current library for the job, QGPL is used.

name   Search the specified library.

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Font character set (FNTCHRSET)

Specifies which font character set or sets within the specified coded font are to be marked as resident or not resident.

*ALL   Specifies that all font character sets referenced in the coded font are to be marked.

generic-name

Specify the generic name of the font character sets to be marked. A generic name is a character string of one or more characters followed by an asterisk (*); for example, C0S0*. The asterisk substitutes for any valid characters. A generic name specifies all font character sets with names that begin with the generic prefix. If an asterisk is not included in the name, the system assumes it to be the complete font character set name. To change all the font character sets in a certain range, for example C0G16F70 - C0G16F7F, you should specify C0G16F7* for the font character set name. Specifying C0G16F* would be the same as *ALL and change all the font character sets in the coded font (assuming all font character set names started with C0G16F0).

name   Specify the name of the font character set to be marked.

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Resident font (RESFNT)

Specifies whether the font character set is resident in the printer or if it is not resident in the printer and needs to be downloaded by the system.

*NO   The font character set is not resident in the printer and needs to be downloaded by the system to the printer. Also, the font character set may be resident in the printer, but has been modified by the user. In that case, *NO should be specified.

*YES   The font character set is resident in the printer and does not need to be downloaded by the system to the printer.

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Examples

Example 1: Mark All as Being Resident

```
CHGCDEFNT   QFNT61/X0G16F FNTCHRSET(*ALL)  RESFNT(*YES)
```

This command marks all the font character set/code page pairs as resident in the printer for coded font X0G16F in library QFNT61. No user defined sections will be downloaded.

Example 2: Mark Sections as Resident

```
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F4*)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F50)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F51)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F52)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F53)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F54)  RESFNT(*YES)
CHGCDEFNT   QFNT61/X0G16B  FNTCHRSET(C0G16F55)  RESFNT(*YES)
```

This set of CHGCDEFNT commands marks all the font character set/code page pairs in sections 41 - 4F as resident and then marks sections 50 - 55 as resident.

Example 3: Mark Generic and Specific Font Character Set and Code Page Pairs

```
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F4*)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F48)   RESFNT(*NO)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F5*)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F60)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F61)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F62)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F63)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F64)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F65)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F66)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F67)   RESFNT(*YES)
CHGCDEFNT    QFNT61/X0G16F   FNTCHRSET(C0G16F68)   RESFNT(*YES)
```

This set of CHGCDEFNT commands marks all the font character set and code page pairs in sections 41 - 4F as resident; then marks section 48 to be downloaded. Sections 50 - 5F are marked as resident and sections 60 - 68 are marked as resident.

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Change Configuration List (CHGCFGL)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Configuration List (CHGCFGL) command changes a configuration list.

Parameters

Keyword	Description	Choices	Notes
TYPE	Configuration list type	*APPNDIR, *APPNLCL, *APPNRMT, *APPNSSN, *ASYNCADR, *ASYNCLOC, *RTLPASTHR, *SNAPASTHR	Required, Key, Positional 1
CFGL	Configuration list	*Name*	Optional, Key
DFTFTRACN	Default filter action	***SAME**, *ACCEPT, *REJECT	Optional
APPNRMTFTR	APPN remote CFGL filter	***SAME**, *ACCEPT, *NONE	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
APPNLCLE	APPN local location entry	Single values: ***PROMPT** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Local location name	*Communications name*	
	Element 2: Entry 'description'	*Character value*, ***BLANK**	
APPNRMTE	APPN remote location entry	Single values: ***PROMPT** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Remote location name	*Generic name, name*, *ANY	
	Element 2: Remote network identifier	*Communications name*, ***NETATR**, *NONE	
	Element 3: Local location name	*Communications name*, ***NETATR**	
	Element 4: Remote control point	*Communications name*, ***NONE**	
	Element 5: Control point net ID	*Communications name*, ***NETATR**, *NONE	
	Element 6: Location password	*Character value*, ***NONE**	
	Element 7: Secure location	*YES, ***NO**, *VFYENCPWD	
	Element 8: Single session	*YES, ***NO**	
	Element 9: Locally controlled session	*YES, ***NO**	
	Element 10: Pre-established session	*YES, ***NO**	
	Element 11: Entry 'description'	*Character value*, ***BLANK**	
	Element 12: Number of conversations	1-512, **10**	

Keyword	Description	Choices	Notes
ASYNCADRE	Async network address entry	Single values: ***PROMPT** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Network address	*Character value*	
	Element 2: Dial retry	1-255, **2**	
	Element 3: Entry 'description'	*Character value*, ***BLANK**	
ASYNCLOCE	Async remote location entry	Single values: ***PROMPT** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Remote location name	*Communications name*	
	Element 2: Remote location identifier	*Name*	
	Element 3: Entry 'description'	*Character value*, ***BLANK**	
RTLPASTHRE	Retail pass-through entry	Single values: ***PROMPT** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Retail device	*Name*	
	Element 2: SNUF device	*Name*	
	Element 3: Default host program	*Name*	
	Element 4: Entry 'description'	*Character value*, ***BLANK**	

Configuration list type (TYPE)

Specifies the type of the configuration list to be changed.

*APPNDIR

An advanced peer-to-peer networking (APPN) directory search filter configuration list is used. Only the text description (TEXT) and default action (DFTACN) parameters can be changed using this command.

Note: To change an entry in an APPN directory configuration list, use the Change Configuration List Entry (CHGCFGLE) command.

*APPNLCL

An APPN local configuration list is used. Up to 476 APPN local location entries are allowed in the configuration list.

*APPNRMT

An APPN remote configuration list is used. Up to 1898 APPN remote location entries are allowed in the configuration list.

*APPNSSN

An APPN session end point filter configuration list is used. Only the text description (TEXT) and default action (DFTACN) parameters can be changed using this command.

Note: To change an entry in an APPN session configuration list, use the Change Configuration List Entry (CHGCFGLE) command.

*ASYNCADR

An asynchronous network address configuration list is used. Up to 294 asynchronous network address entries are allowed in the configuration list.

*ASYNCLOC

An asynchronous remote location configuration list is used. Up to 32000 asynchronous remote location entries are allowed in the configuration list.

*RTLPASTHR

A retail pass-through list is used. Up to 450 retail pass-through entries can be specified in the configuration list.

*SNAPASTHR

An SNA pass-through list is used. Only the text description for an SNA configuration list can be changed using the Change Configuration List (CHGCFGL) command.

Note: To change an entry in an SNA configuration list, use the Change Configuration List Entry (CHGCFGLE) command.

Configuration list (CFGL)

Specifies the name of the configuration list. This value is required and valid only when the configuration list is an asynchronous network address list (*ASYNCADR is specified for the **Configuration list type (TYPE)** parameter). The list types have system-supplied names: QAPPNLCL, QAPPNRMT, QASYNCADR, QASYNCLOC, QRTLPASTHR, and QSNAPASSTHR.

This is a required parameter.

Default filter action (DFTFTRACN)

Specifies the default filter action for APPN requests being handled by the local system. This filter action applies to all directory search requests and session endpoint requests that are not specifically listed in the configuration list.

Note: This parameter is valid only if TYPE(*APPNDIR) or TYPE(*APPNSSN) is specified.

*SAME

The default filter action does not change.

*ACCEPT

The request is accepted.

*REJECT

The request is rejected.

APPN remote CFGL filter (APPNRMTFTR)

Specifies whether APPN remote configuration list entries should be used when filtering session end point requests.

Note: This parameter is valid only if TYPE(*APPNSSN) is specified.

*SAME

The APPN remote CFGL filter action does not change.

*ACCEPT

      Session endpoint requests for entries specified in the APPN remote configuration list are accepted.

*NONE

      Session endpoint requests will not be filtered using the entries specified in the APPN remote configuration list.

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Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*BLANK

      No text is specified.

character-value

      Specify no more than 50 characters of text, enclosed in apostrophes.

*SAME

      The value does not change.

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APPN local location entry (APPNLCLE)

Specifies the APPN local location entry. This value is required if *APPNLCL is specified for the **Configuration list type** prompt (TYPE parameter).

You can enter multiple values for this parameter.

*PROMPT

      The special value of *PROMPT allows you to add, remove, and change entries using a full screen entry panel.

Note: You must specify *PROMPT if you do not want to affect entries already residing in the configuration list. By specifying entries directly from the CHGCFGL command, all entries are removed and replaced with the new entries.

A maximum of 50 entries can be specified directly for this parameter. An entry consists of a value from each of the following elements.

local-location-name

      Specify the location name residing on the local system. This name is used by APPN to determine if the request coming in is for this system or another system in the network. The local location name must be unique and cannot already exist as a remote location name used by configuration list QAPPNRMT, or be specified on another system as a local location in the same APPN network.

entry-description

      Specify a short description of 20 characters or less for each local entry.

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APPN remote location entry (APPNRMTE)

Specifies the APPN remote location entry. This value is required if *APPNRMT is specified for the **Configuration list type** prompt (TYPE parameter).

You can enter multiple values for this parameter.

*PROMPT
: The special value of *PROMPT allows you to add, remove, and change entries using a full screen entry panel.

Note: You must specify *PROMPT if you do not want to affect entries already residing in the configuration list. By specifying entries directly from the CHGCFGL command, all entries are removed and replaced with the new entries.

A maximum of 50 entries can be specified directly for this parameter. An entry consists of a value from each of the following elements.

remote-location-name
: Specify the full name of a remote location or a generic name ending with an asterisk (*). The generic location name is used to allow one directory entry to be defined for all locations, on a single control point, whose name matches the characters preceding the asterisk. You can also specify *ANY so the system will accept all requests sent through it. Generic entries are only allowed from network nodes.

remote-network-identifier
: Specify the network identifier of the network in which the remote location resides. The default of *NETATR uses the LCLNETID value from the system network attributes.

local-location-name
: Specify the location name residing on the local system. This name is used by APPN to match a local/remote location pair entry. The default of *NETATR uses the LCLLOCNAME value from the system network attributes.

control-point-name
: Specify the control point providing network functions for the remote location. By using this control point name (directory entry for the remote location), the network is searched more efficiently to find the location. This field is required if the remote location name is generic. The default is *NONE.

control-point-network-identifier
: Specify the network identifier of the network in which the control point resides. The default of *NETATR uses the LCLNETID value from the system network attributes.

location-password
: Specify the password that is used when establishing sessions on the local location/remote location name pair. This value must contain an even number of hexadecimal characters. The default is *NONE.

secure-location
: Specifies how security information is handled for program start requests received from remote systems. The value is sent to the remote system when sessions are established. It is used in determining how allocate or evoke requests should be built. The value only applies to conversations started with the SECURITY(SAME) level of security.

    *NO   The remote system is not a secure location. Security validation done by the remote system

is not accepted. SECURITY(SAME) conversations are treated as SECURITY(NONE). No
security information will be sent with allocate or evoke requests.

*YES   The remote system is a secure location and the local system will accept security
validation done by remote systems. For SECURITY(SAME) conversations, the local
system allows the remote system to verify user passwords. On the remote system, user
IDs are retrieved from the operating system. The user IDs are then sent with an already
verified indicator in the allocate or evoke requests.

*VFYENCPWD

The remote system is not a secure location. For SECURITY(SAME) conversations, the
remote system is not allowed to send the already verified indicator. On the remote
system, user IDs and passwords are retrieved from the operating system. Passwords are
then encrypted and sent with the user IDs in the allocate or evoke requests, to be verified
by the local system. This value should only be used if the remote system is using OS/400
V3R2M0 or later. If the remote system does not support password protection then session
establishment will not be allowed. For remote systems that support password protection,
but do not support verification of encrypted passwords (VFYENCPWD), conversations
will be treated as SECURITY(NONE).

number-of-conversations
Specify the number of conversations for a single session connection. The default number of
conversations is 10. The default value must be used if single session is *NO. The valid range for
the number of conversations is 1 through 512.

locally-controlled-session
Specify YES or NO to indicate whether a locally controlled session is allowed for this local
location/remote location name pair. The default is *NO.

pre-established-session
Specify YES or NO to indicate whether the session is automatically bound when a connection is
made between the local and remote location. The default is *NO.

entry-description
Specify a short description for each remote entry. The default is *BLANK.

Note: The combination of remote location name, network identifier, and local location name must
be unique. Also, the remote location name can not already exist as a local location in
configuration list QAPPNLCL, or as the current value for LCLLOCNAME or LCLCPNAME
network attribute.

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Async network address entry (ASYNCADRE)

Specifies the asynchronous network address entry. This value is required if *ASYNCADR is specified for
the **Configuration list type** prompt (TYPE parameter).

You can enter multiple values for this parameter.

*PROMPT
The special value of *PROMPT allows you to add, remove, and change entries using a full screen
entry panel.

Note: You must specify *PROMPT if you do not want to affect entries already residing in the configuration list. By specifying entries directly from the CHGCFGL command, all entries are removed and replaced with the new entries.

A maximum of 50 entries can be specified directly for this parameter. An entry consists of a value from each of the following elements.

network-address

> Specify the X.25 network address. This value must contain only digits 0-9.

dial-retry

> Specify the number of times that dialing will be tried again when errors occur while dialing, before attempting to dial the next number on the list. The valid range of dial retries is 1-255.

entry-description

> Specify a short description for each network address entry.

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Async remote location entry (ASYNCLOCE)

Specifies the asynchronous remote location entry. This value is required if *ASYNCLOC is specified for the **Configuration list type** prompt (TYPE parameter).

You can enter multiple values for this parameter.

*PROMPT

> The special value of *PROMPT allows you to add, remove, and change entries using a full screen entry panel.

Note: You must specify *PROMPT if you do not want to affect entries already residing in the configuration list. By specifying entries directly from the CHGCFGL command, all entries are removed and replaced with the new entries.

A maximum of 50 entries can be specified directly for this parameter. An entry consists of a value from each of the following elements.

remote-location-name

> Specify the name that, when combined with the remote location identifier, determines whether to accept an incoming call. It is the same as the name used in the remote system as it's local name. This value must be unique.

remote-location-identifier

> Specify an identifier that, when combined with the remote location name, determines if an incoming call will be accepted. This identifier must be the same as the remote system has for its local identifier.

entry-description

> Specify a short description for each remote location entry. The default is *BLANK.

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Retail pass-through entry (RTLPASTHRE)

Specifies the retail pass-through entry. This value is required if *RTLPASTHR is specified for the **Configuration list type** prompt (TYPE parameter).

You can enter multiple values for this parameter.

*PROMPT
> The special value of *PROMPT allows you to add, remove, and change entries using a full screen entry panel.

Note: You must specify *PROMPT if you do not want to affect entries already residing in the configuration list. By specifying entries directly from the CHGCFGL command, all entries are removed and replaced with the new entries.

A maximum of 50 entries can be specified directly for this parameter. An entry consists of a value from each of the following elements.

retail-device-name
> Specify the name of the retail device that communicates with the host. This value must be unique.

SNUF-device-name
> Specify the name of the SNUF device through which the retail device communicates with the host. This value must be unique.

Default-host-program-name
> Specify the name of the program to be started on the host if the program name is not present in the SNA command (INIT-SELF) that requests a session to be started.

entry-description
> Specify a short description for each retail pass-through entry. The default is *BLANK.

Examples

```
CHGCFGL   TYPE(*ASYNCADR)  CFGL(CFGL01)
```

This command brings up a full-screen entry display, showing existing entries for configuration list CFGL01. From the entry display, the user can add, change, and remove entries.

Error messages

*ESCAPE Messages

CPF260F
> Configuration list &1 not found.

CPF261C
> Index for configuration list &1 not changed.

CPF261D
> Index for configuration list &1 not changed.

CPF261F

Configuration list &1 has been deleted.

CPF2625

Not able to allocate object &1.

CPF263A

CFGL type &1 does not match existing type &2.

CPF2634

Not authorized to object &1.

CPF2663

Configuration list &1 previously deleted.

CPF9838

User profile storage limit exceeded.

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Change Cfg List Entries (CHGCFGLE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Configuration List Entry (CHGCFGLE) command changes one entry in the SNA pass-through configuration list. One entry consists of a group name, entry description, and upstream SNA pass-through device names. The user can add, remove, or change the SNA pass-through device names associated with each entry denoted by a group name.

Parameters

Keyword	Description	Choices	Notes
TYPE	Configuration list type	*SNAPASTHR	Required, Key, Positional 1
GRPNAME	SNA pass-through group name	*Name*, **SAME**	Optional, Key, Positional 2
DEV	SNA pass-through device desc	Single values: **SAME** Other values (up to 254 repetitions): *Name*	Optional
TEXT	Entry 'description'	*Character value*, **SAME**, *BLANK	Optional
SNAPASTHRE	SNA pass-through entry	Single values: **SAME** Other values: *Element list*	Optional
	Element 1: SNA pass-through group name	*Communications name*	
	Element 2: SNA pass-through device desc	Single values: **SAME** Other values (up to 254 repetitions): *Communications name*	
	Element 3: Entry 'description'	*Character value*, **SAME**, *BLANK	

Configuration list type (TYPE)

Specifies the type of configuration list entry being changed.

This is a required parameter.

***SNAPASTHR**
> The SNA pass-through list is used. One SNA pass-through entry can be specified to be changed in the configuration list.

SNA pass-through group name (GRPNAME)

Specifies the SNA pass-through group name of the configuration list entry being changed.

*SAME
> The value does not change.

group-name
> Specify the name of the entry being changed. An entry is identified by a group name. The group name must already exist in the configuration list. The group name has upstream SNA pass-through device names associated with it.

SNA pass-through device desc (DEV)

Specifies the names of the upstream SNA pass-through devices associated with the group name specified for the GRPNAME parameter.

*SAME
> The value does not change.

device-name
> Specify the name of the device or devices to use for the pass-through session(s).

Entry 'description' (TEXT)

Specifies text that briefly describes the SNA pass-through group.

Note: This parameter is valid only if TYPE(*SNAPASTHR) is specified.

*SAME
> The value does not change.

*BLANK
> Text is not specified.

'entry-description'
> Specify a description of up to 50 characters for the SNA pass-through entry being changed.

SNA pass-through entry (SNAPASTHRE)

Specifies the SNA pass-through entry. This parameter can be specified if TYPE(*SNAPASTHR) is specified. However, because this parameter may be removed in a later release, whenever possible use GRPNAME, DEV, and TEXT parameters.

Examples

```
CHGCFGLE   TYPE(*SNAPASTHR)  GRPNAME(CICSGROUP)
           DEV(HOSTDEV1 HOSTDEV2)
           TEXT('Chicago Host CICS group')
```

This command changes the device names currently associated with the SNA configuration group CICSGROUP to HOSTDEV1 and HOSTDEV2.

Error messages

<u>*ESCAPE Messages</u>

CPF260F

> Configuration list &1 not found.

CPF261C

> Index for configuration list &1 not changed.

CPF2625

> Not able to allocate object &1.

CPF2634

> Not authorized to object &1.

CPF2663

> Configuration list &1 previously deleted.

CPF9838

> User profile storage limit exceeded.

Change Cleanup (CHGCLNUP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Cleanup (CHGCLNUP) command allows you to specify cleanup options controlling which objects on the system are to be deleted automatically. The cleanup options control the following:

- whether the cleanup operation is allowed
- when the cleanup operation is run each day
- which objects are cleaned up

Refer to the following parameter descriptions for a list of the objects that are cleaned up.

- **User messages (USRMSG)**
- **System and workstation msgs (SYSMSG)**
- **Job logs and system output (SYSPRT)**
- **System journals and logs (SYSLOG)**
- **Office calendar items (CALITM)**

If cleanup is active when this command is used, the new values may or may not be used, depending on how far along the cleanup is. If cleanup is not active when this command is entered, the new values specified for this command are used the next time cleanup is started with the Start Cleanup (STRCLNUP) command or as described in the Basic System Operation information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restriction: You must have all object (*ALLOBJ), security administrator (*SECADM), and job control (*JOBCTL) special authorities to use this command.

Parameters

Keyword	Description	Choices	Notes
ALWCLNUP	Allow cleanup	***SAME**, *YES, *NO	Optional
STRTIME	Time cleanup starts each day	*Time*, ***SAME**, *SCDPWROFF, *NONE	Optional
USRMSG	Number of days to keep	*Element list*	Optional
	Element 1: User messages	1-366, ***SAME**, *KEEP	
SYSMSG	System and workstation msgs	1-366, ***SAME**, *KEEP	Optional
SYSPRT	Job logs and system output	1-366, ***SAME**, *KEEP	Optional
SYSLOG	System journals and logs	1-366, ***SAME**, *KEEP	Optional
CALITM	Office calendar items	1-366, ***SAME**, *KEEP	Optional
JOBQ	Job queue	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Job queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
JRNRCVSIZ	Journal receiver size	1-1919999, ***SAME**	Optional
RUNPTY	Run priority	1-99, ***SAME**	Optional

Allow cleanup (ALWCLNUP)

Specifies whether the cleanup operation can be run on the system. If **ALWCLNUP(*YES)** is specified, cleanup can be started with the Start Cleanup (STRCLNUP) command or as described in the Basic System Operation information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter. Also, if **ALWCLNUP(*YES)** is specified, you can change the cleanup operation by retrieving the program QEZUSRCLNP with the Retrieve CL Source (RTVCLSRC) command, changing the source, and compiling the CL program with the Create CL Program (CRTCLPGM) command.

*SAME
> The existing value does not change. The initial value is *NO, but is set to *YES during a scratch install.

*YES   Cleanup can be run on this system.

*NO   Cleanup cannot be run on this system.

Time cleanup starts each day (STRTIME)

Specifies the time the cleanup operation starts each day.

*SAME
> The time of day does not change. The initial value is 220000.

*SCDPWROFF
> The cleanup starts at the time of the scheduled power off. The power off takes place when the cleanup finishes, whether or not the cleanup was successfully completed.

*NONE
> No cleanup start time is scheduled. The cleanup batch jobs are not submitted.

time   Specify the time of day when daily cleanup starts in the **hhmmss** format, where **hh = hours**, **mm = minutes**, and **ss = seconds**.

> The time can be specified with or without a time separator:
> - Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where hh = hours, mm = minutes, and ss = seconds.
> - With a time separator, specify a string of 5 or 8 digits where the time separator specified for your job is used to separate the hours, minutes, and seconds. If you enter this command from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command will fail.

User messages (USRMSG)

Specifies whether messages on the user profile message queues are cleaned up. This function deletes messages on the user message queues that have remained on the system longer than the number of days specified.

*SAME
> The number of days does not change. The initial value is 7 days.

*KEEP
>
> Messages are not deleted; they are kept.

1-366 Specify the number of days messages are kept before they are deleted.

System and workstation msgs (SYSMSG)

Specifies whether messages on the QSYSOPR message queue and on work station message queues are cleaned up. The cleanup function deletes messages on the QSYSOPR message queue and the work station message queues that have remained on the system longer than the number of days specified.

*SAME
>
> The number of days does not change. The initial value is 4 days.

*KEEP
>
> Messages are not deleted; they are kept.

1-366 Specify the number of days to keep messages before they are deleted.

Job logs and system output (SYSPRT)

Specifies whether job logs and other system output are cleaned up.

To prevent this output from being mixed with the user's output, the output queue of the printer file for job logs (QPJOBLOG) is changed to QUSRSYS/QEZJOBLOG to receive the job log. The output queue of print files QPSRVDMP, QPPGMDMP, and QPBASDMP is changed to QUSRSYS/QEZDEBUG. All entries in QEZJOBLOG and QEZDEBUG that are older than the number of days specified on this parameter are deleted.

If the cleanup operation is ended, the output queues named QEZJOBLOG and QEZDEBUG will continue to be used for job logs, service dumps, and program dumps.

*SAME
>
> The number of days does not change. The initial value is 7 days.

*KEEP
>
> Job logs and other system output are not deleted; they are kept.

1-366 Specify the number of days to keep job logs and other system output before they are deleted.

System journals and logs (SYSLOG)

Specifies that system journals, history files, problem log files, and the alert database are cleaned up (deleted).

Journal receivers that are cleaned up:

Journal receivers that are used for one of the following system journals and are older than the number of days specified on this parameter are deleted.

QAOSDIAJRN
>
> Journal for DIA files

QDSNX
> Journal for DSNX logs

QSNADS
> Journal for SNADS files

QSXJRN
> Journal for problem databases

QPFRADJ
> Journal for performance adjustment data

QACGJRN
> Journal for job accounting data

QX400 OSI Message Services/400

QCQJMJRN
> Journal for Managed System Services/400

QO1JRN
> Journal for Application Enabler OFC files

ADJRNL0
> Journal for application program driver files

QSNMP
> Journal for SNMP

QLYJRN
> Journal for Application Development Manager Transactions

QLYPRJLOG
> Journal for project logs

QMAJRN
> Journal for work order requests

QZMF
> Journal for QMSF job

Note: The journal receiver for job accounting (QACGJRN) is cleaned up only if Operational Assistant creates the journal.

History files that are cleaned up:

History files that meet both the following conditions are deleted:
- History files that are older than the number of days specified on this parameter.
- History files named QSYS/QHST*.

Problem log files and entries that are cleaned up:

Problem log entries older than the number of days specified on this parameter are deleted. The Delete Problem (DLTPRB) command is run to delete the problem log entries. When the DLTPRB command is run, the number of days specified on this parameter is used for the **Days (DAYS)** parameter of the DLTPRB command.

Note: If the number of days specified on this parameter is less than the number of days specified for the system value QPRBHLDITV (Problem Log Hold Interval), the value for QPRBHLDITV is used for problem log cleanup.

In addition to the problem log entries being deleted, the following problem log files in the QUSRSYS library are reorganized:

Note: The following files are in library QUSRSYS.

```
QASXCALL    QASXFRU     QASXNOTE
QASXPROB    QASXPTF     QASXYMP
QASXEVT
```

Alert database entries that are cleaned up:

Alert database entries older than the number of days specified on this parameter are deleted. The Delete Alert (DLTALR) command is run to delete the alert database entries. When the DLTALR command is run, the number of days specified on this parameter is used for the **Days (DAYS)** parameter of the DLTALR command.

In addition to the alert database entries being deleted, the file QUSRSYS/QAALERT is reorganized.

Program temporary fixes (PTFs) that are cleaned up:

Note: If the library QSMU exists on the system, only the PTFs for the current release are cleaned up. If the library QSMU does not exist on the system, the PTFs for the current and all previous releases are cleaned up.
- Temporary objects named:
    - QPZA000000 through QPZA999999
    - QPZI000000 through QPZI999999
    - QPZR000000 through QPZR999999
    - QSCA000000 through QSCA999999
    - QSCR000000 through QSCR999999
- Exit programs shipped with PTFs
- Physical files in QUSRSYS
- QAPZPTF
- QAPZREQ
- QAPZSYM

*SAME
> The number of days does not change. The initial value is 30 days.

*KEEP
> System journals and system logs are not deleted.

1-366   Specify the number of days to keep system journals and system logs before they are deleted.

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Office calendar items (CALITM)

In V5R1 and later releases, this parameter is not supported.

Specifies whether OfficeVision/400 calendar items are kept or deleted by the cleanup operation and whether office files are reorganized with the Reorganize Document Library Object (RGZDLO) and Reorganize Physical File Member (RGZPFM) commands.

*SAME
> The number of days does not change. The initial value is 30 days.

*KEEP
>   Calendar items are not deleted and office files are not reorganized.

1-366   Specify the number of days calendar items are kept before they are deleted, and the number of
>   days before office files are reorganized.

Job queue (JOBQ)

Specifies the name and library of the job queue to which the cleanup batch jobs are submitted.

Single values

*SAME
>   The job queue does not change. The initial value is *LIBL/QCTL.

Qualifier 1: Job queue

name   Specify the name of the job queue to which cleanup batch jobs are submitted.

Qualifier 2: Library

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
>   The current library for the job is used to locate the job queue. If no library is specified as the
>   current library for the job, QGPL is used.

name   Specify the name of the library where the job queue is located.

Journal receiver size (JRNRCVSIZ)

Specifies a number of kilobytes (KB) of storage. Each 1000 KB specifies 1,024,000 bytes of storage space.
When the size of the space for the journal receiver is larger than the size specified by this value,
Operational Assistant (OA) automatic cleanup function will detach it.

OA also automatically detaches receivers that are older than the number of days you have specified for
the **System journals and logs (SYSLOG)** parameter.

Journal receivers are deleted only after they have been detached longer than the number of days specified
for the SYSLOG parameter.

*SAME
>   The journal receiver size does not change. The initial value is 5000 KB.

1-1919999
>   Specify a journal receiver size in kilobytes (KB) of storage. If this value is exceeded when OA
>   automatic cleanup is run, the journal receiver will be detached.

Run priority (RUNPTY)

Specifies the run priority for the job. Run priority is a value ranging from 1 (highest priority) through 99 (lowest priority), that represents the importance of the job when it competes with other jobs for machine resources. This value represents the relative (not absolute) importance of the job. For example, a routing step with a run priority of 25 is not twice as important as one with a run priority of 50.

*SAME
The run priority does not change. The initial value is 55.

1-99   Specify the run priority that the routing step uses.

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Examples

Example 1: Keeping User Messages During Cleanup

CHGCLNUP   ALWCLNUP(*YES)   USRMSG(*KEEP)   STRTIME(0700)

This command changes the cleanup options so that user messages are kept and not deleted when cleanup is performed. This command sets cleanup start time at 7:00 A.M.

Example 2: Cleanup of System Journals and System Logs

CHGCLNUP   ALWCLNUP(*YES)   SYSMSG(10)   SYSLOG(3)

This command changes the cleanup options so that system messages are kept for ten days, and system journals and system logs are kept for three days, before being deleted.

Example 3: Changing Run Priority of Cleanup Job.

CHGCLNUP   RUNPTY(50)

This command changes the run priority to 50.

Example 4: Changing Journal Receiver Size

CHGCLNUP   JRNRCVSIZ(6000)

This changes the journal receiver size limit to 6000 KB of storage, (6144000 bytes).

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Error messages

*ESCAPE Messages

CPF1E2A
Unexpected error in QSYSSCD job.

CPF1E2B
Power scheduler and cleanup options not found.

CPF1E3C
Job queue &2/&1 not found.

CPF1E3D
Library &1 for JOBQ parameter not found.

CPF1E32
Not authorized to change cleanup options.

CPF1E33

Cleanup options or power schedule in use by another user.

CPF1E99

Unexpected error occurred.

Change Class (CHGCLS)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Class (CHGCLS) command changes the attributes of a class object that was created using the Create Class (CRTCLS) command. The class defines the processing attributes for jobs that use the class. The class used by a job is specified in the subsystem description routing entry used to start the job. If a job consists of multiple routing steps, the class used by each subsequent routing step is specified in the routing entry used to start the routing step.

Any attribute can be changed, except for the public authority attribute. Refer to the Revoke Object Authority (RVKOBJAUT) command and the Grant Object Authority (GRTOBJAUT) command for more information on changing object authorizations.

Restrictions

1. To use this command, you must have:
   - object management (*OBJMGT) and object operational (*OBJOPR) authorities for the class.
   - execute (*EXECUTE) authority for the library in which the class resides.

Parameters

Keyword	Description	Choices	Notes
CLS	Class	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Class	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
RUNPTY	Run priority	1-99, ***SAME**	Optional
TIMESLICE	Time slice	0-9999999, ***SAME**	Optional
PURGE	Eligible for purge	***SAME**, *YES, *NO	Optional
DFTWAIT	Default wait time	0-9999999, ***SAME**, *NOMAX	Optional
CPUTIME	Maximum CPU time	1-9999999, ***SAME**, *NOMAX	Optional
MAXTMPSTG	Maximum temporary storage	1-2147483647, ***SAME**, *NOMAX	Optional
MAXTHD	Maximum threads	1-32767, ***SAME**, *NOMAX	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Class (CLS)

Specifies the qualified name of the class.

Note: The following IBM-supplied classes are not valid for this parameter:
- QARBCLS
- QLPINSTALL

- QMONCLS

This is a required parameter.

Qualifier 1: Class

name   Specify the name of the class.

Qualifier 2: Library

*LIBL   All libraries in the thread's library list are searched until a match is found.

*CURLIB
>   The current library for the thread is used to locate the object. If no library is specified as the current library for the thread, the QGPL library is used.

name   Specify the library where the class is located.

Top

Run priority (RUNPTY)

Specifies the run priority of jobs that use the class. Run priority is a value ranging from 1 (highest priority) through 99 (lowest priority) that represents the priority at which the job competes for the processing unit relative to other jobs that are active at the same time. For multi-threaded jobs, the run priority is also the highest run priority allowed for any thread within the job. Individual threads within the job may have a lower priority.

This value represents the relative, not absolute, importance of the job. For example, a job with a run priority of 25 is **not** twice as important as one with a run priority of 50.

*SAME
>   The run priority does not change.

1-99   Specify the run priority of the job that uses this specified class.

Top

Time slice (TIMESLICE)

Specifies the maximum amount of processor time (in milliseconds) given to each thread in a job using this class before other threads in a job or other jobs are given the opportunity to run. The time slice establishes the amount of time needed by a thread in a job to accomplish a meaningful amount of processing. At the end of the time slice, the thread might be put in an inactive state so that other threads can become active in the storage pool.

*SAME
>   The time slice does not change.

0-9999999
>   Specify the maximum amount of time (in milliseconds) that each thread in a job that uses this class can have to run.

>   **Note:** Although you can specify a value of less than 8, the system takes a minimum of 8 milliseconds to run a process. If you display a job's run attributes, the time slice value is never less than 8.

Top

Eligible for purge (PURGE)

Specifies whether the job is eligible to be moved out of main storage and put into auxiliary storage at the end of a time slice or when there is a long wait (such as waiting for a work station user's response). This attribute is ignored when more than one thread is active within the job.

*SAME
The value does not change.

*YES The job is eligible to be moved out of main storage and into auxiliary storage. However, a job with multiple threads is never purged from main storage.

*NO The job is not eligible to be moved out of main storage and put into auxiliary storage. However, when main storage is needed, pages belonging to a thread in this job may be moved to auxiliary storage. Then, when a thread in this job runs again, its pages are returned to main storage as they are needed.

Default wait time (DFTWAIT)

Specifies the default maximum time (in seconds) that a thread in the job waits for a system instruction, such as the LOCK machine interface (MI) instruction, to acquire a resource. This default wait time is used when a wait time is not specified for a given situation. Normally, this would be the amount of time the system user is willing to wait for the system before the request is ended.

If the wait time for an instruction is exceeded, an error message can be displayed or it can be automatically handled by a Monitor Message (MONMSG) command.

*SAME
The default wait time does not change.

*NOMAX
There is no maximum wait time.

0-9999999
Specify the maximum time (in seconds) that the system waits for the system instruction to acquire a resource.

Note: Although a 0 default wait time is allowed, it is not recommended. Some system instructions require the use of system resources that may be in use and with a 0 default time, will cause the instruction to fail. When a system instruction fails (exceeds the default wait time) unexpected results may occur for the thread. Most system resources will only be in use for a short time, so having a small default wait time will not noticeably degrade the performance of the thread.

Maximum CPU time (CPUTIME)

Specifies the maximum processing unit time (in milliseconds) that the job can use. If the job consists of multiple routing steps, each routing step is allowed to use this amount of processing unit time. If the maximum time is exceeded, the job is ended.

*SAME
The maximum processing unit time does not change.

*NOMAX
There is no limit on the processing unit time used.

1-9999999
> Specify the maximum amount of processing unit time (in milliseconds) that can be used.

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Maximum temporary storage (MAXTMPSTG)

Specifies the maximum amount of temporary (auxiliary) storage (in kilobytes) that the job can use. If the job consists of multiple routing steps, this is the maximum temporary storage that the routing step can use. This temporary storage is used for storage required by the program itself and by implicitly created internal system objects used to support the job. (It does not include storage in the QTEMP library.) If the maximum temporary storage is exceeded, the job is ended. This parameter does not apply to the use of permanent storage, which is controlled through the user profile.

*SAME
> The maximum amount of temporary storage for jobs using this class does not change.

*NOMAX
> The system maximum is used.

1-2147483647
> Specify the maximum amount of temporary storage (in kilobytes) that can be used.

> **Note:** Although the value is specified in kilobytes, the specified value is stored in the class rounded up to the nearest megabyte.

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Maximum threads (MAXTHD)

Specifies the maximum number of threads that a job using this class can run with at any time. If multiple threads are initiated simultaneously, this value may be exceeded. If this maximum value is exceeded, the excess threads will be allowed to run to their normal completion. Initiation of additional threads will be inhibited until the maximum number of threads in the job drops below this maximum value.

*SAME
> The value does not change.

*NOMAX
> There is no maximum number of threads.

1-32767
> Specify the maximum number of threads for a job.

> **Note:** Depending upon the resources used by the threads and the resources available on the system, the initiation of additional threads may be inhibited before this maximum value is reached.

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Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*BLANK
> No text is specified.

'description'
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCLS  CLS(CLASS1)  RUNPTY(60)  TIMESLICE(900)
```

This command changes a class called CLASS1 in the library on the job's library list. The run priority for the class is changed to 60 and a time slice of 900 milliseconds.

Error messages

*ESCAPE Messages

CPF1169

Class &1 in library &2 not changed.

Change Cluster Configuration (CHGCLUCFG)

The Change Cluster Configuration (CHGCLUCFG) command is used to tune cluster performance and configuration parameters. The command provides a base level of tuning support where the cluster will adjust to a predefined set of values identified for maximum, minimum, and normal timeout and messaging interval values. If an advanced level of tuning is desired, usually anticipated with the help of IBM support personnel, then individual parameters may be tuned over a predefined range of values using the Change Cluster Resource Services (QcstChgClusterResourceServices) API.

Values for current settings may be retrieved using the Display Cluster Information (DSPCLUINF) command.

Restrictions:

1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.
2. This command cannot be called from a cluster resource group exit program.
3. This command must be called on a cluster node with a status of Active.
4. The tuning parameters defined under the Change Cluster Resource Services (QcstChgClusterResourceServices) API must match exactly in both partitions for a merge to be allowed.

Top

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
LEVEL	Level	**<u>*NORMAL</u>**, *MIN, *MAX	Optional

Top

Cluster (CLUSTER)

Specifies the cluster for which the configuration and tuning will be changed.

This is a required parameter.

name   Specify the name of the cluster.

Top

Level (LEVEL)

Specifies the desired cluster communications configuration tuning sensitivity level. Provides a simple way to set cluster performance and configuration parameters.

*NORMAL
>   Default values are used for cluster communications performance and configuration parameters. This setting may be used to return all parameters to the original default values.

*MIN   Adjustments are made to cluster communications to increase the heartbeating interval and increase the various message timeout values. With fewer heartbeats and longer timeout values, the cluster will be slower to respond (minimum sensitivity) to communications failures.

*MAX   Adjustments are made to cluster communications to decrease the heartbeating interval and decrease the various message timeout values. With more frequent heartbeats and shorter timeout values, the cluster will be quicker to respond (maximum sensitivity) to communications failures.

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Examples

```
CHGCLUCFG   CLUSTER(MYCLUSTER)   LEVEL(*MIN)
```

This command changes the configuration and tuning level of the cluster MYCLUSTER. The tuning level is set to the minimum sensitivity level.

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Error messages

*ESCAPE Messages

CPF0001
>   Error found on &1 command.

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Change Cluster Node Entry (CHGCLUNODE)

The Change Cluster Node Entry (CHGCLUNODE) command is used to change cluster membership information for a cluster node entry. The information that can be changed is the cluster interface addresses defined for the node and status of the node. The node entry which is being changed may or may not have Cluster Resource Services started.

You can add, remove, or replace an interface address for the cluster node. The cluster interface address is an IP address that is used by Cluster Resource Services to communicate with other nodes in the cluster. The address is in dotted decimal format.

You can also change the the status of a node to Failed. Using this command to change the status of a node to Failed provides a way to tell Cluster Resource Services that a node has really failed. There are certain failure conditions that Cluster Resource Services cannot detect as a node failure. Rather, the problem appears to be a communication problem and the cluster looks like it has become partitioned. By telling Cluster Resource Services that a node has failed, it makes recovery from the partition state simpler since a backup node from the remaining active cluster nodes can then be assigned as the primary node.

When you change the status of a node to Failed, the role of nodes in the recovery domain for each cluster resource group in the partition may be reordered by assigning the specified node as the last backup. If an exit program is specified for the cluster resource group, it will be called with an action code of Change Node Status. If multiple nodes have failed and their status needs to be changed, the order in which the nodes are changed will affect the final order of the recovery domain's backup nodes in the cluster resource group.

If the node status is changed to failed and the node was the primary node for a cluster resource group, the first active backup will be reassigned as the new primary node. When this occurs for a device cluster resource group, ownership of the hardware will be moved to the new primary node.

If a problem is detected and the command does not complete successfully, the command can be run again once the problem is corrected. Any cluster resource group that had already had the status of a node changed from Partition to Failed and the recovery domain order changed will not be affected by running this command again.

Warning: Changing the node status to failed when, in fact, the node is still active and a true partition has occurred should not be done. Doing so allows a node in each partition to become the primary node for a cluster resource group. When two nodes think they are the primary node, data such as files or data bases could become corrupted if two different nodes are each making independent changes to copies of their files. In addition, the two partitions cannot be merged back together when a node in each partition has been assigned the primary role.

Restrictions:
1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.
2. This command cannot be called from a cluster resource group exit program.
3. This command must be called from a program running on a cluster node with a status of Active.
4. If the cluster is in a partitioned state, this operation can only be performed within the partition running the command.

5. Only one cluster interface address can be changed at a time. If the cluster is in partitioned state, the change cluster interface address is only allowed for a node within the same partition.
6. To change the cluster node status, only a node that has a status of Partition or Failed can be changed and it can only be changed to Failed status.

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
NODE	Node identifier	*Name*	Required, Positional 2
OPTION	Option	*ADDIFC, *RMVIFC, *CHGIFC, *CHGSTS	Required, Positional 3
OLDINTNETA	Old IP address	*Character value*	Optional, Positional 4
NEWINTNETA	New IP address	*Character value*	Optional, Positional 5

Cluster (CLUSTER)

Specifies the cluster that contains the node being changed.

This is a required parameter.

name   Specify the name of the cluster.

Node identifier (NODE)

Specifies the node being changed.

This is a required parameter.

name   Specify the name of the node being changed.

Option (OPTION)

Indicates what is being changed.

This is a required parameter.

*ADDIFC
        Add an internet address for the specified node.

*RMVIFC
        Remove an internet address for the specified node.

*CHGIFC
>> Replace an internet address for the specified node with a different existing internet address.

*CHGSTS
>> Change cluster node status from Partition or Failed to Failed.

Old IP address (OLDINTNETA)

Specifies the cluster interface address which is being replaced or removed. The address is in dotted decimal format.

This is a required parameter.

character-value
>> Specify the cluster interface address to be changed.

New IP address (NEWINTNETA)

Specifies the cluster interface address which is being added to the node information or replacing an old cluster interface address. The address is in dotted decimal format.

This is a required parameter.

character-value
>> Specify the cluster interface address which is to be used to communicate with the node.

Examples

```
CHGCLUNODE   CLUSTER(MYCLUSTER)   NODE(NODE01)   OPTION(*CHGSTS)
```

This command changes the status of node NODE01 in cluster MYCLUSTER to Failed.

Error messages

*ESCAPE Messages

CPF0001
>> Error found on &1 command.

Change Cluster Recovery (CHGCLURCY)

The Change Cluster Recovery (CHGCLURCY) command is used for problem analysis. Use this command only when directed by IBM Service personnel. It directs a node in a cluster resource group to perform a specific recovery action. The recovery action can cancel the current protocol, force a recovery of the cluster resource group object associated with the cluster resource group, force a rejoin with the cluster resource group, or end the job that is associated with the cluster resource group.

The actions are intended to be used when a cluster resource group is experiencing a problem, and you need to force some recovery action onto the group. The problem may not be due to Cluster Resource Services. For example, Cluster Resource Services submits a job to invoke user exit programs. If the job is held, then it appears to a user that the cluster resource group is hung. A user may not know what exit program job was submitted, and so cannot perform any recovery outside of the cluster. Performing the appropriate recovery action with CHGCLURCY can satisfy Cluster Resource Services so it can fail the protocol that invoked the exit program job and continue.

Restrictions:

1. To use this command you must have job control (*JOBCTL) special authority, and either service (*SERVICE) special authority or be authorized to the Service Trace function of the operating system through iSeries Navigator's Application Administration support. You must also have change (*CHANGE) authority to any cluster resource group object that is to be acted upon with this command.

2. The cluster must be at version 3 or greater for this command to work remotely (work on any node other than the node issuing the command).

3. Cluster Resource Services must either be active or in the process of starting on the node that this command is issued from.

4. Only nodes that have a job for the desired cluster resource group may particpate in this command.

5. To determine if this command succeeded, check the job logs of the affected cluster jobs for a CPDBB06 message indicating the recovery action performed.

Warning: Use caution with this command, recovery actions cannot be undone or canceled.

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
CRG	Cluster resource group	*Name*, *ALL	Required, Positional 2
NODE	Node identifier	*Name*, *ALL	Required, Positional 3
ACTION	Action	*CANCEL, *RESTART, *REJOIN, *END	Required, Positional 4

Cluster (CLUSTER)

Specifies the cluster that is to be operated upon.

This is a required parameter.

name   Specifies the name of the cluster to which a recovery action will be performed.

Cluster resource group (CRG)

Specifies the cluster resource group that is to be operated upon.

This is a required parameter.

*ALL   All groups, including the reserved groups QCSTCTL and QCSTCRGM.

name   Specify the name of the cluster resource group. The reserved names for the Cluster Control and Cluster Resource Group Manager groups, QCSTCTL and QCSTCRGM, respectively, may also be specified.

Node identifier (NODE)

Specifies the cluster node that is to be operated upon.

This is a required parameter.

*ALL   All active nodes in the cluster.

name   Specify the name of the cluster node.

Action (ACTION)

Specifies a recovery action for the specified cluster resource group on the specified node.

This is a required parameter.

Notes:
1. The only valid value for NODE(*ALL) is *END.
2. The only valid value for CRG(*ALL) is *END.
3. For a CRG parameter value of QCSTCTL or QCSTCRGM, actions *RESTART or *REJOIN will cause clustering to end on the specified node, and then the node will automatically start. For *END, clustering will end on the node and clustering will not be automatically started.

*CANCEL
  Cancels the current protocol request. If no protocol is in-progress, the action is ignored.

*RESTART
  Specifies to restart the specified node in the specified cluster resource group by performing a start

action without the cluster resource group doing any failover of the node. The cluster resource group object associated with the cluster resource group will be recovered from another node in the recovery domain of the group. If there is not another active node in the recovery domain, then the cluster resource group will go inactive and no further operations on it will occur until another node in the recovery domain starts that has a valid cluster resource group object.

*REJOIN
Specifies to rejoin the specified node in the specified cluster resource group. The cluster resource group will first do a failover, and then the cluster resource group will automatically start the node only for that cluster resource group.

*END The job on the specified node that corresponds to the specified cluster resource group is ended. This may cause a failover in the cluster resource group. The cluster resource group will not automatically start the node, and no further cluster resource group operations can be performed on the node without first ending, then starting, clustering on the node.

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Examples

Example 1: Recovery Action for One Node in One Cluster Resource Group

```
CHGCLURCY   CLUSTER(EXAMPLE)  CRG(CRG1)  NODE(NODE1)
            ACTION(*CANCEL)
```

This command cancels the current protocol in cluster resource group CRG1 on node NODE1 in cluster EXAMPLE.

Example 2: Recovery Action for a Reserved Cluster Resource Group

```
CHGCLURCY   CLUSTER(EXAMPLE)  CRG(QCSTCRGM)
            NODE(NODE1)  ACTION(*RESTART)
```

This command causes node NODE1 of cluster resource group QCSTCRGM in cluster EXAMPLE to end clustering on NODE1. Clustering on NODE1 will attempt to automatically restart itself as though NODE1 was started with the Start Cluster Node (STRCLUNOD) command.

Example 3: Recovery Action for All Nodes

```
CHGCLURCY   CLUSTER(EXAMPLE)  CRG(CRG1)
            NODE(*ALL)  ACTION(*END)
```

This command causes all cluster jobs on all nodes associated with cluster resource group CRG1 in cluster EXAMPLE to end. No further operations on CRG1 can be performed on a given node until that node has clustering ended, and then started. The End Cluster Node (ENDCLUNOD) and STRCLUNOD commands may be used for ending and starting a cluster node.

Example 4: Recovery Action for All Groups

```
CHGCLURCY   CLUSTER(EXAMPLE)  CRG(*ALL)
            NODE(NODE1)  ACTION(*END)
```

This command causes all cluster jobs on node NODE1 in cluster EXAMPLE to end. This has the effect of ending clustering on NODE1. To start the cluster jobs on NODE1 requires NODE1 to have clustering started on it. The STRCLUNOD command may be used for starting a cluster node.

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Error messages

CPF222E

&1 special authority is required.

CPF98A2

Not authorized to &1 command.

CPFBB02

Cluster &1 does not exist.

CPFBB09

Cluster node &1 does not exist in cluster &2.

CPFBB0F

Cluster resource group &1 does not exist in cluster &2.

CPFBB70

Request &1 not compatible with current cluster version.

CPFBBA0

Cluster node &1 in cluster resource group &2 is not responding.

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Change Cluster Version (CHGCLUVER)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Cluster Version (CHGCLUVER) command is used to adjust the current version of the cluster. The current cluster version is the version at which the nodes in the cluster are actively communicating with each other. In addition, this value determines what nodes can join into the cluster and the cluster's ability to use new functions supported by the nodes potential node version. It is initially set when the cluster is created. This command adjusts the cluster version to be one level greater than the existing value. To view the current cluster version, use the Display Cluster Information (DSPCLUINF) command.

This command can only be used to adjust to a higher version. The only way to change the cluster to a lower version is to delete and recreate the cluster at the lower version.

This command will not cause the cluster resource group exit program to be called.

Restrictions:

1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.
2. This command cannot be called from a cluster resource group exit program.
3. This command must be invoked from a cluster node with a status of Active.
4. This command cannot be used if the cluster is in a partitioned state.
5. The cluster version cannot be set higher than the lowest potential node version in the cluster. To view the potential node versions, use the Display Cluster Information (DSPCLUINF) command.

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1

Cluster (CLUSTER)

Specifies the cluster being adjusted.

This is a required parameter.

name   Specify the name of the cluster that is to be changed.

Examples

```
CHGCLUVER   CLUSTER(MYCLUSTER)
```

This command adjust the current version of cluster MYCLUSTER. If the current cluster version level was 2, it is set to 3 as a result of this command.

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Error messages

*ESCAPE Messages

CPF0001
    Error found on &1 command.

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Change Command (CHGCMD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Command (CHGCMD) command changes some of the attributes of a command definition. The command gives you the ability to specify a different command processing program to process the command. You can also change the type of operating environment (production, debug, or service) in which the command can be processed, and the text description of the command. CL programs that use the command being changed by the Change Command (CHGCMD) command do *not* have to be created again. The Change Command (CHGCMD) command does not change the parameter descriptions or validity checking information in the command definition object.

Restrictions:

1. The user must have object management authority for the command that is being changed.

2. The CHGCMD command can be used to change only the attributes of a created CL command. That is, those attributes that were specified on the Create Command (CRTCMD) command. The CHGCMD command cannot be used to change attributes of *statements*, such as command definition statements.

3. The CHGCMD command should not be used to change the command processing program (PGM parameter), the validity checking program (VLDCKR parameter), or the prompt override program (PMTOVRPGM parameter) of an IBM-supplied command.

4. If the CHGCMD command is used to change the command processing program (PGM parameter), the validity checking program (VLDCKR parameter), or the prompt override program (PMTOVRPGM parameter), the threadsafe attribute of the command will be set to *NO. You must use the Create Command (CRTCMD) command to set the threadsafe attribute to *YES or *COND.

Parameters

Keyword	Description	Choices	Notes
CMD	Command	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Command	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PGM	Program to process command	Single values: ***SAME**, *REXX Other values: *Qualified object name*	Optional, Positional 2
	Qualifier 1: Program to process command	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
REXSRCFILE	REXX source file	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: REXX source file	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
REXSRCMBR	REXX source member	*Name*, ***SAME**, *CMD	Optional

Keyword	Description	Choices	Notes
REXCMDENV	REXX command environment	Single values: ***SAME**, *COMMAND, *CPICOMM, *EXECSQL Other values: *Qualified object name*	Optional
	Qualifier 1: REXX command environment	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
REXEXITPGM	REXX exit programs	Single values: ***SAME**, *NONE Other values (up to 8 repetitions): *Element list*	Optional
	Element 1: Program	*Qualified object name*	
	Qualifier 1: Program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
	Element 2: Exit code	2, 3, 4, 5, 7, 8, 9, 10	
VLDCKR	Validity checking program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Validity checking program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
MODE	Mode in which valid	Single values: ***SAME**, *ALL Other values (up to 3 repetitions): *PROD, *DEBUG, *SERVICE	Optional
ALLOW	Where allowed to run	Single values: ***SAME**, *ALL Other values (up to 9 repetitions): *BATCH, *INTERACT, *BPGM, *IPGM, *BREXX, *IREXX, *EXEC, *BMOD, *IMOD	Optional
ALWLMTUSR	Allow limited users	***SAME**, *NO, *YES	Optional
HLPSHELF	Help bookshelf	*Simple name*, ***SAME**, *LIST, *NONE	Optional
HLPPNLGRP	Help panel group	Single values: *NONE, ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Help panel group	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
HLPID	Help identifier	*Character value*, ***SAME**, *CMD, *NONE	Optional
HLPSCHIDX	Help search index	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Help search index	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
CURLIB	Current library	*Name*, ***SAME**, *NOCHG, *CRTDFT	Optional
PRDLIB	Product library	*Name*, ***SAME**, *NOCHG, *NONE	Optional
PMTOVRPGM	Prompt override program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Prompt override program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
ENBGUI	Enable GUI	*YES, *NO, ***SAME**	Optional

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Command (CMD)

Specifies the command to be changed. The command can be either a user-defined command or an IBM-supplied command.

This is a required parameter.

Qualifier 1: Command

name   Specify the name of the command to be changed.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

      The current library for the job is used to locate the command. If no library is specified as the current library for the job, QGPL is used.

name   Specify the name of the library where the command is located.

Program to process command (PGM)

Specifies the command processing program (CPP) that is to be called to process the command.

Single values

*SAME

      The current CPP does not change.

*REXX

      The CPP for this command is the REXX procedure identified on the **REXX source member (REXSRCMBR)** parameter.

Qualifier 1: Program to process command

name   Specify the name of the CPP that processes the command.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

      The current library for the job is used to locate the program. If no library is specified as the current library for the job, QGPL is used.

name   Specify the name of the library where the program is located.

REXX source file (REXSRCFILE)

Specifies the source file containing the REXX procedure.

Single values

*SAME

      The REXX source file and library do not change.

Qualifier 1: REXX source file

name   Specify the name of the source file.

Qualifier 2: Library

<u>*LIBL</u>   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the source file. If no library is specified as the current library for the job, QGPL is used.

name   Specify the name of the library where the source file is located.

<div align="right"></div>

REXX source member (REXSRCMBR)

Specifies the source member containing the REXX procedure that is the apparent command processing program (CPP).

<u>***SAME**</u>
> The member name does not change.

*CMD   The source member name is the same as the command name (the name specified on the CMD parameter).

name   Specify the name of the source member containing the REXX procedure.

<div align="right"></div>

REXX command environment (REXCMDENV)

Specifies the command environment that is active when the REXX command processing program (CPP) starts to run. The REXX interpreter calls this program to process commands encountered in the procedure. This environment can be changed through the REXX ADDRESS instruction.

Single values

<u>***SAME**</u>
> The command environment does not change.

*COMMAND
> The OS/400 control language (CL) command environment is used.

*CPICOMM
> The Common Programming Interface (CPI) environment is used.

*EXECSQL
> The Structured Query Language (SQL) Command environment is used. EXECSQL is the command environment used for CL commands that are imbedded with in a SQL procedure.

Qualifier 1: REXX command environment

name   Specify the name of the program to be called to process commands in the REXX procedure.

Qualifier 2: Library

<u>*LIBL</u>   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
>The current library for the job is used to locate the program. If no library is specified as the current library for the job, QGPL is used.

name Specify the name of the library where the program is located.

REXX exit programs (REXEXITPGM)

Specifies the exit programs to be used when the REXX command processing program (CPP) is started. A maximum of eight program and exit code combinations can be specified.

Single values

*SAME
>The exit programs do not change.

*NONE
>There are no exit programs for the REXX CPP.

Element 1: Program

Qualifier 1: Program

name Specify the name of the exit program.

Qualifier 2: Library

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
>The current library list is used to locate the program. If no library is specified as the current library for the job, QGPL is used.

name Specify the name of the library to be searched.

Element 2: Exit code

2 The associated program is called whenever an external function or subroutine has been called by the REXX program. The exit program is then responsible for locating and calling the requested routine.

3 The associated program is called whenever the interpreter is going to call a command. The exit program is responsible for locating and calling the command given the command string and the current environment name.

4 The associated program is called whenever a REXX instruction or function attempts an operation on the REXX external data queue.

5 The associated program is called when session input or output operations are attempted.

7 The associated program is called after running each clause of the REXX procedure to determine whether it should be halted.

8	The associated program is called after running each clause of the REXX program to check whether tracing should be turned on or off.
9	The associated program is called before interpretation of the first instruction of a REXX procedure (including REXX procedures called as external functions and subroutines).
10	The associated program is called after interpretation of the last instruction of a REXX procedure (including REXX procedures called as external functions and subroutines).

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Validity checking program (VLDCKR)

Specifies the program to be called to perform additional validity checking on the parameters in the command being processed. The validity checker is called to do additional user-defined validity checking beyond that specified by the command definition statements in the source file, and beyond the syntax checking that is done on the command when it is compiled.

Single values

*SAME
The value does not change.

*NONE
There is no separate validity checking program for this command. All validity checking is done by the command analyzer and the command processing program. Whenever the command is processed or checked for validity, provided variables and expressions are not used.

Qualifier 1: Validity checking program

name   Specify the name and library of the validity checking program that checks the validity of the command.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
The current library for the job is used to locate the program. If no library is specified as the current library for the job, QGPL is used.

name   Specify the name of the library where the validity checking program is located.

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Mode in which valid (MODE)

Specifies the types of operating environment in which the Change Command (CHGCMD) can be used. One or more of the modes can be specified.

Single values

*SAME
The modes of operation in which the command can be used do not change.

*ALL   The command is valid in all the types of modes: production, debug, and service.

Other values (up to 3 repetitions)

*PROD
> The command is valid for production mode operations.

*DEBUG
> The command is valid for debug mode operations.

*SERVICE
> The command is valid for service mode operations.

Where allowed to run (ALLOW)

Specifies where the command can be processed.

Single values

*SAME
> The environment in which the command can be processed does not change.

*ALL   The command can be processed in a batch input stream, in a CL program, in a REXX procedure, in a CL ILE module, or when processed interactively. It can also be passed to the system program QCMDEXC (or QCAEXEC) for processing.

Other values (up to 9 repetitions)

*BATCH
> The command can be processed in a batch input stream, external to a compiled CL program.

*INTERACT
> The command can be processed interactively, external to a compiled CL program.

*BPGM
> The command can be processed in a compiled CL program that is called from batch entry.

*IPGM
> The command can be processed in a compiled CL program that is called from interactive entry.

*BREXX
> The command can be used in a REXX procedure run in a batch job.

*IREXX
> The command can be used in a REXX procedure run in an interactive job.

*BMOD
> The command can be used in a batch CL ILE program only.

*IMOD
> The command can be used in a interactive CL ILE program only.

*EXEC
> The command can be used as a parameter on the CALL command and be passed as a character string to the system program QCMDEXC (or QCAEXEC) for processing. If *EXEC is specified, either *BATCH or *INTERACT must also be specified.

Allow limited users (ALWLMTUSR)

Specifies whether the command can be entered from the command line on a menu by a user whose profile is set for limited capabilities (the LMTCPB keyword on the Create User Profile (CRTUSRPRF) and Change User Profile (CHGUSRPRF) commands).

*SAME
>The limited user authority does not change.

*NO   This command cannot be entered from the command line on a menu by a user whose profile is set for limited capabilities.

*YES   This command can be entered from the command line on a menu by a user whose profile is set for limited capabilities.

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Help bookshelf (HLPSHELF)

This parameter is no longer supported.

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Help panel group (HLPPNLGRP)

Specifies the help panel group for this command.

Single values

*SAME
>The panel group does not change.

*NONE
>No help panel group is specified.

Qualifier 1: Help panel group

name   Specify the name of the help panel group for this command.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
>The current library for the job is used to locate the panel group. If no library is specified as the current library for the job, QGPL is used.

name   Specify the name of the library where the panel group is located.

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Help identifier (HLPID)

Specifies the root name for all help section identifiers for this command. All help sections in the help panel group associated with this command will begin with this name.

*SAME
>The help ID does not change.

*NONE

No help identifier is specified. *NONE is not allowed if a panel group name is specified for the **Help panel group (HLPPNLGRP)** parameter.

*CMD The name of the command is to be used as the root for help section identifiers in the help panel group.

name Specify the root name for the help section identifiers for this command.

Help search index (HLPSCHIDX)

Specifies the help search index to use when the search index function key is pressed from the help screen.

Single values

*SAME

The value does not change.

*NONE

No help search index is associated with this command.

Qualifier 1: Help search index

name Specify the name of the search index to be used when the search index function key is pressed.

Qualifier 2: Library

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

The current library for the job is used to locate the search index. If no library is specified as the current library for the job, the QGPL library is used.

name Specify the name of the library where the search index is located.

Current library (CURLIB)

Specifies the name of the current library associated with the job being run.

This library is also the current library when the validity checker program (if any) is processed for the command.

*SAME

The current library for the command does not change.

*NOCHG

The current library is not changed for the processing of this command. If the current library is changed during processing of the command, the change remains in effect after command processing is complete.

*CRTDFT

There is no current library active during processing of the command. The current library that was active before command processing is restored when processing is complete. If *CURLIB is specified as the to-value for any single values or special values for this command, or for any command processed while there is no current library active, the QGPL library is used as the current library. QGPL is used as the current library.

name   Specify the name of the library to be used as the current library. The library need not exist when the command is created, but must exist when the command is processed. When command processing is completed, the current library is restored to its previous value. If the current library is changed during command processing by the Change Library List (CHGLIBL) command or Change Current Library (CHGCURLIB) command, the change is effective only until the command is processed. QTEMP cannot be specified for the current library.

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Product library (PRDLIB)

Specifies the product library that is to be in effect during the processing of the command.

Note: The product library for a command or menu remains in the library list while a command or menu is active, unless another command or menu changes the product library. When a command or menu that changed the product library ends, the product library is restored to what it was when the command or menu started.

*SAME
> The product library for the command does not change.

*NOCHG
> The product library is not changed when processing of the command starts. If the product library is changed during the processing of the command, the change remains in effect after command processing is complete.

*NONE
> There is no product library in the job's library list. The product library is restored to its previous value when command processing is complete.

name   Specify the name of the library to be used as the product library during command processing. The library need not exist when the command is created, but must exist when the command is processed. When command processing is completed, the product library is restored to its previous value. QTEMP cannot be specified for the product library.

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Prompt override program (PMTOVRPGM)

Specifies the prompt override program (POP) to be called to replace (on the prompt display) the default values with the current actual values specified for the parameter. If a POP is specified, the key parameters (specified as KEYPARM(*YES) on the PARM statement in the command definition source) are the only parameters visible on the initial prompt display. When values are input for the key parameters, the remaining parameters are shown on the display with the actual values instead of the default values.

Single values

*SAME
> The prompt override program does not change.

*NONE
> No prompt override program is specified.
>
> **Note:** If *NONE is specified when key parameters exist in the command definition source (when KEYPARM(*YES) is specified on the PARM statement), a warning message is issued when the command is created, and KEYPARM(*NO) is assumed for all parameters.

Qualifier 1: Prompt override program

name Specify the name of the prompt override program (POP).

Qualifier 2: Library

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the prompt override program. If no library is specified as the current library for the job, QGPL is used.

name Specify the name of the library where the prompt override program is located.

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Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
> The text, if any, does not change.

*BLANK
> No text is specified.

'description'
> Specify no more than 50 characters, enclosed in apostrophes.

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Enable GUI (ENBGUI)

Specifies whether the command prompt panels are enabled for conversion to a graphical user interface.

*SAME
> The value does not change.

*NO The command prompt panels are not enabled for conversion to a graphical user interface.

*YES The command prompt panels are enabled for conversion to a graphical user interface by including information about the panel content in the 5250 data stream.

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Examples

```
CHGCMD   CMD(PAYROLL)   VLDCKR(LIB01/PAYVLDPGM)
```

The validity checking program for the PAYROLL command is the program named PAYVLDPGM located in library LIB01. All other attributes of the PAYROLL command remain the same.

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Error messages

*ESCAPE Messages

CPF6209
> Library &1 not found.

CPF6210

  Command &1 in library &2 not found.

CPF6211

  Not authorized to change command &1.

CPF6212

  Command &1 not changed.

CPF6213

  Cannot allocate command &1 in library &2.

CPF6214

  Errors detected while changing command &1.

CPF6215

  Command &1 in library &2 cannot be changed.

CPF6219

  Not authorized to library &2.

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Change Command Default (CHGCMDDFT)

The Change Command Default (CHGCMDDFT) command changes the default value of a command parameter.

The parameter must have an existing default to change to a new default value. The changed command can be either an IBM-supplied command or a user-defined command.

To find out which parameters of a command have default values, enter the command name and press the F4 key (Prompt) to prompt for the command. Default values for parameters are shown on the first command prompt screen. However, not all defaults are shown. A parameter that is a list of elements or a qualified name may have a single value (SNGVAL) as the default of the entire list or qualified name. For example, Display Job (DSPJOB) is a command in which JOB is a list of elements but has a SNGVAL as the default for the entire list. See 'Additional Considerations' for more information on SNGVAL as a default value.

The new parameter default must be valid for the parameter being changed. To find out which values are valid, move the cursor to the default value shown and press the F4 key. The Parameter Prompt with Permissible Values display shows a list of valid values and/or the value of the parameter type. When only a list of valid values is shown, only those values can be used as new default values. Otherwise, any valid value that conforms to the requirements of the parameter can be used as the new default.

Processing a command that had earlier default value changes is the same as specifying the new default value for the parameter on an unchanged copy of the same command. The new default value may conflict with other parameter combinations even when the parameter is not explicitly specified.

When the user runs system commands with default value changes from system displays, the new default values cannot be used. This occurs because the system cannot use the command device to process a function. Instead, the system can use an IBM internal device to a system program to run the requested function. Therefore, use the F4 key (Prompt) key to prompt for the system command when processing the command from a system display. In most cases, the specified default value is then used.

To change an IBM-supplied command, the user should create a copy of the command in a user library and change the defaults of the copied command, instead of the IBM-supplied command itself. The user library should be listed before the library QSYS on the library list. Save the source of the CHGCMDDFT command so that the changes can be identified later. This procedure allows the user to use the original IBM-supplied command defaults when necessary and ensures that changes made to the copied commands are not overlaid when a new release on the system is installed.

A compatibility problem can occur when a new release of the system is installed. If IBM-supplied commands have been copied into a user library and the newly installed IBM-supplied version of the command has had new parameters added to it, the copied version of the command does not run correctly. This is a result of parameter mismatches between the copied command and the newly installed IBM-supplied command processing program. Also, if a copied command is used in the starting program of a user profile, this program does not run correctly, again because of parameter mismatches between the old command and the new command processing program. As a result, the user cannot sign onto the system. To prevent this, the user should ensure that at least one user profile exists on the system which

has authority to make the required changes to the starting programs and has QCMD as the starting program. An alternative is to code the starting programs to detect all errors and to recover by showing the Command Entry display (program QCMD).

The CL Programming book, SC41-5721, contains a list of recommendations and examples for using the Change Command Default (CHGCMDDFT) command.

Additional Considerations

A keyword that is defined as a list of elements or as a qualified name, and has a SNGVAL as the default, can have a required element or qualifier as the first element in the list of elements or qualified name. The default SNGVAL may be changed to another valid SNGVAL if one exists, but the required element or qualifier cannot have a default value. A SNGVAL cannot be used as a new default value if the existing default value is *not* a SNGVAL. To find out if list elements or qualifiers of a qualified name have default values, change the SNGVAL to a valid value for the keyword, blank out remaining list elements or qualifiers, and press the Enter key. If any remaining list elements or qualifiers have default values, the default values now appear in the input field for the list element or qualifier.

Restriction: The user must have object management and *USE authority for the command being changed.

Parameters

Keyword	Description	Choices	Notes
CMD	Command	*Qualified object name*	Required, Positional 1
	Qualifier 1: Command	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
NEWDFT	New default parameter string	*Character value*	Required, Positional 2

Command (CMD)

Specifies the command to be changed. The command can be a user-defined or an IBM-supplied command.

Qualifier 1: Command

name   Specify the name of the command whose parameter defaults are to be changed.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
         The current library for the job is used to locate the command. If no library is specified as the current library for the job, QGPL is used.

name   Specify the library where the command is located.

New default parameter string (NEWDFT)

Specifies the parameter string, enclosed in apostrophes, that contains the new default values being assigned to a parameter, element, or qualifier if a value is not specified by the user when the command is processed. New default values can be specified only for those parameters, elements, or qualifiers that already have a default value.

*N must be used as a place holder in a qualified name or in a list of values to take the place of elements or qualifiers that do not have existing default values. If the elements or qualifiers have default values but are not to be changed to a new default value, then *N or the existing default value can be used as the place holder in the list of values or the qualified name.

Note: Checking between parameters and validity checking program processing is done when the command is run. Neither are performed during the changing of the default value.

character-value
> Specify the new default parameter value string, enclosed in apostophes.

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Examples

The following examples show changes in the defaults of command parameters when the CHGCMDDFT command is processed.

Example 1: Changing Default Value of AUT Parameter
```
CHGCMDDFT   CMD(CRTPF)  NEWDFT('AUT(*EXCLUDE)')
```

This command changes the AUT default from *CHANGE to *EXCLUDE on the Create Physical File (CRTPF) command.

Example 2: Changing CRTCLPGM Command Defaults
```
CHGCMDDFT   CMD(USRQSYS/CRTCLPGM)
            NEWDFT('PGM(LIB1/*N) SRCFILE(LIB1/FILE1) LOG(*YES)')
```

This command changes the defaults of the Create CL Program (CRTCLPGM) command when the NEWDFT parameter is specified in the form above. In the example, the default value of the LOG parameter is *YES. No default can be specified for the second qualifier (program-name) of the PGM parameter because no default value exists. Therefore, *N is used as the place holder for the second qualifier. The first qualifier (library-name) of the PGM parameter has a default value of LIB1. For the SRCFILE parameter, the first qualifier (library-name) has a default value of LIB1. The second qualifier (source-file-name) has a default value of FILE1.

Example 3: Changing CRTPF Default Value of MAXMBRS Parameter
```
CHGCMDDFT   CMD(CRTPF)  NEWDFT('MAXMBRS(*NOMAX)')
```

This command changes the default value of the MAXMBRS keyword on the CRTPF command to *NOMAX.

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Error messages

*ESCAPE Messages

CPF6260

Errors detected while changing defaults.

CPF6261

Cannot change command &1 in library &2.

Change Communications Entry (CHGCMNE)

The Change Communications Entry (CHGCMNE) command is used to change the attributes of an existing communications entry in an existing subsystem description.

Notes:

1. When the **Job description (JOBD)** or **Default user profile (DFTUSR)** parameters are changed, the communications entry also changes; however, the values of these parameters are not changed for any jobs that are active at the time.

2. If the value of the **Maximum active jobs (MAXACT)** parameter is reduced to a number less than the total number of jobs that are active through the communications entry, no new program start requests are processed. Active jobs continue to run; but no additional program start requests are processed until the number of active jobs is less than the value specified for the MAXACT parameter.

Restrictions:

1. To use this command, you must have:
   - object operational (*OBJOPR), object management (*OBJMGT), and read (*READ) authority to the specified subsystem description and execute (*EXECUTE) authority to the library containing that subsystem description.
   - object operational (*OBJOPR) and read (*READ) authority to the job description and execute (*EXECUTE) authority to the library containing that job description.
   - use (*USE) authority to the user profile.

Parameters

Keyword	Description	Choices	Notes
SBSD	Subsystem description	*Qualified object name*	Required, Positional 1
	Qualifier 1: Subsystem description	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
DEV	Device	*Generic name, name*, *ALL, *APPC, *ASYNC, *BSCEL, *FINANCE, *INTRA, *RETAIL, *SNUF	Optional, Positional 2
RMTLOCNAME	Remote location	*Communications name*	Optional, Positional 3
JOBD	Job description	Single values: ***SAME**, *USRPRF, *SBSD Other values: *Qualified object name*	Optional, Positional 4
	Qualifier 1: Job description	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
DFTUSR	Default user profile	*Name*, ***SAME**, *NONE, *SYS	Optional
MODE	Mode	*Communications name*, ***ANY**	Optional
MAXACT	Maximum active jobs	0-1000, ***SAME**, *NOMAX	Optional

Subsystem description (SBSD)

Specifies the name and library of the subsystem description that contains the communications entry that is being changed.

This is a required parameter.

Qualifier 1: Subsystem description

name   Specify the name of the subsystem for the communications entry that is being changed.

> **Note:** The following IBM-supplied objects are not valid on this parameter:
> - QSYSSBSD

Qualifier 2: Library

*LIBL   All libraries in the thread's library list are searched until a match is found.

*CURLIB
        The current library for the thread is used to locate the object. If no library is specified as the current library for the thread, the QGPL library is used.

name   Specify the library where the subsystem description is located.

Device (DEV)

Specifies the name of the device description or the type of the device being used with this communications entry.

Note: You must specify a value on either this parameter or the **Remote location (RMTLOCNAME)** parameter, but not both.

*ALL   All communications device types or names can be used with this communications entry.

*APPC
        All advanced program-to-program communications devices can be used with this communications entry. The devices created with the Create Device Desc (APPC) (CRTDEVAPPC) command can be used.

*ASYNC
        All asynchronous communications devices can be used with this communications entry. The devices created with the Create Device Desc (Async) (CRTDEVASC) command can be used. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

*BSCEL
        All bisynchronous equivalency link communications devices can be used with this communications entry. The devices created with the Create Device Desc (BSC) (CRTDEVBSC) command can be used. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

*FINANCE
        Specifies that all finance communications devices can be used with this communication entry. The devices created with the Create Device Desc (Finance) (CRTDEVFNC) command can be used by this communications entry. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

*INTRA

All INTRA communications devices can be used with this communications entry. The devices created with the Create Device Create Device Desc (Intra) (CRTDEVINTR) command can be used. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

*RETAIL

All retail communications devices can be used with this communications entry. The devices created with the Create Device Desc (Retail) (CRTDEVRTL) command can be used by this communications entry. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

*SNUF

All SNA upline facility communications devices can be used with this communications entry. The devices created with the Create Device Desc (SNUF) (CRTDEVSNUF) command are can be used. This value is valid only when *ANY is specified on the **Mode (MODE)** parameter.

generic-name

Specify the generic name of the device description used with this communications entry.

name   Specify the device description used with this communications entry.

Remote location (RMTLOCNAME)

Specifies the name of the remote location used with this communications entry. The remote location name specified in the associated device description can be used here. No validity checking is done on the remote location name.

Note: You must specify a value for either this parameter or the **Device (DEV)** parameter, but not for both.

communications-name

Specify the name of the remote location used with this communications entry.

Job description (JOBD)

Specifies the name and library of the job description used for jobs that are started as a result of receiving a program start request, and that are processed through this communications entry. If the job description does not exist when the entry is added or changed, a library qualifier must be specified because the qualified job description name is kept in the subsystem description.

Note: Only a user with all object (*ALLOBJ) special authority is allowed to add or change an entry for which the job description does not exist.

Single values

*SAME

The current value of this parameter does not change.

*USRPRF

The job description name that is specified in the user profile of the user that made the program start request is used for jobs that are started through this communications entry.

*SBSD

The job description name that is specified in the user profile of the user that made the program start request is used by jobs that are started through this communications entry.

Qualifier 1: Job description

name   Specify the name of the job description that is used for the jobs started through this communications entry.

Qualifier 2: Library

*LIBL   All libraries in the thread's library list are searched until a match is found.

*CURLIB
          The current library for the thread is used to locate the object. If no library is specified as the current library for the thread, the QGPL library is used.

name   Specify the name of the job description's library.

Default user profile (DFTUSR)

Specifies the default user profile used for a program start request that contains no security information. This user profile is not used for program start requests that contain a password or specify a user profile (either valid or not valid).

*SAME
          The current value of this parameter does not change.

*NONE
          No user profile is specified as the default.

*SYS   All user program start requests will be treated the same as *NONE. For program start requests sent by system functions, the request will run under a predetermined user profile if a user profile is not specified on the program start request.

name   Specify the name of the user profile that is used for all program start requests that enter the system through this communications entry and that contain no password or user profile name.

          Note: The names QDFTOWN, QLPINSTALL, QSECOFR, QSPL, QDOC, QDBSHR, QRJE, QTSTRQS, and QSYS are not valid entries for this parameter.

Mode (MODE)

Specifies the mode name of the communications device or remote location name whose communications entry is being added or changed.

*ANY   Any available modes defined to the communications device or remote location are allocated to the subsystem. If the communications device does not have defined modes associated with it, the communications device itself is allocated to the subsystem.

name   Specify the mode name of the communications device or remote location name that is being added or changed.

          Note: The names SNASVCMG and CPSVCMG are not valid for this parameter.

Maximum active jobs (MAXACT)

Specifies the maximum number of jobs (received program start requests) that can be active at the same time through this communications entry.

*SAME
    The current value of this attribute is not changed.

*NOMAX
    There is no maximum number of jobs that can be active at the same time through this communications entry.

1-1000 Specify the maximum number of jobs that can be active at the same time through this communications entry.

Examples

```
CHGCMNE   SBSD(QGPL/BAKER)   DEV(A12)   MAXACT(*NOMAX)
```

This command changes the communications entry (in the subsystem description QGPL/BAKER) for the device A12 and mode *ANY. The maximum activity level is changed to *NOMAX which means that the communications entry puts no restrictions on the number of program start requests that may be active at the same time. However, the MAXJOBS value in the subsystem description BAKER limits the total number of jobs that can be active in the subsystem. This includes those created by program start requests. There is also a limit that the user can specify on the number of active jobs that can be routed through any particular routing entry (MAXACT). The limit specified in the routing entry may control the number of jobs using a particular pool or the recursion level of a particular program. In all cases, none of these limits can be exceeded as a result of processing a program start request.

Error messages

*ESCAPE Messages

CPF1619
    Subsystem description &1 in library &2 damaged.

CPF1691
    Active subsystem description may or may not have changed.

CPF1697
    Subsystem description &1 not changed.

Change Contact Information (CHGCNTINF)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Contact Information command enables you to change the local service information that helps you contact, or be contacted by, various support centers.

Restrictions:

- If the contact information has not been set previously by running this command or by using the Work with Contact Information (WRKCNTINF) command, the default value of *SAME will not be valid for some of the command parameters.

Parameters

Keyword	Description	Choices	Notes
CMPNY	Company	*Character value*, ***SAME**	Optional
CONTACT	Contact	*Character value*, ***SAME**	Optional
TELNBR	Contact telephone numbers	*Element list*	Optional
	Element 1: Primary	*Character value*, ***SAME**	
	Element 2: Alternative	*Character value*, ***SAME**, *NONE	
FAXTELNBR	Fax telephone numbers	*Element list*	Optional
	Element 1: Primary	*Character value*, ***SAME**, *NONE	
	Element 2: Alternative	*Character value*, ***SAME**, *NONE	
MAILADDR	Mailing address	*Element list*	Optional
	Element 1: Street address	*Character value*, ***SAME**	
	Element 2: City and state	*Character value*, ***SAME**	
	Element 3: Country or region	*Character value*, ***SAME**	
	Element 4: Zip code or postal code	*Character value*, ***SAME**	
LNGVER	National language version	2902-2998, ***SAME**, *PRIMARY	Optional
MEDPTF	Media for mailing PTFs	***SAME**, *AUTOMATIC, *CDROM	Optional

Company (CMPNY)

Specifies the name of the organization that owns or is responsible for this system.

*SAME
> The value does not change.

character-value
> Specify the company name, enclosed in apostrophes.

Contact (CONTACT)

Specifies the name of the person in your organization who is responsible for repairs and maintenance on the system. This person may be called by the service provider with information or assistance for a system problem. Also, parts or PTFs may be sent to this person.

*SAME
> The value does not change.

character-value
> Specify the contact person's name, enclosed in apostrophes.

Contact telephone numbers (TELNBR)

Specifies the telephone numbers where the contact person can be reached.

Element 1: Primary

*SAME
> The value does not change.

character-value
> Specify the complete telephone number where the person specified for the **Contact (CONTACT)** parameter may be reached most often. This number should include the area code, exchange numbers, and the extension.

Element 2: Alternative

*SAME
> The value does not change.

*NONE
> There is no alternative telephone number for the contact person.

character-value
> Specify the complete telephone number where the person specified for the **Contact (CONTACT)** parameter may be reached if not found at the primary telephone number. This number should include the area code, exchange numbers, and the extension.

Fax telephone numbers (FAXTELNBR)

Specifies the facsimile (fax) telephone numbers where information for the contact person can be transmitted.

Element 1: Primary

*SAME
> The value does not change.

*NONE
> There is no primary fax number for the contact person.

character-value

Specify the complete fax telephone number where information for the person specified for the **Contact (CONTACT)** parameter can be sent. This number should include the area code, exchange numbers, and the extension.

Element 2: Alternative

*SAME

The value does not change.

*NONE

There is no alternative fax number for the contact person.

character-value

Specify the complete fax telephone number where the information for the person specified for the **Contact (CONTACT)** parameter can be sent, if the primary fax number is not available. This number should include the area code, exchange numbers, and the extension.

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Mailing address (MAILADDR)

Specifies the mailing address of the person specified for the **Contact (CONTACT)** parameter.

Element 1: Street address

*SAME

The value does not change.

character-value

Specify the postal number and street name of the location to which you want your service provider to send parts or assistance for the problem. This should **not** be a post office box.

Element 2: City and state

*SAME

The value does not change.

character-value

Specify the city and the state names of the location to which you want your service provider to send parts or assistance.

Element 3: Country or region

*SAME

The value does not change.

character-value

Specify the name of the country or region of the location to which the service provider should send parts or assistance.

Element 4: Zip code or postal code

*SAME

The value does not change.

character-value

Specify the zip code or postal code for the location to which the service provider should send parts or assistance.

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National language version (LNGVER)

Specifies the preferred language version to be used for program temporary fix (PTF) cover letters. PTF cover letters are initially written in U.S. English. Some of the cover letters are translated into other languages and may be ordered in the other languages. If the cover letter you ordered has not been translated into your preferred language, the cover letter will be sent in U.S. English.

*SAME
> The value does not change.

*PRIMARY
> The language version for the currently installed primary national language on the system is used.

integer-number
> Specify the preferred language version to be used for PTF cover letters.

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Media for mailing PTFs (MEDPTF)

Specifies the media to be used for mailing program temporary fixes (PTFs).

*SAME
> The value does not change.

*AUTOMATIC
> The system will automatically select the media to be used for sending PTFs.

*CDROM
> PTFs will be sent on CD-ROM media.

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Examples

Example 1: Change Contact Telephone Number

```
CHGCNTINF   TELNBR('1-507-345-6789')
```

This command changes the primary telephone number for the contact person. No alternative telephone number is provided, so the alternative telephone number does not change.

Example 2: Change Contact Information Values

```
CHGCNTINF   CONTACT('John Smith')
            TELNBR('1-507-123-4567' '1-507-123-7654')
            FAXTELNBR('1-507-123-4444')
```

This command changes the contact person information, but does not change the company name, mailing address, preferred PTF cover letter language version, or PTF media to be sent.

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Error messages

*ESCAPE Messages

CPF8C84

Error detected while processing support contact data.

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Change Community for SNMP (CHGCOMSNMP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Community for SNMP (CHGCOMSNMP) command changes an SNMP community profile in the SNMP agent community list. An SNMP agent uses a community profile to determine whether or not to honor a request sent by an SNMP manager. The community profile consists of a community name, an object access specification, and a list of the SNMP managers that are part of the community. The community name combined with the ASCII community (ASCIICOM) parameter defines a community.

Parameters

Keyword	Description	Choices	Notes
COM	Community name	*Character value*	Required, Key, Positional 1
ASCIICOM	Translate community name	***YES**, *NO	Optional, Key
INTNETADR	Manager internet address	Single values: ***SAME**, *ANY Other values (up to 300 repetitions): *Character value*	Optional
OBJACC	Object access	***SAME**, *SNMPATR, *READ, *WRITE, *NONE	Optional
LOGSET	Log set requests	***SAME**, *SNMPATR, *YES, *NO	Optional
LOGGET	Log get requests	***SAME**, *SNMPATR, *YES, *NO	Optional

Community name (COM)

Specifies the name of the SNMP community being changed. The community must already exist in the SNMP agent community list. You can define an SNMP community using the Add Community for SNMP (ADDCOMSNMP) command.

The possible values are:

community-name
> Specify the name of the SNMP community being changed. The name may contain characters that cannot be displayed.

Translate community name (ASCIICOM)

Specifies whether the community name is translated to ASCII characters before it is compared with the community name specified in a request from an SNMP manager. This parameter is used in combination with the community name to determine the community to be changed.

The possible values are:

*YES The community name is translated to ASCII characters before it is compared with a community name specified by an SNMP manager.

*NO The community name is not translated to ASCII characters before it is compared with a community name specified by an SNMP manager.

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Manager internet address (INTNETADR)

The internet addresses of the SNMP managers that are part of this community.

The possible values are:

*SAME
The value does not change.

*ANY Allow any SNMP manager to be part of this community.

manager-internet-address
Specify the internet address of the SNMP manager. The internet address is specified in the form *nnn.nnn.nnn.nnn*, where *nnn* is a decimal number ranging from 0 through 255. An internet address is not valid if it has a value of all binary ones or all binary zeros for the network identifier (ID) portion or the host ID portion of the address. If the internet address is entered from a command line, the address must be enclosed in apostrophes. Up to 300 unique internet addresses may be specified. The same internet address may appear in more than one community profile.

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Object access (OBJACC)

Specifies the object access for the community.

The possible values are:

*SAME
The value does not change.

*SNMPATR
The object access defined with the Change SNMP Attributes (CHGSNMPA) command is used for this community.

*READ
Allow SNMP managers that are part of this community to read all management information base (MIB) objects. Modification of MIB objects by SNMP managers is not permitted.

*WRITE
Allow SNMP managers that are part of this community to change all MIB objects that can be changed. Specifying *WRITE implies *READ access.

*NONE
Do not allow SNMP managers that are part of this community to access any MIB objects.

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Log set requests (LOGSET)

Specifies whether Set requests from SNMP managers in this community are logged in journal QSNMP in library QUSRSYS.

The possible values are:

*SAME
> The value does not change.

*SNMPATR
> The value defined with the Change SNMP Attributes (CHGSNMPA) command is used for this community.

*YES Set requests are logged.

*NO Set requests are not logged.

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Log get requests (LOGGET)

Specifies whether get requests and get-next requests from SNMP managers in this community are logged in journal QSNMP in library QUSRSYS.

The possible values are:

*SAME
> The value does not change.

*SNMPATR
> The value defined with the Change SNMP Attributes (CHGSNMPA) command is used for this community.

*YES Get requests and get-next requests are logged.

*NO Get requests and get-next requests are not logged.

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Examples

```
CHGCOMSNMP   COM(ENDICOTT)  INTNETADR(*ANY)  OBJACC(*READ)
```

This command changes community ENDICOTT to have an object access of read and to allow any SNMP manager to read the MIB objects on this system. All of the other community values are unchanged.

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Error messages

*ESCAPE Messages

TCP4001
> Error occurred accessing SNMP configuration information.

TCP4009
> Community does not exist.

TCP8050
>> *IOSYSCFG authority required to use &1.

Change Class-of-Service Desc (CHGCOSD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Class-of-Service Description (CHGCOSD) command changes a class-of-service description.

Parameters

Keyword	Description	Choices	Notes
COSD	Class-of-service description	*Name*	Required, Key, Positional 1
TMSPTY	Transmission priority	***SAME**, *LOW, *MED, *HIGH	Optional

Keyword	Description	Choices	Notes
ROW1LINE	Row 1 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW1NODE	Row 1 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW2LINE	Row 2 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW2NODE	Row 2 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW3LINE	Row 3 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW3NODE	Row 3 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW4LINE	Row 4 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW4NODE	Row 4 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW5LINE	Row 5 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, **<u>*SAME</u>**	
	Element 2: Minimum link speed	**<u>*SAME</u>**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	**<u>*SAME</u>**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, **<u>*SAME</u>**	
	Element 5: Maximum cost/connect time	0-255, **<u>*SAME</u>**	
	Element 6: Minimum cost/byte	0-255, **<u>*SAME</u>**	
	Element 7: Maximum cost/byte	0-255, **<u>*SAME</u>**	
	Element 8: Minimum security for line	**<u>*SAME</u>**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	**<u>*SAME</u>**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	**<u>*SAME</u>**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	**<u>*SAME</u>**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, **<u>*SAME</u>**	
	Element 13: Maximum user-defined 1	0-255, **<u>*SAME</u>**	
	Element 14: Minimum user-defined 2	0-255, **<u>*SAME</u>**	
	Element 15: Maximum user-defined 2	0-255, **<u>*SAME</u>**	
	Element 16: Minimum user-defined 3	0-255, **<u>*SAME</u>**	
	Element 17: Maximum user-defined 3	0-255, **<u>*SAME</u>**	
ROW5NODE	Row 5 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, **<u>*SAME</u>**	
	Element 2: Min route addition resistance	0-255, **<u>*SAME</u>**	
	Element 3: Max route addition resistance	0-255, **<u>*SAME</u>**	
	Element 4: Minimum congestion for node	**<u>*SAME</u>**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	**<u>*SAME</u>**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW6LINE	Row 6 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW6NODE	Row 6 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW7LINE	Row 7 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW7NODE	Row 7 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	

Keyword	Description	Choices	Notes
ROW8LINE	Row 8 for lines	*Element list*	Optional
	Element 1: Line row weight	0-255, ***SAME**	
	Element 2: Minimum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 3: Maximum link speed	***SAME**, *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, *MAX	
	Element 4: Minimum cost/connect time	0-255, ***SAME**	
	Element 5: Maximum cost/connect time	0-255, ***SAME**	
	Element 6: Minimum cost/byte	0-255, ***SAME**	
	Element 7: Maximum cost/byte	0-255, ***SAME**	
	Element 8: Minimum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 9: Maximum security for line	***SAME**, *NONSECURE, *PKTSWTNET, *UNDGRDCBL, *SECURECND, *GUARDCND, *ENCRYPTED, *MAX	
	Element 10: Minimum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 11: Maximum propagation delay	***SAME**, *MIN, *LAN, *TELEPHONE, *PKTSWTNET, *SATELLITE, *MAX	
	Element 12: Minimum user-defined 1	0-255, ***SAME**	
	Element 13: Maximum user-defined 1	0-255, ***SAME**	
	Element 14: Minimum user-defined 2	0-255, ***SAME**	
	Element 15: Maximum user-defined 2	0-255, ***SAME**	
	Element 16: Minimum user-defined 3	0-255, ***SAME**	
	Element 17: Maximum user-defined 3	0-255, ***SAME**	
ROW8NODE	Row 8 for nodes	*Element list*	Optional
	Element 1: Node row weight	0-255, ***SAME**	
	Element 2: Min route addition resistance	0-255, ***SAME**	
	Element 3: Max route addition resistance	0-255, ***SAME**	
	Element 4: Minimum congestion for node	***SAME**, *LOW, *HIGH	
	Element 5: Maximum congestion for node	***SAME**, *LOW, *HIGH	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Class-of-service description (COSD)

Specifies the name of the class-of-service description.

This is a required parameter.

This name ranges from 1 to 8 characters.

This is a required parameter.

Transmission priority (TMSPTY)

Specifies the transmission priority for this class-of-service description.

***LOW** The lowest transmission priority is used for this class-of-service description.

***MED** Medium transmission priority is used for this class-of-service description.

***HIGH**
> The highest transmission priority is used for this class-of-service description.

*SAME
> The value does not change.

Row 1 for lines (ROW1LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
> Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
> Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed
> Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time
> Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time
> Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte
> Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte
> Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security
> Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security
> Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay
> Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

maximum-propagation-delay
> Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)

- *MAX (Maximum propagation delay)

user-defined-fields

Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME

Valid for any element in this list, and indicates that the value does not change.

Row 1 for nodes (ROW1NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor

Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum

Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum

Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum

Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum

Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME

Valid for any element in this list, and indicates that the value does not change.

Row 2 for lines (ROW2LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor

Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed

Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed

Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time

Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time

Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte

Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte

Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security

Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.

- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

maximum-propagation-delay
>   Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
>
>   - *MIN (Minimum propagation delay)
>   - *LAN (Propagation delay using a local area network)
>   - *TELEPHONE (Propagation delay using telephone lines)
>   - *PKTSWTNET (Propagation delay using a packet switched network)
>   - *SATELLITE (Propagation delay using satellite communications)
>   - *MAX (Maximum propagation delay)

user-defined-fields
>   Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME
>   Valid for any element in this list, and indicates that the value does not change.

Row 2 for nodes (ROW2NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor
>   Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum
>   Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum
>   Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum
>   Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum
>   Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
>   Valid for any element in this list, and indicates that the value does not change.

Row 3 for lines (ROW3LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor

Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed

Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed

Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time

Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time

Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte

Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte

Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security

Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

> Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

maximum-propagation-delay

> Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

user-defined-fields

> Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME

> Valid for any element in this list, and indicates that the value does not change.

Row 3 for nodes (ROW3NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor

> Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum

> Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum

> Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum

> Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum

> Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
> Valid for any element in this list, and indicates that the value does not change.

Row 4 for lines (ROW4LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
> Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
> Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed
> Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time
> Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time
> Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte
> Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte
> Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security
> Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

> Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

> Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

maximum-propagation-delay

> Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

user-defined-fields

> Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME

> Valid for any element in this list, and indicates that the value does not change.

Row 4 for nodes (ROW4NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor

> Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum

> Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum
>Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum
>Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum
>Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
>Valid for any element in this list, and indicates that the value does not change.

Row 5 for lines (ROW5LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
>Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
>Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed
>Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time
>Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time
>Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte
>Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte
>Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security
>Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

maximum-propagation-delay

Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

user-defined-fields

Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME

Valid for any element in this list, and indicates that the value does not change.

Row 5 for nodes (ROW5NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor
> Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum
> Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum
> Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum
> Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum
> Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
> Valid for any element in this list, and indicates that the value does not change.

Row 6 for lines (ROW6LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
> Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
> Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed
> Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time
> Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time

Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte

Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte

Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security

Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.

- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

maximum-propagation-delay

Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.

- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)

- *MAX (Maximum propagation delay)

user-defined-fields
> Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME
> Valid for any element in this list, and indicates that the value does not change.

Row 6 for nodes (ROW6NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor
> Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum
> Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum
> Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum
> Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum
> Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
> Valid for any element in this list, and indicates that the value does not change.

Row 7 for lines (ROW7LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
> Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
> Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed

Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time

Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time

Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte

Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte

Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security

Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security

Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.

- *NONSECURE (No Security)
- *PKTSWTNET (Packet Switched Network)
- *UNDGRDCBL (Underground Cable)
- *SECURECND (Secure Conduit)
- *GUARDCND (Guarded Conduit)
- *ENCRYPTED (Encrypted Line)
- *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay

Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.

- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

maximum-propagation-delay

Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.

- *MIN (Minimum propagation delay)
- *LAN (Propagation delay using a local area network)
- *TELEPHONE (Propagation delay using telephone lines)
- *PKTSWTNET (Propagation delay using a packet switched network)
- *SATELLITE (Propagation delay using satellite communications)
- *MAX (Maximum propagation delay)

user-defined-fields

Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME

Valid for any element in this list, and indicates that the value does not change.

Row 7 for nodes (ROW7NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor

Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum

Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum

Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum

Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum

Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME

Valid for any element in this list, and indicates that the value does not change.

Row 8 for lines (ROW8LINE)

Specifies the list of line-related criteria used for the first through eighth rows of the class-of-service description. Each row describes the attributes of the line connection between two nodes in the APPN network. The rows are examined in order from first through eighth to attempt to define a network routing path. The list shows a value for each of the following elements.

line-weighting-factor
> Specifies the relative weight of this row for line connections. The weight ranges from 0 to 255. The more desirable line connections are assigned the lower weights.

minimum-link-speed
> Specifies the minimum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

maximum-link-speed
> Specifies the maximum link speed for a line connection that is accepted by this line row criteria. Valid values are *MIN, 1200, 2400, 4800, 7200, 9600, 14400, 19200, 48000, 56000, 64000, 112000, 128000, 168000, 192000, 224000, 256000, 280000, 320000, 336000, 384000, 448000, 499000, 576000, 614000, 691000, 768000, 845000, 922000, 998000, 1075000, 1152000, 1229000, 1382000, 1536000, 1690000, 1843000, 1997000, 4M, 10M, 16M, or *MAX bps.

minimum-cost/connect-time
> Specifies the minimum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/connect-time
> Specifies the maximum relative cost per connect time that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-cost/byte
> Specifies the minimum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

maximum-cost/byte
> Specifies the maximum relative cost per byte that is accepted by this line row criteria. Valid costs range from 0 to 255. 0 implies a low cost, while 255 indicates a high cost.

minimum-security
> Specifies the minimum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

maximum-security
> Specifies the maximum security level that is accepted by this line row criteria. Valid values are in order from least to most secure.
> - *NONSECURE (No Security)
> - *PKTSWTNET (Packet Switched Network)
> - *UNDGRDCBL (Underground Cable)
> - *SECURECND (Secure Conduit)
> - *GUARDCND (Guarded Conduit)
> - *ENCRYPTED (Encrypted Line)
> - *MAX (Guarded Conduit, protected against physical and radiation tapping)

minimum-propagation-delay
>
> Specifies the minimum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
>
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

maximum-propagation-delay
>
> Specifies the maximum propagation delay that is accepted by this line row criteria. Valid values are in order from least to longest delay.
>
> - *MIN (Minimum propagation delay)
> - *LAN (Propagation delay using a local area network)
> - *TELEPHONE (Propagation delay using telephone lines)
> - *PKTSWTNET (Propagation delay using a packet switched network)
> - *SATELLITE (Propagation delay using satellite communications)
> - *MAX (Maximum propagation delay)

user-defined-fields
>
> Specify your own line connection criteria with three user-defined fields (with minimum and maximum ranges for each field). Valid values are 0 to 255.

*SAME
>
> Valid for any element in this list, and indicates that the value does not change.

Row 8 for nodes (ROW8NODE)

Specifies the list of node-related criteria used for the first through eighth rows of the class-of-service description. This row describes the attributes of a node in the APPN network. The rows are examined in order from the first through eighth rows to define a network routing path. The list shows a value for each of the following elements.

node-weighting-factor
>
> Specifies the relative weight of this row for nodes. The weight ranges from 0 to 255. The more desirable nodes are assigned the lower weights.

route-addition-resistance-minimum
>
> Specifies the minimum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

route-addition-resistance-maximum
>
> Specifies the maximum route addition resistance accepted by this node row criteria. Valid values range from 0 to 255. 0 implies a low resistance, and 255 indicates a high resistance.

congestion-minimum
>
> Specifies the minimum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

congestion-maximum
>
> Specifies the maximum congestion level accepted by this node criteria. Valid values are *LOW (low congestion level) or *HIGH (high congestion level).

*SAME
> Valid for any element in this list, and indicates that the value does not change.

<div align="right">Top</div>

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

*SAME
> The value does not change.

<div align="right">Top</div>

Examples

```
CHGCOSD   COSD(COSD1)   ROW4LINE(80 *SAME *SAME 15)
```

This command changes Row 4 line weight to 80 and Row 4 minimum cost/connect time to 15 for class-of-service description COSD1.

<div align="right">Top</div>

Error messages

*ESCAPE Messages

CPF2621
> Class-of-service description &1 not changed.

<div align="right">Top</div>

Change Cluster Resource Group (CHGCRG)

The Change Cluster Resource Group (CHGCRG) command changes some of the attributes of a cluster resource group. The cluster resource group object is changed on all active nodes in the recovery domain. Recovery domain nodes that are not active at the time of the change will have the change made when they become active again.

Changing the node role to primary or changing the takeover IP address can only be done when the cluster resource group status is Inactive or Indoubt. If the cluster resource group is active, the Change Cluster Resource Group Primary (CHGCRGPRI) command can be used to assign the primary role to the first backup node.

The following fields may be changed without causing the cluster resource group exit program to be called:
- text description
- exit program data
- user profile
- takeover IP address
- job name
- allow application restart
- number of restarts
- the cluster resource group exit program
- failover message queue
- failover wait time
- failover default action
- cluster resource group exit program format name

This command will do the following for all cluster resource group types:
- Call the cluster resource group exit program with an action code of Change on all active nodes in the recovery domain when either the preferred or current role is changed, if an exit program is specified for the cluster resource group. The cluster resource group status is set to Change Pending. If the exit program completes successfully, the cluster resource group status is reset to its value at the time the command was called. If the exit program fails and the cluster resource group cannot be restored to its original condition, the cluster resource group status is set to Indoubt.
- Change the cluster resource group without calling the exit program if neither role is changed.
- Change the name to be used for batch jobs submitted by cluster resource group. If the cluster resource group status is Active, batch jobs already submitted will not be changed. Any jobs submitted after the change will use the new name. This is true for other attributes associated with a submitted exit program such as the user profile, the restart count and so on. Changes to the cluster resource group will not affect an exit program that was previously submitted and is either on a job queue or is running.
- If the current node role in the recovery domain is changed and the cluster resource group is active and it has more than one backup node and some backup nodes are not active, the recovery domain may be reordered so that all active backup nodes are ordered before inactive backup nodes.

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This command will do the following for application cluster resource groups:

- If the Cluster Resource Services configures the takeover IP address, it will remove the current address and add the new address when the takeover IP address is changed. If either the add or remove address function fails, the command will fail.
- If the cluster resource group is active and the role of a node is being changed from replicate to backup, verify the takeover IP address exists and is not active on the node being changed. If the takeover IP address does not exist or is active on the node being changed, the command will fail.

This command will do the following for device cluster resource groups:

- If the role of the current primary node is being changed, ownership of the devices specified in the cluster resource group is switched from the current primary to the new primary if the current primary has none of the devices varied on. If any devices are varied on, an error message is returned. In addition, the new primary node must be active. All members of an auxiliary storage pool group must be configured in the cluster resource group before ownership can be changed. Devices are not varied on after the ownership is switched.

Restrictions:

1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.
2. This command cannot be called from a cluster resource group exit program.
3. Cluster Resource Services must be active on the node processing the request.
4. A cluster resource group must have a status of Inactive or Indoubt to designate a new primary node.
5. If defined, the exit program must exist on all nodes in the recovery domain when the cluster resource group exit program is changed.
6. There must be at least one active node in the recovery domain.
7. If defined, the failover message queue must exist on all nodes in the recovery domain when the cluster resource group is changed.

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
CRG	Cluster resource group	*Name*	Required, Positional 2
CRGTYPE	Cluster resource group type	*DATA, *APP, *DEV	Required, Positional 3
EXITPGM	CRG exit program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: CRG exit program	*Name*	
	Qualifier 2: Library	*Name*, ***CURLIB**	
EXITPGMFMT	Exit program format name	***SAME**, EXTP0100, EXTP0200	Optional
EXITPGMDTA	Exit program data	*Character value*, ***SAME**, *NONE	Optional
USRPRF	User profile	*Simple name*, ***SAME**, *NONE	Optional
TEXT	Text 'description'	*Character value*, ***SAME**	Optional
RCYDMNACN	Recovery domain action	***SAME**, *CHGPREFER, *CHGCUR	Optional
TKVINTNETA	Takeover IP address	*Character value*, ***SAME**	Optional
JOB	Job	*Name*, *JOBD, ***SAME**	Optional

Keyword	Description	Choices	Notes
ALWRESTART	Allow application restarts	*SAME, *NO, *YES	Optional
NBRRESTART	Number of application restarts	0-3, *SAME	Optional
RCYDMN	Recovery domain node list	Values (up to 128 repetitions): *Element list*	Optional
	Element 1: Node identifier	*Name*, *SAME	
	Element 2: Node role	*SAME, *BACKUP, *PRIMARY, *REPLICATE	
	Element 3: Backup sequence number	*Integer*, *SAME, *LAST	
	Element 4: Site name	*Name*, *SAME, *NONE	
	Element 5: Data port IP address action	*SAME, *ADD, *REMOVE	
	Element 6: Data port IP address	Single values: *SAME, *NONE Other values (up to 4 repetitions): *Character value*	
FLVMSGQ	Failover message queue	Single values: *SAME, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Failover message queue	*Name*	
	Qualifier 2: Library	*Name*	
FLVWAITTIM	Failover wait time	*Integer*, *SAME, *NOWAIT, *NOMAX	Optional
FLVDFTACN	Failover default action	*Integer*, *SAME, *PROCEED, *CANCEL	Optional

Cluster (CLUSTER)

Specifies the cluster containing the cluster resource group which will be changed.

This is a required parameter.

name   Specify the name of the cluster.

Cluster resource group (CRG)

Specifies the cluster resource group to be changed.

This is a required parameter.

name   Specify the name of the cluster resource group.

Cluster resource group type (CRGTYPE)

Specifies the type of the cluster resource group that is to be changed.

This is a required parameter.

*DATA
> The cluster resource group is a data cluster resource group.

*APP   The cluster resource group is an application cluster resource group

*DEV   The cluster resouce group is a device cluster resource group.

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CRG exit program (EXITPGM)

Specifies the exit program that is used to handle action codes that are passed to it due to operations on the cluster resource group. The exit program cannot be in an independent auxiliary storage pool. The action codes are described in the Cluster Resource Group Exit Program section of the API reference manual. If the exit program is changed for an active application cluster resource group, the job currently running which was submitted to handle the Start action code continues running the prior exit program.

Single values

*SAME
          The current exit program is not changed.

*NONE
          The cluster resource group does not have an exit program.

Qualifier 1: CRG exit program

name   Specify the name of the exit program.

Qualifier 2: Library

*CURLIB
          The exit program exists in the current library for the job. If no library is specified as the current library for the job, the QGPL library is used.

name   Specify the name of the library where the exit program exists. QTEMP is not a valid library name.

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Exit program format name (EXITPGMFMT)

Specifies the format which should be used for the information passed to the user when a cluster resource group exit program is called.

*SAME
          The exit program format name is not changed.

EXTP0100
          Exit program information defined in EXTP0100 format will be passed to user.

EXTP0200
          Exit program information defined in EXTP0200 format will be passed to user. Additional information such as site name and data port IP address on each node are passed to the exit program.

Top

Exit program data (EXITPGMDTA)

Specifies up to 256 bytes of data that is passed to the cluster resource group exit program when it is called. This parameter may contain any scalar data except pointers. For example, it can be used to provide state information. This data will be stored with the specified cluster resource group and copied to all nodes in the recovery domain. Pointers in this area will not resolve correctly on all nodes and should not be placed in the data. The data specified will replace the existing exit program data stored with the cluster resource group, if the command completes successfully.

*SAME
> The exit program data is not changed.

*NONE
> There is no exit program data.

character-value
> Specify up to 256 bytes of data to be passed to the cluster resource group exit program.

User profile (USRPRF)

Specifies the user profile under which the exit program should be run. The user profile must exist on all nodes in the recovery domain.

The following user profiles are not valid:
 1. QDBSHR
 2. QDOC
 3. QDTFOWN
 4. QRJE
 5. QLPAUTO
 6. QLPOINSTALL
 7. QSECOFR
 8. QSPL
 9. QSYS
10. QTSTRQS

*SAME
> The current user profile is not changed.

*NONE
> There is no exit program so no user profile is needed.

simple-name
> Specify the name of the user profile to use for running the exit program.

Text 'description' (TEXT)

Specifies the text used to briefly describe the cluster resource group object.

*SAME
> The current text description is not changed.

character-value
>Specify the new text to describe the cluster resource group object.

Recovery domain action (RCYDMNACN)

Specifies the type of action to take for the recovery domain.

*SAME
>The recovery domain is not being changed.

*CHGPREFER
>The preferred roles for nodes in the recovery domain are to be changed. The RCYDMN parameter contains the new node roles.

*CHGCUR
>The current roles for nodes in the recovery domain are to be changed. The RCYDMN parameter contains the new node roles. For a device crg, the site name and data port IP address also can be changed.

Takeover IP address (TKVINTNETA)

Specifies the internet interface address that is to be associated with an application. This is the takeover IP address that will be switched between systems. The field must be represented in dotted decimal format. If the value is not *SAME and the Cluster Resource Services configured the takeover IP address, this command will remove the current IP address and add this IP address to the node. If either the add or remove address function fails, the command will fail. The cluster resource group must be Inactive to change this field.

*SAME
>The takeover IP address is not changed.

character-value
>Specify the takeover IP address for the application cluster resource group.

Job (JOB)

Specifies the name given the batch job that is submitted by the cluster resource group. This job will call the cluster resource group exit program with the action code generated by the command being used.

*SAME
>The job name is not changed.

*JOBD
>The job name in the job description for the specified user profile will be used.

name   Specify the name to be given to the batch job submitted for running the exit program.

Allow application restarts (ALWRESTART)

Specifies whether or not to restart an application if the cluster resource group exit program fails.

*SAME
>>>Allow application restart is not changed.

*NO>>>Do not attempt to restart the application. The cluster resource group exit program is called with an action code of Failover.

*YES>>>Attempt to restart the application on the same node. The cluster resource group exit program will be called with an action code of Restart. If the application cannot be restarted in the specified maximum number of attempts, the cluster resource group exit program will be called with an action code of Failover.

Number of application restarts (NBRRESTART)

Specifies the number of times a cluster resource group exit program can be called on a same node before failure occurs. Maximum number of restarts is 3. If the cluster resource group is currently active, any change does not take affect until failover occurs or the cluster resource group exit program job ends.

*SAME
>>>The number of restart attempts is not changed.

0-3>>>Specify the number of times that restart will be attempted before doing a failover.

Recovery domain node list (RCYDMN)

Specifies the changed roles for nodes that compose the recovery domain. The node role can be primary, backup, or replicate. However, for primary and backup nodes, each node within the recovery domain must have a unique role. If conflicting node roles would result from the specified changes, an exception will be signalled and no changes will be made.

Element 1: Node identifier

Specifies the node whose role is being changed in the recovery domain of the cluster resource group specified. The node specified must currently be defined in the recovery domain of the cluster resource group specified. Cluster resource group must have a status of Inactive or Indoubt to change the recovery domain roles.

*SAME
>>>The recovery domain will not be changed. This value must be used if RCYDMNACN(*SAME) is specified.

name>>>Specify the name of the node.

Element 2: Node role

Specifies the role of the node in the recovery domain of the cluster resource group.

*SAME
>>>The node role is not changed.

*BACKUP
>>>The node role will be set as a backup node.

*PRIMARY
>>>The node role will be set as the primary node. The cluster resource group must have a status of Inactive.

*REPLICATE

> The new node role will be set as a replicate. Replicate nodes are not ordered.

Element 3: Backup sequence number

Specifies the backup order for a node with role of *BACKUP. If there is already a node with the same backup order and it is also not changed at the same time, the command will fail. At the completion of the request the nodes with backup roles will be sequentially renumbered from the first backup to the last. The first backup will always be 1.

*SAME

> The backup sequence number is not changed.

*LAST

> The node will be added as the last backup in the recovery domain.

integer

> Specify the backup sequence number.

Element 4: Site name

Specify the site name of the recovery domain node. This is valid only for a device cluster resource group. Can only change from a site name to *NONE or from *NONE to a site name. Cannot change from one site name to another site name.

*SAME

> The site name is not changed.

*NONE

> The recovery domain node does not have a site name.

name   Specify the site name for a recovery domain node.

Element 5: Data port IP address action

Specifies the type of action to take for the data port IP address.

*SAME

> The data port IP address is not changed.

*ADD   Add one or more data port IP address to the recovery domain node.

*REMOVE

> Remove one or more data port IP address from the recovery domain node.

Element 6: Data port IP address

Specify the data port IP address for the recovery domain node. This is valid only for a device cluster resource group, specifically for geographic mirroring. The data port IP address is used to send updates from a source node that owns the production copy of auxiliary storage pool to a target node that owns the mirror copy of auxiliary storage pool.

Single values

*SAME

> The recovery domain node data port IP address is not changed.

*NONE

> The recovery domain node does not have a data port IP address.

Other values (up to 4 repetitions)

character-value

Specify the data port IP address for the recovery domain node. When adding a data port IP address, it must already exist on the specified node. User is responsible for starting/ending data port IP address. This field must be represented in dotted decimal format.

Failover message queue (FLVMSGQ)

Specifies the message queue to receive messages (CPABB01) dealing with failover. If this field is set, the specified message queue must exist on all nodes in the recovery domain after the exit program completes. The message queue cannot be in an independent auxiliary storage pool.

Single values

*SAME

The current failover message queue is not changed.

*NONE

No messages will be sent when a failover occurs for this cluster resource group. This is the behavior for V5R1M0 and prior releases.

Qualifier 1: Failover message queue

name   Specify the name of the failover message queue.

Qualifier 2: Library

name   Specify the name of the library that contains the message queue to receive the failover message. The library name cannot be *CURLIB, QTEMP, or *LIBL.

Failover wait time (FLVWAITTIM)

Specifies the number of minutes to wait for a reply to the failover message that was enqueued on the failover message queue.

*SAME

The current failover wait time is not changed.

*NOWAIT

Failover proceeds without user intervention.

*NOMAX

Wait forever until a response is given to the failover inquiry message.

integer

Specify the number of minutes to wait for a response to the failover inquiry message. If no response is received in the specified number of minutes, the failover default action field will be looked at to decide how to proceed.

Failover default action (FLVDFTACN)

Specifies the default action to be taken if a response to the failover message is not received in the failover wait time limit.

*SAME

> The current failover default action is not changed.

*PROCEED

> Proceed with failover.

*CANCEL

> Do not attempt failover.

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Examples

Example 1: Changing the Exit Program Data

```
CHGCRG   CLUSTER(MYCLUSTER)  CRG(MYCRG)  CRGTYPE(*DATA)
         EXITPGMDTA('replace this data')
         TEXT('CRG FOR PAYROLL APPLICATION DATA')
```

This command changes a data cluster resource group called MYCRG in the cluster called MYCLUSTER. The exit program data is replaced with the character string specified. The text description for the cluster resource group object is also changed to the value specified. All other fields are unchanged.

Example 2: Changing the Recovery Domain

```
CHGCRG   CLUSTER(MYCLUSTER) CRG(MYCRG) CRGTYPE(*DEV)
         EXITPGMFMT(*SAME) TEXT('CRG FOR CROSS SITE MIRRORING')
         RCYDMN((*SAME *SAME *LAST MYSITE *ADD ('1.1.1.1')))
```

This command changes a device cluster resource group called MYCRG in the cluster called MYCLUSTER. The text description for the cluster resource group object is changed to the value specified. The recovery domain is added to the site MYSITE, with 1 data port IP address.

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Error messages

*ESCAPE Messages

CPF1999

> Errors occurred on command.

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Change CRG Device Entry (CHGCRGDEVE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Cluster Resource Group Device Entry (CHGCRGDEVE) command changes information about one or more configuration objects in a device cluster resource group. You can change the configuration action to be taken when the cluster resource group is switched over to a backup system. The entry being changed is found by searching the current entries for a matching configuration object name and configuration object type.

If an exit program is specified for the cluster resource group, the cluster resource group exit program is called with an action code of Change Device Entry on all active nodes in the recovery domain. The cluster resource group status is set to Change Device Entry Pending. If the exit program completes successfully, the cluster resource group status is reset to its value at the time the command was called. If the exit program fails and the cluster resource group cannot be restored to its original condition, the cluster resource group status is set to Indoubt.

Restrictions:

1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.
2. This command cannot be called from a cluster resource group exit program.
3. Cluster Resource Services must be active on the node processing the request.
4. The number of configuration object entries in the configuration object array cannot exceed 256.
5. At least one node in the recovery domain must be active.
6. If a server takeover IP address is specified, it must exist on all nodes in the recovery domain if the cluster resource group is active. The server takeover IP address must be unique. It can only be associated with a primary auxiliary storage pool.

Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
CRG	Cluster resource group	*Name*	Required, Positional 2
CFGOBJ	Configuration object list	Values (up to 256 repetitions): *Element list*	Required, Positional 3
	Element 1: Configuration object	*Name*	
	Element 2: Configuration object type	**<u>*DEVD</u>**	
	Element 3: Configuration object online	**<u>*SAME</u>**, *OFFLINE, *ONLINE, *PRIMARY	
	Element 4: Server takeover IP address	*Character value*, **<u>*SAME</u>**, *NONE	

Cluster (CLUSTER)

Specifies the cluster to which the cluster resource group belongs.

This is a required parameter.

name   Specify the name of the cluster which contains the cluster resource group.

Cluster resource group (CRG)

Specifies the cluster resource group which is to be changed.

This is a required parameter.

name   Specify the name of the device cluster resource group.

Configuration object list (CFGOBJ)

Specifies detailed information about the resilient devices to be changed.

This is a required parameter.

Element 1: Configuration object

Specifies the auxiliary storage pool device description which is in the cluster resource group.

*SAME
        The current configuration object is not changed.

name   Specify the name of the configuration object.

Element 2: Configuration object type

This specifies the type of configuration object specified with configuration object name.

*DEVD
        Type of configuration object.

Element 3: Configuration object online

Specifies what configuration action to take when the cluster resource group is switched over or failed over to a backup node. The configuration object can be varied on and the server takeover IP address will be started or left varied off and the server takeover IP address is left inactive when a device ownership is moved to another node. This attribute does **not** vary the device on or off or start the server takeover IP address when the cluster resource group is started or ended.

*SAME
        The current configuration object online value is not changed.

*OFFLINE
        Do not vary the configuration object on and do not start the server takeover IP address.

*ONLINE

> Vary the configuration object on and start the server takeover IP address.

*PRIMARY

> This is a secondary ASP. Vary on processing and starting of the server takeover IP address is determined by the corresponding primary ASP for this ASP group.

Element 4: Server takeover IP address

Specifies a takeover IP address for servers associated with the relational database name in the device description for an auxiliary storage pool. This element is optional and can only be specified for a primary auxiliary storage pool. If specified, the addresss must be presented in dotted decimal format. The specified address must exist on all nodes in the recovery domain if the cluster resource group is active. If not specified, or for a secondary or UDFS auxiliary storage pool, the element must be set to *NONE.

*SAME

> The current server takeover IP address is not changed.

*NONE

> There is no server takeover IP address associated with the relational database name in the device description for an auxiliary storage pool.

character-value

> Specify the server takeover IP address for the relational database name.

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Examples

```
CHGCRGDEVE   CLUSTER(MYCLUSTER)  CRG(MYCRG)
             CFGOBJ((IASP01 *DEVD *ONLINE *NONE))
```

This command changes the device list information for the configuration object IASP01 in the resilient device cluster resource group MYCRG in the cluster MYCLUSTER. The configuration action is now set to vary the configuration object online in the event of a failover or switchover.

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Error messages

*ESCAPE Messages

CPF0001

> Error found on &1 command.

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Change CRG Primary (CHGCRGPRI)

The Change Cluster Resource Group Primary (CHGCRGPRI) command performs an administrative switchover of the cluster resource group by changing the current roles of nodes in the recovery domain. The primary point of access for the cluster resource group is changed as follows:

1. The current primary node is assigned the role of last active backup.
2. The current first backup is assigned the role of primary.

If a backup node does not exist in the recovery domain, the switchover will fail. If the first backup is not the desired primary, first use the Change Cluster Resource Group (CHGCRG) command to arrange the backup nodes in recovery domain to the desired order.

This command will cause the cluster resource group exit program to be called with an action code of Switchover on all active nodes in the recovery domain.

When switching over cluster resource groups of different types, the order of switchover is important. Device cluster resource group objects should be done first followed by data cluster resource group objects and finally application cluster resource group objects. If you are changing the primary point of access for a data or a device cluster resource group, you should also ensure that the applications using this data are quiesced.

This command will do the following for all cluster resource group types:

1. Set the cluster resource group status Switchover Pending.
2. Call the cluster resource group exit program on all active nodes in the recovery domain with an action code of Switchover, if an exit program is specified for the cluster resource group.
3. Set the cluster resource group status to Active if the exit program completes successfully.
4. Set the cluster resource group status to Indoubt if the exit program is unsuccessful and the original state of the cluster resource group cannot be recovered.

This command will do the following for resilient application cluster resource groups:

1. Cancel the cluster resource group exit program job with a Cancel Job Immediate on the current primary. (**Note:** The application and exit program code should provide cancel handlers to clean up resources the job uses if it is cancelled).
2. End the takeover IP interface on the current primary.
3. Start the takeover IP interface on the new primary.
4. Start the cluster resource group exit program on the new primary.
5. Set the cluster resource group status to Active if the TCP/IP address and the cluster resource group exit program job are started.
6. Set the cluster resource group status to indoubt (30) if either the TCP/IP address or the cluster resource group exit program job are not started.

This command will do the following for resilient device cluster resource groups:

1. The configuration objects must exist on all active nodes in the recovery domain and the resource names in the configuration objects must be the same on all active nodes.
2. The current primary node must own the IOPs or high-speed link I/O bridges for the devices configured in the cluster resource group.

3. The new primary node must be able to access the IOPs or high-speed link I/O bridges for the devices configured in the cluster resource group.

4. For the configuration objects specified in the cluster resource group, vary the configuration objects off if they are varied on and end the server takeover IP addresses if they are active on the current primary node. The devices are varied off and moved to the new primary before the exit program is called on the current primary. If any of the devices in the cluster resource group are a primary auxiliary storage pool, all members of the auxiliary storage pool group will be varied off. Before varying the devices off, cluster resource services will attempt to end all jobs which are using auxiliary storage pools configured in the cluster resource group. There are some system server jobs which will not be cancelled. If those server jobs are performing long running operations against data on an auxiliary storage pool, the devices may not vary off and the switchover will fail.

5. For the configuration objects specified in the cluster resource group, vary the configuration objects on and start the server takeover IP address on the new primary node if the entry in the cluster resource group indicates the configuration objects is to be varied on. If any of the devices in the cluster resource group are a primary auxiliary storage pool, all members of the auxiliary storage pool group will be varied on if the primary specifies the vary on value. The exit program is called on the new primary after the devices are moved to the new primary and varied on.

6. A separate batch job is submitted to vary each configuration object on or off. The job is submitted to the job queue defined in the job description associated with the command's requesting user profile. The batch subsystem should be defined to allow these batch jobs to run concurrently in order to make switchover as fast as possible.

7. Set the cluster resource group status to Active if the devices can be successfully switched to the new primary.

8. If the device entry in the cluster resource group indicates the device should be varied on and the vary on or the start of the server takeover IP address fails for some reason, the switchover will not complete successfully. The exit program will be called with an action code of Undo and the devices will be moved back to the original primary node.

9. Set the cluster resource group status to Indoubt if the devices cannot be successfully switched to the new primary node and cannot be returned to the same state on the old primary node.

Restrictions:

1. You must have input/output system configuration (*IOSYSCFG) special authority to run this command.

2. This command cannot be called from a cluster resource group exit program.

3. Cluster Resource Services must be started on the node processing the request.

4. The status of the cluster resource group being switched must be Active.

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Parameters

Keyword	Description	Choices	Notes
CLUSTER	Cluster	*Name*	Required, Positional 1
CRG	Cluster resource group	*Name*	Required, Positional 2
EXITPGMDTA	Exit program data	*Character value*, ***SAME**	Optional

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Cluster (CLUSTER)

Specifies the cluster containing the cluster resource group.

This is a required parameter.

name Specify the name of the cluster.

Cluster resource group (CRG)

Specifies the cluster resource group.

This is a required parameter.

name Specify the name of the cluster resource group that is to be switched over.

Exit program data (EXITPGMDTA)

Specifies up to 256 bytes of data that is passed to the cluster resource group exit program when it is called. This parameter may contain any scalar data except pointers. For example, it can be used to provide state information. This data will be stored with the specified cluster resource group and copied to all nodes in the recovery domain. Pointers in this area will not resolve correctly on all nodes and should not be placed in the data. The data specified will replace the existing exit program data stored with the cluster resource group. If blanks are specified, then the exit program data stored with the cluster resource group will be cleared. This parameter must be set to *SAME if no exit program is specified for the cluster resource group.

*SAME
> The exit program data stored with the cluster resource group specified will be passed to the exit program.

character-value
> Specify the exit program data that will be passed to the cluster resource group exit program.

Examples

```
CHGCRGPRI   CLUSTER(MYCLUSTER)  CRG(MYCRG)
            EXITPGMDTA('important information')
```

This command changes the primary point of access for the cluster resource group MYCRG in cluster MYCLUSTER. The role of the current primary node is changed to become the last backup and the role of the current first backup node is changed to become the primary. The resilient resources associated with the cluster resource group are now accessed through the new primary node.

Error messages

*ESCAPE Messages

CPF0001

   Error found on &1 command.

   Error found on &1 command.

Change CRQ Description (CHGCRQD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Change Request Description (CHGCRQD) command is used to change a change request description. A change request description contains a list of activities that are performed to complete the specified change. A prompt override is called to provide the current values.

Restrictions:

1. You must have *CHANGE authority to the change request description object.
2. To change the user profile, you must be the owner of the object or must have *ALLOBJ and *SECADM authority.

Parameters

Keyword	Description	Choices	Notes
CRQD	Change request description	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Change request description	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
USRPRF	User profile	***SAME**, *SBM, *OWNER	Optional
PRBID	Problem identifier	*Character value*, ***SAME**, *NONE	Optional
PRBORG	Problem origin	Single values: ***SAME** Other values: *Element list*	Optional
	Element 1: Network identifier	*Communications name*, *NETATR	
	Element 2: Control point name	*Communications name*, ***NETATR**	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Change request description (CRQD)

Specifies the name and the library of the change request description being changed.

The name of the change request description can be qualified by one of the following library values:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
>The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
>Specify the name of the library to be searched.

The possible values are:

change-request-description-name
> Specify the name of the change request description being changed.

This is a required parameter.

User profile (USRPRF)

Specifies the profile to use when the change request is submitted.

The possible values are:

*SAME
> The value does not change.

*SBM The user profile of the submitter is used when the change request is submitted.

*OWNER
> The user profile that created the change request description is used when the change request is submitted.

Problem identifier (PRBID)

Specifies the ID of the problem to be associated with this change request description. Problems with different origin systems can have the same identifier.

The possible values are:

*SAME
> The value does not change.

*NONE
> There is not a problem ID associated with this change request description.

problem-identifier
> Specify the ID of the problem to be associated with the change request description.

Problem Origin (PRBORG)

Specifies the origin system of the problem ID.

The possible network identifier values are:

*SAME
> The value does not change.

*NETATR
> The network ID is the same as the one defined in the network attributes for this system.

network-identifier
> Specify a network ID.

The possible control point name value is:

*NETATR
 The control point name is the same as the local control point name defined in the network attributes for this system.

control-point-name
 Specify a control point name.

Text 'description' (TEXT)

Specifies text that briefly describes the object. More information on this parameter is in the CL Reference book, Appendix A.

The possible values are:

*SAME
 The value does not change.

*BLANK
 Text is not specified.

'description'
 Specify a maximum of 50 characters, enclosed in apostrophes.

Examples

Example 1: Changing the Text Description in Your Own Library

```
CHGCRQD   CRQD(MYLIB/CHG001)   TEXT('This is the change')
```

This command changes the text description for the change request description in MYLIB with the name CHG001.

Example 2: Changing the Associated Problem ID

```
CHGCRQD   CRQD(*LIBL/CHG002)   PRBID(1234567890)
```

This command changes the associated problem ID to the change request description in the library list named CHG002.

Error messages

*ESCAPE Messages

CPF969B
 Change request description changed, but warnings exist.

CPF969C
 Not authorized to change USRPRF.

Change Comm Side Information (CHGCSI)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Communications Side Information (CHGCSI) command is used to change a side information object in a specific library.

Refer to the APPC Programming book, SC41-5443, for information on how the system uses the RMTLOCNAME, DEV, LCLLOCNAME, and RMTNETID parameters to select an APPC device description.

Parameters

Keyword	Description	Choices	Notes
CSI	Side information	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: Side information	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
RMTLOCNAME	Remote location	*Communications name*, ***SAME**	Optional
TNSPGM	Transaction program	*Character value*, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
DEV	Device	*Communications name*, ***SAME**, *LOC	Optional
LCLLOCNAME	Local location	*Communications name*, ***SAME**, *LOC, *NETATR	Optional
MODE	Mode	*Communications name*, ***SAME**, *NETATR	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *LOC, *NETATR, *NONE	Optional

Side information (CSI)

Specifies the name of the side information object to be changed. An object name must be specified.

This is a required parameter.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library is used to locate the side information object. If no library is specified as the current library, the QGPL is used.

library-name
> Specify the name of the library where the side information object is located.

side-information-name
> Specify the name of the object that will contain the desired side information object. The side information object is accessed by the symbolic destination name (sym_dest_name) parameter on the Initialize_Conversation (CMINIT) call.

Remote location (RMTLOCNAME)

Specifies the remote location name with which your program communicates. The Common Programming Interface (CPI)- Communications partner_LU_name, which consists of the remote network identifier and the remote location, determines the remote logical unit of the remote program.

The possible values are:

*SAME
> The remote location name does not change.

remote-location-name
> Specify the name of the remote location that is associated with the symbolic destination name.

Transaction program (TNSPGM)

Specifies the name of the transaction program on the remote system to be started.

The possible values are:

*SAME
> The transaction program name does not change.

transaction-program-name
> Specify up to 64 characters for the transaction program name.

Note: If the specified transaction program name contains characters that are not in the character set 00640, the hexadecimal representation of the transaction program name are displayed. For example, a transaction program name whose hexadecimal representation is 21F0F0F1 is displayed as X'21F0F0F1'.

More information on character sets is in the CPI Communications Reference, SC26-4399.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

The possible values are:

*SAME
> The text does not change.

*BLANK
> No text is specified.

'description'
> Specify no more than 50 characters of text, enclosed in apostrophes.

Device (DEV)

Specifies the name of the device description used for the remote system.

The possible values are:

*SAME
The device name does not change.

*LOC   The device is determined by the system.

device-name
Specify the name of the device that is associated with the remote location.

Local location (LCLLOCNAME)

Specifies the local location name.

The possible values are:

*SAME
The local location name does not change.

*LOC   The location name is determined by the system.

*NETATR
The LCLLOCNAME value specified in the system network attributes is used.

local-location-name
Specify the name of your location. Specify the local location if you want to indicate a specific location name for the remote location.

Mode (MODE)

Specifies the mode used to control the session. This name is the same as the Common Programming Interface (CPI)- Communications mode_name.

The possible values are:

*SAME
The mode name does not change.

*NETATR
The mode in the network attributes is used.

BLANK
Eight blank characters are used.

mode-name
Specify a mode name for the remote location.

Note: SNASVCMG and CPSVCMG are not allowed.

Remote network identifier (RMTNETID)

Specifies the remote network identifier used with the remote location. The Common Programming Interface (CPI)- Communications partner_LU_name, which consists of the remote network identifier and the remote location, determines the remote logical unit of the remote program.

The possible values are:

*SAME
    The remote network ID does not change.

*LOC   The remote network ID for the remote location is used.

*NETATR
    The remote network identifier specified in the network attributes is used.

*NONE
    The remote network has no name.

remote-network-id
    Specify a remote network ID.

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Examples

```
CHGCSI   CSI(QGPL/SIDEOBJ)   RMTNETID(*NETATR)
```

This command changes the remote network ID to *NETATR in the communications side information object SIDEOBJ in library QGPL.

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Error messages

*ESCAPE Messages

CPF3B8B
    Communications side information object &1 not changed in library &2.

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Change Ctl Desc (APPC) (CHGCTLAPPC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (APPC) (CHGCTLAPPC) command changes a controller description for an advanced program-to-program communications (APPC) controller.

If the controller was created with LINKTYPE(*LOCAL), the following restrictions apply:

- No communications line can be specified.
- MAXFRAME, RMTNETID, RMTCPNAME, SSCPID, CPSSN, NODETYPE, and TMSGRPNBR must not be specified.
- Parameters relating to SDLC, X.21 short-hold mode, X.25, or LAN configuration must not be specified.

More information is in the Communications Configuration book, SC41-5401 book.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
APPN	APPN-capable	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
CODE	Character code	***SAME**, *EBCDIC, *ASCII	Optional
MAXFRAME	Maximum frame size	265-16393, 256, 265, 512, 521, 1024, 1033, 1994, 2048, 2057, 4060, 4096, 8156, 16393, ***SAME**, *LINKTYPE	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *NETATR, *NONE, *ANY	Optional
RMTCPNAME	Remote control point	*Communications name*, ***SAME**, *NONE, *ANY	Optional
RMTSYSNAME	Remote System Name	*Character value*, ***SAME**	Optional
SSCPID	SSCP identifier	*Character value*, ***SAME**, *NONE	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
DIALINIT	Dial initiation	***SAME**, *LINKTYPE, *IMMED, *DELAY	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *DC, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
CNNLSTOUT	Outgoing connection list	*Name*, ***SAME**	Optional
CNNLSTOUTE	Connection list entry	*Name*, ***SAME**	Optional
IDLCWDWSIZ	IDLC window size	1-31, ***SAME**, *LIND	Optional
IDLCFRMRTY	IDLC frame retry	0-100, ***SAME**, *LIND	Optional
IDLCRSPTMR	IDLC response timer	10-100, ***SAME**, *LIND	Optional
IDLCCNNRTY	IDLC connect retry	1-100, ***SAME**, *LIND, *NOMAX	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional

Keyword	Description	Choices	Notes
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional
DSCTMR	Disconnect timer	Single values: ***SAME** Other values: *Element list*	Optional
	Element 1: Minimum connect timer	0-65535	
	Element 2: Disconnection delay timer	0-65535, ***SAME**	
SHMDSCLMT	SHM disconnect limit	1-254, ***SAME**, *NOMAX	Optional
SHMDSCTMR	SHM disconnect timer	2-3000, ***SAME**	Optional
STNADR	Station address	X'00'-X'FE', ***SAME**	Optional
POLLPTY	SDLC poll priority	***SAME**, *YES, *NO	Optional
POLLLMT	SDLC poll limit	0-4, ***SAME**	Optional
OUTLMT	SDLC out limit	***SAME**, *POLLLMT, 0, 1, 2, 3, 4	Optional
CNNPOLLRTY	SDLC connect poll retry	0-65534, ***SAME**, *CALC, *NOMAX	Optional
NDMPOLLTMR	SDLC NDM poll timer	0-3000, ***SAME**, *CALC	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
DSAP	LAN DSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
SSAP	LAN SSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
LANFRMRTY	LAN frame retry	0-254, ***SAME**, *CALC	Optional
LANCNNRTY	LAN connection retry	0-254, ***SAME**, *CALC	Optional
LANRSPTMR	LAN response timer	0-254, ***SAME**, *CALC	Optional
LANCNNTMR	LAN connection timer	0-254, ***SAME**, *CALC	Optional
LANACKTMR	LAN acknowledgement timer	0-254, ***SAME**, *CALC	Optional
LANINACTMR	LAN inactivity timer	0-255, ***SAME**, *CALC	Optional
LANACKFRQ	LAN acknowledgement frequency	0-127, ***SAME**, *CALC	Optional
LANMAXOUT	LAN max outstanding frames	1-127, ***SAME**, *CALC	Optional
LANACCPTY	LAN access priority	0-3, ***SAME**, *CALC	Optional
LANWDWSTP	LAN window step	1-127, *NONE, ***SAME**	Optional
NETLVL	X.25 network level	***SAME**, 1980, 1984, 1988	Optional
LINKPCL	X.25 link level protocol	*Character value*, ***SAME**, *QLLC, *ELLC, *LLC2	Optional
CNNPWD	X.25 connection password	*Character value*, ***SAME**, *NONE	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	*Element list*	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	*Element list*	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	*Character value*, ***SAME**, *NONE	Optional

Keyword	Description	Choices	Notes
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
X25FRMRTY	X.25 frame retry	0-21, ***SAME**	Optional
X25CNNRTY	X.25 connection retry	0-21, ***SAME**	Optional
X25RSPTMR	X.25 response timer	1-2550, ***SAME**	Optional
X25CNNTMR	X.25 connection timer	1-2550, ***SAME**	Optional
X25DLYTMR	X.25 delayed connection timer	1-32767, ***SAME**, *CALC	Optional
X25ACKTMR	X.25 acknowledgement timer	0-2550, ***SAME**	Optional
X25INACTMR	X.25 inactivity timer	1-2550, ***SAME**	Optional
USRFCL	User facilities	*Character value*, ***SAME**, *NONE	Optional
CPSSN	APPN CP session support	***SAME**, *YES, *NO	Optional
NODETYPE	Remote APPN node type	***SAME**, *CALC, *NETNODE, *ENDNODE, *LENNODE	Optional
BEXROLE	Branch extender role	***SAME**, *NETNODE, *ENDNODE	Optional
HPR	APPN/HPR capable	***SAME**, *YES, *NO	Optional
HPRPTHSWT	HPR path switching	***SAME**, *NO, *YES	Optional
TMSGRPNBR	APPN transmission group number	1-20, ***SAME**, *CALC	Optional
MINSWTSTS	APPN minimum switched status	***SAME**, *VRYONPND, *VRYON	Optional
AUTOCRTDEV	Autocreate device	***SAME**, *ALL, *NONE	Optional
AUTODLTDEV	Autodelete device	1-10000, *NO, ***SAME**	Optional
USRDFN1	User-defined 1	0-255, *LIND, ***SAME**	Optional
USRDFN2	User-defined 2	0-255, *LIND, ***SAME**	Optional
USRDFN3	User-defined 3	0-255, *LIND, ***SAME**	Optional
CMNRCYLMT	Recovery limits	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
MSGQ	Message queue	Single values: ***SAME**, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
MDLCTL	Model controller description	***SAME**, *YES, *NO	Optional
CNNNETID	Connection network network ID	*Communications name*, ***SAME**, *NETATR, *NONE	Optional
CNNCPNAME	Connection network CP	*Communications name*, ***SAME**, *NONE	Optional
CTLOWN	Control owner	***SAME**, *USER	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

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Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

APPN-capable (APPN)

Specifies whether the local system uses advanced peer-to-peer networking (APPN) functions when communicating with this controller. *YES must be specified for APPC controllers attached to a TDLC line.

*SAME

This value does not change.

*YES

This controller is for APPN.

*NO

This controller is not for APPN.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

*switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Character code (CODE)

Specifies whether the extended binary-coded decimal interchange code (*EBCDIC) or the American National Standard Code for Information Interchange (*ASCII) character code is used on the line.

*SAME

This value does not change.

*EBCDIC

The extended binary-coded decimal interchange code (EBCDIC) character code is used.

*ASCII
     The ASCII character code is used.

Maximum frame size (MAXFRAME)

Specifies the maximum frame (path information unit (PIU)) size the controller can send or receive. This value is used to calculate the request unit (RU) sizes. Since the maximum PIU size that the controller can send or receive is negotiated at exchange identifier time, the maximum PIU size used at run time may be different. This value matches the corresponding value on the host system.

*SAME

This value does not change.

*LINKTYPE

The following values are used for the various types: *LAN - 16393, *SDLC - 521, *TDLC - 4105, *IDLC - 2048, *X25 - 1024, or *FR - 1590.

maximum-frame-size

Specify the frame size for the controller. The frame size that can be used depends on the type of line being used. Valid frame sizes for each line type are: For *FR, specify a value from 265 through 8182. For *IDLC, specify a value ranging from 265 through 8196. For *LAN, specify a value from 265 through 16393 (265 through 4444 for DDI LANs). For *SDLC, specify 265, 521, 1033, or 2057. For *X25, specify 256, 265, 512, 521, 1024, 1033, 2048, or 4096.

Note: The numeric values listed for *LINKTYPE are valid only if TYPE(*BLANK) is specified when the controller is created.

Remote network identifier (RMTNETID)

Specifies the NAME of the remote network in which the adjacent control point resides.

***SAME**

This value does not change.

***NETATR**

The LCLNETID value specified in the system network attributes is used.

***NONE**
No remote network identifier (ID) is used.

***ANY**

Calls are accepted from any X.25 network address.

remote-network-identifier

Specify the remote network identifier.

Remote control point (RMTCPNAME)

Specifies the control point name of the remote system.

***SAME**

This value does not change.

***NONE**

Specifies no remote control point name is used.

***ANY**

The system determines the name of the remote control point used.

remote-control-point-name

Specify the remote control point NAME.

Remote System Name (RMTSYSNAME)

Specifies the NAME of the remote system to which there is an OptiConnect bus connection. The current system NAME of the remote system can be found by using the DSPNETA command on that system.

Note: This parameter is valid only when LINKTYPE(*OPC) is specified.

*SAME

This value does not change.

SSCP identifier (SSCPID)

Specifies the system service control point identifier of the host system.

*SAME

This value does not change.

*NONE

No system service control point identifier is specified.

system-service-control-point-identifier

Specify the system service control point identifier as a 12-digit hexadecimal value.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Dial initiation (DIALINIT)

Specifies the method used to make the initial dial on a switched line between the system and the remote controller.

*SAME

This value does not change.

*LINKTYPE

The type of dial connection initiated is specified on the LINKTYPE parameter. For LAN or SDLC short-hold mode connections, the default is to dial the connection as soon as the controller description is varied on. For all other link types, the default is to delay dialing.

*IMMED

The dial connection is initiated as soon as the controller description is varied on.

*DELAY

The dial connection is delayed until a job is initiated that requests the use of the remote controller resources.

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Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

*DC

Direct call is being used in an X.21 circuit switched network.

*ANY   The system accepts calls from any network address.

connection-number

Specify the connection number.

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Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Outgoing connection list (CNNLSTOUT)

Specifies, for ISDN switched connections, the name of a connection list object that contains the ISDN assigned numbers for a dial out operation to the ISDN.

*SAME

This value does not change.

list-object

Specify the name of a connection list object.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Connection list entry (CNNLSTOUTE)

Specifies, for ISDN switched connections, the entry name from the connection list that is used to make a call to the ISDN. The connection list must have been identified on the **Outgoing connection list (CNNLSTOUT)** parameter.

*SAME

This value does not change.

entry-name

Specify an entry name.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC window size (IDLCWDWSIZ)

Specifies the window size for transmission to and reception controllers attached to the IDLC line.

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

window-size

Specify the window size. Valid values range from 1 through 31.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC frame retry (IDLCFRMRTY)

Specifies the maximum number of attempts to transmit a frame before reporting an error.

<u>*SAME</u>

This value does not change.

*LIND

The number of attempts specified in the line description is used.

IDLC-frame-retry

Specify a number of attempts. Valid values range from 0 through 100.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC response timer (IDLCRSPTMR)

Specifies the amount of time, in tenths of a second, to wait before retransmitting a frame if acknowledgement has not been received.

<u>*SAME</u>

This value does not change.

*LIND

The time specified in the line description is used.

IDLC-response-timer

Specify an amount of time. Valid values range from 10 through 100 tenths of a second. For example, 100 tenths of a second equals 10 seconds.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC connect retry (IDLCCNNRTY)

Specifies the number of times to attempt retransmission at connection time.

*SAME

This value does not change.

*LIND

The number of attempts specified in the line description is used.

*NOMAX

Indicates to continue until a successful transmission has been made.

connect-retry

Specify a number of attempts. Valid values range from 1 through 100.

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Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

Note: This parameter can be specified only if *YES is specified on either the SWITCHED or SNBU parameter, and LINKTYPE(*SDLC) and SHM(*NO) are both specified.

*SAME

This value does not change.

predial-delay

Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

Note: This parameter can be specified only if *YES is specified on either the SWITCHED or SNBU parameter, and LINKTYPE(*SDLC) and SHM(*NO) are both specified.

*SAME

This value does not change.

redial-delay

Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

Note: This parameter can be specified only if *YES is specified on either the SWITCHED or SNBU parameter, and LINKTYPE(*SDLC) and SHM(*NO) are both specified.

*SAME

This value does not change.

dial-retry
> Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

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Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

*SAME

This value does not change.

*NO

The switched connection is not dropped when the last device is varied off.

*YES

The switched connection is varied off when the last device is varied off.

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Disconnect timer (DSCTMR)

Specifies options for controlling the time (in seconds) before a connection without activity is dropped, or the amount of time to delay the automatic disconnection. If the user does not want the line to drop, specify *NO for the SWTDSC parameter.

Element 1: Minimum Connect Timer

*SAME

This value does not change.

disconnect-timer

Specify a time to wait before disconnecting. Valid values range from 0 through 65535 seconds.

Element 2: Disconnect Delay Timer

*SAME

This value does not change.

disconnect-delay-timer

Specify a value to delay link take down after the last session on the controller is stopped. Valid values range from 0 through 65535 seconds.

Note: For objects migrated from V2R1M1 or previous systems, the disconnect delay timer has a value of zero. This value is interpreted by the system as 30 seconds.

SHM disconnect limit (SHMDSCLMT)

Specifies the number of consecutive nonproductive responses that are required from the remote station before the connection can be suspended for this X.21 short hold mode connection. This parameter is used only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

*NOMAX

There is no disconnect limit.

SHM-disconnect-limit

Specify a number from 1 to 254, indicating the number of consecutive nonproductive responses that must be received before the connection can be suspended.

SHM disconnect timer (SHMDSCTMR)

Specifies, in tenths of a second, the minimum length of time that the primary system maintains the connection to the remote system for this X.21 short hold mode controller. This parameter is valid only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

SHM-disconnect-timer

Specify a value from 2 to 3000 in 0.1 second intervals.

Station address (STNADR)

Specifies the station address used when communicating with the controller.

Valid values range from 00 to FE.

Note: 00 can be specified only for APPC controllers when *TDLC is specified for the **Link type (LINKTYPE)** parameter.

Note: If *SEC is specified on the ROLE parameter, this is the station address of the remote controller. If *PRI or *NEG is specified on the ROLE parameter, this is the local station address.

*SAME

This value does not change.

SDLC poll priority (POLLPTY)

Specifies whether this controller has priority when polled. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

*NO

This controller does not have polling priority.

*YES

This controller does have polling priority.

SDLC poll limit (POLLLMT)

Specifies, for an SDLC secondary or negotiable controller, the number of consecutive polls issued to the same controller when the poll results in receiving frames. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

0

The default number of polls is zero.

poll limit

Specify a number of polls. Valid values range from 0 through 4.

SDLC out limit (OUTLMT)

Specifies the number of consecutive times SDLC allows the transmission of the maximum number of frames to a station, before allowing transmission to another station.

*SAME

This value does not change.

*POLLLMT

The value is the same as the one specified for the **SDLC poll limit (POLLLMT)** parameter.

out-limit

Specify a value ranging from 0 through 4.

SDLC connect poll retry (CNNPOLLRTY)

Specifies the number of times to retry connecting to a controller before reporting an error.

*SAME

This value does not change.

*CALC

The number of retries is 7 if the controller is switched, and *NOMAX if the controller is nonswitched.

*NOMAX

The system will retry indefinitely.

connect-poll-retry

Specify a value ranging from 0 to 65534 for the number of retries.

SDLC NDM poll timer (NDMPOLLTMR)

Specifies the minimum interval at which a secondary station should be polled if a poll from the primary to the secondary (which is in normal disconnect mode (NDM)) does not result in receiving the appropriate response.

This parameter is valid only if the link type is *SDLC and the controller role is secondary or negotiable and *NO is specified on the SHM parameter.

*SAME

This value does not change.

*CALC

The poll interval is calculated by the system.

NDM-poll-timer

Specify a value ranging from 1 to 3000 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN remote adapter address (ADPTADR)

Specifies the 12-character adapter address of the remote controller. This is the address to which the system sends data when it communicates with the remote controller. This value can be obtained from the remote controller's configuration record. Valid values range from hex 000000000001 through hex FFFFFFFFFFFF.

*SAME

This value does not change.

adapter-address

Specify the adapter address of the remote controller.

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LAN DSAP (DSAP)

Specifies the destination service access point (DSAP). This is the logical address this system will send to when it communicates with the remote controller. This address allows the controller to properly route the data that comes from this system. The default value for the destination service access point is 04.

The value must match the value specified on the source service access point (SSAP) parameter in the remote controller's configuration record.

Note: The *OPC controller uses the value above for this field. The combination of RMTSYSNAME and DSAP defines a unique controller. This allows multiple controllers to exist between two systems.

*SAME

This value does not change.

destination service access point

Specify a hexidecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the destination service access point.

<div align="right">Top</div>

LAN SSAP (SSAP)

Specifies the source service access point (SSAP). This is the logical address the local system uses when it sends data to the remote controller. This address allows the controller to properly route the data that comes from the local system. The default value for the source service access point is 04.

It must match the value assigned to the destination service access point (DSAP) in the remote controller's configuration record.

*SAME

This value does not change.

source service access point:

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the source service access point.

LAN frame retry (LANFRMRTY)

Specifies the number of times to retry a transmission when there is no acknowledgment from the remote controller in the time period specified by the LANRSPTMR parameter. This value is only used after a successful connection has been made.

*SAME

This value does not change.

*CALC

The system determines the LAN frame retry value based on the type of line that is lined to the controller.

LAN-frame-retry

Specify a value ranging from 0 through 254 for the number of times a frame is transmitted before an acknowledgement is received.

LAN connection retry (LANCNNRTY)

Specifies the number of times a transmission is attempted before an acknowledgement is received. This value is used at connection time (unlike LANFRMRTY which is used after a connection has been made).

*SAME

This value does not change.

*CALC

The system determines the LAN connection retry value.

LAN-connection-retry

Specify a value ranging from 0 through 254 for the number of times the transmission is attempted before an acknowledgement is received.

LAN response timer (LANRSPTMR)

Specifies the time period used to determine an inoperative condition on the link when connected.

*SAME

This value does not change.

*CALC

The system determines the LAN response timer value.

LAN-response-timer

Specify a value from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN connection timer (LANCNNTMR)

Specifies the time period used to determine an inoperative condition on the link at connection time.

*SAME

This value does not change.

*CALC

The system determines the LAN connection timer value.

LAN-connection-timer

Specify a value ranging from 1 through 254 in 0.1-second intervals for the amount of time the system waits before an inoperative condition occurs. To indicate no timer, specify 0.

LAN acknowledgement timer (LANACKTMR)

Specifies the time interval to delay sending acknowledgements for received frames.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement timer value.

LAN-acknowledgement-timer

Specify a value ranging from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0. If 0 is specified for the **LAN acknowledgement frequency (LANACKFRQ)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKFRQ parameter, a non-zero number must also be specified for this parameter.

LAN inactivity timer (LANINACTMR)

Specifies the time period used to determine an inactive condition for the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN inactivity timer value.

LAN-inactivity-timer

Specify a value ranging from 1 through 255 in 0.1-second intervals for the length of time used to determine an inactive condition for the controller. To indicate no timer, specify 0.

LAN acknowledgement frequency (LANACKFRQ)

Specifies the maximum number of frames received before sending an acknowledgement to the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement frequency value.

LAN-acknowledge-frequency

Specify a value from 0 to 127 for the number of frames received. If 0 is specified for the **LAN acknowledgement timer (LANACKTMR)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKTMR parameter, a non-zero number must also be specified for this parameter.

LAN max outstanding frames (LANMAXOUT)

Specifies the maximum number of frames that can be sent before an acknowledgement is received from the remote system.

*SAME

This value does not change.

*CALC

The system determines the LAN maximum outstanding frames value.

LAN-maximum-outstanding-frames

Specify a value ranging from 1 through 127 for the number of frames that can be sent before an acknowledgement is received.

LAN access priority (LANACCPTY)

Specifies the priority used for accessing the remote controller. The larger the number the higher the priority for this controller. This parameter is only used when the controller attaches to TRLAN.

*SAME

This value does not change.

*CALC

The system determines the LAN access priority value.

LAN-access-priority

Specify a value from 0 to 3 for the access priority for this controller on a local area network (LAN).

LAN window step (LANWDWSTP)

Specifies whether to reduce to 1 the maximum number of frames outstanding to the remote system during network congestion. This parameter (LAN Window Step) indicates the number of frames that must be successfully received by the remote system before the number of maximum outstanding frames can be increased by 1. The increase continues this way until the maximum number of outstanding frames reaches the value specified by the LAN maximum outstanding frames (LANMAXOUT) parameter.

*SAME

This value does not change.

*NONE

The number of outstanding frames is not reduced during network congestion.

LAN-window-step

Specify a value from 1 to 127 for the number of frames that must be successfully received by the remote system before the maximum number of outstanding frames can be increased by 1.

X.25 network level (NETLVL)

Specifies the level of the X.25 network used to access this controller. The level is specified by giving the year of the standard used by the X.25 network.

Note: Use of the lower value of the remote DTE or the network level is suggested; for example, if the remote DTE is using the CCITT standard of 1980 and the network 1984, specify 1980 for this parameter.

*SAME

This value does not change.

1980

The 1980 Standard is used.

1984

The 1984 Standard is used.

1988

The 1988 Standard is used.

X.25 link level protocol (LINKPCL)

Specifies the link level protocol used on the X.25 network to communicate with this controller.

*SAME

This value does not change.

*QLLC

The Qualified Logical Link Control (QLLC) protocol is used.

*ELLC

The Enhanced Logical Link Control (ELLC) protocol is used.

X.25 connection password (CNNPWD)

Specifies the X.25 network password used for password exchange with the X.24 Call Request and Incoming Call packets (Call User Data field). This parameter is not valid for permanent virtual circuit (PVC) connections.

If you want to use a connection password that consists of characters whose hexadecimal value is less than 40, you must specify the password as a hexadecimal value. When less than 8 bytes are specified, the end of the password field is padded with blanks. A password of all blank is valid. All incoming call requests must match this password to establish a connection.

To specify a hexadecimal password, the digits must be specified in multiples of two, be no more than 16 digits long, be enclosed in apostrophes, and be preceded by an X. For example, X'0102030405' is a valid hexadecimal password.

Note: This connection password is highly recommended for controllers that operate with the Enhanced Logical Link Control (ELLC) protocol LINKPCL(*ELLC) on switched virtual circuit (SVC) connections. This enhanced protocol supports reconnection of virtual circuits after network errors which disconnect the line with a clear signal; however, this reconnection is not allowed to proceed without the password validation procedure being used as a unique identifier for the controller.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

*SAME

This value does not change.

*NONE

. No connection password is used.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

<div align="right">Top</div>

X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

<div align="right">Top</div>

X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

*SAME

This value does not change.

*NONE

A value is not specified for the user group identifier.

X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

*SAME

This value does not change.

*NONE

No reverse charging for network tariff billing is accepted.

*REQUEST

Charges are requested on outgoing call request packets.

*ACCEPT

Reverse charging for network tariff billing is accepted on incoming requests.

*BOTH

Both incoming and outgoing requests are accepted.

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X.25 frame retry (X25FRMRTY)

Specifies the maximum number of times a frame is sent after the response timer ends when connected to this controller. The value for this parameter depends on the quality of service provided by the network and the connection to that network; that is, the frequency of lost link protocol data units.

*SAME

This value does not change.

X.25 frame retry

Specify a value ranging from 0 through 21 for the number of times a frame is sent.

Top

X.25 connection retry (X25CNNRTY)

Specifies the maximum number of times that a logical link control (LLC) protocol data unit is sent after the connect response timer expires when connecting to this controller.

*SAME

This value does not change.

X.25 connection retry

Specify a value ranging from 0 through 21 for the number times a frame is sent.

Top

X.25 response timer (X25RSPTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connected to this controller.

***SAME**

This value does not change.

X.25 response-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1-second intervals.

X.25 connection timer (X25CNNTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connecting to this controller.

***SAME**

This value does not change.

connection-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1 second intervals.

X.25 delayed connection timer (X25DLYTMR)

Specifies the time interval between attempts to establish a connection to the controller.

***SAME**

This value does not change.

***CALC**

Use the values specified for the **X.25 connection timer (X25CNNTMR)** parameter and the **X.25 connection retry (X25CNNRTY)** parameter to determine how often and how many times to try establishing the connection.

X.25-delay-timer

Specify a value ranging from 1 to 32767 units. Each unit represents 0.1 second. Connection attempts are repeated indefinitely at this time interval.

X.25 acknowledgement timer (X25ACKTMR)

Specifies the amount of time to delay sending acknowledgements for received frames.

*SAME

This value does not change.

X.25-acknowledgment-timer

Valid values range from 1 to 2550 in 0.1 second intervals, or 0 to indicate no delay.

X.25 inactivity timer (X25INACTMR)

Specifies the time period used to determine an inactive condition for the controller. Valid values range from 1 to 2550 in 0.1 second intervals.

*SAME

This value does not change.

User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

*NONE

A value is not specified for the user facilities.

*SAME

This value does not change.

APPN CP session support (CPSSN)

Specifies whether this controller supports sessions between control points.

*SAME

This value does not change.

*YES

This controller supports sessions between control points.

*NO

This controller does not support sessions between control points.

Remote APPN node type (NODETYPE)

Specifies the type of APPN node which this controller represents.

*SAME

This value does not change.

*ENDNODE

This node is an end node in an APPN network.

*NETNODE

This node is a network node in an APPN network.

*LENNODE

This node is a low-entry networking node in an APPN network.

*CALC

The system determines the type of node this controller represents.

Branch extender role (BEXROLE)

Specifies the role of the local system in an APPN network for the remote controller being configured. This parameter is only used when the local system has enabled the branch extender function via the NODETYPE parameter in the network attributes being set to *BEXNODE.

*SAME

This value does not change.

*NETNODE

The local system takes the role of a network node for the remote controller.

*ENDNODE

The local system takes the role of an end node for the remote controller.

APPN/HPR capable (HPR)

Specifies whether the local system can use APPN high-performance routing (HPR) when communicating with this controller. The controller description must specify APPN(*YES) to enable HPR. If HPR(*YES) is specified, the value of the MAXFRAME parameter of the line specified by the switched line list must be greater than or equal to 768, otherwise HPR will not be enabled over this connection.

*SAME

This value does not change.

*YES

The local system can use HPR, and HPR flows can proceed over the link defined by this controller.

*NO

The local system cannot use HPR, and HPR flows cannot proceed over the link defined by this controller.

HPR path switching (HPRPTHSWT)

Specifies whether an attempt is made to switch paths of HPR connections associated with this controller at the time the controller is varied off. If a path switch is not attempted or if there are no other available paths, jobs associated with the HPR connections will be ended. See the APPN Support information in the iSeries Information Center at http://www.iseries.ibm.com/infocenter for more information.

*SAME

This value does not change.

*NO

When this controller is varied off path switching will not be done for HPR connections associated with this controller. Jobs associated with HPR connections will be ended.

*YES

When this controller is varied off an attempt to switch paths of HPR connections associated with this controller will be made.

APPN transmission group number (TMSGRPNBR)

Specifies the transmission group number for this controller.

*SAME

This value does not change.

*CALC

The system specifies the value for the transmission group number.

transmission-group-number

Specify a value from 1 to 20 for the transmission group number.

APPN minimum switched status (MINSWTSTS)

Specifies the minimum status of the switched connection so that APPN will consider it as a controller that is available for routing.

*SAME

This value does not change.

*VRYONPND

APPN will consider the controller available for routing if the status is vary on pending, varied on, or active.

*VRYON

APPN will consider the controller available for routing only if the status is varied on or active.

Autocreate device (AUTOCRTDEV)

Specifies whether device descriptions can be automatically created for this controller description.

Note: This parameter does not apply to the automatic creation of APPC devices. This parameter only applies to dependent devices on this controller.

*SAME

This value does not change.

*ALL

All dependent devices than can be automatically created for this controller, except APPC devices, are automatically created.

*NONE

Dependent devices on this controller are not automatically created.

Autodelete device (AUTODLTDEV)

Specifies the number of minutes an automatically created device can remain in an idle state (when there are no active conversations on that device). When the time expires, the system automatically varies off and deletes the device description.

*SAME

This value does not change.

*NO

The system will not automatically vary off and delete the automatically-configured idle device descriptions.

wait-time

Specify the number of minutes to wait before deleting the automatically-configured idle device descriptions for this controller. Valid values range from 1 to 10,000.

User-defined 1 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

User-defined 2 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

User-defined 3 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
> The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL
> Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR
> Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Model controller description (MDLCTL)

Indicates whether or not this controller is a 'Model' for automatically created controller descriptions. Values on the model description, such as timer delays, retry limits, and frame size, are used for new controller descriptions that are automatically created and configured when communications with a remote system is started. The new controller must be attached to one of the SINGLE line descriptions in the switched line list (SWTLINLST parameter) of the model controller.

A model controller description is not attached to any devices, and only one controller description can be varied on for each line description.

For more information on model controllers, see the APPN Support information in the iSeries Information Center at http://www.iseries.ibm.com/infocenter.

Note: This parameter is only valid if the parameter LINKTYPE is *LAN.

*SAME

This value does not change.

*NO

This controller is not a model controller.

*YES

This controller is a model controller.

Connection network network ID (CNNNETID)

Specifies the connection network identifier of this controller description. If a value is specified for this parameter (other than none), this controller description represents this connection to the connection network.

Note: The LCLNETID value specified in the system network attributes is used.

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

*NONE

There is no connection network identifier.

connection-network-netid

Specify the connection network identifier that represents this controller description to the network.

Connection network CP (CNNCPNAME)

Specifies the name of the connection network control point.

A connection network is defined to allow controller descriptions to be automatically created for incoming or outgoing connections. This parameter is valid only if MDLCTL(*YES) is specified; it is required if CNNNETID is specified.

*SAME

This value does not change.

*NONE

No connection network control point name is specified.

connection-control-point-NAME

Specify the connection control point name.

Control owner (CTLOWN)

Specifies whether the user is allowed to change the controller description. If the user is the current owner, ownership cannot be transferred back to the system.

*SAME

This value does not change.

*USER

The user can make changes to the controller description.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLAPPC   CTLD(CHICAGO)  ONLINE(*YES)
             TEXT('Controller in Chicago')
```

This command changes the APPC controller named CHICAGO to be varied on at IPL and a new text description is specified.

Error messages

*ESCAPE Messages

CPF2652

Controller description &1 not changed.

Change Ctl Desc (Async) (CHGCTLASC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Async) (CHGCTLASC) command changes a controller description for an asynchronous controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional
ACKTMR	File transfer ack timer	16-65535, ***SAME**	Optional
RETRY	File transfer retry	1-255, ***SAME**	Optional
RMTVFY	Remote verify	***SAME**, *YES, *NO	Optional
LCLLOCNAME	Local location	*Name*, ***SAME**	Optional
LCLID	Local identifier	*Name*, ***SAME**	Optional
PADEML	PAD Emulation	***SAME**, *YES, *NO	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	*Element list*	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	*Element list*	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	*Character value*, ***SAME**, *NONE	Optional
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
USRFCL	User facilities	*Character value*, ***SAME**, *NONE	Optional

Keyword	Description	Choices	Notes
CMNRCYLMT	Recovery limits	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
MSGQ	Message queue	Single values: ***SAME**, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Top

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

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Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

*switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

This could be a telephone number, an X.25 network address, or an X.21 connection number depending on the type of line the controller is attached to.

*SAME

This value does not change.

*ANY The system accepts calls from any network address.

connection-number

Specify the connection number used to call this controller. This could be a telephone number or an X.25 network address.

Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

Note: This parameter can be specified only if switched line or switched network backup is *YES and the link type is *ASYNC for asychronous controllers.

*SAME

This value does not change.

predial-delay
> Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

Note: This parameter can be specified only if switched line or switched network backup is *YES and the link type is *ASYNC for asychronous controllers.

*SAME

This value does not change.

redial-delay
>   Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

Note: This parameter can be specified only if switched line or switched network backup is *YES and the link type is *ASYNC for asychronous controllers.

***SAME**

This value does not change.

dial-retry
>   Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

***SAME**

This value does not change.

***NO**

The switched connection is not dropped when the last device is varied off.

***YES**

The switched connection is varied off when the last device is varied off.

File transfer ack timer (ACKTMR)

Specifies the time period allowed for an acknowledgement when using file transfer support.

Valid values range from 16 to 65535 in one-second intervals.

***SAME**

This value does not change.

File transfer retry (RETRY)

Specifies the number of retries when using file transfer support.

Valid values range from 1 to 255.

<u>*SAME</u>

This value does not change.

Remote verify (RMTVFY)

Specifies whether the remote system requires verification of local location NAME and local ID. The remote system requires verification if a generic controller and device are configured to accept calls from any X.25 network address.

<u>*SAME</u>

This value does not change.

*NO

The remote system does not require verification of local location name and local ID.

*YES

The remote system does require verification of the local location name and local ID.

Local location (LCLLOCNAME)

Specifies the name that, when combined with the local ID, identifies your controller to a remote system. This name must be the same as the name specified by the remote system in its remote location list.

<u>*SAME</u>

This value does not change.

Local identifier (LCLID)

Specifies the ID that, when combined with the local location NAME, identifies your controller to a remote system. This ID must be the same as the ID specified by the remote system in its remote location list.

<u>*SAME</u>

This value does not change.

local-identifier

Specify the local identifier.

PAD Emulation (PADEML)

Specifies whether this controller emulates an X.25 packet assembler/disassembler (PAD). This PAD emulation follows CCITT recommendations for X.3, X.28, and X.29. This parameter is valid only if *X25 is specified for the **Link type (LINKTYPE)** parameter, SWITCHED is *YES, and the initial connection (INLCNN) is set to *DIAL.

*SAME

This value does not change.

*NO

This controller does not emulate an X.25 packet assembler/disassembler (PAD).

*YES

This controller emulates an X.25 packet assembler/disassembler (PAD).

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X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

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X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

***SAME**

This value does not change.

***NONE**

A value is not specified for the user group identifier.

X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

***SAME**

This value does not change.

***NONE**

No reverse charging for network tariff billing is accepted.

***REQUEST**

Charges are requested on outgoing call request packets.

***ACCEPT**

Reverse charging for network tariff billing is accepted on incoming requests.

***BOTH**

Both incoming and outgoing requests are accepted.

User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

Note: Values entered in this field are determined by the supplier of the network subscription. Do not include coding of facilities shown through keywords: packet size, window size, user group identifier, and reverse charging.

***SAME**

This value does not change.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
    The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL
    Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR
    Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLASC   CTLD(VRTCTL325)   CNNNBR(2825555)
```

This command changes the connection number for controller description VRTCTL325 to 2825555.

Error messages

*ESCAPE Messages

CPF2652

      Controller description &1 not changed.

Change Ctl Desc (BSC) (CHGCTLBSC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (BSC) (CHGCTLBSC) command changes a controller description for a binary synchronous communications (BSC) controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
CNNNBR	Connection number	*Character value*, ***SAME**	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
LCLID	Local identifier	*Character value*, ***SAME**, *NOID	Optional
RMTID	Remote identifiers	Single values: ***SAME** Other values (up to 64 repetitions): *Character value*, *ANY, *NOID	Optional
RJEHOST	RJE host type	***SAME**, *RES, *JES2, *JES3, *RSCS	Optional
RJELOGON	RJE host signon/logon	*Character value*, ***SAME**	Optional
CMNRCYLMT	Recovery limits	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

connection-number

Specify the connection number.

Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

*SAME

This value does not change.

predial-delay
> Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

*SAME

This value does not change.

redial-delay

Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

*SAME

This value does not change.

dial-retry

Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

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Local identifier (LCLID)

Specifies the local ID used to identify the local system to the remote controller.

*SAME

This value does not change.

*NOID

The local system sends a null identifier when communicating with the controller.

local-id

Specify a local ID that is from 2 to 30 hexadecimal characters long and contains an even number of characters. The identifier cannot contain any BSC control characters.

The following guidelines are recommended to help ensure that the telephone connection is made to the correct BSC controller:

- The local ID should be a minimum of 4 characters.
- If the ID is only 4 characters, the first 2 and last 2 should be the same (example: F3F3 or 8484).

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Remote identifiers (RMTID)

Specifies the identifiers for remote BSC controllers. A maximum of 64 remote controller IDs can be specified.

*SAME

This value does not change.

*NOID

The local system accepts a null identifier sent by the remote system.

*ANY

The system accepts any identifier sent by the remote controller.

Note: This value is valid only when it is the last or the only value specified.

remote-ID

Specify a remote controller ID that is from 2 to 30 hexadecimal characters long and contains an even number of characters. The identifier cannot contain any BSC control characters.

The following guidelines are recommended to help ensure that the phone connection is made to the correct BSC controller:

- The remote ID should be a minimum of 4 characters.
- If the ID is only 4 characters, the first 2 and last 2 should be the same (example: F1F1 or 8585).

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RJE host type (RJEHOST)

Specifies the subsystem type of the host to which RJE is connected.

*SAME

This value does not change.

*RES

The host is RES (Remote Entry System).

*JES2

The host is JES2 (Job Entry Subsystem 2).

*JES3

The host is JES3 (Job Entry Subsystem 3).

*RSCS

The host is RSCS (Remote Spooling Communications System).

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RJE host signon/logon (RJELOGON)

Specify up to 80 characters of text, enclosed in apostrophes, used as sign-on text for the RJE host system. This parameter is required only when APPTYPE(*RJE) is specified. Specify the sign-on information required by the host system.

*SAME

This value does not change.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
    The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLBSC   CTLD(VRTCTL325)   LCLID(ABAB)
```

This command changes the controller named VRTCTL325 to have the local identifier ABAB.

Error messages

*ESCAPE Messages

CPF2652
>   Controller description &1 not changed.

Change Ctl Desc (Finance) (CHGCTLFNC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

Parameters
Examples
Error messages

The Change Controller Description (Finance) (CHGCTLFNC) command changes a controller description for a finance controller.

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Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
CODE	Character code	***SAME**, *EBCDIC, *ASCII	Optional
MAXFRAME	Maximum frame size	265-1033, 256, 265, 512, 521, 1033, ***SAME**, *LINKTYPE	Optional
SSCPID	SSCP identifier	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *DC, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional
SHMDSCLMT	SHM disconnect limit	1-254, ***SAME**, *NOMAX	Optional
SHMDSCTMR	SHM disconnect timer	2-3000, ***SAME**	Optional
STNADR	Station address	X'01'-X'FE', ***SAME**	Optional
POLLPTY	SDLC poll priority	***SAME**, *YES, *NO	Optional
POLLLMT	SDLC poll limit	0-4, ***SAME**	Optional
OUTLMT	SDLC out limit	***SAME**, *POLLLMT, 0, 1, 2, 3, 4	Optional
CNNPOLLRTY	SDLC connect poll retry	0-65534, ***SAME**, *CALC, *NOMAX	Optional
NDMPOLLTMR	SDLC NDM poll timer	0-3000, ***SAME**, *CALC	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
DSAP	LAN DSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
SSAP	LAN SSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
LANFRMRTY	LAN frame retry	0-254, ***SAME**, *CALC	Optional
LANCNNRTY	LAN connection retry	0-254, ***SAME**, *CALC	Optional

Keyword	Description	Choices	Notes
LANRSPTMR	LAN response timer	0-254, ***SAME**, *CALC	Optional
LANCNNTMR	LAN connection timer	0-254, ***SAME**, *CALC	Optional
LANACKTMR	LAN acknowledgement timer	0-254, ***SAME**, *CALC	Optional
LANINACTMR	LAN inactivity timer	0-255, ***SAME**, *CALC	Optional
LANACKFRQ	LAN acknowledgement frequency	0-127, ***SAME**, *CALC	Optional
LANMAXOUT	LAN max outstanding frames	1-127, ***SAME**, *CALC	Optional
LANACCPTY	LAN access priority	0-3, ***SAME**, *CALC	Optional
LANWDWSTP	LAN window step	1-127, *NONE, ***SAME**	Optional
NETLVL	X.25 network level	***SAME**, 1980, 1984, 1988	Optional
LINKPCL	X.25 link level protocol	***SAME**, *QLLC, *ELLC	Optional
CNNPWD	X.25 connection password	*Character value*, ***SAME**, *NONE	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	*Element list*	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	*Element list*	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	*Character value*, ***SAME**, *NONE	Optional
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
X25FRMRTY	X.25 frame retry	0-21, ***SAME**	Optional
X25CNNRTY	X.25 connection retry	0-21, ***SAME**	Optional
X25RSPTMR	X.25 response timer	1-2550, ***SAME**	Optional
X25CNNTMR	X.25 connection timer	1-2550, ***SAME**	Optional
X25DLYTMR	X.25 delayed connection timer	1-32767, ***SAME**, *CALC	Optional
X25ACKTMR	X.25 acknowledgement timer	0-2550, ***SAME**	Optional
X25INACTMR	X.25 inactivity timer	1-2550, ***SAME**	Optional
USRFCL	User facilities	*Character value*, ***SAME**, *NONE	Optional
CMNRCYLMT	Recovery limits	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

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Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Character code (CODE)

Specifies whether the extended binary-coded decimal interchange code (*EBCDIC) or the American National Standard Code for Information Interchange (*ASCII) character code is used on the line.

*SAME

This value does not change.

*EBCDIC

The extended binary-coded decimal interchange code (EBCDIC) character code is used.

*ASCII
        The ASCII character code is used.

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Maximum frame size (MAXFRAME)

Specifies the maximum frame (path information unit (PIU)) size the controller can send or receive. This value is used to calculate the request unit (RU) sizes. Since the maximum PIU size that the controller can send or receive is negotiated at exchange identifier time, the maximum PIU size used at run time may be different. This value matches the corresponding value on the host system.

*SAME

This value does not change.

*LINKTYPE

The following values are used for the various link types: *LAN - 521, *SDLC - 265, *X25 - 256.

256

The frame size for *X25.

265

The frame size for *SDLC, *LAN, or *X25.

512

The frame size for *X25.

521

The frame size for *SDLC, *LAN, or *X25.

1033

The frame size for *SDLC.

frame-size

Specify the frame size. For *LAN, specify a value from 265 to 521. For *SDLC, specify 265, 521, or 1033. For *X25, specify 256, 265, 512, or 521.

Note: For a 4730, 4731, 4732, 4736, or 3694 controller, *LINKTYPE or 265 may be specified.

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SSCP identifier (SSCPID)

Specifies the system service control point identifier of the host system.

*SAME

This value does not change.

system-service-control-point-identifier

Specify the system service control point identifier as a 12-digit hexadecimal value.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

*DC

Direct call is being used in an X.21 circuit switched network.

*ANY   The system accepts calls from any network address.

connection-number

Specify the connection number.

Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

*SAME

This value does not change.

predial-delay
> Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

*SAME

This value does not change.

redial-delay
> Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

*SAME

This value does not change.

dial-retry

       Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

*SAME

This value does not change.

*NO

The switched connection is not dropped when the last device is varied off.

*YES

The switched connection is varied off when the last device is varied off.

SHM disconnect limit (SHMDSCLMT)

Specifies the number of consecutive nonproductive responses that are required from the remote station before the connection can be suspended for this X.21 short hold mode connection. This parameter is used only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

*NOMAX

There is no disconnect limit.

SHM-disconnect-limit

Specify a number from 1 to 254, indicating the number of consecutive nonproductive responses that must be received before the connection can be suspended.

SHM disconnect timer (SHMDSCTMR)

Specifies, in tenths of a second, the minimum length of time that the primary system maintains the connection to the remote system for this X.21 short hold mode controller. This parameter is valid only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

SHM-disconnect-timer

Specify a value from 2 to 3000 in 0.1 second intervals.

Station address (STNADR)

Specifies the station address used when communicating with the controller.

Valid values range from 00 to FE.

Note: 00 can be specified only for APPC controllers when *TDLC is specified for the **Link type (LINKTYPE)** parameter.

Note: If *SEC is specified on the ROLE parameter, this is the station address of the remote controller. If *PRI or *NEG is specified on the ROLE parameter, this is the local station address.

*SAME

This value does not change.

SDLC poll priority (POLLPTY)

Specifies whether this controller has priority when polled. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

*NO

This controller does not have polling priority.

*YES

This controller does have polling priority.

SDLC poll limit (POLLLMT)

Specifies, for an SDLC secondary or negotiable controller, the number of consecutive polls issued to the same controller when the poll results in receiving frames. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

0

The default number of polls is zero.

poll limit

Specify a number of polls. Valid values range from 0 through 4.

SDLC out limit (OUTLMT)

Specifies the number of consecutive times SDLC allows the transmission of the maximum number of frames to a station, before allowing transmission to another station.

*SAME

This value does not change.

*POLLLMT

The value is the same as the one specified for the **SDLC poll limit (POLLLMT)** parameter.

out-limit

Specify a value ranging from 0 through 4.

SDLC connect poll retry (CNNPOLLRTY)

Specifies the number of times to retry connecting to a controller before reporting an error.

*SAME

This value does not change.

*CALC

The number of retries is 7 if the controller is switched, and *NOMAX if the controller is nonswitched.

*NOMAX

The system will retry indefinitely.

connect-poll-retry

Specify a value ranging from 0 to 65534 for the number of retries.

SDLC NDM poll timer (NDMPOLLTMR)

Specifies the minimum interval at which a secondary station should be polled if a poll from the primary to the secondary (which is in normal disconnect mode (NDM)) does not result in receiving the appropriate response.

This parameter is valid only if the link type is *SDLC and the controller role is secondary or negotiable and *NO is specified on the SHM parameter.

*SAME

This value does not change.

*CALC

The poll interval is calculated by the system.

NDM-poll-timer

Specify a value ranging from 1 to 3000 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

Top

LAN remote adapter address (ADPTADR)

Specifies the 12-character adapter address of the remote controller. This is the address to which the system sends data when it communicates with the remote controller. This value can be obtained from the remote controller's configuration record. Valid values range from hex 000000000001 through hex FFFFFFFFFFFF.

<u>*SAME</u>

This value does not change.

adapter-address

Specify the adapter address of the remote controller.

Top

LAN DSAP (DSAP)

Specifies the destination service access point (DSAP). This is the logical address this system will send to when it communicates with the remote controller. This address allows the controller to properly route the data that comes from this system. The default value for the destination service access point is 04.

The value must match the value specified on the source service access point (SSAP) parameter in the remote controller's configuration record.

Note: The *OPC controller uses the value above for this field. The combination of RMTSYSNAME and DSAP defines a unique controller. This allows multiple controllers to exist between two systems.

<u>*SAME</u>

This value does not change.

destination service access point

Specify a hexidecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the destination service access point.

Top

LAN SSAP (SSAP)

Specifies the source service access point (SSAP). This is the logical address the local system uses when it sends data to the remote controller. This address allows the controller to properly route the data that comes from the local system. The default value for the source service access point is 04.

It must match the value assigned to the destination service access point (DSAP) in the remote controller's configuration record.

*SAME

This value does not change.

source service access point:

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the source service access point.

<div align="right">Top</div>

LAN frame retry (LANFRMRTY)

Specifies the number of times to retry a transmission when there is no acknowledgment from the remote controller in the time period specified by the LANRSPTMR parameter. This value is only used after a successful connection has been made.

*SAME

This value does not change.

*CALC

The system determines the LAN frame retry value based on the type of line that is lined to the controller.

LAN-frame-retry

Specify a value ranging from 0 through 254 for the number of times a frame is transmitted before an acknowledgement is received.

<div align="right">Top</div>

LAN connection retry (LANCNNRTY)

Specifies the number of times a transmission is attempted before an acknowledgement is received. This value is used at connection time (unlike LANFRMRTY which is used after a connection has been made).

*SAME

This value does not change.

*CALC

The system determines the LAN connection retry value.

LAN-connection-retry

Specify a value ranging from 0 through 254 for the number of times the transmission is attempted before an acknowledgement is received.

<div align="right">Top</div>

LAN response timer (LANRSPTMR)

Specifies the time period used to determine an inoperative condition on the link when connected.

*SAME

This value does not change.

*CALC

The system determines the LAN response timer value.

LAN-response-timer

Specify a value from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN connection timer (LANCNNTMR)

Specifies the time period used to determine an inoperative condition on the link at connection time.

*SAME

This value does not change.

*CALC

The system determines the LAN connection timer value.

LAN-connection-timer

Specify a value ranging from 1 through 254 in 0.1-second intervals for the amount of time the system waits before an inoperative condition occurs. To indicate no timer, specify 0.

LAN acknowledgement timer (LANACKTMR)

Specifies the time interval to delay sending acknowledgements for received frames.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement timer value.

LAN-acknowledgement-timer

Specify a value ranging from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0. If 0 is specified for the **LAN acknowledgement frequency (LANACKFRQ)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKFRQ parameter, a non-zero number must also be specified for this parameter.

LAN inactivity timer (LANINACTMR)

Specifies the time period used to determine an inactive condition for the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN inactivity timer value.

LAN-inactivity-timer

Specify a value ranging from 1 through 255 in 0.1-second intervals for the length of time used to determine an inactive condition for the controller. To indicate no timer, specify 0.

Top

LAN acknowledgement frequency (LANACKFRQ)

Specifies the maximum number of frames received before sending an acknowledgement to the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement frequency value.

LAN-acknowledge-frequency

Specify a value from 0 to 127 for the number of frames received. If 0 is specified for the **LAN acknowledgement timer (LANACKTMR)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKTMR parameter, a non-zero number must also be specified for this parameter.

Top

LAN max outstanding frames (LANMAXOUT)

Specifies the maximum number of frames that can be sent before an acknowledgement is received from the remote system.

*SAME

This value does not change.

*CALC

The system determines the LAN maximum outstanding frames value.

LAN-maximum-outstanding-frames

Specify a value ranging from 1 through 127 for the number of frames that can be sent before an acknowledgement is received.

Top

LAN access priority (LANACCPTY)

Specifies the priority used for accessing the remote controller. The larger the number the higher the priority for this controller. This parameter is only used when the controller attaches to TRLAN.

*SAME

This value does not change.

*CALC

The system determines the LAN access priority value.

LAN-access-priority

Specify a value from 0 to 3 for the access priority for this controller on a local area network (LAN).

Top

LAN window step (LANWDWSTP)

Specifies whether to reduce to 1 the maximum number of frames outstanding to the remote system during network congestion. This parameter (LAN Window Step) indicates the number of frames that must be successfully received by the remote system before the number of maximum outstanding frames can be increased by 1. The increase continues this way until the maximum number of outstanding frames reaches the value specified by the LAN maximum outstanding frames (LANMAXOUT) parameter.

*SAME

This value does not change.

*NONE

The number of outstanding frames is not reduced during network congestion.

LAN-window-step

Specify a value from 1 to 127 for the number of frames that must be successfully received by the remote system before the maximum number of outstanding frames can be increased by 1.

Top

X.25 network level (NETLVL)

Specifies the level of the X.25 network used to access this controller. The level is specified by giving the year of the standard used by the X.25 network.

Note: Use of the lower value of the remote DTE or the network level is suggested; for example, if the remote DTE is using the CCITT standard of 1980 and the network 1984, specify 1980 for this parameter.

*SAME

This value does not change.

1980

The 1980 Standard is used.

1984

The 1984 Standard is used.

1988

The 1988 Standard is used.

X.25 link level protocol (LINKPCL)

Specifies the link level protocol used on the X.25 network to communicate with this controller.

*SAME

This value does not change.

*QLLC

The Qualified Logical Link Control (QLLC) protocol is used.

*ELLC

The Enhanced Logical Link Control (ELLC) protocol is used.

X.25 connection password (CNNPWD)

Specifies the X.25 network password used for password exchange with the X.24 Call Request and Incoming Call packets (Call User Data field). This parameter is not valid for permanent virtual circuit (PVC) connections.

If you want to use a connection password that consists of characters whose hexadecimal value is less than 40, you must specify the password as a hexadecimal value. When less than 8 bytes are specified, the end of the password field is padded with blanks. A password of all blank is valid. All incoming call requests must match this password to establish a connection.

To specify a hexadecimal password, the digits must be specified in multiples of two, be no more than 16 digits long, be enclosed in apostrophes, and be preceded by an X. For example, X'0102030405' is a valid hexadecimal password.

Note: This connection password is highly recommended for controllers that operate with the Enhanced Logical Link Control (ELLC) protocol LINKPCL(*ELLC) on switched virtual circuit (SVC) connections. This enhanced protocol supports reconnection of virtual circuits after network errors which disconnect the line with a clear signal; however, this reconnection is not allowed to proceed without the password validation procedure being used as a unique identifier for the controller.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

*SAME

This value does not change.

*NONE

. No connection password is used.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

*SAME

This value does not change.

*NONE

A value is not specified for the user group identifier.

X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

*SAME

This value does not change.

*NONE

No reverse charging for network tariff billing is accepted.

*REQUEST

Charges are requested on outgoing call request packets.

*ACCEPT

Reverse charging for network tariff billing is accepted on incoming requests.

*BOTH

Both incoming and outgoing requests are accepted.

X.25 frame retry (X25FRMRTY)

Specifies the maximum number of times a frame is sent after the response timer ends when connected to this controller. The value for this parameter depends on the quality of service provided by the network and the connection to that network; that is, the frequency of lost link protocol data units.

*SAME

This value does not change.

X.25 frame retry

Specify a value ranging from 0 through 21 for the number of times a frame is sent.

X.25 connection retry (X25CNNRTY)

Specifies the maximum number of times that a logical link control (LLC) protocol data unit is sent after the connect response timer expires when connecting to this controller.

*SAME

This value does not change.

X.25 connection retry

Specify a value ranging from 0 through 21 for the number times a frame is sent.

X.25 response timer (X25RSPTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connected to this controller.

*SAME

This value does not change.

X.25 response-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1-second intervals.

X.25 connection timer (X25CNNTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connecting to this controller.

*SAME

This value does not change.

connection-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1 second intervals.

X.25 delayed connection timer (X25DLYTMR)

Specifies the time interval between attempts to establish a connection to the controller.

*SAME

This value does not change.

*CALC

Use the values specified for the **X.25 connection timer (X25CNNTMR)** parameter and the **X.25 connection retry (X25CNNRTY)** parameter to determine how often and how many times to try establishing the connection.

X.25-delay-timer

Specify a value ranging from 1 to 32767 units. Each unit represents 0.1 second. Connection attempts are repeated indefinitely at this time interval.

X.25 acknowledgement timer (X25ACKTMR)

Specifies the amount of time to delay sending acknowledgements for received frames.

*SAME

This value does not change.

X.25-acknowledgment-timer

Valid values range from 1 to 2550 in 0.1 second intervals, or 0 to indicate no delay.

X.25 inactivity timer (X25INACTMR)

Specifies the time period used to determine an inactive condition for the controller. Valid values range from 1 to 2550 in 0.1 second intervals.

*SAME

This value does not change.

User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

*NONE

A value is not specified for the user facilities.

*SAME

This value does not change.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
> The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLFNC   CTLD(FNC1)  X25FRMRTY(7)
```

This command changes the controller named FNC1 to have an X.25 frame retry of seven.

Error messages

*ESCAPE Messages

CPF2652
> Controller description &1 not changed.

Change Ctl Desc (SNA Host) (CHGCTLHOST)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (SNA Host) (CHGCTLHOST) command changes a controller description for a Systems Network Architecture (SNA) Host controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
APPN	APPN-capable	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
CODE	Character code	***SAME**, *EBCDIC, *ASCII	Optional
MAXFRAME	Maximum frame size	265-16393, 256, 265, 512, 521, 1024, 1033, 1994, 2048, 2057, 4060, 4096, 8156, 16393, ***SAME**, *LINKTYPE	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *NETATR, *NONE, *ANY	Optional
RMTCPNAME	Remote control point	*Communications name*, ***SAME**, *NONE, *ANY	Optional
ADJLNKSTN	Adjacent link station	*Communications name*, ***SAME**, *NONE, *ANY	Optional
SSCPID	SSCP identifier	X'050000000000'-X'05FFFFFFFFFF', ***SAME**, *NONE	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
DIALINIT	Dial initiation	***SAME**, *LINKTYPE, *IMMED, *DELAY	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *DC, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
CNNLSTOUT	Outgoing connection list	*Name*, ***SAME**	Optional
CNNLSTOUTE	Connection list entry	*Name*, ***SAME**	Optional
IDLCWDWSIZ	IDLC window size	1-31, ***SAME**, *LIND	Optional
IDLCFRMRTY	IDLC frame retry	0-100, ***SAME**, *LIND	Optional
IDLCRSPTMR	IDLC response timer	10-100, ***SAME**, *LIND	Optional
IDLCCNNRTY	IDLC connect retry	1-100, ***SAME**, *LIND, *NOMAX	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional

Keyword	Description	Choices	Notes
DSCTMR	Disconnect timer	Single values: ***SAME** Other values: *Element list*	Optional
	Element 1: Minimum connect timer	0-65535	
	Element 2: Disconnection delay timer	0-65535, ***SAME**	
STNADR	Station address	X'01'-X'FE', ***SAME**	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
DSAP	LAN DSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
SSAP	LAN SSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
LANFRMRTY	LAN frame retry	0-254, ***SAME**, *CALC	Optional
LANCNNRTY	LAN connection retry	0-254, ***SAME**, *CALC	Optional
LANRSPTMR	LAN response timer	0-254, ***SAME**, *CALC	Optional
LANCNNTMR	LAN connection timer	0-254, ***SAME**, *CALC	Optional
LANACKTMR	LAN acknowledgement timer	0-254, ***SAME**, *CALC	Optional
LANINACTMR	LAN inactivity timer	0-255, ***SAME**, *CALC	Optional
LANACKFRQ	LAN acknowledgement frequency	0-127, ***SAME**, *CALC	Optional
LANMAXOUT	LAN max outstanding frames	1-127, ***SAME**, *CALC	Optional
LANACCPTY	LAN access priority	0-3, ***SAME**, *CALC	Optional
LANWDWSTP	LAN window step	1-127, *NONE, ***SAME**	Optional
NETLVL	X.25 network level	***SAME**, 1980, 1984, 1988	Optional
LINKPCL	X.25 link level protocol	***SAME**, *QLLC, *ELLC	Optional
CNNPWD	X.25 connection password	*Character value*, ***SAME**, *NONE	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	*Element list*	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	*Element list*	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	*Character value*, ***SAME**, *NONE	Optional
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
X25FRMRTY	X.25 frame retry	0-21, ***SAME**	Optional
X25RSPTMR	X.25 response timer	1-2550, ***SAME**	Optional
X25ACKTMR	X.25 acknowledgement timer	0-2550, ***SAME**	Optional
X25INACTMR	X.25 inactivity timer	1-2550, ***SAME**	Optional
USRFCL	User facilities	*Character value*, ***SAME**, *NONE	Optional
CPSSN	APPN CP session support	***SAME**, *YES, *NO	Optional
NODETYPE	Remote APPN node type	***SAME**, *CALC, *NETNODE, *ENDNODE, *LENNODE	Optional
BEXROLE	Branch extender role	***SAME**, *NETNODE, *ENDNODE	Optional
HPR	APPN/HPR capable	***SAME**, *YES, *NO	Optional

Keyword	Description	Choices	Notes
HPRPTHSWT	HPR path switching	*SAME, *NO, *YES	Optional
TMSGRPNBR	APPN transmission group number	1-20, *SAME, *CALC	Optional
MINSWTSTS	APPN minimum switched status	*SAME, *VRYONPND, *VRYON	Optional
AUTOCRTDEV	Autocreate device	*SAME, *ALL, *DEVINIT, *NONE	Optional
AUTODLTDEV	Autodelete device	1-10000, 1440, *SAME, *NO	Optional
USRDFN1	User-defined 1	0-255, *SAME, *LIND	Optional
USRDFN2	User-defined 2	0-255, *SAME, *LIND	Optional
USRDFN3	User-defined 3	0-255, *SAME, *LIND	Optional
CMNRCYLMT	Recovery limits	Single values: *SAME, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
MSGQ	Message queue	Single values: *SAME, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
RECONTACT	Recontact on vary off	*SAME, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, *SAME, *BLANK	Optional
PRIDLUS	Primary DLUS name	Single values: *SAME, *NONE Other values: *Element list*	Optional
	Element 1: Control point name	*Communications name*	
	Element 2: Network identifier	*Communications name*, *NETATR	
BKUDLUS	Backup DLUS name	Single values: *SAME, *NONE Other values: *Element list*	Optional
	Element 1: Control point name	*Communications name*	
	Element 2: Network identifier	*Communications name*, *NETATR	
ACTTMR	Activation timer	30-2550, *SAME	Optional
RECNNTMR	Dsc/reconnect timer (T309)	1-2550, *SAME	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

APPN-capable (APPN)

Specifies whether the local system uses advanced peer-to-peer networking (APPN) functions when communicating with this controller. *YES must be specified for APPC controllers attached to a TDLC line.

*SAME

This value does not change.

*YES

This controller is for APPN.

*NO

This controller is not for APPN.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

*switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Character code (CODE)

Specifies whether the extended binary-coded decimal interchange code (*EBCDIC) or the American National Standard Code for Information Interchange (*ASCII) character code is used on the line.

*SAME

This value does not change.

*EBCDIC

The extended binary-coded decimal interchange code (EBCDIC) character code is used.

*ASCII
    The ASCII character code is used.

Maximum frame size (MAXFRAME)

Specifies the maximum frame (path information unit (PIU)) size the controller can send or receive. This value is used to calculate the request unit (RU) sizes. Since the maximum PIU size that the controller can send or receive is negotiated at exchange identifier time, the maximum PIU size used at run time may be different. This value matches the corresponding value on the host system.

*SAME

This value does not change.

*LINKTYPE

The following values are used for the various types:
- *FR - 1590
- *IDLC - 2048
- *LAN - 16393
- *SDLC - 521
- *X25 - 1024

maximum-frame-size

Specify the frame size for the controller. The frame size that can be used depends on the type of line being used. Valid frame sizes for each line type are: For *FR, specify a value from 265 through 8182. For

*IDLC, specify a value ranging from 265 through 8196. For *LAN, specify a value from 265 through 16393 (265 through 4444 for DDI LANs). For *SDLC, specify 265, 521, 1033, or 2057. For *X25, specify 256, 265, 512, 521, 1024, 1033, 2048, or 4096.

Remote network identifier (RMTNETID)

Specifies the NAME of the remote network in which the adjacent control point resides.

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

*NONE

No remote network identifier (ID) is used.

*ANY

Calls are accepted from any X.25 network address.

remote-network-identifier

Specify the remote network identifier.

Remote control point (RMTCPNAME)

Specifies the control point name of the remote system.

*SAME

This value does not change.

*NONE

Specifies no remote control point name is used.

*ANY

The system determines the name of the remote control point used.

remote-control-point-name

Specify the remote control point NAME.

Adjacent link station (ADJLNKSTN)

Specifies the NAME of the adjacent link station. This name is used by the system to identify which switched controller description on the iSeries system is used to establish a link to a host S/370 system. The adjacent link station name for the iSeries system must match the name provided by the host system during link activation.

*SAME

This value does not change.

*NONE

No adjacent link station NAME is specified.

*ANY

The system determines which adjacent link station is used.

adjacent-link-station-name

Specify the adjacent link station name.

SSCP identifier (SSCPID)

Specifies the system service control point identifier of the host system.

*SAME

This value does not change.

*NONE

No system service control point identifier is specified.

system-service-control-point-identifier

Specify the system service control point identifier as a 12-digit hexadecimal value.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Dial initiation (DIALINIT)

Specifies the method used to make the initial dial on a switched line between the system and the remote controller.

*SAME

This value does not change.

*LINKTYPE

The type of dial connection initiated is specified on the LINKTYPE parameter. For LAN or SDLC short-hold mode connections, the default is to dial the connection as soon as the controller description is varied on. For all other link types, the default is to delay dialing.

*IMMED

The dial connection is initiated as soon as the controller description is varied on.

*DELAY

The dial connection is delayed until a job is initiated that requests the use of the remote controller resources.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

*DC

Direct call is being used in an X.21 circuit switched network.

*ANY   The system accepts calls from any network address.

connection-number

Specify the connection number.

Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Outgoing connection list (CNNLSTOUT)

Specifies, for ISDN switched connections, the name of a connection list object that contains the ISDN assigned numbers for a dial out operation to the ISDN.

*SAME

This value does not change.

list-object

Specify the name of a connection list object.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Connection list entry (CNNLSTOUTE)

Specifies, for ISDN switched connections, the entry name from the connection list that is used to make a call to the ISDN. The connection list must have been identified on the **Outgoing connection list (CNNLSTOUT)** parameter.

*SAME

This value does not change.

entry-name

Specify an entry name.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC window size (IDLCWDWSIZ)

Specifies the window size for transmission to and reception controllers attached to the IDLC line.

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

window-size

Specify the window size. Valid values range from 1 through 31.

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Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC frame retry (IDLCFRMRTY)

Specifies the maximum number of attempts to transmit a frame before reporting an error.

*SAME

This value does not change.

*LIND

The number of attempts specified in the line description is used.

IDLC-frame-retry

Specify a number of attempts. Valid values range from 0 through 100.

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Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC response timer (IDLCRSPTMR)

Specifies the amount of time, in tenths of a second, to wait before retransmitting a frame if acknowledgement has not been received.

*SAME

This value does not change.

*LIND

The time specified in the line description is used.

IDLC-response-timer

Specify an amount of time. Valid values range from 10 through 100 tenths of a second. For example, 100 tenths of a second equals 10 seconds.

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Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC connect retry (IDLCCNNRTY)

Specifies the number of times to attempt retransmission at connection time.

*SAME

This value does not change.

*LIND

The number of attempts specified in the line description is used.

*NOMAX

Indicates to continue until a successful transmission has been made.

connect-retry

Specify a number of attempts. Valid values range from 1 through 100.

Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

*SAME

This value does not change.

predial-delay

Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

*SAME

This value does not change.

redial-delay

Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

*SAME

This value does not change.

dial-retry

> Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

*SAME

This value does not change.

*NO

The switched connection is not dropped when the last device is varied off.

*YES

The switched connection is varied off when the last device is varied off.

Disconnect timer (DSCTMR)

Specifies options for controlling the time (in seconds) before a connection without activity is dropped, or the amount of time to delay the automatic disconnection. If the user does not want the line to drop, specify *NO for the SWTDSC parameter.

Element 1: Minimum Connect Timer

*SAME

This value does not change.

disconnect-timer

Specify a time to wait before disconnecting. Valid values range from 0 through 65535 seconds.

Element 2: Disconnect Delay Timer

*SAME

This value does not change.

disconnect-delay-timer

Specify a value to delay link take down after the last session on the controller is stopped. Valid values range from 0 through 65535 seconds.

Note: For objects migrated from V2R1M1 or previous systems, the disconnect delay timer has a value of zero. This value is interpreted by the system as 30 seconds.

Station address (STNADR)

Specifies the station address used when communicating with the controller.

Valid values range from 00 to FE.

Note: 00 can be specified only for APPC controllers when *TDLC is specified for the **Link type (LINKTYPE)** parameter.

Note: If *SEC is specified on the ROLE parameter, this is the station address of the remote controller. If *PRI or *NEG is specified on the ROLE parameter, this is the local station address.

*SAME

This value does not change.

LAN remote adapter address (ADPTADR)

Specifies the 12-character adapter address of the remote controller. This is the address to which the system sends data when it communicates with the remote controller. This value can be obtained from the remote controller's configuration record. Valid values range from hex 000000000001 through hex FFFFFFFFFFFF.

*SAME

This value does not change.

adapter-address

Specify the adapter address of the remote controller.

LAN DSAP (DSAP)

Specifies the destination service access point (DSAP). This is the logical address this system will send to when it communicates with the remote controller. This address allows the controller to properly route the data that comes from this system. The default value for the destination service access point is 04.

The value must match the value specified on the source service access point (SSAP) parameter in the remote controller's configuration record.

Note: The *OPC controller uses the value above for this field. The combination of RMTSYSNAME and DSAP defines a unique controller. This allows multiple controllers to exist between two systems.

*SAME

This value does not change.

destination service access point

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the destination service access point.

LAN SSAP (SSAP)

Specifies the source service access point (SSAP). This is the logical address the local system uses when it sends data to the remote controller. This address allows the controller to properly route the data that comes from the local system. The default value for the source service access point is 04.

It must match the value assigned to the destination service access point (DSAP) in the remote controller's configuration record.

*SAME

This value does not change.

source service access point:

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the source service access point.

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LAN frame retry (LANFRMRTY)

Specifies the number of times to retry a transmission when there is no acknowledgment from the remote controller in the time period specified by the LANRSPTMR parameter. This value is only used after a successful connection has been made.

*SAME

This value does not change.

*CALC

The system determines the LAN frame retry value based on the type of line that is lined to the controller.

LAN-frame-retry

Specify a value ranging from 0 through 254 for the number of times a frame is transmitted before an acknowledgement is received.

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LAN connection retry (LANCNNRTY)

Specifies the number of times a transmission is attempted before an acknowledgement is received. This value is used at connection time (unlike LANFRMRTY which is used after a connection has been made).

*SAME

This value does not change.

*CALC

The system determines the LAN connection retry value.

LAN-connection-retry

Specify a value ranging from 0 through 254 for the number of times the transmission is attempted before an acknowledgement is received.

LAN response timer (LANRSPTMR)

Specifies the time period used to determine an inoperative condition on the link when connected.

*SAME

This value does not change.

*CALC

The system determines the LAN response timer value.

LAN-response-timer

Specify a value from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN connection timer (LANCNNTMR)

Specifies the time period used to determine an inoperative condition on the link at connection time.

*SAME

This value does not change.

*CALC

The system determines the LAN connection timer value.

LAN-connection-timer

Specify a value ranging from 1 through 254 in 0.1-second intervals for the amount of time the system waits before an inoperative condition occurs. To indicate no timer, specify 0.

LAN acknowledgement timer (LANACKTMR)

Specifies the time interval to delay sending acknowledgements for received frames.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement timer value.

LAN-acknowledgement-timer

Specify a value ranging from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0. If 0 is specified for the **LAN acknowledgement frequency (LANACKFRQ)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKFRQ parameter, a non-zero number must also be specified for this parameter.

LAN inactivity timer (LANINACTMR)

Specifies the time period used to determine an inactive condition for the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN inactivity timer value.

LAN-inactivity-timer

Specify a value ranging from 1 through 255 in 0.1-second intervals for the length of time used to determine an inactive condition for the controller. To indicate no timer, specify 0.

LAN acknowledgement frequency (LANACKFRQ)

Specifies the maximum number of frames received before sending an acknowledgement to the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement frequency value.

LAN-acknowledge-frequency

Specify a value from 0 to 127 for the number of frames received. If 0 is specified for the **LAN acknowledgement timer (LANACKTMR)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKTMR parameter, a non-zero number must also be specified for this parameter.

LAN max outstanding frames (LANMAXOUT)

Specifies the maximum number of frames that can be sent before an acknowledgement is received from the remote system.

*SAME

This value does not change.

*CALC

The system determines the LAN maximum outstanding frames value.

LAN-maximum-outstanding-frames

Specify a value ranging from 1 through 127 for the number of frames that can be sent before an acknowledgement is received.

LAN access priority (LANACCPTY)

Specifies the priority used for accessing the remote controller. The larger the number the higher the priority for this controller. This parameter is only used when the controller attaches to TRLAN.

*SAME

This value does not change.

*CALC

The system determines the LAN access priority value.

LAN-access-priority

Specify a value from 0 to 3 for the access priority for this controller on a local area network (LAN).

LAN window step (LANWDWSTP)

Specifies whether to reduce to 1 the maximum number of frames outstanding to the remote system during network congestion. This parameter (LAN Window Step) indicates the number of frames that must be successfully received by the remote system before the number of maximum outstanding frames can be increased by 1. The increase continues this way until the maximum number of outstanding frames reaches the value specified by the LAN maximum outstanding frames (LANMAXOUT) parameter.

*SAME

This value does not change.

*NONE

The number of outstanding frames is not reduced during network congestion.

LAN-window-step

Specify a value from 1 to 127 for the number of frames that must be successfully received by the remote system before the maximum number of outstanding frames can be increased by 1.

X.25 network level (NETLVL)

Specifies the level of the X.25 network used to access this controller. The level is specified by giving the year of the standard used by the X.25 network.

Note: Use of the lower value of the remote DTE or the network level is suggested; for example, if the remote DTE is using the CCITT standard of 1980 and the network 1984, specify 1980 for this parameter.

*SAME

This value does not change.

1980

The 1980 Standard is used.

1984

The 1984 Standard is used.

1988

The 1988 Standard is used.

X.25 link level protocol (LINKPCL)

Specifies the link level protocol used on the X.25 network to communicate with this controller.

*SAME

This value does not change.

*QLLC

The Qualified Logical Link Control (QLLC) protocol is used.

*ELLC

The Enhanced Logical Link Control (ELLC) protocol is used.

X.25 connection password (CNNPWD)

Specifies the X.25 network password used for password exchange with the X.24 Call Request and Incoming Call packets (Call User Data field). This parameter is not valid for permanent virtual circuit (PVC) connections.

If you want to use a connection password that consists of characters whose hexadecimal value is less than 40, you must specify the password as a hexadecimal value. When less than 8 bytes are specified, the end of the password field is padded with blanks. A password of all blank is valid. All incoming call requests must match this password to establish a connection.

To specify a hexadecimal password, the digits must be specified in multiples of two, be no more than 16 digits long, be enclosed in apostrophes, and be preceded by an X. For example, X'0102030405' is a valid hexadecimal password.

Note: This connection password is highly recommended for controllers that operate with the Enhanced Logical Link Control (ELLC) protocol LINKPCL(*ELLC) on switched virtual circuit (SVC) connections. This enhanced protocol supports reconnection of virtual circuits after network errors which disconnect the line with a clear signal; however, this reconnection is not allowed to proceed without the password validation procedure being used as a unique identifier for the controller.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

*SAME

This value does not change.

*NONE

. No connection password is used.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

*SAME

This value does not change.

*NONE

A value is not specified for the user group identifier.

X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

*SAME

This value does not change.

*NONE

No reverse charging for network tariff billing is accepted.

*REQUEST

Charges are requested on outgoing call request packets.

*ACCEPT

Reverse charging for network tariff billing is accepted on incoming requests.

*BOTH

Both incoming and outgoing requests are accepted.

X.25 frame retry (X25FRMRTY)

Specifies the maximum number of times a frame is sent after the response timer ends when connected to this controller. The value for this parameter depends on the quality of service provided by the network and the connection to that network; that is, the frequency of lost link protocol data units.

*SAME

This value does not change.

X.25 frame retry

Specify a value ranging from 0 through 21 for the number of times a frame is sent.

X.25 response timer (X25RSPTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connected to this controller.

*SAME

This value does not change.

X.25 response-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1-second intervals.

X.25 acknowledgement timer (X25ACKTMR)

Specifies the amount of time to delay sending acknowledgements for received frames.

*SAME

This value does not change.

X.25-acknowledgment-timer

Valid values range from 1 to 2550 in 0.1 second intervals, or 0 to indicate no delay.

X.25 inactivity timer (X25INACTMR)

Specifies the time period used to determine an inactive condition for the controller. Valid values range from 1 to 2550 in 0.1 second intervals.

*SAME

This value does not change.

User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

*NONE

A value is not specified for the user facilities.

*SAME

This value does not change.

APPN CP session support (CPSSN)

Specifies whether this controller supports sessions between control points.

*SAME

This value does not change.

*YES

This controller supports sessions between control points.

*NO

This controller does not support sessions between control points.

Remote APPN node type (NODETYPE)

Specifies the type of APPN node which this controller represents.

*SAME

This value does not change.

*ENDNODE

This node is an end node in an APPN network.

*NETNODE

This node is a network node in an APPN network.

*LENNODE

This node is a low-entry networking node in an APPN network.

*CALC

The system determines the type of node this controller represents.

Branch extender role (BEXROLE)

Specifies the role of the local system in an APPN network for the remote controller being configured. This parameter is only used when the local system has enabled the branch extender function via the NODETYPE parameter in the network attributes being set to *BEXNODE.

*SAME

This value does not change.

*NETNODE

The local system takes the role of a network node for the remote controller.

*ENDNODE

The local system takes the role of an end node for the remote controller.

APPN/HPR capable (HPR)

Specifies whether the local system can use APPN high-performance routing (HPR) when communicating with this controller. The controller description must specify APPN(*YES) to enable HPR. If HPR(*YES) is specified, the value of the MAXFRAME parameter of the line specified by the switched line list must be greater than or equal to 768, otherwise HPR will not be enabled over this connection.

*SAME

This value does not change.

*YES

The local system can use HPR, and HPR flows can proceed over the link defined by this controller.

*NO

The local system cannot use HPR, and HPR flows cannot proceed over the link defined by this controller.

HPR path switching (HPRPTHSWT)

Specifies whether an attempt is made to switch paths of HPR connections associated with this controller at the time the controller is varied off. If a path switch is not attempted or if there are no other available paths, jobs associated with the HPR connections will be ended. See the APPN Support information in the iSeries Information Center at http://www.iseries.ibm.com/infocenter for more information.

*SAME

This value does not change.

*NO

When this controller is varied off path switching will not be done for HPR connections associated with this controller. Jobs associated with HPR connections will be ended.

*YES

When this controller is varied off an attempt to switch paths of HPR connections associated with this controller will be made.

APPN transmission group number (TMSGRPNBR)

Specifies the transmission group number for this controller.

*SAME

This value does not change.

*CALC

The system specifies the value for the transmission group number.

transmission-group-number

Specify a value from 1 to 20 for the transmission group number.

APPN minimum switched status (MINSWTSTS)

Specifies the minimum status of the switched connection so that APPN will consider it as a controller that is available for routing.

*SAME

This value does not change.

*VRYONPND

APPN will consider the controller available for routing if the status is vary on pending, varied on, or active.

*VRYON

APPN will consider the controller available for routing only if the status is varied on or active.

Autocreate device (AUTOCRTDEV)

Specifies whether device descriptions can be automatically created for this controller description.

*SAME

This value does not change.

*ALL

All dependent devices than can be automatically created for this controller, except APPC devices, are automatically created.

*DEVINIT

Only session printer and display devices started by the SNA host controller (device-initiated) are automatically created.

*NONE

Dependent devices on this controller are not automatically created.

Autodelete device (AUTODLTDEV)

Specifies the number of minutes an automatically created device can remain in an idle state (when there are no active conversations on that device). When the time expires, the system automatically varies off and deletes the device description.

*SAME

This value does not change.

*NO

The system will not automatically vary off and delete the automatically-configured idle device descriptions.

wait-time

Specify the number of minutes to wait before deleting the automatically-configured idle device descriptions for this controller. Valid values range from 1 to 10,000.

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User-defined 1 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

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User-defined 2 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

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User-defined 3 (USRDFN)

This field is used to describe unique characteristics of the line that you want to control. This parameter is valid only if advanced peer-to-peer networking (APPN) is used on the system.

*SAME

This value does not change.

*LIND

The user-defined value specified in the line description is used.

user-defined

Specify a value ranging from 0 through 255.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
     The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL

Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR

Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Recontact on vary off (RECONTACT)

Specifies whether a request for re-contact is sent to the host system when a normal vary off of the iSeries controller description is done.

Note: This parameter is valid only for X.25 and SDLC leased lines (if *X.25 or *SDLC is specified on the LINKTYPE parameter and *NO is specified on the SWITCHED parameter).

*SAME

This value does not change.

*YES

A request for re-contact to the remote system is sent.

*NO

A request for re-contact to the remote system is not sent. When this value is specified, a status of inactive is shown for the remote system.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Primary DLUS name (PRIDLUS)

Specifies the primary Dependent LU Server (DLUS) NAME and network identifier.

The name is in the format of XXXXXXXX YYYYYYY the prefix being the CP name and the suffix being the network identifier of the APPN network (subnet) that the remote DLUS resides in. If the DLUS is in the same network as the iSeries system, then the user only needs to define the CP name; the default network identifier that is used is the local network identifier specified in the network attributes.

The network qualified CP name of the remote DLUS system services control point (SSCP) with which the iSeries DLUR host controller prefers to communicate. If this parameter is filled in and the iSeries DLUR controller is configured as Initial Connection *DIAL, the iSeries sends an activation request to this DLUS first.

The default is *NONE, but if Initial Connection is *DIAL INLCNN(*DIAL), then this parameter becomes a required parameter.

Element 1: Primary DLUS name

*SAME

This value does not change.

*NONE

No primary CP name is given.

primary-DLUS-name

Specify the name of the primary Dependent LU Server.

Element 2: Network ID

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

network-ID

Specify the network identifier of the Dependent LU Server.

Backup DLUS name (BKUDLUS)

Specifies the backup Dependent LU Server (DLUS) name and network identifier.

The name is in the format of XXXXXXXX YYYYYYY the prefix being the CP name and the suffix being the network identifier of the APPN network (subnet) that the remote DLUS resides in. If the DLUS is in the same network as the iSeries system, then the user only needs to define the CP name; the default network identifier that is used is the local network identifier specified in the network attributes.

The network qualified CP name of the remote DLUS system services control point (SSCP) with which the iSeries DLUR host controller prefers to communicate. If this parameter is filled in and the iSeries DLUR controller is configured as Initial Connection *DIAL, the iSeries sends an activation request to this DLUS first.

The default is *NONE, but if Initial Connection is *DIAL INLCNN(*DIAL), then this parameter becomes a required parameter.

Element 1: Backup DLUS Name

*SAME

This value does not change.

*NONE

No backup CP name is given.

backup-DLUS-NAME

Specify the NAME of the backup Dependent LU Server.

Element 2: Network ID

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

network-ID

Specify the network identifier of the backup Dependent LU Server.

30-2550 (seconds) (ACTTMR)

This timer is used when OS/400 attempts to activate a session to the remote DLUS node (initial connection *DIAL). It is the amount of time the system will wait for an answer from the remote DLUS.

This parameter is used in conjunction with recovery limits (CMNRCYLMT) count limit and timer interval. For each attempt (up to count limit), an activation request (timed by the activation timer) is requested. Between attempts, the system waits for the timer interval before a new activation is attempted (assuming the system times out before receiving a retry error message).

The three parameters on the attempts to the primary DLUS are used and, once the count limit is exceeded, the system resets and tries the same retry limit count to the backup DLUS (if configured). Once the retry limit count is exhausted to all configured DLUS nodes, an error message is issued to the QSYSOPR message log with options to retry the whole activation sequence again.

*SAME

This value does not change.

activation-timer-value

Specify, in seconds, a value ranging from 30 through 2550.

Dsc/reconnect timer (T309) (RECNNTMR)

This timer is used when a session outage occurs to the remote DLUS node. It is the amount of time the OS/400 DLUR support waits for the DLUS node to send an activation request back to the iSeries. Once the timer expires, OS/400 does the following:

- If the iSeries DLUR host controller is configured to INLCNN(*DIAL):
  1. The DLUR support makes a one time attempt to activate a session to the DLUS node the system was connected to at the time of session outage.
  2. If that attempt fails, an error message is displayed in the QSYSOPR message log with retry option. If retry is taken, then the activation request is sent through the configured primary/backup DLUS again.
- If the iSeries DLUR host controller is configured to INLCNN(*ANS):
  1. The DLUR controller waits for an activation attempt from any DLUS node.

*SAME

This value does not change.

reconnect-timer-value

Specify, in seconds, a value ranging from 30 through 2550.

Examples

```
CHGCTLHOST   CTLD(BOSTON)  SSCPID(050000000011)
```

This command changes the host controller named BOSTON to have 050000000011 as its SSCPID.

Error messages

*ESCAPE Messages

CPF2652
    Controller description &1 not changed.

Change Ctl Desc (Local WS) (CHGCTLLWS)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Local Work Station) (CHGCTLLWS) command changes a controller description for a local work station controller.

Note: Extended wireless controller configuration data is contained in the source file and member specified by the INZFILE and INZMBR parameters, respectively. When the controller is varied on, this configuration data is downloaded to the wireless adapter. It is recommended that INZPGM(QZXCINZ) and INZFILE(QEWCSRC) be used, and that a valid value be specified for the INZMBR parameter. For more information about downloading extended wireless controller configuration data, see the LAN, Frame-Relay and ATM Support book, SC41-5404 book.

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Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	Name, ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
DEVWAITTMR	Device wait timer	2-600, ***SAME**	Optional
AUTOCFG	Auto-configuration controller	***SAME**, *YES, *NO	Optional
INZFILE	Initialization source file	*Qualified object name*	Optional
	Qualifier 1: Initialization source file	Name, ***SAME**, *NONE	
	Qualifier 2: Library	Name, ***LIBL**, *CURLIB	
INZMBR	Initialization source member	Name, ***SAME**, *NONE	Optional
INZPGM	Initialization program	*Qualified object name*	Optional
	Qualifier 1: Initialization program	Name, ***SAME**, *NONE	
	Qualifier 2: Library	Name, ***LIBL**, *CURLIB	
MSGQ	Message queue	Single values: ***SAME**, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware this description represents. Use the WRKHDWRSC command to determine the resource name.

*SAME

This value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Device wait timer (DEVWAITTMR)

Specifies the device wait timeout value. This is used to limit the amount of time that a subsystem takes for the work station input/output to complete. The timeout value that is used for each device is obtained from the controller that it is attached to at vary on time. A change in this parameter value takes effect for attached devices when they are next varied on.

*SAME

This value does not change.

device-wait-timer

Specify a value ranging from 2 through 600 that specifies the maximum number of seconds that the subsystem waits for work station input/output to complete for all work stations attached to this controller.

When selecting a value for this parameter, the types of devices attached to the controller should be taken into account. Locally attached work stations should have a low value for this parameter (10 seconds or less).

Auto-configuration controller (AUTOCFG)

Specifies whether this controller description is the one which should have devices attached when they are automatically configured. Although there can be more than one controller description for each controller, only one description can be an automatic configuration controller. When new devices are automatically configured on that controller, they are attached to the automatic configuration controller description.

*SAME

This value does not change.

*NO

This is not an automatic configuration controller.

*YES

This is an automatic configuration controller.

Initialization source file (INZFILE)

Specifies the NAME of a source file containing configuration initialization data.

Note: The INZFILE and INZMBR parameters are required when downloading extended wireless controller configuration data to the wireless adapter as discussed at the beginning of this command description.

*SAME

This value does not change.

*NONE

No initialization file name is specified.

The NAME of the initialization file NAME can be qualified by one of the following library values:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name

Specify the name of the library to be searched.

initialization-file-NAME

Specify the name of a source file containing the initialization data. A value of *NONE is accepted for this parameter. If a source file name has not been added prior to varying on this controller description then the current IOP defaults are used for initializaion.

Initialization source member (INZMBR)

Specifies the NAME of a source file member containing configuration initialization data (for a type 266A controller only).

Note: The INZFILE and INZMBR parameters are required when downloading extended wireless controller configuration data to the wireless adapter as discussed at the beginning of this command description.

*SAME

This value does not change.

*NONE

No source file member is specified.

initialization-member-name

Specify the name of a source file member containing the initialization data. A value of *NONE is accepted for this parameter. If a source member name has not been added prior to varying on this controller description, then the current IOP defaults are used.

Initialization program (INZPGM)

Specifies the name of a program to manage configuration initialization data.

Note: For 2663 wireless adapters, it is recommended that INZPGM(QZXCINZ) be specified. This results in the values of INZFILE and INZMBR being passed to the Change Extended Wireless Line Member (CHGEWLM) command when the line is varied on.

*SAME

This value does not change.

*NONE

No initialization program name is specified.

The NAME of the initialization program NAME can be qualified by one of the following library values:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name

Specify the name of the library to be searched.

initialization-program-name

Specify the name of a program to manage configuration initialization data. If a program name is specified, it is called when this controller description is created. The name of the source file and member containing configuration initialization data are passed to this program as parameters.

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL
Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR
Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLLWS   CTLD(MYCTLR)   INZMBR(MBR3)
```

This command changes the controller description MYCTLR so that configuration initialization data is now contained in member MBR3 of the same source file as originally specified for this controller.

Error messages

CPF2652

    Controller description &1 not changed.

Change Ctl Desc (Network) (CHGCTLNET)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Network) (CHGCTLNET) changes a controller description for a network controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
CNNRSPTMR	Connection response timer	1-3600, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Connection response timer (CNNRSPTMR)

Specifies the amount of time the system will wait before responding to an incoming connection request.

*SAME

This value does not change.

connection-response-timer

Specify the amount of time the system will wait before responding to an incoming connection request. The valid values range from 1 through 3600 seconds.

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Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGCTLNET   CTLD(CTL0A)   ONLINE(*NO)
```

This command changes the ONLINE parameter value to *NO for a network controller named CTL0A.

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Error messages

*ESCAPE Messages

CPF2652

Controller description &1 not changed.

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Change Ctl Desc (Retail) (CHGCTLRTL)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Retail) (CHGCTLRTL) command changes a controller description for a retail controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
CODE	Character code	***SAME**, *EBCDIC, *ASCII	Optional
MAXFRAME	Maximum frame size	265-1994, 256, 265, 512, 521, 1024, 1033, 1994, ***SAME**, *LINKTYPE	Optional
SSCPID	SSCP identifier	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional
STNADR	Station address	X'01'-X'FE', ***SAME**	Optional
POLLPTY	SDLC poll priority	***SAME**, *YES, *NO	Optional
POLLLMT	SDLC poll limit	0-4, ***SAME**	Optional
OUTLMT	SDLC out limit	***SAME**, *POLLLMT, 0, 1, 2, 3, 4	Optional
CNNPOLLRTY	SDLC connect poll retry	0-65534, ***SAME**, *CALC, *NOMAX	Optional
NDMPOLLTMR	SDLC NDM poll timer	0-3000, ***SAME**, *CALC	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
DSAP	LAN DSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
SSAP	LAN SSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
LANFRMRTY	LAN frame retry	0-254, ***SAME**, *CALC	Optional
LANCNNRTY	LAN connection retry	0-254, ***SAME**, *CALC	Optional
LANRSPTMR	LAN response timer	0-254, ***SAME**, *CALC	Optional

Keyword	Description	Choices	Notes
LANCNNTMR	LAN connection timer	0-254, ***SAME**, *CALC	Optional
LANACKTMR	LAN acknowledgement timer	0-254, ***SAME**, *CALC	Optional
LANINACTMR	LAN inactivity timer	0-255, ***SAME**, *CALC	Optional
LANACKFRQ	LAN acknowledgement frequency	0-127, ***SAME**, *CALC	Optional
LANMAXOUT	LAN max outstanding frames	1-127, ***SAME**, *CALC	Optional
LANACCPTY	LAN access priority	0-3, ***SAME**, *CALC	Optional
LANWDWSTP	LAN window step	1-127, *NONE, ***SAME**	Optional
NETLVL	X.25 network level	***SAME**, 1980, 1984, 1988	Optional
CNNPWD	X.25 connection password	*Character value*, ***SAME**, *NONE	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	*Element list*	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	*Element list*	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	*Character value*, ***SAME**, *NONE	Optional
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
X25FRMRTY	X.25 frame retry	0-21, ***SAME**	Optional
X25CNNRTY	X.25 connection retry	0-21, ***SAME**	Optional
X25RSPTMR	X.25 response timer	1-2550, ***SAME**	Optional
X25CNNTMR	X.25 connection timer	1-2550, ***SAME**	Optional
X25DLYTMR	X.25 delayed connection timer	1-32767, ***SAME**, *CALC	Optional
USRFCL	User facilities	*Character value*, ***SAME**, *NONE	Optional
CMNRCYLMT	Recovery limits	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Character code (CODE)

Specifies whether the extended binary-coded decimal interchange code (*EBCDIC) or the American National Standard Code for Information Interchange (*ASCII) character code is used on the line.

*SAME

This value does not change.

*EBCDIC

The extended binary-coded decimal interchange code (EBCDIC) character code is used.

*ASCII
> The ASCII character code is used.

Maximum frame size (MAXFRAME)

Specifies the maximum frame (path information unit (PIU)) size the controller can send or receive. This value is used to calculate the request unit (RU) sizes. Since the maximum PIU size that the controller can send or receive is negotiated at exchange identifier time, the maximum PIU size used at run time may be different. This value matches the corresponding value on the host system.

*SAME

This value does not change.

*LINKTYPE

The frame size is 521 bytes for *SDLC, 1024 bytes for *X25, and 1994 bytes for *LAN.

maximum-frame-size

Specify either 521, 1033, or 1994 bytes as the maximum frame size for this controller. Specify 1024 only if linktype is *X25. Specify 1994 only if linktype is *LAN.

SSCP identifier (SSCPID)

Specifies the system service control point identifier of the host system.

*SAME

This value does not change.

system-service-control-point-identifier

Specify the system service control point identifier as a 12-digit hexadecimal value.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

*ANY   The system accepts calls from any network address.

Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

*SAME

This value does not change.

predial-delay

> Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

*SAME

This value does not change.

redial-delay

> Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

*SAME

This value does not change.

dial-retry

> Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

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Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

*SAME

This value does not change.

*NO

The switched connection is not dropped when the last device is varied off.

*YES

The switched connection is varied off when the last device is varied off.

Station address (STNADR)

Specifies the station address used when communicating with the controller.

Valid values range from 00 to FE.

Note: 00 can be specified only for APPC controllers when *TDLC is specified for the **Link type (LINKTYPE)** parameter.

Note: If *SEC is specified on the ROLE parameter, this is the station address of the remote controller. If *PRI or *NEG is specified on the ROLE parameter, this is the local station address.

*SAME

This value does not change.

SDLC poll priority (POLLPTY)

Specifies whether this controller has priority when polled. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

*NO

This controller does not have polling priority.

*YES

This controller does have polling priority.

SDLC poll limit (POLLLMT)

Specifies, for an SDLC secondary or negotiable controller, the number of consecutive polls issued to the same controller when the poll results in receiving frames. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

0

The default number of polls is zero.

poll limit

Specify a number of polls. Valid values range from 0 through 4.

SDLC out limit (OUTLMT)

Specifies the number of consecutive times SDLC allows the transmission of the maximum number of frames to a station, before allowing transmission to another station.

*SAME

This value does not change.

*POLLLMT

The value is the same as the one specified for the **SDLC poll limit (POLLLMT)** parameter.

out-limit

Specify a value ranging from 0 through 4.

SDLC connect poll retry (CNNPOLLRTY)

Specifies the number of times to retry connecting to a controller before reporting an error.

*SAME

This value does not change.

*CALC

The number of retries is 7 if the controller is switched, and *NOMAX if the controller is nonswitched.

*NOMAX

The system will retry indefinitely.

connect-poll-retry

Specify a value ranging from 0 to 65534 for the number of retries.

SDLC NDM poll timer (NDMPOLLTMR)

Specifies the minimum interval at which a secondary station should be polled if a poll from the primary to the secondary (which is in normal disconnect mode (NDM)) does not result in receiving the appropriate response.

This parameter is valid only if the link type is *SDLC and the controller role is secondary or negotiable and *NO is specified on the SHM parameter.

*SAME

This value does not change.

*CALC

The poll interval is calculated by the system.

NDM-poll-timer

Specify a value ranging from 1 to 3000 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN remote adapter address (ADPTADR)

Specifies the 12-character adapter address of the remote controller. This is the address to which the system sends data when it communicates with the remote controller. This value can be obtained from the remote controller's configuration record. Valid values range from hex 000000000001 through hex FFFFFFFFFFFF.

*SAME

This value does not change.

adapter-address

Specify the adapter address of the remote controller.

LAN DSAP (DSAP)

Specifies the destination service access point (DSAP). This is the logical address this system will send to when it communicates with the remote controller. This address allows the controller to properly route the data that comes from this system. The default value for the destination service access point is 04.

The value must match the value specified on the source service access point (SSAP) parameter in the remote controller's configuration record.

*SAME

This value does not change.

destination service access point

Specify a hexidecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the destination service access point.

LAN SSAP (SSAP)

Specifies the source service access point (SSAP). This is the logical address the local system uses when it sends data to the remote controller. This address allows the controller to properly route the data that comes from the local system. The default value for the source service access point is 04.

It must match the value assigned to the destination service access point (DSAP) in the remote controller's configuration record.

*SAME

This value does not change.

source service access point:

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the source service access point.

LAN frame retry (LANFRMRTY)

Specifies the number of times to retry a transmission when there is no acknowledgment from the remote controller in the time period specified by the LANRSPTMR parameter. This value is only used after a successful connection has been made.

***SAME**

This value does not change.

***CALC**

The system determines the LAN frame retry value based on the type of line that is lined to the controller.

LAN-frame-retry

Specify a value ranging from 0 through 254 for the number of times a frame is transmitted before an acknowledgement is received.

LAN connection retry (LANCNNRTY)

Specifies the number of times a transmission is attempted before an acknowledgement is received. This value is used at connection time (unlike LANFRMRTY which is used after a connection has been made).

***SAME**

This value does not change.

***CALC**

The system determines the LAN connection retry value.

LAN-connection-retry

Specify a value ranging from 0 through 254 for the number of times the transmission is attempted before an acknowledgement is received.

LAN response timer (LANRSPTMR)

Specifies the time period used to determine an inoperative condition on the link when connected.

***SAME**

This value does not change.

***CALC**

The system determines the LAN response timer value.

LAN-response-timer

Specify a value from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN connection timer (LANCNNTMR)

Specifies the time period used to determine an inoperative condition on the link at connection time.

*SAME

This value does not change.

*CALC

The system determines the LAN connection timer value.

LAN-connection-timer

Specify a value ranging from 1 through 254 in 0.1-second intervals for the amount of time the system waits before an inoperative condition occurs. To indicate no timer, specify 0.

LAN acknowledgement timer (LANACKTMR)

Specifies the time interval to delay sending acknowledgements for received frames.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement timer value.

LAN-acknowledgement-timer

Specify a value ranging from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0. If 0 is specified for the **LAN acknowledgement frequency (LANACKFRQ)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKFRQ parameter, a non-zero number must also be specified for this parameter.

LAN inactivity timer (LANINACTMR)

Specifies the time period used to determine an inactive condition for the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN inactivity timer value.

LAN-inactivity-timer

Specify a value ranging from 1 through 255 in 0.1-second intervals for the length of time used to determine an inactive condition for the controller. To indicate no timer, specify 0.

LAN acknowledgement frequency (LANACKFRQ)

Specifies the maximum number of frames received before sending an acknowledgement to the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement frequency value.

LAN-acknowledge-frequency

Specify a value from 0 to 127 for the number of frames received. If 0 is specified for the **LAN acknowledgement timer (LANACKTMR)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKTMR parameter, a non-zero number must also be specified for this parameter.

LAN max outstanding frames (LANMAXOUT)

Specifies the maximum number of frames that can be sent before an acknowledgement is received from the remote system.

*SAME

This value does not change.

*CALC

The system determines the LAN maximum outstanding frames value.

LAN-maximum-outstanding-frames

Specify a value ranging from 1 through 127 for the number of frames that can be sent before an acknowledgement is received.

LAN access priority (LANACCPTY)

Specifies the priority granted to the sending system for sending frames. The larger the number, the higher the priority.

*SAME

This value does not change.

*CALC

The system determines the LAN access priority value.

LAN-access-priority

Specify a value from 0 to 3 for the access priority for this controller on a local area network (LAN).

LAN window step (LANWDWSTP)

Specifies whether to reduce to 1 the maximum number of frames outstanding to the remote system during network congestion. This parameter (LAN Window Step) indicates the number of frames that must be successfully received by the remote system before the number of maximum outstanding frames can be increased by 1. The increase continues this way until the maximum number of outstanding frames reaches the value specified by the LAN maximum outstanding frames (LANMAXOUT) parameter.

*SAME

This value does not change.

*NONE

The number of outstanding frames is not reduced during network congestion.

LAN-window-step

Specify a value from 1 to 127 for the number of frames that must be successfully received by the remote system before the maximum number of outstanding frames can be increased by 1.

X.25 network level (NETLVL)

Specifies the level of the X.25 network used to access this controller. The level is specified by giving the year of the standard used by the X.25 network.

Note: Use of the lower value of the remote DTE or the network level is suggested; for example, if the remote DTE is using the CCITT standard of 1980 and the network 1984, specify 1980 for this parameter.

*SAME

This value does not change.

1980

The 1980 Standard is used.

1984

The 1984 Standard is used.

1988

The 1988 Standard is used.

X.25 connection password (CNNPWD)

Specifies the X.25 network password used for password exchange with the X.24 Call Request and Incoming Call packets (Call User Data field). This parameter is not valid for permanent virtual circuit (PVC) connections.

If you want to use a connection password that consists of characters whose hexadecimal value is less than 40, you must specify the password as a hexadecimal value. When less than 8 bytes are specified, the end of the password field is padded with blanks. A password of all blank is valid. All incoming call requests must match this password to establish a connection.

To specify a hexadecimal password, the digits must be specified in multiples of two, be no more than 16 digits long, be enclosed in apostrophes, and be preceded by an X. For example, X'0102030405' is a valid hexadecimal password.

Note: This connection password is highly recommended for controllers that operate with the Enhanced Logical Link Control (ELLC) protocol LINKPCL(*ELLC) on switched virtual circuit (SVC) connections. This enhanced protocol supports reconnection of virtual circuits after network errors which disconnect the line with a clear signal; however, this reconnection is not allowed to proceed without the password validation procedure being used as a unique identifier for the controller.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

*SAME

This value does not change.

*NONE

. No connection password is used.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

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X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

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X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

*SAME

This value does not change.

*NONE

A value is not specified for the user group identifier.

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X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

*SAME

This value does not change.

*NONE

No reverse charging for network tariff billing is accepted.

*REQUEST

Charges are requested on outgoing call request packets.

*ACCEPT

Reverse charging for network tariff billing is accepted on incoming requests.

*BOTH

Both incoming and outgoing requests are accepted.

X.25 frame retry (X25FRMRTY)

Specifies the maximum number of times a frame is sent after the response timer ends when connected to this controller. The value for this parameter depends on the quality of service provided by the network and the connection to that network; that is, the frequency of lost link protocol data units.

*SAME

This value does not change.

X.25 frame retry

Specify a value ranging from 0 through 21 for the number of times a frame is sent.

X.25 connection retry (X25CNNRTY)

Specifies the maximum number of times that a logical link control (LLC) protocol data unit is sent after the connect response timer expires when connecting to this controller.

*SAME

This value does not change.

X.25 connection retry

Specify a value ranging from 0 through 21 for the number times a frame is sent.

X.25 response timer (X25RSPTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connected to this controller.

*SAME

This value does not change.

X.25 response-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1-second intervals.

X.25 connection timer (X25CNNTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connecting to this controller.

*SAME

This value does not change.

connection-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1 second intervals.

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X.25 delayed connection timer (X25DLYTMR)

Specifies the time interval between attempts to establish a connection to the controller.

*SAME

This value does not change.

*CALC

Use the values specified for the **X.25 connection timer (X25CNNTMR)** parameter and the **X.25 connection retry (X25CNNRTY)** parameter to determine how often and how many times to try establishing the connection.

X.25-delay-timer

Specify a value ranging from 1 to 32767 units. Each unit represents 0.1 second. Connection attempts are repeated indefinitely at this time interval.

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User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

*SAME

This value does not change.

*NONE

A value is not specified for the user facilities.

characters

Specify a string of up to 218 hexadecimal characters.

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Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

***SYSVAL**

      The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLRTL   CTLD(CTLR05)  SWTLINLST(LINE02)
            CNNNBR('255-3436')
```

This command changes the retail controller description CTLR05. The switched line list now contains only the name LINE02, and the connection number has changed to 255-3436.

Error messages

*ESCAPE Messages

CPF2652

      Controller description &1 not changed.

Change Ctl Desc (Remote WS) (CHGCTLRWS)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Remote Work Station) (CHGCTLRWS) command changes a controller description for a remote work station controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ACTSNBU	Activate swt network backup	***SAME**, *YES, *NO	Optional
SWTLINLST	Switched line list	Single values: ***SAME** Other values (up to 64 repetitions): *Name*	Optional
CODE	Character code	***SAME**, *EBCDIC, *ASCII	Optional
DEVWAITTMR	Device wait timer	2-600, ***SAME**	Optional
MAXFRAME	Maximum frame size	265-1994, 256, 261, 265, 512, 521, 1033, 1994, ***SAME**, *LINKTYPE	Optional
RMTLOCNAME	Remote location	*Communications name*, ***SAME**	Optional
LCLLOCNAME	Local location	*Communications name*, ***SAME**, *NETATR	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *NETATR, *NONE	Optional
SSCPID	SSCP identifier	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
INLCNN	Initial connection	***SAME**, *ANS, *DIAL	Optional
DIALINIT	Dial initiation	***SAME**, *LINKTYPE, *IMMED, *DELAY	Optional
CNNNBR	Connection number	*Character value*, ***SAME**, *DC, *ANY	Optional
ANSNBR	Answer number	***SAME**, *CNNNBR, *ANY	Optional
CNNLSTOUT	Outgoing connection list	*Name*, ***SAME**	Optional
CNNLSTOUTE	Connection list entry	*Name*, ***SAME**	Optional
IDLCWDWSIZ	IDLC window size	1-31, ***SAME**, *LIND	Optional
IDLCFRMRTY	IDLC frame retry	0-100, ***SAME**, *LIND	Optional
IDLCRSPTMR	IDLC response timer	10-100, ***SAME**, *LIND	Optional
IDLCCNNRTY	IDLC connect retry	1-100, ***SAME**, *LIND, *NOMAX	Optional
PREDIALDLY	Predial delay	0-254, ***SAME**	Optional
REDIALDLY	Redial delay	0-254, ***SAME**	Optional
DIALRTY	Dial retry	0-254, ***SAME**	Optional
SHMDSCLMT	SHM disconnect limit	1-254, ***SAME**, *NOMAX	Optional
SHMDSCTMR	SHM disconnect timer	2-3000, ***SAME**	Optional
STNADR	Station address	X'01'-X'FE', ***SAME**	Optional
POLLPTY	SDLC poll priority	***SAME**, *YES, *NO	Optional
POLLLMT	SDLC poll limit	0-4, ***SAME**	Optional

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Keyword	Description	Choices	Notes
OUTLMT	SDLC out limit	***SAME**, *POLLLMT, 0, 1, 2, 3, 4	Optional
CNNPOLLRTY	SDLC connect poll retry	0-65534, ***SAME**, *CALC, *NOMAX	Optional
NDMPOLLTMR	SDLC NDM poll timer	0-3000, ***SAME**, *CALC	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFF', ***SAME**	Optional
DSAP	LAN DSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
SSAP	LAN SSAP	***SAME**, 04, 08, 0C, 10, 14, 18, 1C, 20, 24, 28, 2C, 30, 34, 38, 3C, 40, 44, 48, 4C, 50, 54, 58, 5C, 60, 64, 68, 6C, 70, 74, 78, 7C, 80, 84, 88, 8C, 90, 94, 98, 9C	Optional
LANFRMRTY	LAN frame retry	0-254, ***SAME**, *CALC	Optional
LANCNNRTY	LAN connection retry	0-254, ***SAME**, *CALC	Optional
LANRSPTMR	LAN response timer	0-254, ***SAME**, *CALC	Optional
LANCNNTMR	LAN connection timer	0-254, ***SAME**, *CALC	Optional
LANACKTMR	LAN acknowledgement timer	0-254, ***SAME**, *CALC	Optional
LANINACTMR	LAN inactivity timer	0-255, ***SAME**, *CALC	Optional
LANACKFRQ	LAN acknowledgement frequency	0-127, ***SAME**, *CALC	Optional
LANMAXOUT	LAN max outstanding frames	1-127, ***SAME**, *CALC	Optional
LANACCPTY	LAN access priority	0-3, ***SAME**, *CALC	Optional
LANWDWSTP	LAN window step	1-127, *NONE, ***SAME**	Optional
NETLVL	X.25 network level	***SAME**, 1980, 1984, 1988	Optional
LINKPCL	X.25 link level protocol	***SAME**, *QLLC, *ELLC	Optional
CNNPWD	X.25 connection password	Character value, ***SAME**, *NONE	Optional
SWTLINSLCT	X.25 switched line selection	*FIRST, *CALC, ***SAME**	Optional
DFTPKTSIZE	X.25 default packet size	Element list	Optional
	Element 1: Transmit value	***SAME**, *LIND, 64, 128, 256, 512, 1024, 2048, 4096	
	Element 2: Receive value	***SAME**, *LIND, *TRANSMIT, 64, 128, 256, 512, 1024, 2048, 4096	
DFTWDWSIZE	X.25 default window size	Element list	Optional
	Element 1: Transmit value	1-15, ***SAME**, *LIND	
	Element 2: Receive value	1-15, ***SAME**, *LIND, *TRANSMIT	
USRGRPID	X.25 user group identifier	Character value, ***SAME**, *NONE	Optional
RVSCRG	X.25 reverse charging	***SAME**, *NONE, *REQUEST, *ACCEPT, *BOTH	Optional
X25FRMRTY	X.25 frame retry	0-21, ***SAME**	Optional
X25CNNRTY	X.25 connection retry	0-21, ***SAME**	Optional
X25RSPTMR	X.25 response timer	1-2550, ***SAME**	Optional
X25CNNTMR	X.25 connection timer	1-2550, ***SAME**	Optional
X25DLYTMR	X.25 delayed connection timer	1-32767, ***SAME**, *CALC	Optional
X25ACKTMR	X.25 acknowledgement timer	0-2550, ***SAME**	Optional
X25INACTMR	X.25 inactivity timer	1-2550, ***SAME**	Optional
USRFCL	User facilities	Character value, ***SAME**, *NONE	Optional
ALCRTYTMR	Allocation retry timer	1-9999, ***SAME**	Optional
AUTOCRTDEV	Autocreate device	***SAME**, *ALL, *NONE	Optional
SWTDSC	Switched disconnect	***SAME**, *YES, *NO	Optional

Keyword	Description	Choices	Notes
CMNRCYLMT	Recovery limits	Single values: *SAME, *SYSVAL Other values: *Element list*	Optional
	Element 1: Count limit	0-99	
	Element 2: Time interval	0-120	
MSGQ	Message queue	Single values: *SAME, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
TEXT	Text 'description'	*Character value*, *SAME, *BLANK	Optional

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Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

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Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

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Activate swt network backup (ACTSNBU)

Specifies, for modems that support the switched network backup (SNBU) feature and that are not IBM 386x, 586x, or 786x models, whether the SNBU feature is activated or deactivated. The local modem and remote modem must both support the SNBU to activate it. IBM 386x, 586x, and 786x models are activated with a hardware switch only. This feature lets you bypass a broken nonswitched connection (nonswitched line) by establishing a switched connection.

*SAME

This value does not change.

*NO

The SNBU feature is not used.

*YES

The SNBU feature is activated. You must also specify a value of *YES for the **Activate swt network backup (ACTSNBU)** parameter for the line.

Switched line list (SWTLINLST)

Specifies the names of the switched lines to which this controller attaches. The line descriptions must already exist. Up to 64 switched line names can be specified.

*SAME

This value does not change.

*switched-line-NAME

Specify the names of up to 64 lines that are connected to this controller. The same line name can be used more than once. For each line name specified, a line description by that name must already exist.

Character code (CODE)

Specifies whether the extended binary-coded decimal interchange code (*EBCDIC) or the American National Standard Code for Information Interchange (*ASCII) character code is used on the line.

*SAME

This value does not change.

*EBCDIC

The extended binary-coded decimal interchange code (EBCDIC) character code is used.

*ASCII
     The ASCII character code is used.

Device wait timer (DEVWAITTMR)

Specifies the device wait timeout value. This is used to limit the amount of time that a subsystem takes for the work station input/output to complete. The timeout value that is used for each device is obtained from the controller that it is attached to at vary on time. A change in this parameter value takes effect for attached devices when they are next varied on.

*SAME

This value does not change.

device-wait-timer

Specify a value ranging from 2 through 600 that specifies the maximum number of seconds that the subsystem waits for work station input/output to complete for all work stations attached to this controller.

When selecting a value for this parameter, the types of devices attached to the controller should be taken into account. Locally attached work stations should have a low value for this parameter (10 seconds or less).

Maximum frame size (MAXFRAME)

Specifies the maximum frame (path information unit (PIU)) size the controller can send or receive. This value is used to calculate the request unit (RU) sizes. Since the maximum PIU size that the controller can send or receive is negotiated at exchange identifier time, the maximum PIU size used at run time may be different. This value matches the corresponding value on the host system.

*SAME

This value does not change.

*LINKTYPE

For a 3174 controller with a link type of *ISDN, a value of 521 is used. For a 3174 controller with a link type of *LAN, a value of 1994 is used. For a 3174 controller with a link type of *SDLC, a value of 265 is used. For a 3174 controller with a link type of *X25, a value of 256 is used. For a 5394 controller with a link type of *X25, a value of 512 is used. For a 5394 controller with a link type of *SDLC, a value of 517 is used.

maximum-frame-size

For a 3174 controller with a link type of *SDLC or *X25, specify the value 265. For a 5394 controller with a link type of *X25 line, specify 265 or 521. For a 5394 controller with a link type of *SDLC, specify 261 or 517.

Remote location (RMTLOCNAME)

Specifies the NAME of the remote location associated with the remote system.

*SAME

This value does not change.

Local location (LCLLOCNAME)

Specifies the local location name.

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

local-location-name

Specify the name (8 characters maximum) by which the local system is known to the remote system.

Remote network identifier (RMTNETID)

Specifies the NAME of the remote network in which the adjacent control point resides.

*SAME

This value does not change.

*NETATR

The LCLNETID value specified in the system network attributes is used.

*NONE
No remote network identifier (ID) is used.

remote-network-identifier

Specify the remote network identifier.

SSCP identifier (SSCPID)

Specifies the system service control point identifier of the host system.

*SAME

This value does not change.

system-service-control-point-identifier

Specify the system service control point identifier as a 12-digit hexadecimal value.

Initial connection (INLCNN)

Specifies the method used to establish a connection with this controller.

*SAME

This value does not change.

*DIAL

The system initiates outgoing calls and answers incoming calls.

*ANS

The connection is made by the iSeries system when it answers an incoming call from this controller. If a call is received from the remote controller and all necessary conditions are met, the incoming call is answered by the system.

For X.25 connections, the line attached to the controller requires switched virtual circuits (SVCs) configured on the LGLCHLE parameter of type OUT or BOTH(*SVCOUT or *SVCBOTH) for the connection to succeed.

The line can be changed using the Change Line Description (X.25) (CHGLINX25) command.

Dial initiation (DIALINIT)

Specifies the method used to make the initial dial on a switched line between the system and the remote controller.

*SAME

This value does not change.

*LINKTYPE

The type of dial connection initiated is specified on the LINKTYPE parameter. For LAN or SDLC short-hold mode connections, the default is to dial the connection as soon as the controller description is varied on. For all other link types, the default is to delay dialing.

*IMMED

The dial connection is initiated as soon as the controller description is varied on.

*DELAY

The dial connection is delayed until a job is initiated that requests the use of the remote controller resources.

Connection number (CNNNBR)

Specifies the telephone number to dial to connect to this controller.

*SAME

This value does not change.

*DC

Direct call is being used in an X.21 circuit switched network.

*ANY   The system accepts calls from any network address.

connection-number

Specify the connection number.

Answer number (ANSNBR)

Specifies the X.25 network address from which calls are accepted.

*SAME

This value does not change.

*CNNNBR

Calls from the X.25 network address specified on the CNNNBR parameter are accepted.

*ANY

Calls are accepted from any X.25 network address.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Outgoing connection list (CNNLSTOUT)

Specifies, for ISDN switched connections, the name of a connection list object that contains the ISDN assigned numbers for a dial out operation to the ISDN.

*SAME

This value does not change.

list-object

Specify the name of a connection list object.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

Connection list entry (CNNLSTOUTE)

Specifies, for ISDN switched connections, the entry name from the connection list that is used to make a call to the ISDN. The connection list must have been identified on the **Outgoing connection list (CNNLSTOUT)** parameter.

*SAME

This value does not change.

entry-name

Specify an entry name.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC window size (IDLCWDWSIZ)

Specifies the window size for transmission to and reception controllers attached to the IDLC line.

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

window-size

Specify the window size. Valid values range from 1 through 31.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC frame retry (IDLCFRMRTY)

Specifies the maximum number of attempts to transmit a frame before reporting an error.

***SAME**

This value does not change.

***LIND**

The number of attempts specified in the line description is used.

IDLC-frame-retry

Specify a number of attempts. Valid values range from 0 through 100.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC response timer (IDLCRSPTMR)

Specifies the amount of time, in tenths of a second, to wait before retransmitting a frame if acknowledgement has not been received.

***SAME**

This value does not change.

***LIND**

The time specified in the line description is used.

IDLC-response-timer

Specify an amount of time. Valid values range from 10 through 100 tenths of a second. For example, 100 tenths of a second equals 10 seconds.

Note: This parameter is no longer supported. It exists solely for compatibility with releases earlier than Version 5 Release 3 Modification 0 of OS/400.

IDLC connect retry (IDLCCNNRTY)

Specifies the number of times to attempt retransmission at connection time.

*SAME

This value does not change.

*LIND

The number of attempts specified in the line description is used.

*NOMAX

Indicates to continue until a successful transmission has been made.

connect-retry

Specify a number of attempts. Valid values range from 1 through 100.

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Predial delay (PREDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before dialing a number.

*SAME

This value does not change.

predial-delay

Specify a value ranging from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Redial delay (REDIALDLY)

Specifies the time interval to wait (in 0.5 second intervals) before re-dialing when the call attempt is unsuccessful.

*SAME

This value does not change.

redial-delay

Specify a value from 0 to 254 units. Each unit represents 0.5 second. To indicate no delay, specify a value of 0.

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Dial retry (DIALRTY)

Specifies the number of re-dial attempts made by the system before considering the dialing unsuccessful.

*SAME

This value does not change.

dial-retry

Specify a value from 0 to 254 in 0.5-second intervals, for the number of times the dialing will be tried.

SHM disconnect limit (SHMDSCLMT)

Specifies the number of consecutive nonproductive responses that are required from the remote station before the connection can be suspended for this X.21 short hold mode connection. This parameter is used only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

*NOMAX

There is no disconnect limit.

SHM-disconnect-limit

Specify a number from 1 to 254, indicating the number of consecutive nonproductive responses that must be received before the connection can be suspended.

SHM disconnect timer (SHMDSCTMR)

Specifies, in tenths of a second, the minimum length of time that the primary system maintains the connection to the remote system for this X.21 short hold mode controller. This parameter is valid only if *YES is specified for the **Short hold mode (SHM)** parameter, and *NEG or *SEC is specified for the **Data link role (ROLE)** parameter.

*SAME

This value does not change.

SHM-disconnect-timer

Specify a value from 2 to 3000 in 0.1 second intervals.

Station address (STNADR)

Specifies the station address used when communicating with the controller.

Valid values range from 00 to FE.

Note: 00 can be specified only for APPC controllers when *TDLC is specified for the **Link type (LINKTYPE)** parameter.

Note: If *SEC is specified on the ROLE parameter, this is the station address of the remote controller. If *PRI or *NEG is specified on the ROLE parameter, this is the local station address.

*SAME

This value does not change.

SDLC poll priority (POLLPTY)

Specifies whether this controller has priority when polled. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

*NO

This controller does not have polling priority.

*YES

This controller does have polling priority.

SDLC poll limit (POLLLMT)

Specifies, for an SDLC secondary or negotiable controller, the number of consecutive polls issued to the same controller when the poll results in receiving frames. This parameter can be specified only if SHM is *NO.

*SAME

This value does not change.

0

The default number of polls is zero.

poll limit

Specify a number of polls. Valid values range from 0 through 4.

SDLC out limit (OUTLMT)

Specifies the number of consecutive times SDLC allows the transmission of the maximum number of frames to a station, before allowing transmission to another station.

*SAME

This value does not change.

*POLLLMT

The value is the same as the one specified for the **SDLC poll limit (POLLLMT)** parameter.

out-limit

Specify a value ranging from 0 through 4.

SDLC connect poll retry (CNNPOLLRTY)

Specifies the number of times to retry connecting to a controller before reporting an error.

*SAME

This value does not change.

*CALC

The number of retries is 7 if the controller is switched, and *NOMAX if the controller is nonswitched.

*NOMAX

The system will retry indefinitely.

connect-poll-retry

Specify a value ranging from 0 to 65534 for the number of retries.

SDLC NDM poll timer (NDMPOLLTMR)

Specifies the minimum interval at which a secondary station should be polled if a poll from the primary to the secondary (which is in normal disconnect mode (NDM)) does not result in receiving the appropriate response.

This parameter is valid only if the link type is *SDLC and the controller role is secondary or negotiable and *NO is specified on the SHM parameter.

*SAME

This value does not change.

*CALC

The poll interval is calculated by the system.

NDM-poll-timer

Specify a value ranging from 1 to 3000 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

LAN remote adapter address (ADPTADR)

Specifies the 12-character adapter address of the remote controller. This is the address to which the system sends data when it communicates with the remote controller. This value can be obtained from the remote controller's configuration record. Valid values range from hex 000000000001 through hex FFFFFFFFFFFF.

*SAME

This value does not change.

adapter-address

Specify the adapter address of the remote controller.

LAN DSAP (DSAP)

Specifies the destination service access point (DSAP). This is the logical address this system will send to when it communicates with the remote controller. This address allows the controller to properly route the data that comes from this system. The default value for the destination service access point is 04.

The value must match the value specified on the source service access point (SSAP) parameter in the remote controller's configuration record.

Note: The *OPC controller uses the value above for this field. The combination of RMTSYSNAME and DSAP defines a unique controller. This allows multiple controllers to exist between two systems.

***SAME**

This value does not change.

destination service access point

Specify a hexidecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the destination service access point.

LAN SSAP (SSAP)

Specifies the source service access point (SSAP). This is the logical address the local system uses when it sends data to the remote controller. This address allows the controller to properly route the data that comes from the local system. The default value for the source service access point is 04.

It must match the value assigned to the destination service access point (DSAP) in the remote controller's configuration record.

***SAME**

This value does not change.

source service access point:

Specify a hexadecimal value ranging from 04 through 9C, in increments of 4 (for example, 04, 08, 0C, 10) to represent the source service access point.

LAN frame retry (LANFRMRTY)

Specifies the number of times to retry a transmission when there is no acknowledgment from the remote controller in the time period specified by the LANRSPTMR parameter. This value is only used after a successful connection has been made.

*SAME

This value does not change.

*CALC

The system determines the LAN frame retry value based on the type of line that is lined to the controller.

LAN-frame-retry

Specify a value ranging from 0 through 254 for the number of times a frame is transmitted before an acknowledgement is received.

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LAN connection retry (LANCNNRTY)

Specifies the number of times a transmission is attempted before an acknowledgement is received. This value is used at connection time (unlike LANFRMRTY which is used after a connection has been made).

*SAME

This value does not change.

*CALC

The system determines the LAN connection retry value.

LAN-connection-retry

Specify a value ranging from 0 through 254 for the number of times the transmission is attempted before an acknowledgement is received.

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LAN response timer (LANRSPTMR)

Specifies the time period used to determine an inoperative condition on the link when connected.

*SAME

This value does not change.

*CALC

The system determines the LAN response timer value.

LAN-response-timer

Specify a value from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0.

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LAN connection timer (LANCNNTMR)

Specifies the time period used to determine an inoperative condition on the link at connection time.

*SAME

This value does not change.

*CALC

The system determines the LAN connection timer value.

LAN-connection-timer

Specify a value ranging from 1 through 254 in 0.1-second intervals for the amount of time the system waits before an inoperative condition occurs. To indicate no timer, specify 0.

LAN acknowledgement timer (LANACKTMR)

Specifies the time interval to delay sending acknowledgements for received frames.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement timer value.

LAN-acknowledgement-timer

Specify a value ranging from 1 to 254 units. Each unit represents 0.1 second. To indicate no timer, specify 0. If 0 is specified for the **LAN acknowledgement frequency (LANACKFRQ)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKFRQ parameter, a non-zero number must also be specified for this parameter.

LAN inactivity timer (LANINACTMR)

Specifies the time period used to determine an inactive condition for the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN inactivity timer value.

LAN-inactivity-timer

Specify a value ranging from 1 through 255 in 0.1-second intervals for the length of time used to determine an inactive condition for the controller. To indicate no timer, specify 0.

LAN acknowledgement frequency (LANACKFRQ)

Specifies the maximum number of frames received before sending an acknowledgement to the controller.

*SAME

This value does not change.

*CALC

The system determines the LAN acknowledgement frequency value.

LAN-acknowledge-frequency

Specify a value from 0 to 127 for the number of frames received. If 0 is specified for the **LAN acknowledgement timer (LANACKTMR)** parameter, 0 must also be specified for this parameter. If a non-zero number is specified for the LANACKTMR parameter, a non-zero number must also be specified for this parameter.

Top

LAN max outstanding frames (LANMAXOUT)

Specifies the maximum number of frames that can be sent before an acknowledgement is received from the remote system.

*SAME

This value does not change.

*CALC

The system determines the LAN maximum outstanding frames value.

LAN-maximum-outstanding-frames

Specify a value ranging from 1 through 127 for the number of frames that can be sent before an acknowledgement is received.

Top

LAN access priority (LANACCPTY)

Specifies the priority used for accessing the remote controller. The larger the number the higher the priority for this controller. This parameter is only used when the controller attaches to TRLAN.

*SAME

This value does not change.

*CALC

The system determines the LAN access priority value.

LAN-access-priority

Specify a value from 0 to 3 for the access priority for this controller on a local area network (LAN).

Top

LAN window step (LANWDWSTP)

Specifies whether to reduce to 1 the maximum number of frames outstanding to the remote system during network congestion. This parameter (LAN Window Step) indicates the number of frames that must be successfully received by the remote system before the number of maximum outstanding frames can be increased by 1. The increase continues this way until the maximum number of outstanding frames reaches the value specified by the LAN maximum outstanding frames (LANMAXOUT) parameter.

*SAME

This value does not change.

*NONE

The number of outstanding frames is not reduced during network congestion.

LAN-window-step

Specify a value from 1 to 127 for the number of frames that must be successfully received by the remote system before the maximum number of outstanding frames can be increased by 1.

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X.25 network level (NETLVL)

Specifies the level of the X.25 network used to access this controller. The level is specified by giving the year of the standard used by the X.25 network.

Note: Use of the lower value of the remote DTE or the network level is suggested; for example, if the remote DTE is using the CCITT standard of 1980 and the network 1984, specify 1980 for this parameter.

*SAME

This value does not change.

1980

The 1980 Standard is used.

1984

The 1984 Standard is used.

1988

The 1988 Standard is used.

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X.25 link level protocol (LINKPCL)

Specifies the link level protocol used on the X.25 network to communicate with this controller.

*SAME

This value does not change.

*QLLC

The Qualified Logical Link Control (QLLC) protocol is used.

*ELLC

The Enhanced Logical Link Control (ELLC) protocol is used.

Top

X.25 connection password (CNNPWD)

Specifies the X.25 network password used for password exchange with the X.24 Call Request and Incoming Call packets (Call User Data field). This parameter is not valid for permanent virtual circuit (PVC) connections.

If you want to use a connection password that consists of characters whose hexadecimal value is less than 40, you must specify the password as a hexadecimal value. When less than 8 bytes are specified, the end of the password field is padded with blanks. A password of all blank is valid. All incoming call requests must match this password to establish a connection.

To specify a hexadecimal password, the digits must be specified in multiples of two, be no more than 16 digits long, be enclosed in apostrophes, and be preceded by an X. For example, X'0102030405' is a valid hexadecimal password.

Note: This connection password is highly recommended for controllers that operate with the Enhanced Logical Link Control (ELLC) protocol LINKPCL(*ELLC) on switched virtual circuit (SVC) connections. This enhanced protocol supports reconnection of virtual circuits after network errors which disconnect the line with a clear signal; however, this reconnection is not allowed to proceed without the password validation procedure being used as a unique identifier for the controller.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

*SAME

This value does not change.

*NONE

. No connection password is used.

X.25-connection-password

Specify the connection password. The password for each controller can consist of any alphanumeric characters represented by the hexadecimal values ranging from 40 through FF.

Top

X.25 switched line selection (SWTLINSLCT)

Specifies the method that is used to select lines from an X.25 switched line list.

*SAME

This value does not change.

*FIRST

Change Ctl Desc (Remote WS) (CHGCTLRWS)   **449**

Lines are selected beginning with the first line in the switched line list.

*CALC

The system determines which line in the switched line list will be selected.

X.25 default packet size (DFTPKTSIZE)

Specifies the default packet size used by the X.25 network for transmission and reception.

The possible **transmission** values are:

*SAME

This value does not change.

*LIND

The value specified in the line description is the default value.

transmit-packet-size

Specify a default packet size for transmission. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

The possible **reception** values are:

*SAME

This value does not change.

*TRANSMIT

The value specified as the default packet size for transmission is used as the default for reception.

receive-packet-size

Specify a default packet size for reception. The valid values for the packet size are 64, 128, 256, 512, 1024, 2048, and 4096.

X.25 default window size (DFTWDWSIZE)

Specifies the default window size for transmission and reception.

Element 1: Transmit Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

transmit-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15. For switched virtual circuit (SVC) incoming calls, the system accepts the window size indicated in the Incoming Call packet facilities field.

Element 2: Receive Window Size

*SAME

This value does not change.

*LIND

The value specified in the line description is used as the default window size.

*TRANSMIT

The value specified as the default window size for transmission is used as the default for reception.

receive-window-size

Specify the appropriate default window size. If you specified modulus 8, valid values range from 1 through 7. If you specified modulus 128, valid values range from 1 through 15.

X.25 user group identifier (USRGRPID)

Specifies the closed user-group ID for contacting this switched virtual circuit (SVC) controller on the X.25 network.

Specify the 2-digit decimal value, from 00 through 99, as provided by the network subscription. This parameter is not valid for permanent virtual circuit (PVC) connections. It is valid only for SVC circuit outgoing call operations and is ignored for SVC incoming call connections.

*SAME

This value does not change.

*NONE

A value is not specified for the user group identifier.

X.25 reverse charging (RVSCRG)

Specifies whether reverse charges are accepted or requested when contacting this controller.

*SAME

This value does not change.

*NONE

No reverse charging for network tariff billing is accepted.

*REQUEST

Charges are requested on outgoing call request packets.

*ACCEPT

Reverse charging for network tariff billing is accepted on incoming requests.

*BOTH

Both incoming and outgoing requests are accepted.

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X.25 frame retry (X25FRMRTY)

Specifies the maximum number of times a frame is sent after the response timer ends when connected to this controller. The value for this parameter depends on the quality of service provided by the network and the connection to that network; that is, the frequency of lost link protocol data units.

*SAME

This value does not change.

X.25 frame retry

Specify a value ranging from 0 through 21 for the number of times a frame is sent.

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X.25 connection retry (X25CNNRTY)

Specifies the maximum number of times that a logical link control (LLC) protocol data unit is sent after the connect response timer expires when connecting to this controller.

*SAME

This value does not change.

X.25 connection retry

Specify a value ranging from 0 through 21 for the number times a frame is sent.

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X.25 response timer (X25RSPTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connected to this controller.

*SAME

This value does not change.

X.25 response-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1-second intervals.

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X.25 connection timer (X25CNNTMR)

Specifies the time period allowed to return an acknowledgement when an LLC protocol data unit is sent while connecting to this controller.

*SAME

This value does not change.

connection-timer

Specify an amount of time in tenths of a second. Valid values range from 1 through 2550 in 0.1 second intervals.

X.25 delayed connection timer (X25DLYTMR)

Specifies the time interval between attempts to establish a connection to the controller.

*SAME

This value does not change.

*CALC

Use the values specified for the **X.25 connection timer (X25CNNTMR)** parameter and the **X.25 connection retry (X25CNNRTY)** parameter to determine how often and how many times to try establishing the connection.

X.25-delay-timer

Specify a value ranging from 1 to 32767 units. Each unit represents 0.1 second. Connection attempts are repeated indefinitely at this time interval.

X.25 acknowledgement timer (X25ACKTMR)

Specifies the amount of time to delay sending acknowledgements for received frames.

*SAME

This value does not change.

X.25-acknowledgment-timer

Valid values range from 1 to 2550 in 0.1 second intervals, or 0 to indicate no delay.

X.25 inactivity timer (X25INACTMR)

Specifies the time period used to determine an inactive condition for the controller. Valid values range from 1 to 2550 in 0.1 second intervals.

*SAME

This value does not change.

User facilities (USRFCL)

Specifies a string of hexadecimal characters sent to the X.25 network to request additional services. The system allows up to 218 hexadecimal characters.

*NONE

A value is not specified for the user facilities.

*SAME

This value does not change.

Allocation retry timer (ALCRTYTMR)

Specifies the length of time, in seconds, the system waits between attempts to establish an LU6.2 session.

*SAME

This value does not change.

1-9999

Specify a length of time ranging from 1 through 9999 seconds.

Autocreate device (AUTOCRTDEV)

Specifies whether device descriptions can be automatically created for this controller description.

*SAME

This value does not change.

*ALL

All dependent devices than can be automatically created for this controller, except APPC devices, are automatically created.

*NONE

Dependent devices on this controller are not automatically created.

Switched disconnect (SWTDSC)

Specifies whether the switched connection to this controller is dropped when the last device is varied off.

*SAME

This value does not change.

*NO

The switched connection is not dropped when the last device is varied off.

*YES

The switched connection is varied off when the last device is varied off.

Recovery limits (CMNRCYLMT)

Specifies the number of recovery attempts made by the system before an inquiry message is sent to the system operator. Also specifies the time (in minutes) that must elapse before the system sends an inquiry message to the system operator indicating that the recovery attempt count limit is reached.

Element 1: Maximum Recovery Limit

*SAME

This value does not change.

count limit

Specify the number of second-level recovery attempts to be made. Valid values range from 0 through 99.

Element 2: Recovery Time Interval

time-interval

Specify the time interval (in minutes) at which the specified number of second-level recoveries are attempted. Valid values range from 0 through 120. If the value specified for *count-limit* is not 0, the value 0 specifies infinite recovery.

*SYSVAL
        The value in the QCMNRCYLMT system value is used.

More information on communication recovery is in the Communcations Management book, SC41-5406.

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL
        Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR
> Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLRWS   CTLD(CTL005)  SWTLINLST(LINE01)
            CNNNBR('555-5950')
```

This command changes the controller description CTL005. The switched line list now contains only the name LINE01, and the connection number has changed to 555-5950.

Error messages

*ESCAPE Messages

CPF2652
> Controller description &1 not changed.

Change Ctl Desc (Tape) (CHGCTLTAP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Tape) (CHGCTLTAP) command changes a controller description for a tape controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Optional, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**, *NONE	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
AUTOCFG	Auto-configuration controller	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware this description represents. Use the WRKHDWRSC command to determine the resource name.

*SAME

This value does not change.

*NONE

No resource name is specified at this time. A resource name must be provided before the device can be varied on.

resource-NAME

Specify the name to identify the physical devices on the system. Use the Work with Hardware Resources (WRKHDWRSC) command with *STG specified for the TYPE parameter to help determine the resource name.

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Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Auto-configuration controller (AUTOCFG)

Specifies whether this controller description is the one which should have devices attached when they are automatically configured. Although there can be more than one controller description for each controller, only one description can be an automatic configuration controller. When new devices are automatically configured on that controller, they are attached to the automatic configuration controller description.

*SAME

This value does not change.

*NO

This is not an automatic configuration controller.

*YES

This is an automatic configuration controller.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLTAP   CTLD(TAP01)   ONLINE(*NO)
```

This command changes the ONLINE parameter value to *NO for a tape controller named TAP01.

Error messages

*ESCAPE Messages

CPF2652

       Controller description &1 not changed.

Change Ctl Desc (Virtual WS) (CHGCTLVWS)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Controller Description (Virtual Work Station) (CHGCTLVWS) command changes a controller description for a virtual work station (pass-through) controller.

Parameters

Keyword	Description	Choices	Notes
CTLD	Controller description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
DEVWAITTMR	Device wait timer	2-120, ***SAME**	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Controller description (CTLD)

This is a required parameter.

Specifies the name of the controller description.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME

This value does not change.

*YES

The controller is automatically varied on at IPL.

*NO

The controller is not automatically varied on at IPL.

Device wait timer (DEVWAITTMR)

Specifies the device wait timeout value. This is used to limit the amount of time that a subsystem takes for the work station input/output to complete. The timeout value that is used for each device is obtained from the controller that it is attached to at vary on time. A change in this parameter value takes effect for attached devices when they are next varied on.

*SAME

This value does not change.

device-wait-timer

Specify a value ranging from 2 through 600 that specifies the maximum number of seconds that the subsystem waits for work station input/output to complete for all work stations attached to this controller.

When selecting a value for this parameter, the types of devices attached to the controller should be taken into account. Locally attached work stations should have a low value for this parameter (10 seconds or less).

Top

Message queue (MSGQ)

Specifies the message queue to which operational messages are sent.

*SAME

This value does not change.

*SYSVAL
Messages are sent to the message queue defined in the QCFGMSGQ system value.

*SYSOPR
Messages are sent to the system operator message queue (QSYS/QSYSOPR).

Qualifier 1: Message queue

name   Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

name   Specify the name of the library where the message queue is located.

Top

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME

This value does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGCTLVWS   CTLD(VRTCTL325)  TEXT('S/325 virtual controller')
```

This command changes the controller description of controller VRTCTL325 to have a new text description.

Error messages

*ESCAPE Messages

CPF2652
Controller description &1 not changed.

Change Current Directory (CHGCURDIR)

The Change Current Directory (CHGCURDIR) command changes a specified directory to the current working directory. The current directory can be a directory, library, folder, or database file. The current directory is used to locate objects used by the commands.

This command can also be issued using the following alternative file system command names:

- CD
- CHDIR

For more information about integrated file system commands, see the Integrated file system information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions:

1. This command works on only one object. If a pattern is specified on the **Directory (DIR)** parameter and more than one object matches the pattern, the user can select the object from a list in an interactive job. If this is a batch job, the command fails with error message CPFA08E, ″More than one name matches pattern.″.

2. The current directory and current library are separate and distinct entities. The current library and current directory can be set to the same library, but a change to either the current library or current directory does not affect the other.

   The current directory, set with this command, affects the integrated file system commands and APIs. The current library, set with the Change Current Library (CHGCURLIB) command, affects commands such as the Create Display File (CRTDSPF) command, that uses the value *CURLIB as a library qualifier.

3. The user must have read (*R) authority to the directory.
4. The user must have execute (*X) authority to each directory in the path.

Parameters

Keyword	Description	Choices	Notes
DIR	Directory	*Path name*	Required, Positional 1

Directory (DIR)

Specifies the path name of the directory that replaces the current working directory of the job.

For more information on specifying path names, refer to ″Object naming rules″ in ″CL concepts and reference″ in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

This is a required parameter.

Examples

Example 1: Changing a Current Directory

```
CHGCURDIR   DIR(/DIRECTORY2)
```

This command changes the current directory to the directory named DIRECTORY2.

Example 2: Changing a Current Directory to the Parent of the Current Directory

```
CHGCURDIR   DIR('..')
```

This command changes the current directory to the parent directory of the directory that contains the current directory before this command is run.

Error messages

*ESCAPE Messages

CPFA085
   Home directory not found for user &1.

CPFA08E
   More than one name matches pattern.

CPFA093
   Name matching pattern not found.

CPFA09C
   Not authorized to object. Object is &1.

CPFA09D
   Error occurred in program &1.

CPFA0A1
   An input or output error occurred.

CPFA0A3
   Path name resolution causes looping.

CPFA0A7
   Path name too long.

CPFA0A9
   Object not found. Object is &1.

CPFA0AB
   Operation failed for object. Object is &1.

Change Current Library (CHGCURLIB)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Current Library (CHGCURLIB) command replaces the current library entry in the library list for the current thread.

Note: If this command is used to change the current library entry in the library list from a menu or program that has a current library associated with it, the current library change is only in effect for the call level of the menu or program from which it was changed.

Parameters

Keyword	Description	Choices	Notes
CURLIB	Current library	*Name*, *CRTDFT	Required, Positional 1

Current library (CURLIB)

Specifies the library that replaces the current library entry in the library list for the current thread.

This is a required parameter.

***CRTDFT**
No library should be in the current entry in the library list for the current thread. If objects are created into the current library, the QGPL library is used as the default current library.

name Specify the name of the library that replaces the current library entry in the library list for the current thread.

Examples

```
CHGCURLIB   CURLIB(ULIB10)
```

This command changes the current library entry in the library list for the current thread to library ULIB10.

Error messages

*ESCAPE Messages

CPF2106

Library list not available.

CPF2110

Library &1 not found.

CPF2113

Cannot allocate library &1.

CPF2133

First product library on library list destroyed.

CPF2134

Second product library on library list destroyed.

CPF2137

Current library on library list destroyed.

CPF2176

Library &1 damaged.

CPF2182

Not authorized to library &1.

Top

Change Debug (CHGDBG)

The Change Debug (CHGDBG) command changes the attributes of the debugging session currently in effect for a job. All of the attributes can be changed, except which programs to debug. Use the Add Program (ADDPGM) command or the Remove Program (RMVPGM) commands to add or remove a program from debug mode.

Restrictions: This command is valid only in debug mode. To start debug mode, see the STRDBG (Start Debug) command. If the user is servicing another job, and that job is ending, this command is not allowed.

Parameters

Keyword	Description	Choices	Notes
DFTPGM	Default program	*Name*, ***SAME**, *NONE	Optional, Positional 1
MAXTRC	Maximum trace statements	*Integer*, ***SAME**	Optional
TRCFULL	Trace full	***SAME**, *STOPTRC, *WRAP	Optional
UPDPROD	Update production files	***SAME**, *NO, *YES	Optional
OPMSRC	OPM source level debug	***SAME**, *NO, *YES	Optional

Default program (DFTPGM)

Specifies the name of the OPM program to use as the default program during debug mode. The program specified here is used as the default program for any of the other debug commands for which *DFTPGM was supplied for the **Program (PGM)** parameter. (That is, if a default program was previously specified, this parameter can change it.)

This parameter is applicable only in the OPM environment.

*SAME
> The same program currently specified as the default program, if any, is used.

*NONE
> No program is specified as the default program; if a program was specified as a default program, it is no longer the default program. If the job has no default program, *DFTPGM cannot be specified for the **Program (PGM)** parameter of any other debug commands.

program-name
> Specify the name of the program to use as the default program during debug mode. The same name must have been specified for the PGM parameter of the Start Debug (STRDBG) or Add Program (ADDPGM) command.

Maximum trace statements (MAXTRC)

Specifies the maximum number of trace statements that the system puts into the job's trace file before either stopping tracing or wrapping around (overlaying) on the trace file. When the trace file contains the maximum specified, the system performs the actions indicated by the value supplied for the **Trace full (TRCFULL)** parameter.

Note: Instruction stepping can be performed on a program being debugged in an interactive environment by setting the maximum number of trace statements to **1** and the value for the **Trace full (TRCFULL)** parameter to *STOPTRC.

This parameter is applicable only in the OPM environment.

*SAME
> The maximum for the number of trace statements in the file is not changed.

maximum-trace-statements
> Specify the maximum number of trace statements that can be in the trace file.

Trace full (TRCFULL)

Specifies what happens when the job's trace file is full, that is when it contains the maximum number of trace statements specified by the **Maximum trace statements (MAXTRC)** parameter.

This parameter is applicable only in the OPM environment.

*SAME
> The action taken when the trace file is full is not changed.

*STOPTRC
> In a batch environment, tracing stops but the program continues processing. In an interactive environment, control is given to the user when a breakpoint occurs. If the user continues processing, a breakpoint occurs before processing each subsequent statement within the range of statements being traced, and the trace file is extended to contain the new entry.

*WRAP
> The trace file is overlaid with new trace statements as they occur, wrapping from the beginning of the file. The program continues processing until completed with no message to indicate that wrapping has occurred. The trace file never has more than the maximum specified statements, and they are the most recently recorded statements.

Update production files (UPDPROD)

Specifies whether or not database files in a production library can be opened for changes (that is, for adding, deleting, or changing records in the file) while the job is in debug mode. If not, the files must be copied into a test library before trying to run a program that uses the files.

This parameter is applicable in both the OPM and ILE environments.

*SAME
> The previously specified value for this parameter is not changed.

*NO Database files in production libraries cannot be changed during debug mode. Database files can be opened for reading only.

*YES Database files in production libraries can be changed while the job is in debug mode.

OPM source level debug (OPMSRC)

Specifies that OPM programs are debugged using the system source debug support (same as ILE source debug).

This parameter is valid for OPM CL, OPM RPG and OPM COBOL programs that were created with OPTION(*SRCDBG) with CRTCLPGM, CRTRPGPGM and CRTCBLPGM commands. Additionally, this parameter is valid for OPM CL, OPM RPG and OPM COBOL programs that were created with OPTION(*LSTDBG) with the CRTCLPGM, CRTRPGPGM, CRTCBLPGM CRTSQLRPG, CRTSQLCBL, and CRTRPTRPG commands. If the OPM program is not CL, RPG or COBOL and was not compiled with a valid debug option, then this parameter is ignored.

OPM programs already added to debug prior to the CHGDBG command will continue to be active under the debug environment (ILE or OPM) they are currently active under. Programs added to debug after the CHGDBG command is issued are affected by the OPMSRC parameter.

This parameter is applicable in both OPM and ILE environment.

ILE functions will now operate on OPM programs. For example, source level debug.

*SAME
     The value does not change.

*NO OPM debug functions are used for OPM programs.

*YES ILE debug functions are used for OPM programs.

Examples

```
CHGDBG   MAXTRC(400)   TRCFULL(*STOPTRC)
```

This command changes the maximum number of trace statements that can be put in the trace file to 400. The tracing is stopped when the file is full.

Error messages

*ESCAPE Messages

CPF1999
     Errors occurred on command.

Change DDM File (CHGDDMF)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Distributed Data Management File (CHGDDMF) command changes, in the distributed data management file (DDM) description, one or more of the attributes of the specified DDM file. The DDM file is used as a reference file by programs on the iSeries system to access files located on any target system in the iSeries system DDM network.

Parameters

Keyword	Description	Choices	Notes
FILE	DDM file	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: DDM file	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
RMTFILE	Remote file	Single values: ***SAME** Other values: *Element list*	Optional, Positional 2
	Element 1: File	Single values: ***NONSTD** Other values: *Qualified object name*	
	Qualifier 1: File	*Name*	
	Qualifier 2: Library	*Name*, *LIBL, *CURLIB	
	Element 2: Nonstandard file 'name'	*Character value*	
RMTLOCNAME	Remote location	Single values: *RDB Other values: *Element list*	Optional, Positional 3
	Element 1: Name or address	*Character value*, ***SAME**, *DEVD	
	Element 2: Type	***SAME**, *SNA, *IP	
LVLCHK	Record format level check	***SAME**, *RMTFILE, *NO	Optional
RDB	Relational database	*Name*, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
DEV	Device	*Element list*	Optional
	Element 1: APPC device description	*Name*, ***SAME**, *LOC	
LCLLOCNAME	Local location	*Communications name*, ***SAME**, *LOC, *NETATR	Optional
MODE	Mode	*Communications name*, ***SAME**, *NETATR	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *LOC, *NETATR, *NONE	Optional
PORT	Port number	1-65535, ***SAME**, *DRDA	Optional
ACCMTH	Access method	Single values: ***SAME**, *RMTFILE, *COMBINED Other values: *Element list*	Optional
	Element 1: Remote file attribute	***KEYED**, *ARRIVAL	
	Element 2: Local access method	***BOTH**, *RANDOM, *SEQUENTIAL	
SHARE	Share open data path	***SAME**, *NO, *YES	Optional
PTCCNV	Protected conversation	***SAME**, *NO, *YES	Optional

DDM file (FILE)

Specifies the distributed data management (DDM) file to be changed.

This is a required parameter.

Qualifier 1: DDM file

name   Specify the name of the DDM file.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current job library is used to locate the DDM file. If no library is specified as the current library for the job, QGPL is used.

name   Specify the library where the DDM file is located.

Remote file (RMTFILE)

Specifies the name of the remote file as it is coded on the target system. The remote file does not need to exist when the Distributed Data Management (DDM) file is changed.

Note: This file name must be specified in code page 500.

Single values

*SAME
> The name of the remote file does not change.

Element 1: File

Single values

*NONSTD
> The remote file name is not at standard iSeries file name. Specify the complete file name in apostrophes for the second element of this parameter.

Qualifier 1: File

name   Specify the name of the remote file as it is known on the remote system. If the remote system is an iSeries system, specify the file name. The file name can be up to 10 characters in length. If the remote system is a System/36, the file name is the same as its System/36 file label. The file name can be up to eight characters in length. If the remote system is a System/38, a simple (unqualified) file name can be specified. The file name can be up to 10 characters in length. Labels for all other remote systems (including qualified file names for System/38) must use *NONSTD followed by the remote file name in apostrophes.

Qualifier 2: Library

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
The current library for the job is used to locate the file. If no library is specified as the current library for the job, QGPL is used.

name Specifies the library where the file is located.

Note: The library name is used only if the target system is an iSeries system.

Element 2: Nonstandard file 'name'

character-value
For target systems that allow naming conventions other than those used by the iSeries system and System/36, and when specifying a qualified System/38 file name and when specifying a *member* name of a remote iSeries or System/38 file, specify up to 255 characters for the name of the remote file to be accessed. The name must be coded in the form required by the target system. The name must always be enclosed in apostrophes, and may contain lowercase letters, blanks, periods, or any other special characters.

Names for the iSeries system, System/38, and System/36 must be in uppercase, and no blanks are allowed.

If the target system is an iSeries system or a System/38, a file name, library name, and member name can all be specified. If a member name is specified, the full file name must be enclosed in apostrophes and must follow the value *NONSTD, and the member name must be enclosed in parentheses and immediately follow (with no space) either the library name (System/38) or the file name (iSeries).

Top

Remote location (RMTLOCNAME)

Specifies the remote (target) system location name or address used with the distributed data management (DDM) file. Multiple DDM files can use the same remote location for the target system.

Single values

*RDB The remote location information from the relational database entry specified for the **Relational database (RDB)** parameter is used to determine the remote system.

Element 1: Name or address

*SAME
The remote location name specified in the file description does not change.

*DEVD
The remote location name defined in the device description specified for the **Device (DEV)** parameter is used.

Note: If *LOC is specified for the DEV parameter, a remote location name must be specified for this parameter.

character-value
Specify the name or address of the remote location that is associated with the target system. The

remote location, which is used in accessing the target system, does not need to exist when the DDM file is created but must exist when the DDM file is opened. The remote location can take several forms:

- SNA remote location name (LU name). Specify a maximum of 8 characters for the remote location name. If this form is used, the address type of this parameter must be *SNA (the default).

- SNA remote network identifier and remote location name separated by a period. Specify a maximum of 8 characters for the remote location name, and a maximum of 8 characters for the remote network identifier. If this form of the parameter is used, the address type of this parameter must be *SNA (the default), and any value specified for the RMTNETID parameter must agree. If the RMTNETID parameter is not specified, the RMTNETID value will be set to agree with the RMTLOCNAME parameter.

- IP address in dotted decimal form. Specify an internet protocol address in the form nnn.nnn.nnn.nnn where each nnn is a number in the range 0 through 255. If this form is used, the address type of this parameter must be specified as *IP.

- IP host domain name. Specify an internet host domain name of up to 254 characters in length. If this form is used, the address type of this parameter must be specified as *IP.

If *IP is specified for the address type, the DDM server at the remote location must support the use of TCP/IP, and the DEV, LCLLOCNAME, RMTNETID, and MODE parameters will be ignored.

If *IP is not specified, the DDM server must support SNA connectivity, and the PORT parameter will be ignored.

Element 2: Type

*SAME
    The address type does not change.

*SNA   The remote location has a Systems Network Architecture (SNA) address type.

*IP   The remote location has an Internet Protocol (IP) address type.

Record format level check (LVLCHK)

Specifies whether the level identifiers in the program are checked with the level identifiers of the record formats in the remote file when the distributed data management (DDM) file is opened. If they do not match, an error message is sent to the program requesting the open, and neither the DDM file nor the associated remote file is opened. This parameter value can be overridden by an Override Database File (OVRDBF) command before the remote file is opened.

*SAME
    The level identifiers value does not change.

*RMTFILE
    The level identifiers of the record formats of the remote file are checked at the time the DDM file is opened.

    Note: For systems other than iSeries systems, the program must be compiled (or recompiled) by using the DDM file. During the compile operation, the DDM file is used to establish communications with the target system, get the remote file's attributes from the target system, and create the level identifier values so they can be included in the compiled program for later level checking.

*NO   The level identifiers are not checked when the file is opened.

Relational database (RDB)

Specifies the relational database entry that is used to determine the remote location information for the DDM file.

*SAME
The relational database entry does not change.

name Specify the name of the relational database entry that identifies the target system or target ASP (auxiliary storage pool) group. The relational database name can refer to a remote system or an ASP group that is configured and available on a remote system. The relational database entry does not need to exist when the DDM file is created but must exist when the DDM file is opened. This parameter is required when *RDB is used as the remote location name (RMTLOCNAME parameter).

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
The text (if any) does not change.

*BLANK
No text is specified.

character-value
Specify no more than 50 characters of text, enclosed in apostrophes.

Device (DEV)

Specifies the name of the advanced program-to-program communications (APPC) device description on the source system that is used with this DDM file.

This parameter will be ignored if *IP is specified for the **Remote location (RMTLOCNAME)** parameter.

More information on device names is in the APPC Programming book, SC41-5443.

*SAME
The device name specified in the file description does not change.

*LOC The device associated with the remote location is used. If several devices are associated with the remote location, the system determines which device is used.

 Note: If *DEVD is specified for the RMTLOCNAME parameter for the remote location, a device name must be specified for this parameter.

name Specify the name of a communications device that is associated with the remote location. If the device name is not valid for the remote location, an escape message is sent when the DDM file is opened.

Local location (LCLLOCNAME)

Specifies the local location name.

This parameter will be ignored if *IP is specified for the **Remote location (RMTLOCNAME)** parameter.

*SAME
> The local location name specified in the file description does not change.

*LOC The local location name associated with the remote location is used.

*NETATR
> The LCLLOCNAME value specified in the system network attributes is used.

communications-name
> Specify the name of the local location used with the remote location name. The local location name is only specified to indicate a specific local location for the remote location.

Mode (MODE)

Specifies the mode name that is used with the remote location name to communicate with the target system.

This parameter will be ignored if *IP is specified for the **Remote location (RMTLOCNAME)** parameter.

More information on mode names is in the APPC Programming book, SC41-5443.

*SAME
> The mode name does not change.

*NETATR
> The mode in the network attributes is used.

BLANK
> A mode name consisting of 8 blank characters is used.

communications-name
> Specify the name of the mode that is used. If the mode name is not valid for any combination of remote location name and local location name, an escape message is sent when the Distributed Data Management (DDM) file is opened.

Remote network identifier (RMTNETID)

Specifies the remote network identifier (remote network ID) in which the remote location resides, and which is used to communicate with the target system.

If this parameter is specified, the value specified for the **Remote location (RMTLOCNAME)** parameter must be consistent with the RMTNETID parameter. If the RMTLOCNAME parameter specified a network ID, this parameter must agree (otherwise, an error message will be issued). If the RMTLOCNAME parameter does not specify any network ID, there is no possibility of conflict with this parameter.

This parameter will be ignored if *IP is specified for the RMTLOCNAME parameter.

More information on remote network IDs is in the APPC Programming book, SC41-5443.

*SAME

> The remote network ID specified in the file description does not change.

*LOC   The remote network ID associated with the remote location is used.

*NETATR

> The remote network identifier specified in the network attributes is used.

*NONE

> No remote network ID is used.

communications-name

> Specify the remote network ID to be associated with the remote location. The remote network ID is specified only if the user wants to indicate a specific remote network ID for the remote location. If the remote network ID is not valid for the remote location, an escape message is sent when the distributed data management (DDM) file is opened.

Port number (PORT)

Specifies the TCP/IP port that is used at the remote location to communicate with the system on which the remote file is located.

This parameter will be ignored if *SNA is specified for the **Remote location (RMTLOCNAME)** parameter.

*SAME

> The value does not change.

*DRDA

> The DRDA well-known port of 446 will be used. This is the port on which the iSeries DDM TCP/IP server listens.

1-65535

> Specify a port number.

Access method (ACCMTH)

Specifies the distributed data management (DDM) access method used to open the remote file and access its records when the target system is not an iSeries system. Specifying a value other than *RMTFILE for this parameter may improve performance when requests to remote files are processed on the target system. This parameter is ignored when the target system is an iSeries system or a System/38. The remote system file is accessed as if it is a local file.

Single values

*SAME

> The access method does not change.

*RMTFILE

> The source system selects the access method that is compatible with the attributes of the remote file identified by the **Remote file (RMTFILE)** parameter and the access methods supported by the target system for that file. For target systems other than iSeries systems, if this value is used and the source system cannot select an access method when the file is opened, a message is sent to the program user.

*COMBINED

The DDM combined access method is used for the remote file. This access method combines the file processing capabilities of the *combined by key* (*KEYED *BOTH) and the *combined by record number* (*ARRIVAL *BOTH) access methods, as shown in the following table. The record can be selected with a key value or a record number. From that position, the position can be set relatively or randomly by key value or by record number. If duplicate keys are present in the file, they are processed in the order defined by each target system's implementation of the DDM architecture.

Element 1: Remote file attribute

*KEYED

Remote file is a keyed file.

*ARRIVAL

Remote file is a non-keyed file.

Element 2: Local access method

*BOTH

Remote file allows both sequential and random record access.

*RANDOM

Remote file allows random record access.

*SEQUENTIAL

Remote file allows sequential record access.

Determining the Access Method

The two elements of this parameter indicate the access method to be used to access the remote file. The following table shows the combinations of values for the ACCMTH parameter. The remote file attributes (in the far left column) refer to the type of file on the target system. The local access method (in the last three columns) refers to the way in which the source iSeries program intends to access the records in the remote file.

Table 1. **Figure: Access Method Combinations of Values**

```
Remote                 Local Access Method
File
Attributes    *SEQUENTIAL    *RANDOM        *BOTH
----------    ------------   ------------   ------------
*ARRIVAL      Relative by    Random by      Combined by
              record number  record number  record number
*KEYED        Relative by    Random by      Combined by
              key            key            key
```

Relative by record number access method (*ARRIVAL *SEQUENTIAL):

This method allows access to records relative to the current position in record number sequence. The record number is not specified to identify the record.

Random by record number access method (*ARRIVAL *RANDOM):

This method allows access to records by specifying a record number in a random sequence determined by the requester.

Combined by record number access method (*ARRIVAL *BOTH):

This method combines the capabilities of the relative by record number and random by record number access methods.

Relative by key access method (*KEYED *SEQUENTIAL):
>   This method allows records in a keyed file accessed in key value sequence. Records can be accessed by moving forward or backwards in key sequence from the current record. The key value is not specified to identify the record.

Random by key access method (*KEYED *RANDOM):
>   This method allows records in a keyed file accessed in a random sequence. Records are selected by their key value and not their position in the file.

Combined by key access method (*KEYED *BOTH):
>   This method combines the capabilities of the relative by key and random by key access methods.

Top

Top

Share open data path (SHARE)

Specifies whether the open data path (ODP) is shared with other programs in the same routing step. When an ODP is shared, the programs accessing the file share facilities such as the file status and the buffer.

*SAME
>   The value does not change.

*NO   The ODP is not shared with other programs in the routing step. A new ODP for the file is created and used every time a program opens the file.

*YES   The same ODP is shared with each program in the job that also specifies *YES when it opens the file.

Top

Protected conversation (PTCCNV)

Specifies whether the DDM conversation that is started for the DDM file is a protected conversation or not. A **protected conversation** is a conversation that uses two-phase commit protocols to ensure, even if a failure occurs, updates made on the remote system are synchronized with updates to other remote or local resources. A protected conversation is required to use two-phase commitment control with DDM. More information on using two-phase commitment control with DDM is in the Distributed Data Management information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter. PTCCNV(*NO) must be specified if *IP is specified for the **Remote location (RMTLOCNAME)** parameter.

*SAME
>   The value does not change.

*NO   The DDM conversation started, using this DDM file, is not a protected conversation.

*YES   The DDM conversation started, using this DDM file, is a protected conversation. Two-phase commitment control can be used with this DDM file.

Top

Examples

The following examples describe the changing of a DDM file.

Example 1: Changing the Communications Mode System
```
CHGDDMF   FILE(SOURCE/SALES)  MODE(MODEX)
```

This command changes the communications mode for the DDM file named SALES stored in the SOURCE library on the source system. The mode is changed to MODEX.

Example 2: Changing a DDM File to Access a File through TCP/IP

```
CHGDDMF   FILE(OTHER/SALES)   RMTLOCNAME(ROCHESTER.XYZ.COM *IP)
          PORT(*DRDA)
```

This command changes the remote location name for the DDM file named SALES stored in the OTHER library on the source system. The remote location is changed to the TCP/IP host having the domain name of ROCHESTER.XYZ.COM. The host listens on the standard DRDA port of 446.

Example 3: Changing a DDM File to Access a File through TCP/IP using Dotted Decimal IP Address and a Numeric Port Number

```
CHGDDMF   FILE(OTHER/SALES)   RMTLOCNAME('9.5.36.17' *IP)
          PORT(5021)
```

This command changes the remote location name for the DDM file named SALES stored in the OTHER library on the source system. The remote location is changed to the TCP/IP host with the IP address of 9.5.36.17. The host listens on port 5021.

Top

Error messages

*ESCAPE Messages

CPF7304

    File &1 in &2 not changed.

Top

Change DDM TCP/IP Attributes (CHGDDMTCPA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change DDM TCP/IP Attributes (CHGDDMTCPA) command provides an interface to configure parameters for the use of DDM or DRDA over TCP/IP.

Restrictions:

*IOSYSCFG special authority is needed to use this command.

Parameters

Keyword	Description	Choices	Notes
AUTOSTART	Autostart server	*NO, *YES, ***SAME**	Optional, Positional 1
PWDRQD	Password required	*NO, *YES, *ENCRYPTED, *VLDONLY, *KERBEROS, ***SAME**	Optional

Autostart server (AUTOSTART)

Specifies whether to automatically start the DDM server when TCP/IP is started by the Start TCP/IP (STRTCP) command. The parameter takes effect the next time the STRTCP command is run. It also causes the DDM server to start when selected TCP/IP servers are started with the STRTCPSVR SERVER(*AUTOSTART) command.

The possible values are:

*SAME
    The value does not change.

*YES   Start the DDM TCP/IP server.

*NO   Do not start the DDM TCP/IP server when starting TCP/IP, or when running the STRTCPSVR SERVER(*AUTOSTART) command.

Password required (PWDRQD)

Specifies the minimum level of password security required when a client system connects to this system as a server. This parameter takes effect on the next DRDA or DDM connect request over TCP/IP.

The possible values are:

*SAME
>The value does not change.

*YES   Refuse the connection if a DDM connection request does not contain a password associated with the userid.

*NO   Do not require a password on a DDM connection request. If a password is sent, it is ignored. See also *VLDONLY description.

*ENCRYPTED
>Require the sending of an encrypted password along with the userid by a remote client system attempting to connect.

*VLDONLY
>Do not require a password on a DDM connection request. If a password is sent, however, it must be valid for the associated userid.

*KERBEROS
>Authentication occurs using Kerberos.

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Examples

Example 1: Displaying the Change DDM TCP/IP Attributes Display

CHGDDMTCPA

This command, when prompted, shows the current DDM TCP/IP attribute values.

Example 2: Starting the DDM TCP/IP Server Automatically

CHGDDMTCPA   AUTOSTART(*YES)

This command indicates that the next time TCP/IP is started by the STRTCP command, the DDM server is to be started automatically.

Example 3: Allowing DDM TCP/IP Connection Requests to be Accepted if They Contain at Minimum a Userid with No Password.

CHGDDMTCPA   PWDRQD(*NO)

This command indicates that on the next DDM TCP/IP connection request, a password will not be required in order to initiate the connection.

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Error messages

*ESCAPE Messages

CPF3EC6
>Change DDM TCP/IP attributes failed.

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Change Device Desc (APPC) (CHGDEVAPPC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (APPC) (CHGDEVAPPC) command changes a device description for an Advanced Program-to-Program Communications (APPC) device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
MODE	Mode	Single values: ***SAME** Other values (up to 14 repetitions): *Communications name*, *NETATR	Optional
MSGQ	Message queue	Single values: ***SAME**, *CTLD, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*, QSYSOPR	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
LOCADR	Local location address	*Character value*, ***SAME**	Optional
SNGSSN	Single session	Single values: ***SAME**, *NO Other values: *Element list*	Optional
	Element 1: Single session capable	*YES	
	Element 2: Number of conversations	1-512	
LCLCTLSSN	Locally controlled session	***SAME**, *YES, *NO	Optional
PREESTSSN	Pre-established session	***SAME**, *YES, *NO	Optional
LOCPWD	Location password	*Character value*, ***SAME**, *NONE	Optional
SECURELOC	Secure location	***SAME**, *YES, *NO, *VFYENCPWD	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Mode (MODE)

Specifies the names of the modes that define the sessions on this device.

You can enter multiple values for this parameter.

*SAME
> The value does not change.

*NETATR
> The remote network identifier specified in the network attributes is used.

mode-name
> Specify the name of mode descriptions used by this device. The mode name cannot be CPSVCMG or SNASVCMG; these mode names are reserved for system use.
>
> Specify up to 14 mode names.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

*SAME
> The value does not change.

*CTLD
> Messages are sent to the message queue defined in the attached controller. The message queue is determined when the device is varied on.

*SYSOPR
> Messages are sent to the system operator message queue (QSYS/QSYSOPR).

message-queue-name
> Specify the name of the message queue to which operational messages are sent.

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library to be searched.

Local location address (LOCADR)

Specifies the local location address for this device.

The possible values are 00 to FF.

*SAME
        The value does not change.

Single session (SNGSSN)

Specifies whether a single or multiple sessions are used with remote locations. If single sessions are used, the number of conversations must be specified.

Single values

*SAME
        The value does not change.

*NO   Multiple sessions are used.

Element 1: Single session capable

*YES   Single sessions are used.

Element 2: Number of conversations

conversations
        Specify a valid value that ranges from 1 through 512 for the number of conversations.

Locally controlled session (LCLCTLSSN)

Specifies whether the session is a locally controlled session.

*SAME
        The value does not change.

*NO   The single session is remotely controlled.

*YES   The single session is locally controlled.

Pre-established session (PREESTSSN)

Specifies whether the session is established when the connection with the remote system is established.

*SAME
        The value does not change.

*NO   The session is not established automatically at connection time.

*YES   The session is established automatically at connection time.

Location password (LOCPWD)

Specifies the password to be used to validate a connection.

*SAME
> The value does not change.

*NONE
> There is no password.

location-password
> Specify the password as a string of hexadecimal characters.

Secure location (SECURELOC)

Specifies how security information is handled for program start requests received from remote systems. The value is sent to the remote system when sessions are established. It is used in determining how allocate or evoke requests should be built. The value only applies to conversations started with the SECURITY(SAME) level of security.

*SAME
> The value does not change.

*NO The remote system is not a secure location. Security validation done by the remote system is not accepted. SECURITY(SAME) conversations are treated as SECURITY(NONE). No security information will be sent with allocate or evoke requests.

*YES The remote system is a secure location and the local system will accept security validation done by remote systems. For SECURITY(SAME) conversations, the local system allows the remote system to verify user passwords. On the remote system, user IDs are retrieved from the security manager. The user IDs are then sent with an already verified indicator in the allocate or evoke requests.

*VFYENCPWD
> The remote system is not a secure location. For SECURITY(SAME) conversations, the remote system is not allowed to send the already verified indicator. On the remote system, user IDs and passwords are retrieved from the security manager. Passwords are then encrypted and sent with the user IDs in the allocate or evoke requests, to be verified by the local system. This value should only be used if the remote system is using OS/400 V3R2M0 or later. If the remote system does not support password protection then session establishment will not be allowed. For remote systems that support password protection, but do not support verification of encrypted passwords (VFYENCPWD), conversations will be treated as SECURITY(NONE).

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVAPPC  DEVD(APPC1)  SNGSSN(*NO)
```

This command changes the device description for communication device APPC1 so it is no longer limited to single sessions.

Top

Error messages

*ESCAPE Messages

CPF2618
        Device description &1 not changed.

Top

Change Device Desc (Async) (CHGDEVASC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

Parameters
Examples
Error messages

The Change Device Description Asynchronous (CHGDEVASC) command changes a device description for an asynchronous (ASYNC) device.

Top

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Top

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Top

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVASC  DEVD(ASC003)  ONLINE(*YES)
```

This command changes the device description for asynchronous device ASC003 so it is automatically varied on at IPL.

Error messages

*ESCAPE Messages

CPF2618
  Device description &1 not changed.

Change Device Desc (ASP) (CHGDEVASP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (ASP) (CHGDEVASP) command changes the device description for an auxiliary storage pool (ASP) device.

More information about independent disk pools, see the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**	Optional
RDB	Relational database	*Name*, ***SAME**, *GEN	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Resource name (RSRCNAME)

Specifies the resource name that identifies the auxiliary storage pool (ASP) by which a collection of disks is known.

*SAME
>   The value does not change.

resource-name
>   Specify the name that identifies the ASP by which a collection of disks is known.

Relational database (RDB)

Specifies the relational database (RDB) name to associate with the auxiliary storage pool (ASP) device.

*SAME
> The value does not change.

*GEN The RDB name will be generated by the operating system after a successful vary on of the device. If the device is the primary ASP of an ASP group, the RDB name will be the same as the device name. If the ASP device is a secondary ASP, or a user-defined file system (UDFS) ASP, the RDB name will be set to blanks.

relational-database-name
> Specify the RDB name to associate with the ASP device. The specified RDB name will not be used if the ASP device description is a secondary ASP or UDFS ASP. If the ASP device description is the primary ASP of an ASP group, when the ASP group is varied on, the specified RDB name will become the name by which the relational database is known on this system and other systems which connect to this system.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

The possible qualified names are:

*SAME
> The value does not change.

*SYSOPR
> Messages are sent to the QSYSOPR message queue in QSYS.

message-queue-name
> Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

*LIBL All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library to be searched.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVASP   DEVD(WAREHOUSE)   RSRCNAME(WAREHOUSE2)
```

This command changes the device description to an ASP resource that is known as WAREHOUSE2.

Error messages

*ESCAPE Messages

CPF2618
> Device description &1 not changed.

Change Device Desc (BSC) (CHGDEVBSC)

The Change Device Description (BSC) (CHGDEVBSC) command changes a device description for a binary synchronous communications (BSC) device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	***SAME**, 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 3A, 3B, 3C, 3D, 3E, 3F, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 4A, 4B, 4C, 4D, 4E, 4F, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 5A, 5B, 5C, 5D, 5E, 5F, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 6A, 6B, 6C, 6D, 6E, 6F, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 7A, 7B, 7C, 7D, 7E, 7F, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 8A, 8B, 8C, 8D, 8E, 8F, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 9A, 9B, 9C, 9D, 9E, 9F, A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, AA, AB, AC, AD, AE, AF, B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, BA, BB, BC, BD, BE, BF, C0, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, DA, DB, DC, DD, DE, DF, E0, E1, E2, E3, E4, E5, E6, E7, E8, E9, EA, EB, EC, ED, EE, EF, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
CTNWIN	Contention resolution winner	***SAME**, *SEC, *PRI	Optional
BLOCK	Blocking type	***SAME**, *NONE, *ITB, *IRS, *NOSEP, *USER, *SEP	Optional
SEPCHAR	Separator character	***SAME**, 00, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1E, 20, 21, 22, 23, 24, 25, 27, 28, 29, 2A, 2B, 2C, 2E, 2F, 30, 31, 33, 34, 35, 36, 38, 39, 3A, 3B, 3C, 3E, 3F, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 4A, 4B, 4C, 4D, 4E, 4F, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 5A, 5B, 5C, 5D, 5E, 5F, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 6A, 6B, 6C, 6D, 6E, 6F, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 7A, 7B, 7C, 7D, 7E, 7F, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 8A, 8B, 8C, 8D, 8E, 8F, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 9A, 9B, 9C, 9D, 9E, 9F, A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, AA, AB, AC, AD, AE, AF, B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, BA, BB, BC, BD, BE, BF, C0, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, DA, DB, DC, DD, DE, DF, E0, E1, E2, E3, E4, E5, E6, E7, E8, E9, EA, EB, EC, ED, EE, EF, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, FF	Optional
RMTBSCEL	Remote BSCEL	***SAME**, *NO, *YES	Optional
RCDLEN	Record length	1-8192, ***SAME**	Optional

Keyword	Description	Choices	Notes
BLKLEN	Block length	1-8192, *SAME	Optional
TRNSPY	Transmit in transparent mode	*SAME, *YES, *NO	Optional
DTACPR	Compress and decompress data	*SAME, *YES, *NO	Optional
TRUNC	Truncate trailing blanks	*SAME, *YES, *NO	Optional
GRPSEP	Group separator type	*SAME, *EOT, *OFCSYS, *DEV3740	Optional
EMLDEV	Emulated device	*SAME, 3278, 3284, 3286, 3287, 3288, 3289	Optional
EMLKBD	Emulated keyboard	*SAME, *UPPER, *LOWER	Optional
EMLNUMLCK	Emulated numeric lock	*SAME, *YES, *NO	Optional
EMLWRKSTN	Emulation work station	Name, *SAME, *ANY	Optional
TEXT	Text 'description'	Character value, *SAME, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Local location address (LOCADR)

Specifies the local location address for this device.

Valid values range from 00 to FE.

***SAME**
>	The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

***SAME**
>	The value does not change.

***YES**	This device is varied on automatically at IPL.

***NO**	This device is not varied on automatically at IPL.

Contention resolution winner (CTNWIN)

Specifies which BSC station will gain control when line contention occurs.

***SAME**
>	The value does not change.

*SEC   Specifies that the local system is the secondary station. It will give way to the other station when line contention occurs.

*PRI   Specifies that the local system is the primary station. It gets control when contention occurs.

Blocking type (BLOCK)

Specifies if the system or user blocks and deblocks transmitted records.

*SAME
>   The value does not change.

*NONE
>   No blocking or deblocking is done by the system.

*ITB   Records are blocked or deblocked based on the location of an intermediate text block (ITB) control character.

*IRS   Records are blocked or deblocked, based on the location of an interrecord separator (IRS) character.

*NOSEP
>   No record separator character is in the transmission block sent to or received from the device. The system blocks and deblocks the records by a fixed record length, as specified in the DDS format specifications.

*USER
>   The user program provides all control characters, including record separator characters, BSC framing characters, transparency characters, and any other characters needed to transmit records.

*SEP   Records are blocked or deblocked based on the location of a user-specified record separator character.

Separator character (SEPCHAR)

Specifies a unique one-byte record separator character.

Valid values range from 00 to FF; BSC control characters are not allowed.

*SAME
>   The value does not change.

Remote BSCEL (RMTBSCEL)

Specifies the type of BSCEL session with the remote system.

*SAME
>   The value does not change.

*NO   The remote system or device cannot recognize BSCEL commands. ICF operations and return codes are used.

*YES   The remote system can recognize BSCEL start and end commands, and BSCEL online messages.

Record length (RCDLEN)

Specifies the maximum record length allowed when communicating with this device.

The value must be at least the size of the largest record to be sent, but must not exceed the buffer size specified on the line description (MAXBUFFER parameter) to which this device is attached.

*SAME
> The value does not change.

Block length (BLKLEN)

Specifies the maximum block length allowed when communicating with this device.

The value must be at least the size of the largest record to be sent, but must not exceed the buffer size specified on the line description (MAXBUFFER parameter) to which this device is attached.

Note: This parameter is valid only if APPTYPE(*BSCEL) or APPTYPE(*RPGT) is specified.

*SAME
> The value does not change.

block-length
> Specify the maximum block length (in bytes) of records sent. The value must be at least the size of the largest record sent. Valid values range from 1 through 32767.

Transmit in transparent mode (TRNSPY)

Specifies whether the text transparency feature is used when sending blocked records. This feature permits the transmission of all 256 EBCDIC character codes; you should use this feature when transmitting packed or binary data fields.

*SAME
> The value does not change.

*NO   The text transparency feature is not used.

*YES   The text transparency feature is to be used, which permits the transmission of all 256 EBCDIC character codes.

Compress and decompress data (DTACPR)

Specifies whether data compression is performed.

Note: DTACPR(*YES) cannot be specified if TRNSPY(*YES) or TRUNC(*YES) is specified. This parameter is valid only if APPTYPE(*BSCEL) or APPTYPE(*RPGT) is specified.

*SAME
> The value does not change.

*NO   No data compression or decompression occurs.

*YES   Data is compressed for output and decompressed for input.

Truncate trailing blanks (TRUNC)

Specifies whether trailing blanks are removed from output records.

*SAME
        The value does not change.

*NO   Trailing blanks are not removed from output records.

*YES   Trailing blanks are removed from output records.

Group separator type (GRPSEP)

Specifies a separator for groups of data, such as data sets and documents.

*SAME
        The value does not change.

*EOT   An end of transmission (EOT) control character is used.

*OFCSYS
        A transmission block ending with an end of text (ETX) control character is used.

*DEV3740
        A null record (STX ETX) is used.

Emulated device (EMLDEV)

Specifies that this program device entry is used to send and receive 3270 data streams. The emulation device parameter consists of an emulation device type and an emulation device data format. The emulation device data format specifies the format of the type 3270 data stream being sent or received. A 20- or 32-byte common header that contains type 3270 command and data flow information is located at the start of the I/O buffer that is sending or receiving the type 3270 data stream. This parameter applies only to SNUF communications. This parameter can be specified as a list of two values (elements) or as a single value (*NONE).

*SAME
        The value does not change.

3278   This device is used to emulate a 3278 display device.

3284   This device is used to emulate a 3284 printer device.

3286   This device is used to emulate a 3286 printer device.

3287   This device is used to emulate a 3287 printer device.

3288   This device is used to emulate a 3288 printer device.

3289   This device is used to emulate a 3289 printer device.

Emulated keyboard (EMLKBD)

Specifies the type of 3278 display keyboard that is emulated. This parameter is valid only when *EML is specified for the **Application type (APPTYPE)** parameter.

*SAME
> The value does not change.

*UPPER
> A 3270 display device keyboard is emulated with uppercase characters only.

*LOWER
> A 3270 display device keyboard is emulated with uppercase and lowercase characters.

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Emulated numeric lock (EMLNUMLCK)

Specifies whether numeric input fields only allow numeric data on a 5250 keyboard. The value can be specified for this parameter only if *EML is specified for the **Application type (APPTYPE)** parameter.

*SAME
> The value does not change.

*NO   3270 emulation allows any data to be typed in the numeric input fields.

*YES   3270 emulation allows only numeric data to be typed in the numeric input fields. Valid numeric data include the characters 0 through 9 and symbols + - , . and blank.

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Emulation work station (EMLWRKSTN)

The emulation work station associates an emulation device with a real display or printer device. The device address is reserved for use exclusively by that work station. If no device or *ANY is specified, any work station can use the emulation device.

*SAME
> The value does not change.

*ANY   Any work station can use the emulation device.

work-station
> Specify the name for the work station that is to use this emulation device.

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Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVBSC   DEVD(BSC001)   EMLDEV(3278)   EMLKBD(*LOWER)
```

This command changes the device description for the BSC device named BSC001 so it emulates a 3278 display station with both uppercase and lowercase characters.

Error messages

*ESCAPE Messages

CPF2618
>   Device description &1 not changed.

Change Device Desc (Crypto) (CHGDEVCRP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Crypto) (CHGDEVCRP) command changes the device description for a cryptographic device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**, *NONE	Optional
APPTYPE	Application type	***SAME**, *CCA, *CCAUDX, *NONE	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSVAL, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PKAKEYFILE	PKA key store file	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: PKA key store file	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
DESKEYFILE	DES key store file	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: DES key store file	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware that the description represents.

*SAME
> The value does not change.

resource-name
> Specify the name that identifies the cryptographic device hardware on the system.

> **Note:** Use the Work with Hardware Resources (WRKHDWRSC) command with TYPE(*CRP) specified to determine the resource name.

Application type (APPTYPE)

Specifies the application that runs inside of the secure computing environment on the cryptographic device.

*SAME
> The value does not change.

*CCA The flash memory in the cryptographic device is initialized with the Common Cryptographic Architecture (CCA) application.

> **Note:** This value is valid only for 4758 and 4764 device types.

*CCAUDX
> The flash memory in the cryptographic device is initialized only if the system does not detect the CCA application or a CCA User Defined Extension (UDX) application within the flash memory of the device.

> **Note:** This value is valid only for 4758 and 4764 device types.

*NONE
> The cryptographic device does not support flash memory applications.

> **Note:** This value is valid only for 2058 device type.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES This device is varied on automatically at IPL.

*NO This device is not varied on automatically at IPL.

Message queue (MSGQ)

Specifies the qualified name of the message queue to which messages are sent.

Single values

*SAME
> The message queue to which messages are sent remains the same.

*SYSOPR
> Messages are sent to the system operator message queue (message queue QSYSOPR in library QSYS).

*SYSVAL
> The messages are sent to the message queue specified by the system value QCFGMSGQ.

Other values

message-queue-name
> Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

*LIBL All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library to be searched.

PKA key store file (PKAKEYFILE)

Specifies the name of the database file containing the PKA (Public Key Algorithm) keys.

Single values

*SAME
> The PKA key database file value does not change.

*NONE
> No PKA key database file is specified.

Other values

PKA-key-store-file-name
> Specify the name of the default PKA key database file.

The possible library values are:

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

DES key store file (DESKEYFILE)

Specifies the name of the database file containing the DES (Data Encryption Standard) keys.

Single values

*SAME
The DES key database file value does not change.

*NONE
No DES key database file is specified.

Other values

DES-key-store-file-name
Specify the name of the default DES key database file.

The possible library values are:

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
Specify the library where the object is located.

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Text 'description' (TEXT)

*SAME
The text (if any) does not change.

*BLANK
No text is specified.

character-value
Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVCRP   DEVD(CRP01)   ONLINE(*YES)
```

This command changes the device description of a cryptographic that is named CRP01 so that the device is automatically varied on at IPL.

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Error messages

None

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Change Device Desc (Diskette) (CHGDEVDKT)

The Change Device Description (Diskette) (CHGDEVDKT) command changes a device description for a diskette unit.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware this description represents. Use the WRKHDWRSC command to determine the resource name.

*SAME
> The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Text 'description' (TEXT)

*SAME
The text (if any) does not change.

*BLANK
No text is specified.

character-value
Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVDKT    DEVD(DKT01)   ONLINE(*YES)
```

This command changes the device description for DKT01 so the device description is varied on automatically during IPL.

Error messages

*ESCAPE Messages

CPF2618
Device description &1 not changed.

Change Device Desc (Display) (CHGDEVDSP)

The Change Device Description (Display) (CHGDEVDSP) command changes a device description for a display device.

Restriction: This command cannot be used to remove port sharing (when *CALC was specified for the TYPE and/or LINESPEED parameters of the CRTDEVDSP command). Port sharing for a display device must be removed by first deleting and then recreating its device description.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
PORT	Port number	0-17, ***SAME**	Optional
SWTSET	Switch setting	0-6, ***SAME**	Optional
SHRSSNNBR	Shared session number	***SAME**, 0, 1, 2, 3	Optional
LOCADR	Local location address	X'00'-X'FE', ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
KBDTYPE	Keyboard language type	***SAME**, *SYSVAL, *NONE, AGB, AGE, AGI, AGM, ALI, ALM, BGB, BGE, BLI, BLM, BRB, BRE, CAB, CAE, CAI, CAM, CLB, CLE, CSB, CSE, CYB, DMB, DME, DMI, DMM, ESB, FAB, FAE, FAI, FAM, FNB, FNE, FNI, FNM, FQB, FQI, GKB, GNB, GNE, HIB, HNB, HNE, ICB, ICE, ICI, ICM, INB, INI, IRB, ITB, ITE, ITI, ITM, JEB, JEI, JKB, JPB, JPE, JUB, KAB, KOB, LAB, LAE, LTB, LVB, MKB, MKE, NCB, NCE, NEB, NEE, NEI, NEM, NWB, NWE, NWI, NWM, PLB, PLE, PKB, PKE, PRB, PRE, PRI, PRM, RCB, RMB, RME, ROB, ROE, RUB, RUE, SFI, SFM, SGI, SGM, SKB, SKE, SPB, SPE, SPI, SPM, SQB, SQE, SSB, SSE, SSI, SSM, SWB, SWE, SWI, SWM, TAB, THB, THE, TKB, TKE, TRB, TRE, UAB, UAE, UKB, UKE, UKI, UKM, USB, USE, USI, USM, VNB, VNE, YGI, YGM	Optional
DROP	Drop line at signoff	***SAME**, *YES, *NO	Optional
CHRID	Character identifier	Single values: *KBDTYPE, *SYSVAL, ***SAME** Other values: *Element list*	Optional
	Element 1: Graphic character set	1-32767	
	Element 2: Code page	1-32767	
ALWBLN	Allow blinking cursor	***SAME**, *YES, *NO	Optional
AUXDEV	Auxiliary device	Single values: ***SAME**, *NONE Other values (up to 31 repetitions): *Element list*	Optional
	Element 1: Auxiliary device type	6180, 6182, 6184, 6185, 6186M1, 6186M2, 7371, 7372	
	Element 2: Auxiliary device address	1-31	

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Keyword	Description	Choices	Notes
PRTDEV	Print device	*Name*, ***SAME**, *SYSVAL	Optional
OUTQ	Output queue	Single values: ***SAME**, *DEV Other values: *Qualified object name*	Optional
	Qualifier 1: Output queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PRINTER	Printer	*Name*, ***SAME**, *NONE	Optional
PRTFILE	Printer file	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Printer file	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
MAXLENRU	Maximum length of request unit	***SAME**, *CALC, 241, 245, 247, 256	Optional
ACTTMR	Activation timer	1-2550, ***SAME**	Optional
INACTTMR	Inactivity timer	1-30, ***SAME**, *ATTACH, *NOMAX, *SEC15, *SEC30	Optional
SNPTDEV	SNA pass-through device desc	*Name*, *NONE, ***SAME**	Optional
SNPTGRP	SNA pass-through group name	*Name*, *NONE, ***SAME**	Optional
LOGON	Host signon/logon command	*Character value*, *NONE, ***SAME**	Optional
LINESPEED	Line speed	***SAME**, *TYPE, 150, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 19200, 38400	Optional
WORDLEN	Word length	***SAME**, *TYPE, 7, 8	Optional
PARITY	Type of parity	***SAME**, *TYPE, *EVEN, *ODD, *NONE, *MARK, *SPACE	Optional
STOPBITS	Stop bits	***SAME**, *TYPE, 1, 2	Optional
MAXOUT	Maximum outstanding frames	1-7, ***SAME**	Optional
IDLTMR	Idle timer	10-250, ***SAME**	Optional
NRMPOLLTMR	NRM poll timer	2-100, ***SAME**	Optional
FRAMERTY	Frame retry	5-64, ***SAME**	Optional
RMTLOCNAME	Remote location	*Communications name*, ***SAME**	Optional
LCLLOCNAME	Local location	*Communications name*, ***SAME**, *NETATR	Optional
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *NETATR, *NONE	Optional
IGCFEAT	DBCS feature	Single values: ***SAME** Other values: *Element list*	Optional
	Element 1: Device features	*Character value*	
	Element 2: Last code point	X'4141'-X'FFFE'	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
WSCST	Workstation customizing object	Single values: *NONE, ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Workstation customizing object	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Port number (PORT)

Specifies the port number for local devices.

For twinaxial devices: Possible values range from 0 through 7.

For ASCII devices: Possible values range from 0 through 17 and indicate the port on the ASCII work station controller to which this device is attached. Without the 12-port expansion feature, ports 0 through 5 are valid. With the 12-port expansion feature, ports 6 through 17 are added.

For LAN printers: Valid values range from 0 through 65535 and indicate to which port the external LAN adapter is attached.

*SAME
> The value does not change.

port-number
> Specify the port number. Valid values range from 0 through 65535.

Switch setting (SWTSET)

Specifies the switch setting for local twinaxial devices.

Valid values range from 0 to 6.

*SAME
> The value does not change.

Shared session number (SHRSSNNBR)

Specifies the shared session number for a twinaxial display station. This parameter is valid only for 3486 and 3487 configured device types.

Note: Displays that share session addresses can be attached only to the 2661, 6050, 9146, or the 915A local work station controllers, or to the 5494 remote work station controller.

*SAME
> The value does not change.

0   The shared session number is 0.

1   The shared session number is 1.

2   The shared session number is 2.

3   The shared session number is 3.

Local location address (LOCADR)

Specifies the local location address for this device.

The possible values range from 00 to FE. The type of controller to which the device is being attached determines which values are valid.

Controller
> **Valid Values**

5251 00, 02-09

5294 00-1B

5394 00-14

5494 00-37

3174 02-41

3274 02-41

SNA Host
> 01-FE

4701 02-FE

4702 02-FE

4680 02-54

4684 02-FE

FBSS 02-FE

*SAME
> The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES This device is varied on automatically at IPL.

*NO This device is not varied on automatically at IPL.

Keyboard language type (KBDTYPE)

Specifies the country keyboard language identifier for this display station.

NOTES:

1. When DEVCLS(*RMT) is specified and when TYPE(3277), TYPE(3278), or TYPE(3279) is specified, the following values can be specified: *SYSVAL, AGI, ALI, BGB, BLI, CAI, CSB, DMI, FNI, FAI, HNB, IRB,

ITI, JPB, MKB, NWI, PLB, PRI, RMB, RUB, SKB, SPI, SQB, SSI, SWI, TRB, USB, USI, or YGI. Otherwise, this parameter is not valid when DEVCLS(*RMT) is specified.

2. When TYPE(3486) or TYPE(3487) is specified, the following values can be specified: *SYSVAL, AGB, AGI, ALI, BGB, BLI, CAB, CAI, CLB, CSB, DMB, DMI, FAB, FAI, FNB, FNI, GNB (or GKB), HNB, ICB, ICI, IRB, ITB, ITI, JPB, KAB, MKB, NCB, NEB, NEI, NWB, PLB, PRB, PRI, RMB, RUB, SFI, SGI, SKB, SPB, SPI, SQB, SSB, SSI, SWB, SWI, TKB, TRB, UKB, UKI, USB, USI, or YGI.

3. This parameter is optional for the combination of DEVCLS(*LCL) and TYPE(5150).

*SYSVAL
>   Instructs the system to use the QKBDTYPE system value.

keyboard language-type
>   Specify the 3-character country identifier (used for EBCDIC and ASCII) for this display station.

The following two tables can be used to confirm the appropriate value for this parameter, or to determine which ASCII display devices can be used with a specified language.

- The keyboard mapping table shows valid country identifiers, the language represented by each identifier, and the ASCII device groups, if applicable, for each language.
- The ASCII displays and device groups table shows the valid display devices and their associated ASCII device groups.

For example, assume a user wants to create a 3101 display device. The ASCII displays and device groups table shows that a 3101 display supports ASCII device group A. The Keyboard Mapping table shows that the valid language identifiers that can be used with device group A include AGB, AGI, CAB, CAI, FAB, FAI, ITB, ITI, UKB, UKI, USB, and USI.

The following keyboards can be specified by ASCII displays only if a customizing object is also used: ALI, BGB, CSB, ESB, HNB, LTB, LVB, MKB, PKB, PLB, RMB, RUB, SKB, SQB, TRB, UAB, and YGI.

Identifier
>   **Language(Country) - ASCII Device Groups**

ALI   Albania

ALM   Albania Euro Currency

CLB   Arabic X/Basic - D*

CLE   Arabic X/Basic Euro Currency

AGB   Austria/Germany - A, B

AGE   Austria/Germany Euro Currency

AGI   Austria/Germany Multinational - A, B

AGM   Austria/Germany Multinational Euro Currency

BLI   Belgium Multinational - B

BLM   Belgium Multinational Euro Currency

BRB   Brazilian Portuguese

BRE   Brazilian Portuguese Euro Currency

BGB   Bulgaria

BGE   Bulgaria Euro Currency

CAB   Canadian French - A, B

CAE   Canadian French Euro Currency

CAI   Canadian French Multinational - A, B

CAM	Canadian French Multinational Euro Currency
SPB	Catalan
RCB	Chinese (Simplified)
TAB	Chinese (Traditional)
YGI	Croatia
YGM	Croatia Euro Currency
CYB	Cyrillic
CSB	Czech Republic
CSE	Czech Republic Euro Currency
DMB	Denmark - B
DME	Denmark Euro Currency
DMI	Denmark Multinational - B
DMM	Denmark Multinational Euro Currency
ESB	Estonia
FNB	Finland/Sweden - B
FNE	Finland/Sweden Euro Currency
FNI	Finland/Sweden Multinational - B
FNM	Finland/Sweden Multinational Euro Currency
FAB	France (Azerty) - A, B
FAE	France (Azerty) Euro Currency
FAI	France (Azerty) Multinational - A, B
FAM	France (Azerty) Multinational Euro Currency
FQB	France (Qwerty)
FQI	France (Qwerty) International
GNB	Greek (see note)
GNE	Greek Euro Currency
NCB	Hebrew - D*
NCE	Hebrew Euro Currency
HIB	Hindi
HNB	Hungary
HNE	Hungary Euro Currency
ICB	Iceland
ICE	Iceland Euro Currency
ICI	Iceland Multinational
ICM	Iceland Multinational Euro Currency
INB	International
INI	International Multinational

IRB   Iran (Farsi)

ITB   Italy - A, B

ITE   Italy Euro Currency

ITI   Italy Multinational - A, B

ITM   Italy Multinational Euro Currency

JEB   Japan English

JEI   Japan English Multinational

JKB   Japan Kanji

JPB   Japan Latin Extended

JPE   Japan Latin Extended Euro Currency

JUB   Japan U.S. Basic

KAB   Japan Katakana

KOB   Korea

LAB   Lao People's Democratic Republic

LAE   Lao People's Democratic Republic Euro Currency

ROB   Latin-2/ROECE

ROE   Latin-2/ROECE Euro Currency

LVB   Latvia

LTB   Lithuania

MKB   FYR Macedonia (Former Yugoslav Republic)

MKE   FYR Macedonia Euro Currency

NEB   Netherlands

NEE   Netherlands Euro Currency

NEI   Netherlands Multinational

NEM   Netherlands Multinational Euro Currency

NWB   Norway - B

NWE   Norway Euro Currency

NWI   Norway Multinational - B

NWM   Norway Multinational Euro Currency

PLB   Poland

PLE   Poland Euro Currency

PRB   Portugal - B

PRE   Portugal Euro Currency

PRI   Portugal Multinational - B

PRM   Portugal Multinational Euro Currency

RMB   Romania

RME   Romania Euro Currency

RUB	Russia
RUE	Russia Euro Currency
SQB	Serbia (Cyrillic)
SQE	Serbia (Cyrillic) Euro Currency
YGI	Serbia (Latin)
YGM	Serbia (Latin) Euro Currency
SKB	Slovakia
SKE	Slovakia Euro Currency
YGI	Slovenia
YGM	Slovenia Euro Currency
SPB	Spain - B
SPE	Spain Euro Currency
SPI	Spain Multinational - B
SPM	Spain Multinational Euro Currency
SSB	Spanish Speaking - B
SSE	Spanish Speaking Euro Currency
SSI	Spanish Speaking Multinational - B
SSM	Spanish Speaking Multinational Euro Currency
SWB	Sweden - B
SWE	Sweden Euro Currency
SWI	Sweden Multinational - B
SWM	Sweden Multinational Euro Currency
SFI	Switzerland/France Multinational - B
SFM	Switzerland/France Multinational Euro Currency
SGI	Switzerland/Germany Multinational - B
THB	Thailand
THE	Thailand Euro Currency
TKB	Turkey (Qwerty)
TKE	Turkey (Qwerty) Euro Currency
TRB	Turkey (F)
TRE	Turkey (F) Euro Currency
UAB	Ukraine
UAE	Ukraine Euro Currency
UKB	United Kingdom - A, B
UKE	United Kingdom Euro Currency
UKI	United Kingdom Multinational - A, B
UKM	United Kingdom Multinational Euro Currency

USB United States/Canada - A, B, C

USE United States/Canada Euro Currency

USI United States/Canada Multinational - A, B, C

USM United States/Canada Multinational Euro Currency

PKB Urdu

PKE Urdu Euro Currency

VNB Vietnam

VNE Vietnam Euro Currency

YGI Languages of the former Yugoslavia

YGM Languages of the former Yugoslavia Euro Currency

Note: The GNB code is the current identifier for Greece. The GKB code was used prior to V2R1, and continues to be supported, but provides fewer characters than the recommended GNB code.

ASCII Displays and Devices Groups

Display
ASCII Device Group

3101 A

3151 B

3161 B

3162 B

3163 B

3164 B

The following devices are trademarks by TeleVideo, DEC, or Wyse, and must only specify languages in ASCII Device Group C or D:

Display
Description

D220 Data General Dasher D220

T910 TeleVideo 910

T925 TeleVideo 925

T955 TeleVideo 955

V100 DEC VT-100

V220 DEC VT-220 (supports ASCII Device Group D and C)

W30 Wyse WY30

W50 Wyse WY50

W60 Wyse WY60

*SAME
The value does not change.

*NONE
No country keyboard language identifier is set for this display station. This is only valid for displays where the keyboard type is not required.

Drop line at signoff (DROP)

Specifies, for remote display stations, whether the line is disconnected by the system when all devices on the line are no longer in use.

The value specified in the device description can be overridden by a user signing off at the device if the user specifies the **Drop line at signoff (DROP)** parameter on the SIGNOFF command.

*SAME
> The value does not change.

*YES The switched line to the controller to which this device is attached is disconnected when this device and all other attached devices are no longer in use.

*NO The switched line is not disconnected from the controller when all of its attached devices are no longer in use.

Character identifier (CHRID)

Specifies the character identifier (graphic character set and code page) that a work station display device supports.

*SAME
> The value does not change.

*KBDTYPE
> The system determines the graphic character set and code page value that corresponds to the country keyboard language identifier value specified for the **Keyboard language type (KBDTYPE)** parameter.

*SYSVAL
> The system determines the graphic character set and code page values for the command parameters from the QCHRID system value.

graphic-character-set code-page
> Specify the graphic character set and code page values that match the attributes of this display device. The graphic character set and code page values must be numbers in the range of 1 through 32767.

Allow blinking cursor (ALWBLN)

Specifies whether the (program controlled) blinking cursor is suppressed.

Note: The value specified for this parameter can be overridden by display stations that have a keyboard setup capability that allows the blinking cursor attribute to be changed.

*SAME
> The value does not change.

*YES Allows the cursor to blink for the 3179, 3180, 3196, 3197, 3476, 3477, 3486, 3487, 5251, 5291, and 5292 display devices.

*NO The blinking cursor is suppressed.

Auxiliary device (AUXDEV)

Specifies the device type and address of an additional device (if any) that is attached to the IEEE-488 port on the 5292 Model 2 device. Up to 31 plotters can be attached to the same IEEE-488 AUXDEV port on the 5292 Model 2, but at different IEEE-488 addresses. The valid additional device types are: 7371 (IBM 7371 Plotter), the 7372 (IBM 7372 Plotter), the 6180 (IBM 6180 Plotter), the 6182 (IBM 6182 Plotter), the 6184 (IBM 6184 Plotter), the 6185 (IBM 6185 Plotter), the 6186M1 (IBM 6186M1 Plotter), and the 6186M2 (IBM 6186M2 Plotter). The valid additional device address is a number from 1 to 31.

You can enter multiple values for this parameter.

*SAME
The value does not change.

*NONE
There are no auxiliary devices.

Print device (PRTDEV)

Specifies the name of the default printer device for this workstation. If the printer file being used to create the output specifies to spool the file, the spooled file is placed on the device's output queue, which is named the same as the device.

Note: This assumes the defaults are specified on the OUTQ parameter for the printer file, job description, user profile and workstation.

*SAME
The printer value does not change.

*SYSVAL
The default system printer specified in the system value QPRTDEV is used.

printer-device-name
Specify the name of a printer that is used to print the output.

Output queue (OUTQ)

Specifies the name and library of the output queue that is used by the user. The output queue must already exist.

*SAME
The output queue value does not change.

*DEV The output queue associated with the printer specified on the DEV parameter of the printer file is used. The output queue has the same name as the printer. (The printer file DEV parameter is determined by the CRTPRTF, CHGPRTF, or the OVRPRTF command).

Note: This assumes the defaults were specified on the OUTQ parameter for the printer file, job description, user profile, and workstation.

output-queue-name
Specify the name of the output queue.

The possible library values are:

__*LIBL__   All libraries in the library list for the current thread are searched until the first match is found.

__*CURLIB__
>   The current library is used to locate the output queue. If no current library entry exists in the library list, QGPL is used.

library-name
>   Specify the name of the library where the output queue is located.

Printer (PRINTER)

Specifies, for a remote display station, the device name of the printer associated with the display device. The device description of the work station printer named in this parameter must have already been created and must currently exist on the system. Both the printer and the display device must be attached to the same controller.

__*SAME__
>   The value does not change.

__*NONE__
>   No printer is associated with this display station.

Printer file (PRTFILE)

Specifies an alternative printer device file to be used for processing the Print key on this display station.

The printer file is specified by its qualified name (library-name/print-file-name).

__*SAME__
>   The value does not change.

The possible library values are:

__*LIBL__   All libraries in the library list for the current thread are searched until the first match is found.

__*CURLIB__
>   The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
>   Specify the library where the object is located.

Maximum length of request unit (MAXLENRU)

Specifies, for remote display stations and printers, the maximum request unit (RU) length (in bytes) allowed.

__*SAME__
>   The value does not change.

__*CALC__
>   The system determines the best value to use. A value of *CALC must be specified for those

devices not attached to an X.25 network. *CALC may be specified for devices attached to an X.25 network. In all instances, *CALC is the recommended value.

maximum-length-request-unit
Specify 241 or 247. These values are valid only for devices attached to X.25 networks. If the recommended value of *CALC is not specified, it is recommended that 241 be used for ELLC and 247 be used for QLLC. The values 245 and 256 can be specified, but the result is the same as specifying *CALC.

Activation timer (ACTTMR)

Specifies, for switched lines, the amount of time (in seconds) that the SNA pass-through support waits for the device to respond to the activation request from the host iSeries system. If the device does not respond within this time, it is considered not available.

*SAME
The value does not change.

activate-time
Specify a number ranging from 1 through 2550 indicating the number of seconds before the device is considered not available.

Inactivity timer (INACTTMR)

Specifies an inactivity timer (time-out) value for display devices. This parameter also specifies what happens when the time-out value is exceeded, dependent on other attributes of the device:

- For display stations attached to an ASCII work station controller, the user's job is canceled when the display station is inactive (no data is sent or received) for a period of time that exceeds the time-out value. The display station is automatically varied off and on again, resulting in a new sign-on display.
- For display devices connected using SNA pass-through (SNPT) support, the user is informed by a message to QSYSOPR and the session is ended when the amount of time that the device is not bound to a host application exceeds the time-out value. The user must reestablish the connection and session.
- For display devices with an application type value of *APPINIT, *DEVINIT, or *NRF, the session is ended when the device is inactive (the file opened against the device is closed and no additional requests to open files are received for the device) for a period of time that exceeds the time-out value.

Note: This timer is not used by devices allocated to a subsystem (normal interactive use) because the subsystem always has a file open for the device. The timer is used by batch jobs that open and close files for the device.

For a connection using SNA pass-through (*SNPT) device class support, the default of *ATTACH maps to *NOMAX.

For a device with an application type value of *APPINIT, *CLTSSN, *DEVINIT, or *NRF, the default of *ATTACH maps to 1 minute.

For Post Telephone and Telegraph (*PTT) attachment, valid inactivity timer values are *SEC15 (15 seconds), *SEC30 (30 seconds), and 1 to 10 minutes. *ATTACH maps to *SEC30 (30 seconds).

For all other attachments, valid inactivity timer values are 1 to 30 minutes and *NOMAX. *ATTACH maps to *NOMAX for these attachments.

*SAME

> The value does not change.

*ATTACH

> This value varies by the value specified on the **Physical attachment (ATTACH)** parameter and certain values on the **Application type (APPTYPE)** parameter and **Device class (DEVCLS)** parameter.

*NOMAX

> No maximum inactivity time is tracked (no inactivity timer is to be enforced).

*SEC15

> A 15-second time-out period is used.

*SEC30

> A 30-second time-out period is used.

inactivity-timer

> Specifies a time-out value in minutes.

SNA pass-through device desc (SNPTDEV)

Specifies the name of the associated SNA pass-through device that is attached to a host or advanced program-to-program communications (APPC) controller.

*SAME

> The value does not change.

*NONE

> No name is specified.

associated-device-name

> Specify the name of a device that is attached to a host or an APPC controller that is associated with this device.

SNA pass-through group name (SNPTGRP)

Specifies the name configured for a group of host devices in a configuration list. This indicates that this device is associated with any one of the devices in that group which is available.

*SAME

> The value does not change.

*NONE

> No name is specified.

group-name

> Specify the name configured for a group of host devices that must be associated with this device.

Host signon/logon command (LOGON)

Specifies the sign-on (logon) text. This parameter is allowed when DEVCLS(*SNPT) or APPTYPE(*NRF) is specified. APPTYPE(*NRF) specifies the logon string that is sent to the host system when a request is made to establish a session. DEVCLS(*SNPT) specifies the sign-on (logon) text that is sent to the host system after starting SNA pass-through support.

This parameter also specifies the logon string that is sent to the system services control point (SSCP) on the host network when the file is opened for *NRF.

*SAME
> The value does not change.

*NONE
> No text is sent to the host system.

host-logon-command
> Specify text that is sent to the host system. The text must be enclosed in apostrophes if it contains blanks or other special characters. All apostrophes within the text must be represented by two apostrophes. A maximum of 256 characters can be specified.

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Line speed (LINESPEED)

Specifies the line speed in bits per second (bps).

*SAME
> The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE selects 19200 bits per second for all display stations except the 3101 display station for which 9600 bits per second is selected. For a 5150 A1 device, *TYPE selects 1200 bits per second.

line-speed
> Valid values are: 150, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 19200, or 38400.

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Word length (WORDLEN)

Specifies, for ASCII devices, the word length (bits per character) used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the word length must be the same as the word length selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the word length must be the same as the word length specified for the display's device description.

Some devices do not support all word lengths; verify that your device supports the word length you intend to use.

*SAME
> The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE selects 8 bit word lengths for all display stations except the 3101 and D220 display stations which select 7 bit word lengths.

7 Specifies 7 bit word lengths.

8 Specifies 8 bit word lengths.

Type of parity (PARITY)

Specifies, for ASCII devices, the type of parity used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the type of parity must be the same as the type of parity selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the type of parity must be the same as the type of parity specified for the display's device description.

Some devices do not support all types of parity; verify that your device supports the type of parity you intend to use.

*SAME
The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE selects *EVEN (Even parity) for all display stations except for the D220 which selects *MARK. For a 5150 A1 device, *TYPE selects *NONE for an 8 bit word length and *EVEN for a 7 bit word length.

*EVEN
Even parity is used.

*ODD Odd parity is used.

*NONE
No parity bit is used.

*MARK
Mark parity (1 is used for the parity) is used.

*SPACE
Space parity (0 is used for the parity) is used.

Stop bits (STOPBITS)

Specifies, for ASCII devices, the number of stop bits used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the number of stop bits must be the same as the number of stop bits selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the number of stop bits must be the same as the number of stop bits specified for the display's device description.

Some devices do not support all numbers of stop bits; verify that your device supports the number of stop bits you intend to use.

*SAME
The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE selects 1 stop bit for all displays except the DEC VT-100 display station, for which a setting of 2 stop bits is selected.

1   Specifies 1 stop bit.

2   Specifies 2 stop bits.

Maximum outstanding frames (MAXOUT)

Specifies the maximum number of frames that are sent sequentially to a remote system before the remote system (the 5150 work station) must respond. The maximum number of frames must be between 1 and 7. This parameter is valid only if 5150 is specified for the **Device type (TYPE)** parameter and A1 is specified for the **Device model (MODEL)** parameter or if ASCII port sharing is being used.

*SAME
> The value does not change.

maximum-outstanding-frames
> Specify a value from 1 to 7 for the number of frames.

Idle timer (IDLTMR)

Specifies the time (in 0.1 second intervals) that the system waits for a response. If no response is received in the specified amount of time, then error recovery procedures are started. This parameter is valid only if the number is between 10 and 250, and if 5150 is specified for the **Device type (TYPE)** parameter and A1 is specified for the **Device model (MODEL)** parameter, or if ASCII port sharing is being used.

*SAME
> The value does not change.

idle-timer
> Specify a value from 10 to 250 in 0.1 second intervals.

NRM poll timer (NRMPOLLTMR)

Specifies the interval (in 0.1 second intervals) for polling this device when it is in normal response mode (NRM). This parameter is valid only if 5150 is specified for the **Device type (TYPE)** parameter and A1 is specified for the **Device model (MODEL)** parameter or if ASCII port sharing is being used.

*SAME
> The value does not change.

NRM-poll-timer
> Specify a value from 2 to 100 in 0.1 second intervals.

Frame retry (FRAMERTY)

Specifies the number of retries for an unanswered command frame or unacknowledged information frame. This parameter is valid only if 5150 is specified for the **Device type (TYPE)** parameter and A1 is specified for the **Device model (MODEL)** parameter or if ASCII port sharing is being used.

*SAME
> The value does not change.

frame-retry
> Specify a value from 5 to 64 for the number of retries.

Remote location (RMTLOCNAME)

Specifies the remote location name of the system with which this object communicates.

Note: This parameter is required for APPTYPE(*APPINIT) devices. The remote location name for APPTYPE(*APPINIT) devices is the VTAM/NCP (Virtual Telecommunications Access Method/Network Control Program) name of the physical device.

*SAME
> The value does not change.

Local location (LCLLOCNAME)

Specifies the local location name. When this parameter is specified with APPTYPE(*CTLSSN) or APPTYPE(*APPINIT), the remote location name is the name of the independent logical unit (LU) in the network control program (NCP).

*SAME
> The value does not change.

*NETATR
> The LCLLOCNAME value specified in the system network attributes is used.

local-location-name
> Specify the local location name.

Remote network identifier (RMTNETID)

Specifies the name of the remote network identifier (ID). This parameter can be specified for APPTYPE(*APPINIT) devices.

*SAME
> The value does not change.

*NETATR
> The RMTNETID value specified in the system network attributes is used.

*NONE
> No remote network identifier (ID) is used.

remote-network-ID
> Specify the name of the remote network identifier.

DBCS feature (IGCFEAT)

Specifies which double-byte character set (DBCS) table is used in DBCS feature code format expressing device features and the last code point value. The table at the end of this parameter description shows valid device features and last code point values for DBCS-capable devices.

Note: This parameter is valid for DBCS-capable devices only.

*SAME
> The value does not change.

Element 1: Features of the DBCS-Capable Devices

device-features
> Specify the device character resolution, language, and relative buffer size device features using the format SSSSLR, where:

SSSS =
> The resolution (number of matrix points used to create) of the character. For example, 2424 would be 24 matrix points of height and 24 matrix points of width available to formulate the character.

L = The language code. The 4 language codes currently supported are:
> - J = Japanese
> - K = Korean
> - C = Traditional Chinese
> - S = Simplified Chinese

R = The relative buffer size. The valid values are: 0, 1, 2, and 4.

Element 2: Last Code Point

last-code-point
> Specify the 4-digit code point of the last double-byte character. This value can be blank.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Workstation customizing object (WSCST)

Specifies the qualified name of a work station customizing object.

*SAME
> The value does not change.

*NONE
> No work station customizing object is specified.

work-station-customizing-object
> Specify the work station customizing object.

> **Note:** If a work station customizing object is specified for the WSCST parameter, all country keyboard identifiers are valid for ASCII devices except for the following: FQB, FQI, INB, INI, JEB, JEI, JKB, JUB, KAB, KOB, RCB, and TAB.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name

> Specify the library where the object is located.

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Examples

```
CHGDEVDSP   DEVD(DSP4)  PORT(1)  SWTSET(5)
```

This command moves display station DSP4 to port 1 and changes its address to 5. No other device can exist at this location on the same controller.

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Error messages

*ESCAPE Messages

CPF2618

> Device description &1 not changed.

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Change Device Desc (Finance) (CHGDEVFNC)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Finance) (CHGDEVFNC) command changes a device description for a finance device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	X'01'-X'FF', ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
MAXLENRU	Maximum length of request unit	8-4096, ***SAME**, *CALC	Optional
ACTTMR	Activation timer	1-2550, ***SAME**	Optional
INACTTMR	Inactivity timer	1-30, ***SAME**, *NOMAX, *SEC15, *SEC30	Optional
SNPTDEV	SNA pass-through device desc	*Name*, *NONE, ***SAME**	Optional
SNPTGRP	SNA pass-through group name	*Name*, *NONE, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Local location address (LOCADR)

Specifies the local location address for this device.

The type of controller to which the device is being attached determines which values are valid.

Controller
> **Valid Values**

FBSS   01-FF

4701   01-FF

4702   01-FF

3694   01-04

4730   01-03

4731   01-02

4732   01-02

4736   01-02

LOCADR 01 is used only to communicate with the system monitor session and is valid only if *FNCICF is specified for the **Device type (TYPE)** parameter.

*SAME
> The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Maximum length of request unit (MAXLENRU)

Specifies the maximum request unit (RU) length allowed.

*SAME
> The value does not change.

*CALC
> The system calculates the value to use.

maximum-length-request-unit
> Specify a value in the range of 8 through 4096 bytes as the maximum length for incoming request units.

Note: *CALC is the only allowed value for a 3624, 3694, or 4704 device type. If *FNCICF is specified for the **Device type (TYPE)** parameter and attached to either a 3694, 4730, 4731, 4732, or 4736 controller, *CALC or 256 are the only allowed values.

Activation timer (ACTTMR)

Specifies, for switched lines, the amount of time that the SNA pass-through support waits for the device to respond to the activation request from the host iSeries system. If the device does not respond within this time, it is considered not available.

*SAME
> The value does not change.

activation-timer
> Specify a number ranging from 1 through 2550 indicating the number of seconds before the device is considered not available.

Inactivity timer (INACTTMR)

Specifies, for devices connected using SNA pass-through support, a timeout value that measures the amount of time that the device is not bound to a host application. When the timeout value is exceeded, the session is ended.

*SAME
> The value does not change.

*NOMAX
> No maximum inactivity time is tracked (no inactivity timer is be enforced).

*SEC15
> A 15-second timeout period is used.

*SEC30
> A 30-second timeout period is used.

inactivity-timer
> Specifies a timeout value in minutes.

SNA pass-through device desc (SNPTDEV)

Specifies the name of the associated SNA pass-through device that is attached to a host or advanced program-to-program communications (APPC) controller.

*SAME
> The value does not change.

*NONE
> No name is specified.

associated-device-name
> Specify the name of a device that is attached to a host or an APPC controller that is associated with this device.

SNA pass-through group name (SNPTGRP)

Specifies the name configured for a group of host devices in a configuration list (see CRTCFGL command). This indicates that this device is associated with any one of the devices in that group which is available.

This parameter is only allowed when *SNPT is specified for the DEVCLS parameter.

*SAME
> The value does not change.

*NONE
> No name is specified.

group-name
> Specify the name configured for a group of host devices that must be associated with this device.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVFNC   DEVD(FNCDSP1)  ONLINE(*YES)
```

This command changes the device description for the finance device FNCDSP1 so that the device will be varied on at IPL.

Error messages

*ESCAPE Messages

CPF2618
> Device description &1 not changed.

Change Device Desc (SNA Host) (CHGDEVHOST)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (SNA Host) (CHGDEVHOST) command changes a device description for a Systems Network Architecture (SNA) host system device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	***SAME**, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 3A, 3B, 3C, 3D, 3E, 3F, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 4A, 4B, 4C, 4D, 4E, 4F, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 5A, 5B, 5C, 5D, 5E, 5F, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 6A, 6B, 6C, 6D, 6E, 6F, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 7A, 7B, 7C, 7D, 7E, 7F, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 8A, 8B, 8C, 8D, 8E, 8F, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 9A, 9B, 9C, 9D, 9E, 9F, A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, AA, AB, AC, AD, AE, AF, B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, BA, BB, BC, BD, BE, BF, C0, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, DA, DB, DC, DD, DE, DF, E0, E1, E2, E3, E4, E5, E6, E7, E8, E9, EA, EB, EC, ED, EE, EF, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, FF	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
MAXLENRU	Maximum length of request unit	*CALC, ***SAME**, 241, 245, 247, 256, 497, 501, 503, 512, 768, 1009, 1015, 1024, 1280, 1536, 1792, 2048, 2304, 2560, 2816, 3072, 3328, 3584, 3840, 4096	Optional
EMLDEV	Emulated device	***SAME**, 3278, 3284, 3286, 3287, 3288, 3289	Optional
EMLKBD	Emulated keyboard	***SAME**, *UPPER, *LOWER	Optional
EMLNUMLCK	Emulated numeric lock	***SAME**, *YES, *NO	Optional
EMLWRKSTN	Emulation work station	*Name*, ***SAME**, *ANY	Optional
ENDSSNHOST	End session with host	***SAME**, *UNBIND, *RSHUTD	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Local location address (LOCADR)

Specifies the local location address for this device.

Valid values range from 01 to FF.

*SAME
> The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Maximum length of request unit (MAXLENRU)

Specifies the maximum request unit (RU) length allowed.

*SAME
> The value does not change.

*CALC
> The system determines the best value to use. This is the recommended value.

maximum-length-request-unit
> Specify a value, 256 through 4096, in amounts of 256, to be used as the maximum length for
> incoming request units. Values 241, 247, 497, 503, 1009, and 1015 can also be specified but are
> valid only if the device is attached to an X.25 network.

Emulated device (EMLDEV)

Specifies that this program device entry is used to send and receive 3270 data streams. The emulation
device parameter consists of an emulation device type and an emulation device data format. The
emulation device data format specifies the format of the type 3270 data stream being sent or received. A
20- or 32-byte common header that contains type 3270 command and data flow information is located at
the start of the I/O buffer that is sending or receiving the type 3270 data stream. This parameter applies
only to SNUF communications. This parameter can be specified as a list of two values (elements) or as a
single value (*NONE).

*SAME
> The value does not change.

3278   This device is used to emulate a 3278 display device.

3284   This device is used to emulate a 3284 printer device.

3286   This device is used to emulate a 3286 printer device.

3287   This device is used to emulate a 3287 printer device.

3288   This device is used to emulate a 3288 printer device.

3289   This device is used to emulate a 3289 printer device.

Emulated keyboard (EMLKBD)

Specifies the type of 3278 display keyboard that is emulated. This parameter is valid only when *EML is specified for the **Application type (APPTYPE)** parameter.

*SAME
The value does not change.

*UPPER
A 3270 display device keyboard is emulated with uppercase characters only.

*LOWER
A 3270 display device keyboard is emulated with uppercase and lowercase characters.

Emulated numeric lock (EMLNUMLCK)

Specifies whether numeric input fields only allow numeric data on a 5250 keyboard. The value can be specified for this parameter only if *EML is specified for the **Application type (APPTYPE)** parameter.

*SAME
The value does not change.

*NO   3270 emulation allows any data to be typed in the numeric input fields.

*YES   3270 emulation allows only numeric data to be typed in the numeric input fields. Valid numeric data include the characters 0 through 9 and symbols + - , . and blank.

Emulation work station (EMLWRKSTN)

The emulation work station associates an emulation device with a real display or printer device. The device address is reserved for use exclusively by that work station. If no device or *ANY is specified, any work station can use the emulation device.

*SAME
The value does not change.

*ANY   Any work station can use the emulation device.

work-station
Specify the name for the work station that is to use this emulation device.

End session with host (ENDSSNHOST)

Specifies how the host device ends a session with the host system. The ENDSSNHOST parameter can be changed at any time and takes effect immediately after the change occurs.

*SAME
> The value does not change.

*UNBIND
> The host device sends the SNA command requesting the iSeries system to end the session.

*RSHUTD
> The host device sends the SNA command requesting the host system to end the session.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVHOST   DEVD(COMMDSP1)   EMLDEV(3286)
```

This command changes the device description named COMMDSP1 so it emulates a 3286 printer.

Error messages

*ESCAPE Messages

CPF2618
> Device description &1 not changed.

Change Device Desc (Intra) (CHGDEVINTR)

The Change Device Description (Intrasystem) (CHGDEVINTR) command changes a device description for an intrasystem (INTRA) device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES This device is varied on automatically at IPL.

*NO This device is not varied on automatically at IPL.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVINTR   DEVD(TRM5292)   ONLINE(*NO)
```

This command changes the ONLINE parameter to indicate that the device is not automatically varied on during IPL.

Error messages

*ESCAPE Messages

CPF2618
      Device description &1 not changed.

Change Device Desc (Media Lib) (CHGDEVMLB)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Media Library) (CHGDEVMLB) command changes the device description for a media library device. Refer to the Automated Tape Library Planning and Management information in iSeries Information Center at http://www.iseries.ibm.com/infocenter for more tape information.

Restriction: The user of this command must have *IOSYSCFG authority.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
DEVCLS	Device class	***SAME**, *OPT, *TAP	Optional
RSRCNAME	Resource name	*Name*, ***SAME**, *NONE	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
UNLOADWAIT	Unload wait time	*Character value*, ***SAME**, *SYSGEN	Optional
MAXDEVTIME	Maximum device wait time	*Character value*, ***SAME**, *SYSGEN	Optional
RSCALCPTY	Resource allocation priority	*Character value*, ***SAME**, *JOB	Optional
INLMNTWAIT	Initial mount wait time	*Character value*, ***SAME**, *JOB, *IMMED, *NOMAX	Optional
EOVMNTWAIT	End of volume mount wait time	*Character value*, ***SAME**, *JOB, *IMMED, *NOMAX	Optional
GENCTGID	Generate cartridge ids	***SAME**, *VOLID, *SYSGEN	Optional
ROBOTDEV	Robot device descriptions	Single values: ***SAME**, *NONE Other values (up to 2 repetitions): *Name*	Optional
ROBOTHOST	Robot host	Single values: ***SAME**, *NONE Other values (up to 2 repetitions): *Character value*	Optional
LCLINTNETA	Local internet address	*Character value*, ***SAME**, *NONE	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Device class (DEVCLS)

Specifies the class of the media library being created.

*SAME
> The value does not change.

*OPT   The device is an optical media library.

*TAP   The device is a tape media library.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware that the description represents.

Note: Use the Work with Hardware Resources (WRKHDWRSC) command with TYPE(*STG) specified to determine the resource name.

*SAME
> The value does not change.

*NONE
> No resource name is specified. A resource name must be provided before the device can be varied on.

resource-name
> Specify the name that identifies the media library device hardware on the system.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Unload wait time (UNLOADWAIT)

Specifies the amount of time the system waits for another request to use the mounted volume before unloading the volume if there are outstanding requests for an available drive.

Note: This parameter is valid only when DEVCLS(*OPT) is specified.

*SAME
> The value does not change.

*SYSGEN
> The system determines the value.

unload-wait-time
>   Specify the number of seconds to wait. Valid values range from 1 through 120.

Maximum device wait time (MAXDEVTIME)

Specifies the maximum number of minutes a volume can remain mounted in an internal device if there are requests for other volumes.

Note: This parameter is valid only when DEVCLS(*OPT) is specified, and is ignored when *DEVCLS(*TAP) is specified.

*SAME
>   The value does not change.

*SYSGEN
>   The system default is used. This allows a maximum device wait time to be specified for each library device user rather than the same value for each user of the library device.

*NOMAX
>   The requests will wait until a tape resource is available.

>   **Note:** This value is valid for tape devices only.

max-device-time
>   For optical devices, specify the number of minutes the volume can remain mounted. Valid values range from 1 through 60. For tape devices, specify the number of minutes a request will wait for allocation of a tape resource. Valid values range from 1 through 600.

Resource allocation priority (RSCALCPTY)

Specifies the resource allocation priority.

Note: This parameter is valid only when DEVCLS(*TAP) is specified.

*SAME
>   The value does not change.

*JOB   The priority of the job is used as the resource allocation priority.

resource-allocation-priority
>   Specify the priority this job is given when requesting a resource. Valid values range from 1 (highest) through 99 (lowest).

Initial mount wait time (INLMNTWAIT)

Specifies the maximum amount of time a request will wait for allocation of a tape resource for the initial mount.

Note: This parameter is valid only when DEVCLS(*TAP) is specified.

*SAME
>   The value does not change.

*JOB   The allocation wait time is determined by the default wait time attribute of the job requesting the allocation, rounded up to the nearest minute.

*IMMED
:   The request will not wait for a tape resource to become available.

*NOMAX
:   The request will wait until a tape resource is available.

initial-mount-wait-time
:   Specify the number of minutes a request will wait for allocation of a tape resource. Valid values range from 1 through 600 minutes.

End of volume mount wait time (EOVMNTWAIT)

Specifies the maximum amount of time a request will wait for allocation of a tape resource for the end of volume mount.

Note: This parameter is valid only when DEVCLS(*TAP) is specified.

*SAME
:   The value does not change.

*JOB   The allocation wait time is determined by the default wait time attribute of the job requesting the allocation, rounded up to the nearest minute.

*IMMED
:   The request will not wait for a tape resource to become available.

*NOMAX
:   The request will wait until a tape resource is available.

end-of-volume-mount-wait-time
:   Specify the number of minutes a request will wait for allocation of a tape resource. Valid values range from 1 through 600 minutes.

Generate cartridge ids (GENCTGID)

Specifies how the cartridge identifiers are assigned to each volume for tape libraries without bar code readers.

*SAME
:   The value does not change.

*VOLID
:   Specifies that the volume identifier is used as the cartridge identifier. Cartridge identifiers can be assigned by mounting each volume and reading the volume identifier.

*SYSGEN
:   Specifies that the system generate the cartridge identifiers for each volume. If system-generated identifiers are used, tape operations must use the generated cartridge identifiers. The cartridge identifiers are assigned sequentially in the form SLT001, SLT002, SLT003, and so on.

Robot device descriptions (ROBOTDEV)

Specifies the name of the device description representing the robot for library devices with separate robots.

*SAME
> The value does not change.

*NONE
> No robot device device description is specified.

robot-device-description
> The specified device description is used.

Robot host (ROBOTHOST)

Specifies the TCP/IP host name or Internet address of the robotic library manager. A maximum of 2 robot library managers can be specified.

*SAME
> The value does not change.

*NONE
> No robotic host is specified at this time.

host-name
> The specified name of the robotic library manager. The user may enter the robot host name by entering the robot host name or the domain qualified robot host name. The domain qualified robot host name allows input of 255 bytes.

host-internet-address
> The specified address of the robotic library manager. The internet address must be of the form ddd.ddd.ddd.ddd where ddd is a decimal number ranging from 0 to 255. This decimal number should not contain leading zeros. If the host internet address is entered from a command line, the address must be enclosed in apostrophes.

Local internet address (LCLINTNETA)

Specifies the local internet address of the interface that is connecting to the robot library manager. This is the interface the operating system will start when TCP/IP needs to be started to use the tape media library.

*SAME
> The value does not change.

*NONE
> No TCP/IP address is specified at this time.

local-ip-address
> Specify the local internet address to be started. The internet address must be of the form ddd.ddd.ddd.ddd where ddd is a decimal number ranging from 0 to 255. This decimal number should not contain leading zeros. If the local internet address is entered from a command line, the address must be enclosed in apostrophes.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

*SAME
> The value does not change.

*SYSOPR
> Messages are sent to the QSYSOPR message queue in QSYS.

message-queue-name
> Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

*LIBL All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library to be searched.

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Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVMLB   DEVD(LIB01)   ONLINE(*NO)
```

This command changes the device description of a media library device named LIB01. The device is changed so that it is not automatically varied on at IPL.

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Error messages

None

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Change Device Desc (Network) (CHGDEVNET)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Network) (CHGDEVNET) command changes a device description for a network device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES This device is varied on automatically at IPL.

*NO This device is not varied on automatically at IPL.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVNET   DEVD(NETDEV02)   ONLINE(*NO)
```

This command changes a device description for a network device named NETDEV02 so that the device is not automatically varied on at IPL.

Error messages

*ESCAPE Messages

CPF2618
      Device description &1 not changed.

Change Device Desc (Optical) (CHGDEVOPT)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Optical) (CHGDEVOPT) command changes the device description for an optical device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**, *NONE, *VRT	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware that the description represents.

*SAME
> The value does not change.

*NONE
> No resource name is specified. A resource name must be provided before the device can be varied on.

*VRT The resource name will be generated by the operating system at the time the device description is modified. The resource name will represent virtual (not physical) hardware.

resource-name
> Specify the name that identifies the optical device hardware on the system.

Note: Use the Work with Hardware Resources (WRKHDWRSC) command with TYPE(*STG) specified to determine the resource name.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

The possible qualified names are:

*SAME
> The value does not change.

*SYSOPR
> Messages are sent to the QSYSOPR message queue in QSYS.

message-queue-name
> Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
> The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library to be searched.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVOPT  DEVD(OPT01)  ONLINE(*YES)
```

This command changes the device description of an optical device that is named OPT01 so that the device is automatically varied on at IPL.

Error messages

None

Change Device Desc (Printer) (CHGDEVPRT)

The Change Device Description (Printer) (CHGDEVPRT) command changes a device description for a printer device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
SWTLINLST	Switched line list	Values (up to 8 repetitions): *Name*, ***SAME**, *NONE	Optional
ADPTADR	LAN remote adapter address	X'000000000001'-X'FFFFFFFFFFFE', ***SAME**	Optional
ADPTTYPE	Adapter type	***SAME**, *INTERNAL, *EXTERNAL	Optional
ADPTCNNTYP	Adapter connection type	***SAME**, *PARALLEL, *SERIAL	Optional
AFP	Advanced function printing	***SAME**, *YES, *NO	Optional
PORT	Port number	0-65535, ***SAME**	Optional
SWTSET	Switch setting	0-6, ***SAME**	Optional
LOCADR	Local location address	X'00'-X'FE', ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
LNGTYPE	Language type	***SAME**, *SYSVAL, AGB, AGI, ALI, BGB, BLI, BRB, CAB, CAI, CLB, CSB, CYB, DMB, DMI, ESB, FAB, FAI, FNB, FNI, GKB, GNB, HNB, ICB, ICI, IRB, ITB, ITI, JPB, LTB, LVB, MKB, NCB, NEB, NEI, NWB, NWI, PKB, PLB, PRB, PRI, RMB, ROB, RUB, SFI, SGI, SKB, SPB, SPI, SQB, SSB, SSI, SWB, SWI, THB, TKB, TRB, UAB, UKB, UKI, USB, USI, YGI	Optional
PRTQLTY	Print quality	***SAME**, *STD, *DRAFT, *NLQ	Optional
FONT	Font	*Element list*	Optional
	Element 1: Identifier	*Character value*, ***SAME**, 2, 3, 5, 8, 10, 11, 12, 13, 18, 19, 20, 21, 25, 26, 30, 31, 38, 39, 40, 41, 42, 43, 44, 46, 49, 50, 51, 52, 55, 61, 62, 63, 66, 68, 69, 70, 71, 72, 74, 75, 76, 80, 84, 85, 86, 87, 91, 92, 95, 96, 98, 99, 101, 102, 103, 109, 110, 111, 112, 154, 155, 157, 158, 159, 160, 162, 163, 164, 167, 168, 173, 174, 175, 178, 179, 180, 181, 182, 183, 186, 187, 188, 189, 190, 191, 194, 195, 204, 205, 211, 212, 221, 222, 223, 225, 226, 229, 230, 232, 233, 234, 244, 245, 247, 248, 249, 252, 253, 254, 255, 256, 258, 259, 279, 281, 282, 285, 290, 300, 400, 434, 435, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 1051, 1053, 1056, 1351, 1653, 1803, 2103, 4407, 4427, 4535, 4919, 4939, 5047, 5067, 5687, 5707, 5815, 5835, 5943, 6199, 6219, 6327, 6347, 8503, 8523, 8631, 8651, 8759, 8779, 8887, 8907, 12855, 12875, 16951, 16971, 17079, 17099, 33335, 33355, 33463, 33483, 33591, 33601, 33719, 33729, 34103, 34123, 34231, 34251, 37431, 41783, 41803	
	Element 2: Point size	0.1-999.9, ***SAME**, *NONE	
FORMFEED	Form feed	***SAME**, *TYPE, *CONT, *CONT2, *CUT, *AUTOCUT	Optional

Keyword	Description	Choices	Notes
SEPDRAWER	Separator drawer	1-255, ***SAME**, *FILE	Optional
SEPPGM	Separator program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Separator program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
NBRDRAWER	Number of drawers	***SAME**, 1, 2, 3	Optional
PRTERRMSG	Printer error message	***SAME**, *INQ, *INFO	Optional
MSGQ	Message queue	Single values: ***SAME**, *CTLD, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*, QSYSOPR	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
MAXLENRU	Maximum length of request unit	***SAME**, *CALC, 241, 245, 247, 256	Optional
ACTTMR	Activation timer	1-2550, ***SAME**, *NOMAX	Optional
INACTTMR	Inactivity timer	1-30, ***SAME**, *ATTACH, *NOMAX, *SEC15, *SEC30	Optional
SNPTDEV	SNA pass-through device desc	*Name*, ***SAME**, *NONE	Optional
SNPTGRP	SNA pass-through group name	*Name*, ***SAME**, *NONE	Optional
LOGON	Host signon/logon command	*Character value*, ***SAME**, *NONE	Optional
PACING	Pacing	1-7, ***SAME**	Optional
LINESPEED	Line speed	***SAME**, *TYPE, 150, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 19200, 38400	Optional
WORDLEN	Word length	***SAME**, *TYPE, 7, 8	Optional
PARITY	Type of parity	***SAME**, *TYPE, *EVEN, *ODD, *NONE, *MARK, *SPACE	Optional
STOPBITS	Stop bits	***SAME**, *TYPE, 1, 2	Optional
TRANSFORM	Host print transform	***SAME**, *NO, *YES	Optional
MFRTYPMDL	Manufacturer type and model	*Character value*, ***SAME**	Optional
PPRSRC1	Paper source 1	***SAME**, *MFRTYPMDL, *LETTER, *LEGAL, *EXECUTIVE, *LEDGER, *A3, *A4, *A5, *B4, *B5, *CONT80, *CONT132, *NONE	Optional
PPRSRC2	Paper source 2	***SAME**, *MFRTYPMDL, *LETTER, *LEGAL, *EXECUTIVE, *LEDGER, *A3, *A4, *A5, *B4, *B5, *CONT80, *CONT132, *NONE	Optional
ENVELOPE	Envelope source	***SAME**, *MFRTYPMDL, *MONARCH, *NUMBER9, *NUMBER10, *B5, *C5, *DL, *NONE	Optional
ASCII899	ASCII code page 899 support	***SAME**, *NO, *YES	Optional
IMGCFG	Image configuration	*Character value*, ***SAME**, *NONE	Optional
MAXPNDRQS	Maximum pending requests	1-31, ***SAME**	Optional
PRTCVT	Print while converting	***SAME**, *YES, *NO	Optional
PRTRQSTMR	Print request timer	1-3600, ***SAME**, *NOMAX	Optional
FORMDF	Form definition	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Form definition	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

Keyword	Description	Choices	Notes
CHRID	Character identifier	Single values: ***SAME**, *SYSVAL Other values: *Element list*	Optional
	Element 1: Graphic character set	1-32767	
	Element 2: Code page	1-32767	
RMTLOCNAME	Remote location	*Element list*	Optional
	Element 1: Name or address	*Character value*, ***SAME**	
LCLLOCNAME	Local location	*Communications name*, ***SAME**, *NETATR	Optional
MODE	Mode	*Communications name*, ***SAME**, QSPWTR, *NETATR	Optional
IGCFEAT	DBCS feature	Single values: ***SAME** Other values: *Element list*	Optional
	Element 1: Device features	*Character value*	
	Element 2: Last code point	X'4141'-X'FFFE'	
USRDFNOPT	User-defined options	Values (up to 4 repetitions): *Character value*, ***SAME**, *NONE	Optional
USRDFNOBJ	User-defined object	Single values: ***SAME**, *NONE Other values: *Element list*	Optional
	Element 1: Object	*Qualified object name*	
	Qualifier 1: Object	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
	Element 2: Object type	*DTAARA, *DTAQ, *FILE, *USRIDX, *PSFCFG, *USRQ, *USRSPC	
USRDTATFM	Data transform program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Data transform program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
USRDRVPGM	User-defined driver program	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: User-defined driver program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
SYSDRVPGM	System driver program	*Character value*, ***SAME**	Optional
SECURECNN	Secure connection	***SAME**, *NO, *YES	Optional
VLDL	Validation list	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Validation list	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
PUBLISHINF	Publishing information	*Element list*	Optional
	Element 1: Support duplex	***SAME**, *SIMPLEX, *DUPLEX, *UNKNOWN	
	Element 2: Support color	***SAME**, *NOCOLOR, *COLOR, *UNKNOWN	
	Element 3: Pages per minute black	1-32767, ***SAME**, *UNKNOWN	
	Element 4: Pages per minute color	1-32767, ***SAME**, *UNKNOWN	
	Element 5: Location	*Character value*, ***SAME**, *BLANK	
	Element 6: Data streams supported	Single values: ***SAME**, *UNKNOWN Other values (up to 5 repetitions): *PCL, *PS, *PDF, *IPDS, *SCS	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Keyword	Description	Choices	Notes
RMTNETID	Remote network identifier	*Communications name*, ***SAME**, *NETATR, *NONE	Optional
WSCST	Workstation customizing object	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Workstation customizing object	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Switched line list (SWTLINLST)

Specifies the name of the switched lines to which a 3812 printer is associated when DEVCLS(*LAN) and LANATTACH(*LEXLINK) or LANATTACH(*USRDFN) are specified. The types of switched lines this printer may associate with are: frame relay direct, Token-Ring, Ethernet IEEE 802.3, and Ethernet with all standards specified.

*SAME
    The value does not change.

*NONE
    No switched lines are specified.

switched-line
    Specify the name of the switched line. A maximum of 8 switched lines can be specified.

LAN remote adapter address (ADPTADR)

Specifies the LAN address of the remote printer when DEVCLS(*LAN) and LANATTACH(*LEXLINK) or LANATTACH(*USRDFN) are specified.

*SAME
    The value does not change.

printer-address
    Specify the 12-character hexadecimal LAN address of the remote printer. Valid values range from 000000000001 through FFFFFFFFFFFE.

Adapter type (ADPTTYPE)

Specifies the type of LAN printer adapter to be used when DEVCLS(*LAN) and LANATTACH(*LEXLINK) or LANATTACH(*USRDFN) are specified.

*SAME
> The value does not change.

*INTERNAL
> The printer has an internal LAN adapter card.

*EXTERNAL
> The printer has an external LAN adapter.

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Adapter connection type (ADPTCNNTYP)

Specifies the type of ports supported by the external LAN printer adapter when DEVCLS(*LAN) and ADPTTYPE(*EXTERNAL) are specified.

Note: This parameter is ignored when ADPTTYPE(*INTERNAL) is specified.

*SAME
> The value does not change.

*PARALLEL
> The LAN printer adapter supports one or more parallel ports.

*SERIAL
> The LAN printer adapter supports one or more serial ports.

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Advanced function printing (AFP)

Specifies whether or not this printer does advanced function printing. Most IPDS printers can be configured with AFP(*YES) or AFP(*NO). Most non-IPDS printers can be configured only with AFP(*NO). This parameter is only used if *LCL, *RMT, or *LAN is specified on the **Device class (DEVCLS)** parameter and *IPDS is specified on the **Device type (TYPE)** parameter.

*SAME
> The value does not change.

*NO   This printer is not used for advanced function printing.

*YES   This printer is used for advanced function printing.

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Port number (PORT)

Specifies the port number for printer devices. Valid values range from 0 through 65535. Some printer devices may further restrict the valid value range.

For twinaxial attached printers: Valid values range from 0 through 7.

For printers attached to a TCP/IP network, where DEVCLS(*LAN), TYPE(3812), and LANATTACH(*IP) are specified:

Note: If the device supports the Simple Network Management Protocol (SNMP), SYSDRVPGM(*IBMSNMPDRV), or the HP Printer Job Language (PJL), SYSDRVPGM(*IBMPJLDRV), refer to the device's documentation, or contact the device manufacturer to determine the port number.

If the device supports the Internet Printing Protocol (IPP), SYSDRVPGM(*IBMIPPDRV), the well known port number is 631.

For printers attached to the ASCII workstation controller: Valid values range from 0 through 17 and indicate the port of the ASCII workstation controller to which the printer is attached. Without the 12-port expansion feature, only ports 0 through 5 are valid. With the 12-port expansion feature, ports 6 through 17 are added.

For printers attached to a LAN, where DEVCLS(*LAN) TYPE(3812), and LANATTACH(*LEXLINK) or LANATTACH(*USRDFN):

Note: If ADPTTYPE(*EXTERNAL) is specified, the port number value indicates which parallel or serial port to use, if there is more than one port on the external LAN adapter. Valid values range from 0 - 17.

If ADPTTYPE(*INTERNAL) is specified, the port number is not required.

*SAME
The value does not change.

port-number
Specify the port number. Valid values range from 0 through 65535. Some printer devices may further restrict the valid value range.

Switch setting (SWTSET)

Specifies the switch setting for local twinaxial devices.

Valid values range from 0 to 6.

*SAME
The value does not change.

Local location address (LOCADR)

Specifies the local location address for this device.

The possible values range from 00 to FE. The type of controller to which the device is being attached determines which values are valid.

Controller
   Valid Values

5251   00, 02-09

5294   00-1B

5394   00-14

5494   00-37

3174   02-41

3274   02-41

SNA Host
   01-FE

4701   02-FE

4702   02-FE

4680   02-54

4684   02-FE

FBSS   02-FE

*SAME
        The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
        The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Language type (LNGTYPE)

For ASCII printers, describes the default country keyboard language identifier for this printer.

The following languages can be used by ASCII devices only if either host print transform or work station customization are also used: ALI, BGB, CSB, ESB, HNB, IRB, JPB, LTB, LVB, MKB, PKB, PLB, RMB, RUB, SKB, SQB, TRB, UAB, and YGI.

*SAME
        The value does not change.

*SYSVAL
        The system uses the QKBDTYPE system value.

language-type
        Specify the correct country keyboard language identifier for this printer from the following table.

Identifier
        Language(Country) - ASCII Device Groups

ALI   Albania

CLB   Arabic X/Basic - D*

AGB   Austria/Germany - A, B

AGI   Austria/Germany Multinational - A, B

BLI   Belgium Multinational - B

BRB   Brazilian Portuguese

BGB   Bulgaria

CAB   Canadian French - A, B

CAI   Canadian French Multinational - A, B

SPB   Catalan

YGI   Croatia/Serbia (Latin)/Slovenia

CYB   Cyrillic

CSB   Czech Republic

DMB   Denmark - B

DMI   Denmark Multinational - B

ESB   Estonia

FNB   Finland/Sweden - B

FNI   Finland/Sweden Multinational - B

FAB   France (Azerty) - A, B

FAI   France (Azerty) Multinational - A, B

GNB   Greek (see note)

NCB   Hebrew - D*

HNB   Hungary

ICB   Iceland

ICI   Iceland Multinational

IRB   Iran (Farsi)

ITB   Italy - A, B

ITI   Italy Multinational - A, B

JPB   Japan Latin Extended

ROB   Latin-2/ROECE

LVB   Latvia

LTB   Lithuania

MKB   FYR Macedonia (Former Yugoslav Republic)

NEB   Netherlands

NEI   Netherlands Multinational

NWB   Norway - B

NWI   Norway Multinational - B

PLB   Poland

PRB   Portugal - B

PRI   Portugal Multinational - B

RMB   Romania

RUB   Russia

SQB   Serbia (Cyrillic)

SKB   Slovakia

SPB   Spain - B

SPI   Spain Multinational - B

SSB   Spanish Speaking - B

SSI   Spanish Speaking Multinational - B

SWB   Sweden - B

SWI   Sweden Multinational - B

SFI   Switzerland/France Multinational - B

SGI   Switzerland/Germany Multinational - B

THB   Thailand

TKB   Turkey (Qwerty)

TRB   Turkey (F)

UAB   Ukraine

UKB   United Kingdom - A, B

UKI   United Kingdom Multinational - A, B

USB   United States/Canada - A, B, C

USI   United States/Canada Multinational - A, B, C

PKB   Urdu

YGI   Languages of the former Yugoslavia

Note: The GNB code is the current identifier for Greece. The GKB code was used prior to V2R1, and continues to be supported, but provides fewer characters than the recommended GNB code.

Print quality (PRTQLTY)

Specifies whether the default print quality for ASCII printers should be draft (*DRAFT), standard (*STD), or near-letter quality (*NLQ), from least to best quality. All ASCII printer types (with all emulations) support this parameter. If the printer is emulating a 5219 (EMLDEV parameter), this quality setting is overridden by individual printer files sent to this printer.

Note: All twinaxial printer emulations support this parameter. If the ASCII printer is emulating a 5219 twinaxial printer, then this print quality setting can be overridden by individual print files sent to this printer.

*SAME
> The value does not change.

*STD   Specifies standard quality setting.

*DRAFT
> Specifies draft quality setting.

*NLQ   Specifies near letter quality setting.

Font identifier (FONT)

Specifies the font identifier and the point size used by the 3812, 3816, 5219 printers (including ASCII printers emulating the 5219 printer), and IPDS printers. A font identifier (up to 10 digits) is used with this printer file. Each font identifier has an implied characters-per-inch (CPI) value. If an identifier or point size is not specified, the system automatically sets one.

Note: Some fonts may be substituted by the printer. Consult the various printer reference guides for details.

*SAME
> The value does not change.

Element 1: Font identifier

identifier
> Specify the font identifier associated with this printer.

Element 2: Point size

*NONE
> The point size is supplied by the system and is determined by the specified font identifier.

point-size
> Specify a point size ranging from 0.1 through 999.9.

Form feed (FORMFEED)

Specifies the form feed attachment used for this spooled file. This parameter determines how forms are fed into the printer. Not all printers support this parameter. Refer to the Create Printer File (CRTPRTF) command to determine if this parameter is supported.

Note: The FORMFEED parameter is overridden by the value specified on the PPRSRC1 parameter when the host print transform function is enabled.

*SAME
> The value does not change.

*TYPE Form feed value is determined by the system based on printer type.

*CONT
> Continuous forms are used by the printer. Some printers (3812, 4216) don't have tractor feed attachments (they don't actually support continuous forms). But in some cases, *CONT must be specified to match what the emulated twinaxial printer supports.

*CONT2
> Continuous forms are used by the printer. The form is fed from the secondary tractor feed attachment. The secondary tractor feed attachment must be on the printer device.

*CUT Single-cut sheets are used by the printer.

*AUTOCUT
> Single-cut sheets are fed into the printer automatically. The printer must have the sheet feed attachment. The *AUTOCUT feature is valid for 4207, 4208, 4216, 4224, and 5204 printers that are emulating a 5219 printer.

Separator drawer (SEPDRAWER)

Specifies which drawer is selected for printing separators.

*SAME
> The value does not change.

*FILE   The separator pages are printed on paper from the same drawer as the rest of the spooled file.

separator-drawer
> Specify a value ranging from 1 through 255 to indicate the drawer from which the separator pages are printed.
>
> **Note:** For some printers, SEPDRAWER(3) implies an envelope drawer.

1   The separator pages are printed from drawer 1.

2   The separator pages are printed from drawer 2.

3   The separator pages are printed from drawer 3.

Separator program (SEPPGM)

Specifies a style of separator page by allowing you to call a user exit program while printing job and file separators.

*SAME
> The value does not change.

*NONE
> The separator pages are not changed.

exit-program-name
> Specify an exit program name.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the job is used to locate the exit program. If no library is specified as the current library for the job, the QGPL library is used.

library-name
> Specify the name of the library where the exit program is located.

Number of drawers (NBRDRAWER)

Specifies, for ASCII printers defined with *AUTOCUT for the form feed (FORMFEED parameter), whether the printer's sheet feed attachment supports 1, 2, or 3 drawers. This parameter is not applicable if form feed is *CONT or *CUT.

Note: The number of drawers parameter specifies how many drawers the printer physically supports, not which drawer the paper is selected from. The individual print files sent to the printer will dictate which drawer is selected.

*SAME
> The value does not change.

1   One drawer is physically supported.

2   Two drawers are physically supported.

3   Three drawers are physically supported.

For the printers that support FORMFEED(*AUTOCUT), the following number of drawers are supported:

1. For 4207-1 and 4208 printers, only NBRDRAWER(1) is valid.
2. For a 4224 printer, only NBRDRAWER(3) is valid.
3. For 4207-2, 4216, and 5204 printers, NBRDRAWER values of 1, 2, and 3, are supported.

Note: NBRDRAWER(3) implies that two paper drawers and an envelope drawer are used.

Printer error message (PRTERRMSG)

Specifies whether the device has inquiry messages or informational messages for recoverable errors. This parameter is not applicable for printers attached to ASCII work station controllers.

*SAME
        The value does not change.

*INQ   Inquiry messages are sent for recoverable errors.

*INFO
        Informational messages are sent for recoverable errors.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

*SAME
        The value does not change.

*CTLD
        Messages are sent to the message queue defined in the attached controller. The message queue is determined when the device is varied on.

*SYSOPR
        Messages are sent to the system operator message queue (QSYS/QSYSOPR).

message-queue-name
        Specify the name of the message queue to which operational messages are sent.

*LIBL   All libraries in the job's library list are searched until the first match is found.

*CURLIB
        The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name
        Specify the name of the library to be searched.

Maximum length of request unit (MAXLENRU)

Specifies, for remote display stations and printers, the maximum request unit (RU) length (in bytes) allowed.

*SAME
> The value does not change.

*CALC
> The system determines the best value to use. A value of *CALC must be specified for those devices not attached to an X.25 network. *CALC may be specified for devices attached to an X.25 network. In all instances, *CALC is the recommended value.

maximum-length-request-unit
> Specify 241 or 247. These values are valid only for devices attached to X.25 networks. If the recommended value of *CALC is not specified, it is recommended that 241 be used for ELLC and 247 be used for QLLC. The values 245 and 256 can be specified, but the result is the same as specifying *CALC.

Activation timer (ACTTMR)

Specifies the amount of time (in seconds) to wait for the device to respond to the activation request from the host iSeries system. If the device does not respond within this time, it is considered not available.

*NOMAX
> The device waits forever.
>
> **Note:** *NOMAX is valid only when DEVCLS(*LAN) and AFP(*YES), or when are specified.

activation-timer
> Specify a number indicating the number of seconds before the device is considered not available.
>
> **Note:** If LANATTACH is *LEXLINK, and the specified number of seconds has elapsed, an inquiry message is issued.

Inactivity timer (INACTTMR)

Specifies an inactivity timer (time-out) value. This parameter also specifies what happens when the time-out value is exceeded, dependent on other attributes of the device:

- For devices connected using SNA pass-through (SNPT) support, the user is informed by a message to QSYSOPR and the session is ended when the amount of time that the device is not bound to a host application exceeds the time-out value. The user must reestablish the connection and session.
- For devices with an application type value of *APPINIT, *DEVINIT, or *NRF, the session is ended when the device is inactive (the file opened against the device is closed and no additional requests to open files are received for the device) for a period of time that exceeds the time-out value.

Note: This timer is not used by devices allocated to a subsystem (normal interactive use) because the subsystem always has a file open for the device. The timer is used by batch jobs that open and close files for the device.

For all other attachments, valid values range from 1 through 30 minutes.

*SAME
> The value does not change.

*ATTACH

> This value varies by the value on the physical attachment (ATTACH parameter) and certain values on the device class (DEVCLS) and application type (APPTYPE) parameters.
>
> 1. For DEVCLS(*SNPT) or APPTYPE(*DEVINIT) support, *ATTACH maps to *NOMAX.
> 2. For DEVCLS(*LAN), *ATTACH maps to *SEC15.
> 3. For APPTYPE(*NRF) and APPTYPE(*APPINIT) support, *ATTACH maps to 1 minute.

*NOMAX

> Maximum inactivity time is not tracked.

*SEC15

> A 15-second time-out period is used.

*SEC30

> A 30-second time-out period is used.

inactivity-timer

> Specify a time-out value.

SNA pass-through device desc (SNPTDEV)

Specifies the name of the associated SNA pass-through device that is attached to a host or advanced program-to-program communications (APPC) controller.

*SAME

> The value does not change.

*NONE

> No name is specified.

associated-device-name

> Specify the name of a device that is attached to a host or an APPC controller that is associated with this device.

SNA pass-through group name (SNPTGRP)

Specifies the name configured for a group of host devices in a configuration list. This indicates that this device is tied to any one of the devices in that group which is available.

*SAME

> The value does not change.

*NONE

> No name is specified.

group-name

> Specify the name configured for a group of host devices that must be associated with this device.

Host signon/logon command (LOGON)

Specifies the sign-on (logon) text. This parameter is allowed when DEVCLS(*SNPT) or APPTYPE(*NRF) is specified. APPTYPE(*NRF) specifies the logon string that is sent to the host system when a request is made to establish a session. DEVCLS(*SNPT) specifies the sign-on text that is sent to the host system after starting SNA pass-through support.

Specifies the logon string that is sent to the system service control point (SSCP) on the host network when the file is opened.

*SAME
> The value does not change.

*NONE
> No text is sent to the host system.

host-logon-command
> Specify text that is sent to the host system. The text must be enclosed in apostrophes if it contains blanks or other special characters. All apostrophes within the text must be represented by two apostrophes. A maximum of 256 characters can be specified.

Pacing value (PACING)

Specifies the SNA pacing value used for request/response units (RUs).

*SAME
> The value does not change.

pacing-value
> Specify a value, ranging from 1 through 7.

Line speed (LINESPEED)

Specifies the line speed in bits per second (bps).

*SAME
> The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE will select 19200 bits per second for all printers.

line-speed
> Valid values are: 150, 300, 600, 1200, 1800, 2400, 3600, 4800, 7200, 9600, 19200, and 38400 bits per second.

Word length (WORDLEN)

Specifies, for ASCII devices, the word length (bits per character) used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the word length must be the same as the word length selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the word length must be the same as the word length specified for the display's device description.

Some devices do not support all word lengths; verify that your device supports the word length you intend to use.

*SAME
>The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE selects 8-bit word lengths for all printers.

7 Specifies 7-bit word lengths.

8 Specifies 8-bit word lengths.

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Type of parity (PARITY)

Specifies, for ASCII devices, the type of parity used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the type of parity must be the same as the type of parity selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the type of parity must be the same as the type of parity specified for the display's device description.

Some devices do not support all types of parity; verify that your device supports the type of parity you intend to use.

*SAME
>The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE will select *EVEN (Even parity) for all printers.

*EVEN
>Specifies Even parity.

*ODD Specifies Odd parity.

*NONE
>Specifies that no parity bit is used.

*MARK
>Specifies Mark parity (1 is used for the parity).

*SPACE
>Specifies Space parity (0 is used for the parity).

<div align="right">Top</div>

Stop bits (STOPBITS)

Specifies, for ASCII devices, the number of stop bits used to communicate over the attachment between the ASCII work station controller and the device. For modem and Post Telephone and Telegraph (PTT) attachments, the number of stop bits must be the same as the number of stop bits selected for the modem. For auxiliary printers connected to the auxiliary port of a display station, the number of stop bits must be the same as the number of stop bits specified for the display's device description.

Some devices do not support all numbers of stop bits; verify that your device supports the number of stop bits you intend to use.

*SAME
>The value does not change.

*TYPE The system uses the suggested setting for this device type. *TYPE will select 1 stop bit for all printers.

1 Specifies 1 stop bit.

2 Specifies 2 stop bits.

Host print transform (TRANSFORM)

Specifies whether the printer uses host print transform support.

*SAME
The value does not change.

*NO The printer does not use host print transform support.

*YES The printer uses host print transform support.

Note: If TRANSFORM is changed from *NO to *YES, and host print transform has never been enabled for the device, the MFRTYPMDL parameter MUST be specified.

Manufacturer type and model (MFRTYPMDL)

Specifies the manufacturer, type, and model for a printer using the host print transform function.

*SAME
The value does not change.

character-value
Specify the corresponding manufacturer, type, and model for a printer.

The following list shows the values to be specified for the device you are using:

Note: If *WSCSTxxx is specified for MFRTYPMDL, a workstation customizing object must be specified.

Manufacturer Type and Model Table

```
*IBM2380      IBM 2380 Personal Printer Series II
              IBM 2380 Plus Printer
*IBM2381      IBM 2381 Personal Printer Series II,
              IBM 2381 Plus Printer
*IBM2390      IBM 2390 Personal Printer Series II
              IBM 2390 Plus Printer
*IBM2391      IBM 2391 Personal Printer Series II
              IBM 2391 Plus Printer
*IBM3112      IBM 3112 Page Printer
*IBM3116      IBM 3116 Page Printer
*IBM3130      IBM 3130 Advanced Function Printer
*IBM3812      IBM 3812 Pageprinter
*IBM3816      IBM 3816 Pageprinter
*IBM3912HP    IBM 3912 Page Printer (HP Mode)
*IBM3916HP    IBM 3916 Page Printer (HP Mode)
*IBM39302     IBM 39302 IBM 3930-02S Page Printer
              IBM 39302 IBM 3930-02D Page Printer
*IBM39303     IBM 39303 IBM 3930-03S Page Printer
              IBM 39303 IBM 3930-03D Page Printer
*IBM4019      IBM 4019 LaserPrinter
              IBM 4019E LaserPrinter E
*IBM4019HP    IBM 4019 LaserPrinter (HP Mode)
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                  IBM 4019E LaserPrinter E (HP Mode)
*IBM4029          IBM 4029-010 LaserPrinter 5E
                  IBM 4029-020 LaserPrinter 6
                  IBM 4029-030 LaserPrinter 10
                  IBM 4029-040 LaserPrinter 10L
*IBM4029HP        IBM 4029-010 LaserPrinter 5E (HP Mode)
                  IBM 4029-020 LaserPrinter 6 (HP Mode)
                  IBM 4029-030 LaserPrinter 10 (HP Mode)
                  IBM 4029-040 LaserPrinter 10L (HP Mode)
*IBM4037          IBM 4037 5E Printer
*IBM4039HP        IBM 4039 LaserPrinter 10D (HP Mode)
                  IBM 4039 LaserPrinter 10D Plus (HP Mode)
                  IBM 4039 LaserPrinter 10R (HP Mode)
                  IBM 4039 LaserPrinter 10R Plus (HP Mode)
                  IBM 4039 LaserPrinter 12R (HP Mode)
                  IBM 4039 LaserPrinter 12R Plus (HP Mode)
                  IBM 4039 LaserPrinter 12L (HP Mode)
                  IBM 4039 LaserPrinter 12L Plus (HP Mode)
                  IBM 4039 LaserPrinter 16L (HP Mode)
                  IBM 4039 LaserPrinter 16L Plus (HP Mode)
*IBM4070          IBM 4070 IJ (IBM Mode)
*IBM4070EP        IBM 4070 IJ (Epson Mode)
*IBM4072          IBM 4072 ExecJet
*IBM4076          IBM 4076 ExecJet II Printer (HP Mode)
*IBM42011         IBM 4201-1 Proprinter
*IBM42012         IBM 4201-2 Proprinter II
*IBM42013         IBM 4201-3 Proprinter III
*IBM42021         IBM 4202-1 Proprinter XL
*IBM42022         IBM 4202-2 Proprinter II XL
*IBM42023         IBM 4202-3 Proprinter III XL
*IBM42071         IBM 4207-1 Proprinter X24
*IBM42072         IBM 4207-2 Proprinter X24E
*IBM42081         IBM 4208-1 Proprinter XL24
*IBM42082         IBM 4208-2 Proprinter XL24E
*IBM4212          IBM 4212 Proprinter 24P
*IBM4216          IBM 4216-10 Personal Pageprinter
*IBM4226          IBM 4226-302 Printer
*IBM4230          IBM 4230-4S3 Printer (IBM Mode)
                  IBM 4230-4I3 Printer (IBM Mode)
*IBM4232          IBM 4232-302 Printer (IBM Mode)
*IBM4244ASF       IBM4244 Printer (single tractor feed and ASF)
*IBM4244DUAL      IBM4244 Printer (dual tractor feeds)
*IBM4244MAN       IBM4244 Printer (single tractor or manual
                                 feed selection)
*IBM4247ASF       IBM4247 Printer (single tractor feed and ASF)
*IBM4247DUAL      IBM4247 Printer (dual tractor feeds)
*IBM4247MAN       IBM4247 Printer (single form feed or
                                 manual selection)
*IBM4308          IBM Infoprint Color 8
*IBM4312          IBM Network Printer 12
*IBM4317          IBM Network Printer 17
*IBM4320          IBM InfoPrint 20
*IBM4322          IBM InfoPrint 21
*IBM4324          IBM Network Printer 24
*IBM4332          IBM InfoPrint 32
*IBM4340          IBM InfoPrint 40
*IBM47121         IBM 4712-1 Transaction Printer
*IBM47122         IBM 4712-2 Transaction Printer
*IBM47221         IBM 4722-1 Document Printer
*IBM47222         IBM 4722-2 Document Printer
*IBM4770          IBM 4770 InkJet Transaction Printer
*IBM4912          IBM InfoPrint 12
*IBM5152          IBM 5152 Graphics Printer
*IBM5201          IBM 5201-2 Quietwriter
*IBM5202          IBM 5202-1 Quietwriter III
*IBM5204          IBM 5204-1 Quickwriter
*IBM5216          IBM 5216 Wheelprinter
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*IBM5575        IBM 5579-H02 Printer
                IBM 5579-K02 Printer
                IBM 5577-T02 Printer
                IBM 5579-S02 Printer
                IBM 5577-K02 Printer
                IBM 5577-J02 Printer
                IBM 5577-G02 Printer
                IBM 5577-H02 Printer
                IBM 5577-F02 Printer
                IBM 5577-B02 Printer
                IBM 5575-H02 Printer
                IBM 5575-F02 Printer (with SBCS Cartridge)
                IBM 5575-B02 Printer (with SBCS Cartridge)
                IBM 5573-K02 Printer
                IBM 5573-J02 Printer
                IBM 5573-H02 Printer
                IBM 5573-G02 Printer
                IBM 5572-B02 Printer
                IBM 5417-011 Printer
                IBM 5407-011 Printer
                IBM 5327-011 Printer
                IBM 4208-502 Printer
*IBM6400        IBM 6400 Printers (IBM Mode)
*IBM6400EP      IBM 6400 Printers (Epson Mode)
*IBM6404        IBM 6404 Printers (IBM Mode)
*IBM6404EP      IBM 6404 Printers (Epson Mode)
*IBM6408        IBM 6408-A00 Printer (IBM Mode)
                IBM 6408-CTA Printer (IBM Mode)
*IBM6408EP      IBM 6408-A00 Printer (Epson Mode)
                IBM 6408-CTA Printer (Epson Mode)
*IBM6412        IBM 6412-A00 Printer (IBM Mode)
                IBM 6412-CTA Printer (IBM Mode)
*IBM6412EP      IBM 6412-A00 Printer (Epson Mode)
                IBM 6412-CTA Printer (Epson Mode)
*IBMPAGES       IBM 5589-H01 Printer
                IBM 5588-H02 Printer
                IBM 5587-H01 Printer
                IBM 5586-H02 Printer
                IBM 5585-H01 Printer
                IBM 5584-K02 Printer
                IBM 5584-H02 Printer
                IBM 5584-G02 Printer
*IBMPAGESNPB    Same as *IBMPAGES, but without text
                positioning adjustments for a no-print border
*IBMPAGES300    IBM Network Printer 12 (with PAGES feature)
                IBM Network Printer 17 (with PAGES feature)
                IBM Network Printer 24 (with PAGES feature)
                IBM Infoprint 20 (with PAGES feature)
                IBM Infoprint 32 (with PAGES feature)
                IBM Infoprint 40 (with PAGES feature)
*IBMPAGES300NPB Same as *IBMPAGES300, but without text
                positioning adjustments for a no-print border
*INFOPRINT8C    IBM Infoprint Color 8
*INFOPRINT12    IBM Infoprint 12
*INFOPRINT20    IBM Infoprint 20
*INFOPRINT21    IBM Infoprint 21
*INFOPRINT32    IBM Infoprint 32
*INFOPRINT40    IBM Infoprint 40
*INFOPRINT70    IBM Infoprint 70
*INFOPRINT85    IBM Infoprint 2085
*INFOPRINT105   IBM Infoprint 2105
*INFOPRINT1116  IBM Infoprint 1116
*INFOPRINT1120  IBM Infoprint 1120
*INFOPRINT1125  IBM Infoprint 1125
*INFOPRINT1130  IBM Infoprint 1130
*INFOPRINT1140  IBM Infoprint 1140
*INFOPRINT1145  IBM Infoprint 1145
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*INFOPRINT1220C IBM Infoprint 1220C
*INFOPRINT1222  IBM Infoprint 1222
*INFOPRINT1226  IBM Infoprint 1226
*INFOPRINT1228C IBM Infoprint 1228C
*INFOPRINT1312  IBM Infoprint 1312
*INFOPRINT1332  IBM Infoprint 1332
*INFOPRINT1352  IBM Infoprint 1352
*INFOPRINT1357C IBM Infoprint 1357C
*INFOPRINT1372  IBM Infoprint 1372
*INFOPRINT2000  IBM Infoprint 2000
*INFOPRINT2085  IBM Infoprint 2085
*INFOPRINT2105  IBM Infoprint 2105
*CANLIPS3       Canon LIPS3 DBCS Printers
*CANLIPS3NPB    Same as *CANLIPS3, but without text
                positioning adjustments for a no-print border
*CPQPM15        COMPAQ** PageMark 15 (HP Mode)
*CPQPM20        COMPAQ PageMark 20 (HP Mode)
*EPAP2250       Epson ActionPrinter 2250
*EPAP3250       Epson ActionPrinter 3250
*EPAP5000       Epson ActionPrinter 5000
*EPAP5500       Epson ActionPrinter 5500
*EPDFX5000      Epson DFX-5000
*EPDFX8000      Epson DFX-8000
*EPEPL7000      Epson EPL-7000
*EPEPL8000      Epson EPL-8000
*EPFX850        Epson FX-850
*EPFX870        Epson FX-870
*EPFX1170       Epson FX-1170
*EPLQ510        Epson LQ-510
*EPLQ570        Epson LQ-570
*EPLQ860        Epson LQ-860
*EPLQ870        Epson LQ-870
*EPLQ1070       Epson LQ-1070
*EPLQ1170       Epson LQ-1170
*EPLQ2550       Epson LQ-2550
*EPLX810        Epson LX-810
*EPSQ870        Epson SQ-870
*EPSQ1170       Epson SQ-1170
*ESCPDBCS       Epson ESC/P DBCS Printers
*HPII           HP LaserJet** Series II
*HPIID          HP LaserJet IID
*HPIIP          HP LaserJet IIP
*HPIII          HP LaserJet III
*HPIIID         HP LaserJet IIID
*HPIIIP         HP LaserJet IIIP
*HPIIISI        HP LaserJet IIISi
*HP4            HP LaserJet 4
*HP5            HP LaserJet 5 series
*HP5SI          HP LaserJet 5Si
*HP6            HP LaserJet 6 series
*HP310          HP DeskJet 310
*HP320          HP DeskJet 320
*HP500          HP DeskJet 500
*HP520          HP DeskJet 520
*HP540          HP DeskJet 540
*HP550C         HP DeskJet 550C
*HP560C         HP DeskJet 560C
*HP1100         HP LaserJet 1100 series
*HP1200C        HP DeskJet 1200C
*HP1600C        HP DeskJet 1600C
*HP4000         HP LaserJet 4000 series
*HP5000         HP LaserJet 5000 series
*HP8000         HP LaserJet 8000 series
*HPCOLORLJ      HP Color LaserJet 5
*HPDBCS         HP LaserJet-compatible printers for
                Double Byte Character Set (DBCS) input.
*HPPAINT        HP PaintJet
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                    HP PaintJet XL
                    HP PaintJet XL300
*LEX2380            Lexmark Forms Printer 2380 Plus
*LEX2381            Lexmark Forms Printer 2381 Plus
*LEX2390            Lexmark Forms Printer 2390 Plus
*LEX2391            Lexmark Forms Printer 2391 Plus
*LEX4227            Lexmark 4227 Forms Printer
*LEXMARKC750        Lexmark C750 Color Printer
*LEXMARKC910        Lexmark C910 Color Printer
*LEXMARKC912        Lexmark C912 Color Printer
*LEXMARKE322        Lexmark E322 Printer
*LEXMARKE323        Lexmark E323 Printer
*LEXMARKT420        Lexmark T420 Printer
*LEXMARKT520        Lexmark T520 Printer
*LEXMARKT522        Lexmark T522 Printer
*LEXMARKT620        Lexmark T620 Printer
*LEXMARKT622        Lexmark T622 Printer
*LEXMARKT630        Lexmark T630 Printer
*LEXMARKT632        Lexmark T632 Printer
*LEXMARKT634        Lexmark T634 Printer
*LEXMARKW812        Lexmark W812 Printer
*LEXMARKW820        Lexmark W820 Printer
*LEXOPTRA           Lexmark Optra Family (HP Mode)
*LEXOPTRAC          Lexmark Optra C Color Printer
*LEXOPTRAN          Lexmark Optra N Printer
*LEXOPTRAS          Lexmark Optra S Printer family
*LEXOPTRASC         Lexmark Optra SC Color Printer
                    Lexmark Optra Color 1200 Printer
*LEXOPTRAT          Lexmark Optra T Printer series
*LEXOPTRAW          Lexmark Optra W Printer series
*NECP2              NEC P2 Pinwriter
*NECP2200           NEC P2200 Pinwriter
*NECP2200XE         NEC P2200 XE Pinwriter
*NECP5200           NEC P5200 Pinwriter
*NECP5300           NEC P5300 Pinwriter
*NECP6200           NEC P6200 Pinwriter
*NECP6300           NEC P6300 Pinwriter
*NECPCPR201         NEC PC-PR101 DBCS Printer
                    NEC PC-PR201 DBCS Printer
*NONE               Printer supports page-descriptor language
                    generated by the CVTIMG API.
                    NOTE: Spoolfiles with device type of *SCS or
                    *AFPDS cannot be processed by the Host
                    Print Transform function for these printers.
*OKI184IBM          Okidata Microline 184 Turbo (IBM Mode)
*OKI320IBM          Okidata Microline 320 (IBM Mode)
*OKI321IBM          Okidata Microline 321 (IBM Mode)
*OKI390IBM          Okidata Microline 390 Plus (IBM Mode)
*OKI391IBM          Okidata Microline 391 Plus (IBM Mode)
*OKI393IBM          Okidata Microline 393 Plus (IBM Mode)
*OKI590IBM          Okidata Microline 590 (IBM Mode)
*OKI591IBM          Okidata Microline 591 (IBM Mode)
*OKI400             Okidata OL400 LED Page Printer
*OKI800             Okidata OL800 LED Page Printer
*OKI810             Okidata OL810 LED Page Printer
*OKI820             Okidata OL820 LED Page Printer
*OKI3410            Okidata Pacemark 3410
*PAN1123EP          Panasonic KX-P1123 (Epson Mode)
*PAN1124EP          Panasonic KX-P1124 (Epson Mode)
*PAN1124IEP         Panasonic KX-P1124i (Epson Mode)
*PAN1180EP          Panasonic KX-P1180 (Epson Mode)
*PAN1180IEP         Panasonic KX-P1180i (Epson Mode)
*PAN1191EP          Panasonic KX-P1191 (Epson Mode)
*PAN1624EP          Panasonic KX-P1624 (Epson Mode)
*PAN1654EP          Panasonic KX-P1654 (Epson Mode)
*PAN1695EP          Panasonic KX-P1695 (Epson Mode)
*PAN2123EP          Panasonic KX-P2123 (Epson Mode)
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*PAN2124EP      Panasonic KX-P2124 (Epson Mode)
*PAN2180EP      Panasonic KX-P2180 (Epson Mode)
*PAN2624EP      Panasonic KX-P2624 (Epson Mode)
*PAN4410HP      Panasonic KX-P4410 (HP Mode)
*PAN4420HP      Panasonic KX-P4420 (HP Mode)
*PAN4430HP      Panasonic KX-P4430 (HP Mode)
*PAN4450IHP     Panasonic KX-P4450i (HP Mode)
*PAN4451HP      Panasonic KX-P4451 (HP Mode)
*PANASONIC3510  Panasonic DP-3510 Printer (HP Mode)
*PANASONIC4510  Panasonic DP-4510 Printer (HP Mode)
*PANASONIC6010  Panasonic DP-6010 Printer (HP Mode)
*XRX4215MRP     Xerox 4215/MRP (HP Mode)
*XRX4219MRP     Xerox 4219/MRP (HP Mode)
*XRX4220MRP     Xerox 4220/MRP (HP Mode)
*XRX4230MRP     Xerox 4230/MRP (HP Mode)
*XRX4235        Xerox 4235 LaserPrinting (HP Mode)
*XRX4700II      Xerox 4700 II Color Document Printer (HP Mode)
*WSCSTA3        Printer not listed (A3-sized paper)
*WSCSTA4        Printer not listed (A4-sized paper)
*WSCSTA5        Printer not listed (A5-sized paper)
*WSCSTB4        Printer not listed (B4-sized paper)
*WSCSTB5        Printer not listed (B5-sized paper)
*WSCSTCONT80    Printer not listed (8-inch continuous forms)
*WSCSTCONT132   Printer not listed (13.2 inch continuous forms)
*WSCSTEXECUTIVE Printer not listed (executive-sized paper)
*WSCSTLEDGER    Printer not listed (ledger-sized paper)
*WSCSTLEGAL     Printer not listed (legal-sized paper)
*WSCSTLETTER    Printer not listed (letter-sized paper)
*WSCSTNONE      Printer not listed (paper size not specified)
*WSCST          Printer not listed
```

Paper source 1 (PPRSRC1)

Specifies the type of paper used in paper source one.

*SAME
> The value does not change.

*MFRTYPMDL
> The system uses the suggested setting for this printer.

*LETTER
> The paper for this source is letter-sized (8.5 x 11 inches).

*LEGAL
> The paper for this source is legal-sized (8.5 x 14 inches).

*LEDGER
> The paper for this source is ledger-sized (11 x 17 inches).

*EXECUTIVE
> The paper for this source is executive-sized (7.25 x 10.5 inches).

*A3 The paper for this source is A3-sized (297mm x 420mm).

*A4 The paper for this source is A4-sized (210mm x 297mm).

*A5 The paper for this source is A5-sized (148 x 210mm).

*B4 The paper for this source is B4-sized (257mm x 364mm).

*B5 The paper for this source is B5-sized (182 x 257mm).

*CONT80

The paper for this source is continuous form (8.0 inches).

*CONT132

The paper for this source is continuous form (13.2 inches).

*NONE

No paper source number one is specified.

Paper source 2 (PPRSRC2)

Specifies the type of paper used in paper source two.

*SAME

The value does not change.

*MFRTYPMDL

The system uses the suggested setting for this printer.

*LETTER

The paper for this source is letter-sized (8.5 x 11 inches).

*LEGAL

The paper for this source is legal-sized (8.5 x 14 inches).

*LEDGER

The paper for this source is ledger-sized (11 x 17 inches).

*EXECUTIVE

The paper for this source is executive-sized (7.25 x 10.5 inches).

*A3 The paper for this source is A3-sized (297mm x 420mm).

*A4 The paper for this source is A4-sized (210mm x 297mm).

*A5 The paper for this source is A5-sized (148 x 210mm).

*B4 The paper for this source is B4-sized (257mm x 364mm).

*B5 The paper for this source is B5-sized (182 x 257mm).

*NONE

No paper source number two is specified.

Envelope source (ENVELOPE)

Specifies the type of envelopes used in the third paper source.

*SAME

The value does not change.

*MFRTYPMDL

The system uses the suggested setting for this printer.

*MONARCH

The envelopes for this source are monarch-sized (3.875 x 7.5 inches).

*NUMBER9

The envelopes for this source are number 9-sized (3.875 x 8.875 inches).

*NUMBER10
> The envelopes for this source are number 10-sized (4.125 x 9.5 inches).

*B5   The envelopes for this source are B5-sized (176mm x 250mm).

*C5   The envelopes for this source are C5-sized (162mm x 229mm).

*DL   The envelopes for this source are DL-sized (110mm x 220mm).

*NONE
> No envelope source is specified.

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ASCII code page 899 support (ASCII899)

Specifies whether the printer has ASCII code page 899 installed.

*SAME
> The value does not change.

*NO   The printer does not have ASCII code page 899 installed.

*YES   The printer has ASCII code page 899 installed.

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Image configuration (IMGCFG)

Specifies the image configuration for this printer. An image configuration object provides transform services for a variety of image and print datastream formats.

*SAME
> The value does not change.

*NONE
> No image configuration specified.

image-configuration
> Specify image configuration for a printer.

The following lists include the image configuration objects provided and suggested image configuration objects for many popular printers.

Image Configuration Object Table

```
 -------------- HP PCL Datastream -----------------------
*IMGA01    PCL 300-dpi printer
*IMGA02    PCL 600-dpi printer
*IMGA03    PCL 1200-dpi printer
*IMGA04    PCL 300-dpi color printer
*IMGA05    PCL 600-dpi color printer
*IMGA06    PCL 1200-dpi color printer
*IMGA07    PCL 75-dpi printer (No compression)
*IMGA08    PCL 600-dpi color printer
           with larger no-print border
*IMGA09    PCL 300-dpi printer (No compression)
 ------------- Postscript Datastream ---------------------
*IMGB01    Postscript 300-dpi printer
*IMGB02    Postscript 600-dpi printer
*IMGB03    Postscript 1200-dpi printer
*IMGB04    Postscript 300-dpi color printer
*IMGB05    Postscript 600-dpi color printer
*IMGB06    Postscript 1200-dpi color printer
```

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*IMGB07    Postscript 600x300-dpi color printer
*IMGB08    Postscript 1200x300-dpi color printer
*IMGB09    Postscript 360-dpi color printer
*IMGB10    Postscript 720-dpi color printer
*IMGB11    Postscript 1440x720-dpi color printer
*IMGB12    Postscript 400-dpi printer
*IMGB13    Postscript 800-dpi color printer
*IMGB14    Postscript 600-dpi color printer
           with larger no-print border
*IMGB15    Postscript 300-dpi color printer
           with larger no-print border
 ---------------- IPDS Datastream ------------------------
*IMGC01    IPDS 240-dpi printer
*IMGC02    IPDS 300-dpi printer
*IMGC03    IPDS 600-dpi printer
*IMGC04    IPDS 1200-dpi printer
*IMGC05    IPDS 240-dpi printer with no-print border
*IMGC06    IPDS 300-dpi printer with no-print border
*IMGC07    IPDS 600-dpi printer with no-print border
*IMGC08    IPDS 1200-dpi printer with no-print border
*IMGC09    IPDS 240-dpi printer (IM/1 image only)
*IMGC10    IPDS 240-dpi printer with no-print border
               (IM/1 image only)
*IMGC11    IPDS 240-dpi printer (CCITT G4 compression)
 ------------- PCL and Postscript Datastreams ---------------
*IMGD01    PCL/Postscript 300-dpi printer
*IMGD02    PCL/Postscript 600-dpi printer
*IMGD03    PCL/Postscript 1200-dpi printer
*IMGD04    PCL/Postscript 300-dpi color printer
*IMGD05    PCL/Postscript 600-dpi color printer
*IMGD06    PCL/Postscript 1200-dpi color printer
*IMGD07    PCL 300-dpi/Postscript 600-dpi printer
*IMGD08    PCL 300-dpi/Postscript 1200-dpi printer
*IMGD09    PCL 600-dpi/Postscript 300-dpi printer
*IMGD10    PCL 600-dpi/Postscript 1200-dpi printer
*IMGD11    PCL/Postscript 600-dpi color printer
           with larger no-print border
```

Recommended Image Configuration Objects by Printer Table

```
Compaq Pagemarc 20                                    *IMGD01
Epson EPCL-4 Printer                                   *IMGA01
Epson EPCL-5 Printer                                   *IMGA02
Epson Stylus Photo with Postscript                    *IMGB10
Epson Stylus Color 600, 800 with Postscript           *IMGB11
HP Color Laserjet 5                                    *IMGA04
HP Color Laserjet 5M                                   *IMGD04
HP Deskjet 560C, 820C, 1200C                          *IMGA04
HP Deskjet 500, 600, 1200                             *IMGA01
HP Deskjet 1600C, 1600CN                              *IMGA04
HP Deskjet 1600CM                                     *IMGD04
HP Laserjet II, IID, IIP                              *IMGA09
HP Laserjet II, IID, IIP with Postscript             *IMGB01
HP Laserjet III, IIID, IIISi, 4L                     *IMGA01
HP Laserjet III, IIID, IIISi, 4L with Postscript     *IMGD01
HP Laserjet 4, 4P, 4V, 4Si, 4 Plus                   *IMGA02
HP Laserjet 4M, 4MP, 4MV, 4Si MX, 4M Plus            *IMGD02
HP Laserjet 5, 5P, 5Si                                *IMGA02
HP Laserjet 5M, 5MP, 5Si MX                          *IMGD02
HP Laserjet 6, 6P, 6L                                 *IMGA02
HP Laserjet 6M, 6MP                                   *IMGD02
IBM 3112, 3116 Page Printer with IPDS feature        *IMGD02
IBM 3112, 3116 Page Printer (ASCII/LAN)              *IMGA02
IBM 3112, 3116 Page Printer with Postscript          *IMGD02
IBM 3130, 3160-1 AF Printer (240-pel mode)           *IMGC01
IBM 3130 AF Printer (300-pel mode)                    *IMGC02
IBM InfoPrint 20 with IPDS feature                    *IMGC02
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IBM InfoPrint 20 (ASCII)                                  *IMGA02
IBM InfoPrint 32 with IPDS feature                        *IMGC02
IBM InfoPrint 32 (ASCII)                                  *IMGA02
IBM InfoPrint 60                                          *IMGC03
IBM InfoPrint 62 Model 2                                  *IMGC05
IBM InfoPrint 62 Model 3                                  *IMGC06
IBM InfoColor 70                                          *IMGB05
IBM InfoPrint 4000                                        *IMGC05
IBM InfoPrint 4000 High Resolution                        *IMGC06
IBM 3825, 3827, 3828 AF Printer                           *IMGC09
IBM 3825, 3827, 3828 AF Printer (with AFIG)               *IMGC01
IBM 3829 AF Printer                                       *IMGC01
IBM 3835-001 AF Printer                                   *IMGC10
IBM 3835-001 AF Printer (with AFIG)                       *IMGC05
IBM 3835-002, 3900 AF Printer                             *IMGC05
IBM 3912, 3916 Page Printer (ASCII/LAN)                   *IMGA01
IBM 3912, 3916 Page Printer with IPDS feature (twinax)    *IMGC06
IBM 3930-02 Page Printer (IPDS diskette)                  *IMGC01
IBM 3930-03 Page Printer                                  *IMGA01
IBM 3930-03 Page Printer with Postscript                  *IMGD01
IBM 3935 AF Printer                                       *IMGC02
IBM 4019 LaserPrinters (HP mode)                          *IMGA09
IBM 4019 LaserPrinters with Postscript                    *IMGB01
IBM 4028 LaserPrinters                                    *IMGC06
IBM 4029 LaserPrinters                                    *IMGA01
IBM 4029 LaserPrinters with Postscript                    *IMGB02
IBM 4039 LaserPrinters                                    *IMGA01
IBM 4039 LaserPrinters with Postscript                    *IMGD07
IBM 4049 LaserPrinters                                    *IMGA02
IBM 4049 LaserPrinters with Postscript                    *IMGD02
IBM 4079 Color Jetprinter PS                              *IMGB09
IBM 4303 Network Color Printer                            *IMGB05
IBM 4312, 4317, 4324 NP with IPDS feature (twinax)        *IMGC06
IBM 4312, 4317, 4324 NP with IPDS feature (LAN)           *IMGC06
IBM 4312, 4317, 4324 NP (ASCII/LAN)                       *IMGA02
IBM 4312, 4317, 4324 NP with Postscript (ASCII/LAN)       *IMGD02
Lexmark 4039Plus                                          *IMGB02
Lexmark Optra C Color Printer                             *IMGD11
Lexmark Optra E, E+                                       *IMGA02
Lexmark Optra N                                           *IMGD02
Lexmark Optra R+, Rx+, Lx+, Lxn+                          *IMGD02
Lexmark Optra S Printers                                  *IMGD02
Lexmark Optra SC Color Printer                            *IMGD05
Okidata OL400 LED Page Printer                            *IMGA01
Okidata OL800, OL810 LED Page Printers                    *IMGA02
QMS 2025, 3225                                            *IMGB12
QMS Magicolor CX                                          *IMGD04
Tektronix Phaser 140                                      *IMGB09
Tektronix Phaser 300                                      *IMGB04
Tektronix Phaser 400                                      *IMGB05
Tektronix Phaser 540, 550                                 *IMGB05
Tektronix Phaser 560                                      *IMGB06
Xerox 4219/MRP                                            *IMGA01
Xerox 4220/MRP                                            *IMGA02
Xerox 4230 DocuPrinter                                    *IMGA02
Xerox 4512, 4517 Network Printer                          *IMGA02
Xerox 4520mp Printer                                      *IMGB13
Xerox 4700 II Color Document Printer                      *IMGD04
Xerox 4915 Color Laser Printer                            *IMGB08
Xerox 4920, 4925 Color Laser Printer                      *IMGB05
```

Maximum pending requests (MAXPNDRQS)

Specifies the maximum number of print requests that may be queued for printers. This parameter is used only if *YES is specified for the **Advanced function printing (AFP)** parameter.

*SAME
> The value does not change.

maximum-print-requests
> Specify a number from 1 to 31, indicating the maximum number of print requests that can be queued.

Print while converting (PRTCVT)

Specifies whether a file using AFP must be completely converted to IPDS before printing can begin.

*SAME
> The value does not change.

*YES   Printing begins prior to complete IPDS conversion.

*NO   Printing does not begin prior to complete IPDS conversion.

Print request timer (PRTRQSTMR)

Specifies the number of seconds to wait, after a print request has been sent to a printer using continuous forms, before the last pages of the output are forced out of the printer into the paper stacker. This parameter is used only if *YES is specified for the **Advanced function printing (AFP)** parameter and *CONT is specified for the **Form feed (FORMFEED)** parameter.

*SAME
> The value does not change.

*NOMAX
> No timer is used.

print-request-timer
> Specify the number of seconds, from 1 to 3600, to wait after a print request has been sent before forcing the last pages of the output out of the printer.

Form definition (FORMDF)

Specifies the name of the form definition to be used in the absence of any other form definition specification for a print request. This parameter is used only if *YES is specified for the **Advanced function printing (AFP)** parameter.

*SAME
> The value does not change.

form-definition-name
> Specify the name of the form definition to be used.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB

>   The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name

>   Specify the library where the object is located.

Character identifier (CHRID)

Specifies, for printers, the character identifier (graphic character set and code page) indicating which font is used to print the job and file separator pages when no separator page font is explicitly specified. This parameter is used only if *YES is specified for the **Advanced function printing (AFP)** parameter and *APPC is specified for the **AFP attachment (AFPATTACH)** parameter, or if *YES is specified for the **Host print transform (TRANSFORM)** parameter.

Note: The AFPATTACH parameter is not changeable. To change the CHRID values for a printer, the printer must have been created by specifying AFPATTACH(*APPC) or TRANSFORM(*YES).

*SAME

>   The value does not change.

*SYSVAL

>   The system determines the graphic character set and code page values for the command parameters from the QCHRID system value.

graphic-character-set code-page

>   Specify the graphic character set and code page values that match the attributes of this printer. The graphic character set and code page values must be numbers from 1 through 32767.

Remote location (RMTLOCNAME)

Specifies the remote location name of the printer device. This value may be an SNA network ID and control point name, an internet protocol (IP) host name, or an internet address.

An SNA remote location name is specified using the format nnnnnnnn.cccccccc, where nnnnnnnn is the network ID and cccccccc is the control point name. If only the control point name is specified, the RMTNETID parameter value is used as the value of the network ID.

An IP remote location name must be from 1 to 255 characters in length.

Note: This parameter is valid if AFP(*YES) and AFPATTACH(*APPC) both are specified, or when LANATTACH(*IP) or LANATTACH(*USRDFN) is specified. This parameter is required when APPTYPE(*APPINIT) is specified. The remote location name for an APPTYPE(*APPINIT) device is the Virtual Telecommunications Access Method/IBM Network Control Program (VTAM/NCP) name of the physical device.

*SAME

>   The value does not change.

remote-location-name

>   Specify the remote location name, remote system name, or internet address.

Local location (LCLLOCNAME)

Specifies the local location name. This parameter is valid only when AFP(*YES) and AFPATTACH(*APPC) are specified, or when APPTYPE(*APPINIT) is specified. The local location name for an APPTYPE(*APPINIT) device is the name of the independent logical unit (LU) in the IBM Network Control Program (NCP).

*SAME
> The value does not change.

*NETATR
> The LCLLOCNAME value specified in the system network attributes is used.

local-location-name
> Specify the local location name.

Mode (MODE)

Specifies the name of the mode used to define the session limits and session characteristics for this device.

*SAME
> The value does not change.

QSPWTR
> The mode which exists specifically for use with printers.

*NETATR
> The mode in the network attributes is used.

mode-name
> Specify the name of the mode description to be used by this device.

DBCS feature (IGCFEAT)

Specifies which double-byte character set (DBCS) table is used in DBCS feature code format expressing device features and the last code point value. The table at the end of this parameter description shows valid device features and last code point values for DBCS-capable devices.

Note: This parameter is valid for DBCS-capable devices only.

*SAME
> The value does not change.

Element 1: Features of the DBCS-Capable Devices

device-features
> Specify the device character resolution, language, and relative buffer size device features using the format SSSSLR, where:

SSSS =
The resolution (number of matrix points used to create) of the character. For example, 2424 would be 24 matrix points of height and 24 matrix points of width available to formulate the character.

L =
The language code. The 4 language codes currently supported are:
- J = Japanese
- K = Korean
- C = Traditional Chinese
- S = Simplified Chinese

R =
The relative buffer size. The valid values are: 0, 1, 2, and 4.

Element 2: Last Code Point

last-code-point
Specify the 4-digit code point of the last double-byte character. This value can be blank.

User-defined options (USRDFNOPT)

Specifies, for spooled output only, one or more user-defined options to be used by user applications or user-specified programs that process spooled files. A maximum of four user-defined options can be specified.

*SAME
The value does not change.

*NONE
No user-defined option is specified.

user-defined-option
Specify the user-defined option to be used by user applications that process spooled files. All characters are acceptable.

User-defined object (USRDFNOBJ)

Specifies, for spooled output only, the user-defined object to be used by user applications or user-specified programs that process spooled files.

Single values

*SAME
The value does not change.

*NONE
No user-defined object name is specified.

Element 1: Name of User-Defined Object

user-defined-object-name
Specify the name of the user-defined object to be used by user applications or user-specified programs that process spooled files.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
>   The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
>   Specify the library where the object is located.

Element 2: User-Defined Object Type

object-type
>   The user object type can be one of the following:

>   ***DTAARA**
>   >   Data Area

>   ***DTAQ**
>   >   Data Queue

>   ***FILE**   File

>   ***PSFCFG**
>   >   PSF Configuration

>   ***USRIDX**
>   >   User Index

>   ***USRQ**
>   >   User Queue

>   ***USRSPC**
>   >   User Space

Data transform program (USRDTATFM)

Specifies the user-defined data program that is used to transform the spooled file data.

Notes:

1. This parameter must be *NONE when AFP(*YES) is specified.
2. This parameter must be *NONE when TRANSFORM(*YES) is specified.

*SAME
>   The value does not change.

*NONE
>   No user-defined data transform program name is specified.

user-defined-data-transform-program-name
>   Specify the name of a user-defined data transform program.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

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User-defined driver program (USRDRVPGM)

Specifies the qualified name of a user-defined driver program.

Note: This parameter must be *NONE when AFP(*YES) is specified.

*SAME
> The value does not change.

*NONE
> No user-defined driver program is specified.

user-defined-driver-program-name
> Specify the name of a user-defined driver program.

The possible library values are:

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

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System driver program (SYSDRVPGM)

Specifies the name of a system-defined driver program, which provides the capability for sending iSeries printer output to a printer attached over a TCP/IP network.

Note: This parameter is only valid when DEVCLS(*LAN), TYPE(3812) and LANATTACH(*IP) are specified.

*SAME
> The value does not change.

*HPPJLDRV
> An HP-compatible printer driver program is used.

*IBMPJLDRV
> An IBM network printer driver program is used.

*NETSTNDRV
> A network station driver program is used.

*IBMSNMPDRV
> An IBM SNMP printer driver program is used.

*IBMIPPDRV
> An IBM IPP printer driver program is used.

Secure connection(SECURECNN)

Specifies whether a secure connection is established with the printer. A secure connection provides an encrypted communications session to ensure print data that passes over the connection remains private.

Note: This parameter is only valid when SYSDRVPGM(*IBMIPPDRV) is specified.

*SAME
> The value does not change.

*NO The connection with the printer is not secure.

*YES The connection with the printer is secure. The printer must support SSL(Secure Sockets Layer) or TLS(Transport Layer Security) and must have a system digital certificate. More information about the secure connections can be found in the Printer Device Programming book.

Validation list (VLDL)

Specifies a validation list that is used is the printer requests authentication. The validation list is checked for the name of the user who created the spooled file, the name of the printer device, or the name of the system. Authentication information associated with the name is returned to the printer. More information about building a validation list can be found in the Printer Device Programming book.

Note: This parameter is only valid when SYSDRVPGM(*IBMIPPDRV) is specified.

*SAME
> The value does not change.

*NONE
> No validation list is specified.

validation-list-object
> Specify the name of the validation list which contains authentication information.

The possible library values are:

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

Specifies information about the printer device that could be **published** to a Lightweight Directory Access Protocol (LDAP) directory.

Element 1: Support Duplex

Specifies whether the printer supports printing on both sides of a sheet of paper.

*SAME
> The value does not change.

*UNKNOWN
> The value for this field is unknown.

*SIMPLEX
> The printer device only supports printing on one side of a sheet of paper.

*DUPLEX
> The printer device supports printing on both sides of a sheet of paper.

Element 2: Support Color

Specifies whether the printer device supports color ink printing.

*SAME
> The value does not change.

*UNKNOWN
> The value for this field is unknown.

*COLOR
> The printer device does support color ink printing.

*NOCOLOR
> The printer device does not support color ink printing.

Element 3: Pages per minute black

The number of pages per minute in black ink that the printer device can produce.

*SAME
> The value does not change.

*UNKNOWN
> The value for this field is unknown.

pages-count-black
> The number of pages per minute in black ink that the printer device can produce. This field is an integer value ranging from 1 to 32767.

Element 4: Pages Per Minute Color

The number of pages per minute in color ink that the printer device can produce.

Note: The number of pages per minute in color ink is valid only when *COLOR is specified for element 2.

*SAME
> The value does not change.

*UNKNOWN
> The value for this field is unknown.

page-count-color
> The number of pages per minute in color ink that the printer device can produce. This field is an integer value ranging from 1 to 32767.

Element 5: Location

Briefly describes the location of the printer device.

*SAME
> The value does not change.

*BLANK
> The location of the printer device is not specified.

location
> Specify no more than 30 characters of text, enclosed in apostrophes, to describe where the printer is located.

Element 6: Data Streams Supported

Specifies the data stream formats supported by the printer device.

*SAME
> The value does not change.

*UNKNOWN
> The value for this field is unknown.

*PCL   The printer device supports PCL (Printer Command Language).

*PS   The printer device supports PostScript.

*PDF   The printer device supports PDF (Portable Document Format).

*IPDS   The printer device supports IPDS (Intelligent Printer Data Stream).

*SCS   The printer device supports SCS (SNA Character String).

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Remote network identifier (RMTNETID)

Specifies the identifier (ID) of the remote network. This parameter is required when AFP(*YES) and AFPATTACH(*APPC) are specified, or when APPTYPE(*APPINIT) is specified.

*SAME
> The value does not change.

*NETATR
> The remote network identifier specified in the network attributes is used.

*NONE
> No remote network ID is used.

remote-network-ID
> Specify the ID of the remote network.

Workstation customizing object (WSCST)

Specifies the qualified name of a work station customizing object to be created.

Note: This parameter is ignored when AFP(*YES) is specified.

*SAME
> The value does not change.

*NONE
> No work station customizing object is specified.

work-station-customizing-object
> Specify the work station customizing object. If a work station customizing object is specified for the WSCST parameter, all country keyboard identifiers are valid for ASCII devices except for the following: FQB, FQI, INB, INI, JEB, JEI, JKB, JUB, KAB, KOB, RCB, and TAB.

The possible library values are:

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

Examples

Example 1: Changing a Printer Address

```
CHGDEVPRT   DEVD(PRT1)   PORT(1)   SWTSET(5)
```

This command changes the device description for the printer named PRT1 so that it is now located at port 1, and its address is 5.

Example 2: Changing an Adapter Address

```
CHGDEVPRT   DEVD(PRT2)   ADPTADR(222222222222)
```

This command changes the device description for the printer named PRT2 so that its adapter address is 222222222222.

Error messages

*ESCAPE Messages

CPDB12C
> Remote location name &2 not in correct format.

CPF2618
> Device description &1 not changed.

CPDB1B8
    Combination of parameters not valid. Reason code is &2.

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Change Device Desc (Retail) (CHGDEVRTL)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Device Description (Retail) (CHGDEVRTL) command changes a device description for a retail device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	X'01'-X'FE', ***SAME**	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
PACING	Pacing value	0-7, ***SAME**	Optional
MAXLENRU	Maximum length of request unit	*CALC, ***SAME**, 247, 256, 503, 512, 1015, 1024	Optional
APPTYPE	Application type	***SAME**, *OTHER, *RCMS, *SBMRTLPGM	Optional
ACTTMR	Activation timer	1-2550, ***SAME**	Optional
INACTTMR	Inactivity timer	1-30, ***SAME**, *NOMAX, *SEC15, *SEC30	Optional
SNPTDEV	SNA pass-through device desc	*Name*, *NONE, ***SAME**	Optional
SNPTGRP	SNA pass-through group name	*Name*, *NONE, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Local location address (LOCADR)

Specifies the local location address for this device.

Valid values range from 01 to FE.

*SAME

The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Pacing value (PACING)

Specifies the SNA pacing value used for request/response units (RUs).

*SAME
> The value does not change.

pacing-value
> Specify a value, ranging from 1 through 7.

Maximum length of request unit (MAXLENRU)

Specifies the maximum request unit (RU) length allowed.

*SAME
> The value does not change.

*CALC
> The system calculates the value to use.

maximum-length-request-unit
> Specify 247, 256, 503, 512, 1015, or 1024 bytes as the maximum length for incoming request units.

Application type (APPTYPE)

Specifies the application type used by this device.

*SAME
> The value does not change.

*OTHER
> This device communicates with either HCP, if 01 is specified for the **Local location address (LOCADR)** parameter, or an application on the controller. *OTHER should always be specified when 01 is specified for the LOCADR parameter. For a 4684 controller, this parameter should not be specified if the LOCADR parameter is any value other than 01.

*RCMS
> This device communicates with the remote change management server (RCMS). *RCMS should only be specified for a 4680 or a 4684 controller. For a 4684 controller, *RCMS should be specified if the LOCADR parameter is any value other than 01.

*SBMRTLPGM

This device is used with the Submit Retail Program (SBMRTLPGM) command to start a program on the retail controller using the ADCS SUP (Start User Program) support. This value is valid only when the Retail Point-of-Sale Communications Facility Licensed Program is being used on the controller. *SBMRTLPGM should not be specified for a 4684 controller.

Activation timer (ACTTMR)

Specifies, for switched lines, the amount of time (in seconds) that the SNA pass-through support waits for the device to respond to the activation request from the host iSeries system. If the device does not respond within this time, it is considered not available.

*SAME

The value does not change.

activation-timer

Specify a number ranging from 1 through 2550 indicating the number of seconds before the device is considered not available.

Inactivity timer (INACTTMR)

Specifies, for devices connected using SNA pass-through support, a timeout value that measures the amount of time that the device is not bound to a host application. When the timeout value is exceeded, the session is ended.

*SAME

The value does not change.

*NOMAX

No maximum inactivity time is tracked (no inactivity timer is be enforced).

*SEC15

A 15-second timeout period is used.

*SEC30

A 30-second timeout period is used.

inactivity-timer

Specifies a timeout value in minutes. Valid values range from 1 through 30 minutes.

SNA pass-through device desc (SNPTDEV)

Specifies the name of the associated SNA pass-through device that is attached to a host or advanced program-to-program communications (APPC) controller.

*SAME

The value does not change.

*NONE

No name is specified.

associated-device-name
> Specify the name of a device that is attached to a host or an APPC controller that is associated with this device.

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SNA pass-through group name (SNPTGRP)

Specifies the name configured for a group of host devices in a configuration list. This indicates that this device is tied to any one of the devices in that group which is available.

*SAME
> The value does not change.

*NONE
> No name is specified.

group-name
> Specify the name configured for a group of host devices that must be associated with this device.

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Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVRTL  DEVD(RTL1)  PACING(5)
```

This command changes a retail device description named RTL1, specifying 5 as the new pacing value.

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Error messages

*ESCAPE Messages

CPF2618
> Device description &1 not changed.

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Change Device Desc (SNPT) (CHGDEVSNPT)

Where allowed to run: All environments (*ALL)			Parameters
Threadsafe: No			Examples
			Error messages

The Change Device Description (SNA Pass-Through) (CHGDEVSNPT) command changes a device description for an SNA pass-through device.

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Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	X'00'-X'FE', ***SAME**	Optional
ONLINE	Online at IPL	*YES, *NO, ***SAME**	Optional
ACTTMR	Activation timer	1-2550, ***SAME**	Optional
SNPTDEV	SNA pass-through device desc	*Name*, ***SAME**, *NONE	Optional
SNPTGRP	SNA pass-through group name	*Name*, ***SAME**, *NONE	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

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Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

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Local location address (LOCADR)

Specifies the local location address for this device.

*SAME
> The value does not change.

location-address
> Specify the location address.

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Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

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*SAME
The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Activation timer (ACTTMR)

Specifies, for switched connections, the amount of time (in seconds) that the SNA pass-through support waits for the device to respond to the activation request from the host iSeries system. If the device does not respond within this time, it is considered not available.

*SAME
The value does not change.

activation-timer
Specify a number ranging from 1 through 2550 indicating the number of seconds before the device is considered not available.

SNA pass-through device desc (SNPTDEV)

Specifies the name of the associated SNA pass-through device that is attached to a host or advanced program-to-program communications (APPC) controller.

*SAME
The value does not change.

*NONE
No name is specified.

associated-device-name
Specify the name of a device that is attached to a host or an APPC controller that is associated with this device.

SNA pass-through group name (SNPTGRP)

Specifies the name configured for a group of host devices in a configuration list. This indicates that this device is tied to any one of the devices in that group which is available.

*SAME
The value does not change.

*NONE
No name is specified.

group-name
Specify the name configured for a group of host devices that must be associated with this device.

Text 'description' (TEXT)

*SAME
>The text (if any) does not change.

*BLANK
>No text is specified.

character-value
>Specify no more than 50 characters of text, enclosed in apostrophes.

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Examples

```
CHGDEVSNPT   DEVD(SNPTDEV1)   LOCADR(05)   SNPTDEV(DOWNDEV1)
```

This command changes an SNA pass-through device description named SNPTDEV1. The location address of the device is X'05'. The SNA pass-through device name associated with this device is DOWNDEV1.

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Error messages

*ESCAPE Messages

CPF2618
>Device description &1 not changed.

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Change Device Desc (SNUF) (CHGDEVSNUF)

The Change Device Description (SNUF) (CHGDEVSNUF) command changes a device description for a Systems Network Architecture Upline Facility (SNUF) device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
LOCADR	Local location address	***SAME**, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 0D, 0E, 0F, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 2A, 2B, 2C, 2D, 2E, 2F, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 3A, 3B, 3C, 3D, 3E, 3F, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 4A, 4B, 4C, 4D, 4E, 4F, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 5A, 5B, 5C, 5D, 5E, 5F, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 6A, 6B, 6C, 6D, 6E, 6F, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 7A, 7B, 7C, 7D, 7E, 7F, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 8A, 8B, 8C, 8D, 8E, 8F, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 9A, 9B, 9C, 9D, 9E, 9F, A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, AA, AB, AC, AD, AE, AF, B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, BA, BB, BC, BD, BE, BF, C0, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, D0, D1, D2, D3, D4, D5, D6, D7, D8, D9, DA, DB, DC, DD, DE, DF, E0, E1, E2, E3, E4, E5, E6, E7, E8, E9, EA, EB, EC, ED, EE, EF, F0, F1, F2, F3, F4, F5, F6, F7, F8, F9, FA, FB, FC, FD, FE, FF	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
PGMSTRRQS	Program start request capable	***SAME**, *YES, *NO	Optional
SPCHOSTAPP	Special host application	***SAME**, *NONE, *FLASH	Optional
APPID	Application identifier	*Name*, ***SAME**	Optional
HOST	Host type	***SAME**, *CICS, *IMS, *IMSRTR, *ADCS	Optional
RCDLEN	Record length	1-32767, ***SAME**	Optional
BLKLEN	Block length	1-32767, ***SAME**	Optional
DFTPGM	Default program	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Default program	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
HCPEML	HCP emulation	***SAME**, *STRUSRPGM, 3651, 3684, 4680, 4684	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Local location address (LOCADR)

Specifies the local location address for this device.

Valid values range from 01 to FF.

*SAME
> The value does not change.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
> The value does not change.

*YES   This device is varied on automatically at IPL.

*NO   This device is not varied on automatically at IPL.

Program start request capable (PGMSTRRQS)

Specifies whether this device is reserved for host system call through a Program Start Request (PSR).

*SAME
> The value does not change.

*NO   This device is not reserved for a PSR request.

*YES   This device is reserved for a PSR request.

Special host application (SPCHOSTAPP)

Specifies whether SNUF customizes support for special host applications outside the Customer Information Control System for Virtual Storage (CICS/VS) or Information Management System for Virtual Storage (IMS/VS) application layer.

*SAME
> The value does not change.

*NONE
> SNUF does not customize support for special host applications.

*FLASH
> SNUF customizes support for the Federal Reserve Flash application.

Application identifier (APPID)

Specifies the VTAM Application Identifier sent with the log-on message.

*SAME
> The value does not change.

Host type (HOST)

Specifies the type of host system with which the device will communicate.

*SAME
> The value does not change.

*CICS The host system type is CICS/VS.

*IMS The host system type is IMS/VS.

*IMSRTR
> The Information Management System is the host system. RTR (return-to-ready) commands will be used in communicating with the host system.

*ADCS
> The Advanced Data Communications for Stores is the host system.

Record length (RCDLEN)

Specifies the maximum record length allowed when communicating with this device.

Valid values range from 1 to 32767.

The value must be at least the size of the largest record to be sent, but must not exceed the buffer size specified on the line description (MAXBUFFER parameter) to which this device is attached.

*SAME
> The value does not change.

Block length (BLKLEN)

Specifies the maximum block length allowed when communicating with this device.

The possible values are from 1 to 32767.

The value must be at least the size of the largest record to be sent, but must not exceed the buffer size specified on the line description (MAXBUFFER parameter) to which this device is attached.

*SAME
> The value does not change.

Default program (DFTPGM)

Specifies the name of the program called if a program start request is received and no program is specified.

The program is specified by its qualified name (library-name/program-name).

*SAME
> The value does not change.

The possible library values are:

*LIBL All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

library-name
> Specify the library where the object is located.

HCP emulation (HCPEML)

Specifies the Host Command Processor (HCP) emulation to be performed.

*SAME
> The value does not change.

3651 The host is running ADCS and will use this device description for a 3651 HCP emulated session.

3684 The host is running ADCS and will use this device description for a 3684 HCP emulated session.

4680 The host is running ADCS and will use this device description for a 4680 HCP emulated session.

4684 The host is running ADCS and will use this device description for a 4684 HCP emulated session.

*STRUSRPGM
> The host is running ADCS and will use this device description for the Start User Program (SUP) emulated session.

Text 'description' (TEXT)

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

```
CHGDEVSNUF   DEVD(SNUFDEV01)  PGMSTRRQS(*YES)  DFTPGM(INQUIRY)
```

This command changes the device description for communications device SNUFDEV01, reserving it for host system call by the use of a program start request. The default program is changed to INQUIRY.

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Error messages

*ESCAPE Messages

CPF2618

Device description &1 not changed.

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Change Device Desc (Tape) (CHGDEVTAP)

The Change Device Description (Tape) (CHGDEVTAP) command changes a device description for a tape device.

Parameters

Keyword	Description	Choices	Notes
DEVD	Device description	*Name*	Required, Key, Positional 1
RSRCNAME	Resource name	*Name*, ***SAME**, *NONE	Optional
ONLINE	Online at IPL	***SAME**, *YES, *NO	Optional
ASSIGN	Assign device at vary on	***SAME**, *YES, *NO	Optional
UNLOAD	Unload device at vary off	***SAME**, *YES, *NO	Optional
MSGQ	Message queue	Single values: ***SAME**, *SYSOPR Other values: *Qualified object name*	Optional
	Qualifier 1: Message queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
SWTSET	Switch setting	*Character value*, ***SAME**	Optional

Device description (DEVD)

Specifies the name of the device description being changed.

This is a required parameter.

Resource name (RSRCNAME)

Specifies the resource name that identifies the hardware this description represents. Use the WRKHDWRSC command to determine the resource name.

*SAME

> The value does not change.

*NONE

> No resource name is specified.

resource-name

> Specify the name to identify the physical devices on the system.

Online at IPL (ONLINE)

Specifies whether this object is automatically varied on at initial program load (IPL).

*SAME
The value does not change.

*YES This device is varied on automatically at IPL.

*NO This device is not varied on automatically at IPL.

Assign device at vary on (ASSIGN)

Specifies whether the tape drive is assigned to the system when it is varied on.

Note: This parameter is valid only for 3480, 3490, and 3590 device types.

*SAME
The value does not change.

*YES The tape drive is assigned when the device is varied on.

*NO The tape drive is not assigned when the device is varied on.

Unload device at vary off (UNLOAD)

Specifies whether the tape drive is unloaded when the device is varied off.

*SAME
The value does not change.

*YES The tape drive is unloaded when the device is varied off.

*NO The tape drive is not unloaded when the device is varied off. The tape is rewound, but not past the beginning-of-tape marker.

Message queue (MSGQ)

Specifies the message queue to which operational messages for this device are sent.

The possible qualified names are:

*SAME
The value does not change.

*SYSOPR
Messages are sent to the QSYSOPR message queue in QSYS.

message-queue-name
Specify the name of the message queue to which operational messages are sent.

Qualifier 2: Library

*LIBL All libraries in the job's library list are searched until the first match is found.

*CURLIB

The current library for the job is searched. If no library is specified as the current library for the job, the QGPL library is used.

library-name

Specify the name of the library to be searched.

Text 'description' (TEXT)

*SAME

The text (if any) does not change.

*BLANK

No text is specified.

character-value

Specify no more than 50 characters of text, enclosed in apostrophes.

Switch setting (SWTSET)

Specifies the switch setting for tape devices.

For 3422, 3480, and 3490 tape devices the possible values are 0 to F.

For 3430 tape devices the possible values are 0 to 3.

Note: This parameter is no longer valid. Specify the RSRCNAME parameter for all tape devices. The SWTSET parameter is provided for compatibility with earlier versions of this command. If specified, the SWTSET parameter is converted to a resource name by the system.

*SAME

The value does not change.

Examples

```
CHGDEVTAP  DEVD(TAP01)  ONLINE(*YES)
```

This command changes the device description of a tape device named TAP01 so that at an IPL the device is automatically varied on.

Error messages

*ESCAPE Messages

CPF2618

Device description &1 not changed.

Change DHCP Attributes (CHGDHCPA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

(CHGDHCPA) Use this command to set or change the DHCP Server Attributes: AUTOSTART and MODE

The changes take effect the next time the DHCP server is started.

Restriction:

You must have *IOSYSCFG special authority to use this command.

Parameters

Keyword	Description	Choices	Notes
AUTOSTART	Autostart server	*YES, *NO, **SAME**	Optional
MODE	Mode	*SERVER, *RELAY, **SAME**	Optional

Autostart server (AUTOSTART)

The AUTOSTART attribute determines whether or not the DHCP server starts automatically when TCP/IP is started using the STRTCP command, or when the STRTCPSVR SERVER(*AUTOSTART) command is issued.

This attribute is used by the STRTCPSVR command if STRTCPSVR *AUTOSTART is specified. STRTCPSVR *DHCP or STRTCPSVR *ALL will start the DHCP server regardless of the value of the AUTOSTART attribute. There is an exception:

Note: If the STRTCPSVR *ALL command is issued, all TCP/IP servers that have been configured will start. However, a BOOTP and DHCP server cannot both run on the same machine at the same time. If the STRTCPSVR *ALL command is issued, the system will first check to see if both a BOOTP and DHCP server job is configured. If both are configured the system will check the AUTOSTART attribute for each server.

If one of the server (BOOTP or DHCP) AUTOSTART attributes is set to *YES and the other is set to *NO, the server with AUTOSTART attribute set to *YES will start.

If both the BOOTP and DHCP AUTOSTART attributes are set to *NO, the DHCP server will start.

You cannot set the DHCP AUTOSTART attribute to *YES if the BOOTP AUTOSTART value is set to *YES. A BOOTP and DHCP server cannot run simultaneously on the same machine. You will get an error message if you attempt to set both the BOOTP and DHCP AUTOSTART values to *YES.

The possible values are:

*SAME
Specify *SAME if you do not want to change the AUTOSTART value from the previous setting. If you specify *SAME and this value was not previously set, the value *NO will be used.

*YES Specify a value of *YES if you want the DHCP server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

*NO Specify *NO if you do not want the DHCP server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

When the value is set to *NO, only the STRTCPSVR *DHCP command or the STRTCPSVR *ALL command will start the DHCP server.

If you do not intend to use the DHCP server, set AUTOSTART to *NO.

Mode (MODE)

The MODE attribute determines how the DHCP server will function. It can function as a DHCP server, or as a Relay agent only. A Relay Agent forwards BOOTP or DHCP packets from hosts to active BOOTP or DHCP servers and from the servers back to the hosts. It performs no BOOTP or DHCP server functions.

The possible values are:

*SAME
Specify *SAME if you do not want to change the MODE value from the previous setting. If you specify *SAME and this value was not previously set, the value *SERVER will be used.

*SERVER
Set this value to *SERVER if you want the DHCP server to automatically assign reusable IP addresses to hosts in response to host requests.

*RELAY
Set this value to *RELAY if you want the DHCP server to function only as a Relay Agent. A Relay Agent forwards BOOTP or DHCP packets from hosts to active BOOTP or DHCP servers and from the servers back to the hosts. It performs no BOOTP or DHCP server functions.

Examples

Example 1: Start the DHCP Server automatically

CHGDHCPA   AUTOSTART(*YES)

This command indicates that the next time the STRTCP command is issued to start up TCP/IP and to automatically start the TCP/IP applications, the DHCP Server will be started automatically.

Example 2: Have DHCP Function as a BOOTP/DHCP Relay Agent

CHGDHCPA   AUTOSTART(*SAME) MODE(*RELAY)

This command indicates that the next time the DHCP Server gets started, it should function as a BOOTP/DHCP Relay Agent. It will no longer attempt to process DHCP packets on the local system, but will instead relay them. If DHCP is currently running, this command has no affect on its current execution mode, since CHGDHCPA attributes do not take affect until the next time the server is started. The autostart attribute is not changed.

Example 3: Only allow DHCP Server to be Started Manually
```
CHGDHCPA  AUTOSTART(*NO)  MODE(*SERVER)
```

This command indicates that the DHCP Server should not be started automatically with the rest of TCP/IP when the STRTCP command is issued. It can only be started manually via the STRTCPSVR command. Via the MODE setting of *SERVER, this example is also causing the DHCP server to attempt to process all DHCP packets received on this system.

Error messages

Unknown

Change Directory Entry (CHGDIRE)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Directory Entry (CHGDIRE) command allows you to change the data for a specific entry in the system distribution directory.

This command provides support for the X.400 product (X.400). The X.400 is a limited program offering (LPO) developed for the &sys. system as an Open System Interconnect (OSI) application. It implements the X.400 series of recommendations developed by the International Telegraph and Telephone Consultative Committee (CCITT) to allow the interchange of messages (mail) between users on systems from different vendors (for example, IBM and DEC).

The CHGDIRE command does not provide interactive display support. This is provided by the Work with Directory Entries (WRKDIRE) command.

NOTES:

1. To prevent the system from changing lowercase characters to uppercase characters, enclose the values in apostrophes. This does not apply to user ID/address, system name/group, department, or X.400 originator/recipient (O/R) name.
2. Only the user ID/address, system name/group, department, and X.400 O/R name are translated from the graphic character identifier (GCID) specified by the CMDCHRID parameter. All other parameters are stored exactly as they are entered and the GCID is stored with them. The default GCID value is taken from the QCHRID system value. The user can override the defaults by specifying a character set and code page or specify *DEVD to display the device description.
3. Double-byte character set (DBCS) characters can be entered for the following system directory entry parameters:
   - USRD
   - LSTNAM
   - FSTNAM
   - MIDNAM
   - PREFNAM
   - FULNAM
   - DEPT
   - TITLE
   - CMPNY
   - LOCATION
   - BLDG
   - OFC
   - ADDR1
   - ADDR2
   - ADDR3
   - ADDR4
   - TEXT
   - USRDFNFLD

4. Administrators have authority to update any directory entry. Users who are not administrators are restricted to changing specific fields on their own directory entry. If users who are not administrators run this command and specify a USRID other than their own, an error message is returned. If a non-administrator requests a change to any of the following fields, an error message is returned, indicating the person running the command is not authorized to update these fields.

   - Description (USRD)
   - User profile (USER)
   - System name (SYSNAME)
   - Indirect user (INDUSR)
   - Receiving personal mail (PRTPERS)
   - Last name (LSTNAM)
   - First name (FSTNAM)
   - Middle name (MIDNAM)
   - Preferred name (PREFNAM)
   - Full name (FULNAM)
   - Department (DEPT)
   - Forward from (FWDFRM)
   - Network user ID (NETUSRID)
   - Allow synchronization (ALWSYNC)
   - DLO Owner (DLOOWN)
   - X.400 O/R name fields (COUNTRY, ADMD, PRMD, ORG, SURNAM, GIVENNAM, INITIALS, GENQUAL, ORGUNIT AND DMNDFNATR)
   - Mail service level (MSFSRVLVL)
   - Preferred address (PREFADR)

An X.400 O/R name in the directory can be changed with this command. X.400 is an international standard for communications and the O/R name is the addressing information used in X.400 communications. The X.400 O/R name must be in character set 1169 and code page 500. This set includes A through Z, 0 through 9, and some special characters. Additional information on characters allowed is in the Globalization information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter.

Restrictions: You must have administrator authority to update any of the data contained in a directory entry, except the user ID and address. If you are not an administrator, you can update only a limited number of fields in your own directory entry.

Parameters

Keyword	Description	Choices	Notes
USRID	User identifier	*Element list*	Required, Key, Positional 1
	Element 1: User ID	*Character value*	
	Element 2: Address	*Character value*	
USRD	User description	Single values: ***SAME** Other values: *Element list*	Optional, Positional 2
	Element 1: Existing description	*Character value*, *FIRST	
	Element 2: New description	*Character value*	

Keyword	Description	Choices	Notes
USER	User profile	*Name*, ***SAME**, *NONE	Optional
SYSNAME	System name	Single values: ***SAME**, *LCL, *PC, *ERROR Other values: *Element list*	Optional
	Element 1: System name	*Character value*	
	Element 2: System group	*Character value*	
NETUSRID	Network user ID	*Character value*, ***SAME**, *USRID	Optional
LSTNAM	Last name	*Character value*, ***SAME**, *NONE	Optional
FSTNAM	First name	*Character value*, ***SAME**, *NONE	Optional
MIDNAM	Middle name	*Character value*, ***SAME**, *NONE	Optional
PREFNAM	Preferred name	*Character value*, ***SAME**, *NONE	Optional
FULNAM	Full name	*Character value*, ***SAME**, *DFT	Optional
DEPT	Department	*Character value*, ***SAME**, *NONE	Optional
TITLE	Job title	*Character value*, ***SAME**, *NONE	Optional
CMPNY	Company	*Character value*, ***SAME**, *NONE	Optional
TELNBR1	Telephone number 1	*Character value*, ***SAME**, *NONE	Optional
TELNBR2	Telephone number 2	*Character value*, ***SAME**, *NONE	Optional
FAXTELNBR	FAX telephone number	*Character value*, ***SAME**, *NONE	Optional
LOC	Location	*Character value*, ***SAME**, *NONE	Optional
BLDG	Building	*Character value*, ***SAME**, *NONE	Optional
OFC	Office	*Character value*, ***SAME**, *NONE	Optional
ADDR1	Address line 1	*Character value*, ***SAME**, *NONE	Optional
ADDR2	Address line 2	*Character value*, ***SAME**, *NONE	Optional
ADDR3	Address line 3	*Character value*, ***SAME**, *NONE	Optional
ADDR4	Address line 4	*Character value*, ***SAME**, *NONE	Optional
FWDFRM	Forward from user identifier	Single values: ***SAME**, *NONE Other values: *Element list*	Optional
	Element 1: User ID	*Character value*	
	Element 2: Address	*Character value*	
INDUSR	Indirect user	***SAME**, *NO, *YES	Optional
PRTPERS	Print private mail	***SAME**, *NO, *YES	Optional
PRTCOVER	Print cover page	***SAME**, *YES, *NO	Optional
NFYMAIL	Mail notification	***SAME**, *SPECIFIC, *ALLMAIL, *NOMAIL	Optional
NFYPTYPERS	Priority, private, important	***SAME**, *YES, *NO	Optional
NFYMSGS	Messages	***SAME**, *YES, *NO	Optional
TEXT	Text	*Character value*, ***SAME**, *NONE	Optional
CMDCHRID	Command character identifier	Single values: ***SYSVAL**, *DEVD Other values: *Element list*	Optional
	Element 1: Graphic character set	*Integer*	
	Element 2: Code page	*Integer*	
COUNTRY	Country or region ID	*Character value*, ***SAME**, *NONE	Optional
ADMD	Administration domain	*Character value*, ***SAME**, *NONE	Optional
PRMD	Private management domain	*Character value*, ***SAME**, *NONE	Optional
SURNAM	Surname	*Character value*, ***SAME**, *NONE, *LSTNAM	Optional
GIVENNAM	Given name	*Character value*, ***SAME**, *NONE, *FSTNAM	Optional
INITIALS	Initials	*Character value*, ***SAME**, *NONE	Optional
GENQUAL	Generation qualifier	*Character value*, ***SAME**, *NONE	Optional

Keyword	Description	Choices	Notes
ORG	Organization	*Character value*, **<u>*SAME</u>**, *NONE	Optional
ORGUNIT	Organizational units	Single values: **<u>*SAME</u>**, *NONE Other values (up to 4 repetitions): *Character value*	Optional
DMNDFNATR	Domain-defined attributes	Single values: **<u>*SAME</u>**, *NONE Other values (up to 4 repetitions): *Element list*	Optional
	Element 1: Type	*Character value*	
	Element 2: Value	*Character value*	
USRDFNFLD	User-defined fields	Single values: **<u>*SAME</u>**, *NONE Other values (up to 100 repetitions): *Element list*	Optional
	Element 1: Field name	*Character value*	
	Element 2: Product ID	*Character value*, *NONE	
	Element 3: Value	*Character value*	
MSFSRVLVL	Mail service level	Single values: **<u>*SAME</u>**, *USRIDX, *SYSMS, *DOMINO Other values: *Element list*	Optional
	Element 1: Field name	*Character value*	
	Element 2: Product ID	*Character value*, *NONE	
PREFADR	Preferred address	*Element list*	Optional
	Element 1: Field name	*Character value*, **<u>*SAME</u>**, *USRID, *ORNAME, *SMTP	
	Element 2: Product ID	*Character value*, *NONE	
	Element 3: Address type	*Character value*	
CCMAILADR	cc:Mail address	*Character value*, **<u>*SAME</u>**, *NONE	Optional
CCMAILCMT	cc:Mail comment	*Character value*, **<u>*SAME</u>**, *NONE	Optional
ALWSYNC	Allow synchronization	**<u>*SAME</u>**, *YES, *NO	Optional
DLOOWN	DLO owner	**<u>*SAME</u>**, *USRPRF, *GRPPRF	Optional

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User identifier (USRID)

Specifies the user ID and address of the directory entry being updated. Both parts must be provided.

This is a required parameter.

user-id and address
> Specify both the user ID and address. Each part can have a maximum of 8 characters.

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User description (USRD)

Specifies the specific description to be changed and the description that replaces it. The description must be unique only for a user ID and address. It does not need to be unique in the directory.

Note: Only an administrator can update this field.

<u>*SAME</u>
> The specific description is not being provided and no changes are made to any of the descriptions for this user.

The possible **existing description** values are:

*FIRST
> The first description for the user is changed.

existing-description
> Specify the specific description for this user that is changed.

The possible **new description** values are:

new-description
> Specify the new user description to replace the specified description value.

User profile (USER)

Specifies the user profile of the user.

Note: Only an administrator can update this field.

*SAME
> The user profile does not change.

*NONE
> The user profile is changed to blanks. This value is valid only for remote users.

user-profile-name
> Specify a maximum of 10 characters for the valid system user profile name. The profile name is required for all local users. A user profile is required for a remote user only if the user needs to work with documents and folders on the local system.

System name (SYSNAME)

Specifies the system name and group name for the system on which the user works.

More information is in the SNA Distribution Services book, SC41-5410.

Note: Only an administrator can update this field.

*SAME
> The system name and group name do not change.

*LCL   The system name and group name default to the local system name.

*PC   *PC is for a distributed systems node executive (DSNX) user with a personal computer (PC) attached to this system.

*ERROR
> Use this value if your network contains a central system that receives all unresolved distributions. In this type of network, you may encounter distribution looping when a distribution cannot find a specific user ID on the intended system and the intended system has a ***ANY *ANY** entry directing distributions to the central system. The central system also has a default ***ANY address** entry directing unresolved distributions to the intended system. To prevent distribution looping, specify *ERROR as the system name for the default entry you are adding or changing. When a distribution cannot find a specific user ID, but matches this default entry, the distribution is handled as a user that is not valid, just as if no directory match were found.
>
> *ERROR is valid only when ***ANY address** or ***ANY *ANY** is specified on the **User identifier (USRID)** parameter.

system-name-and-group
>	Specify the system name and the group name of the system to which the user's distributions are sent. Only the system name is required. Each part can have a maximum of 8 characters.

>	A remote system name and group can be assigned to a user before they are defined to the system network tables, but distributions cannot be sent to that remote user until the system name and group are defined on the remote system. The remote system name and group are defined by using the Configure Distribution Services (CFGDSTSRV) command.

Network user ID (NETUSRID)

Specifies the network user ID for the directory entry. The network user ID is used to uniquely identify a user in a network.

*SAME
>	The value does not change.

*USRID
>	Change the network user ID to the user ID and address associated with this entry. The format of the network user ID is the 8 character user ID, 1 blank character, and the 8-character address.

network-user-ID
>	Specify the network user ID for this user. A maximum of 47 characters can be specified.

Last name (LSTNAM)

Specifies the user's last name. If no names are provided (last, first, middle, preferred, or full) but a value is specified on the **Department (DEPT)** parameter, the last name defaults to an asterisk (*).

*SAME
>	The last name does not change.

*NONE
>	The last name is changed to blanks.

last-name
>	Specify a maximum of 40 characters for the user's last name.

First name (FSTNAM)

Specifies the user's first name.

*SAME
>	The first name does not change.

*NONE
>	The first name is changed to blanks.

first-name
>	Specify a maximum of 20 characters for the user's first name.

Middle name (MIDNAM)

Specifies the user's middle name.

*SAME
The middle name does not change.

*NONE
The middle name is changed to blanks.

middle-name
Specify a maximum of 20 characters for the user's middle name.

Preferred name (PREFNAM)

Specifies the name by which the user likes to be addressed.

*SAME
The preferred name does not change.

*NONE
The preferred name is changed to blanks.

preferred-name
Specify a maximum of 8 characters for the user's preferred name.

Full name (FULNAM)

Specifies the user's full name. This field can be entered by an administrator, or it can be built by the system. If the administrator enters data in this field, it is stored in the format in which it is entered. If the full name is not specified, it is created by the system as follows:

- Last, First Middle (Preferred)
- If parts of the full name are not provided, the missing parts are removed from this format.
- The preferred name, when it is specified, is always enclosed in parentheses.
- If a preferred name is specified but it does not fit in the 50 characters after the last, first, and middle names, the preferred name occupies the last positions of the full name field, replacing the characters in those positions. Therefore, if a preferred name is specified, it always appears.

Note: Only an administrator can change this field.

*SAME
If the previous full name was entered by the administrator, the full name does not change.

If the previous full name was built by the system from the last name, first name, middle name, and preferred name, and a new last name, first name, middle name, or preferred name is specified, the full name is rebuilt by the system from the new values.

*DFT The full name is determined from the default values.

full-name
Specify a maximum of 50 characters for the user's full name.

Department (DEPT)

Specifies the name or number of the department of which the user is a member.

Note: Only an administrator can change this field.

*SAME
> The department name or number does not change.

*NONE
> The department name or number is changed to blanks.

department-name
> Specify a maximum of 10 characters for the name of the user's department.

Job title (TITLE)

Specifies the user's job title, such as marketing director, account manager, or production engineer.

*SAME
> The user's job title does not change.

*NONE
> The job title is changed to blanks.

job-title
> Specify a maximum of 40 characters for the user's job title.

Company (CMPNY)

Specifies the name of the company for which the user works.

*SAME
> The company name does not change.

*NONE
> The company name is changed to blanks.

company
> Specify a maximum of 50 characters for the company name.

Telephone number 1 (TELNBR1)

Specifies the user's primary telephone number. The telephone number can be specified in any arrangement appropriate to the user, including an international telephone number format.

*SAME
> The telephone number does not change.

*NONE
> The primary telephone number is changed to blanks.

telephone-number 1
> Specify a maximum of 26 characters for the user's primary telephone number.

Telephone number 2 (TELNBR2)

Specifies the user's secondary telephone number. The telephone number can be specified in any arrangement appropriate to the user, including an international telephone number format.

*SAME
The secondary telephone number does not change.

*NONE
The secondary telephone number is changed to blanks.

telephone-number 2
Specify a maximum of 26 characters for the secondary telephone number of the user.

FAX telephone number (FAXTELNBR)

Specifies the user's facsimile telephone number. The facsimile telephone number can be specified in any format appropriate for the user, including an international telephone number format.

*SAME
The facsimile telephone number does not change.

*NONE
The facsimile telephone number is changed to blanks.

facsimile-telephone-number
Specify a maximum of 32 characters for the user's facsimile telephone number.

Location (LOC)

Specifies the user's location.

*SAME
The user's location does not change.

*NONE
The location is changed to blanks.

location
Specify a maximum of 40 characters for the location of the user.

Building (BLDG)

Specifies the name of the building in which the user works.

*SAME
The name of the building does not change.

*NONE
The name of the building is changed to blanks.

building
> Specify a maximum of 20 characters for the name of the building in which the user works.

Office (OFC)

Specifies the name or number of the user's office.

*SAME
> The name or number of the user's office does not change.

*NONE
> The name or number of the user's office is changed to blanks.

office Specify a maximum of 16 characters for the name or number of the user's office.

Address line 1 (ADDR1)

Specifies the user's mailing address. A maximum of 40 characters can be entered into each of these fields.

*SAME
> The address line does not change.

*NONE
> The address line is changed to blanks.

address-line
> Specify the user's mailing address in any format.

Address line 2 (ADDR2)

Specifies the user's mailing address. A maximum of 40 characters can be entered into each of these fields.

*SAME
> The address line does not change.

*NONE
> The address line is changed to blanks.

address-line
> Specify the user's mailing address in any format.

Address line 3 (ADDR3)

Specifies the user's mailing address. A maximum of 40 characters can be entered into each of these fields.

*SAME
> The address line does not change.

*NONE
> The address line is changed to blanks.

address-line
>   Specify the user's mailing address in any format.

Address line 4 (ADDR4)

Specifies the user's mailing address. A maximum of 40 characters can be entered into each of these fields.

*SAME
>   The address line does not change.

*NONE
>   The address line is changed to blanks.

address-line
>   Specify the user's mailing address in any format.

Forward from user identifier (FWDFRM)

Specifies whether distributions are automatically forwarded from a specified user ID and address. This value is valid only for local users. This value cannot be an existing user ID, address, or forward-from value in the directory. It is used with the Rename Directory Entry (RNMDIRE) command to allow distributions to be sent to the old user until all users can be renamed or changed.

*SAME
>   The value does not change.

*NONE
>   Distributions are not forwarded.

>   **Element 1: User ID**

user-ID
>   Specify the user ID from which distributions are to be forwarded. A maximum of 8 characters can be specified. If this value is specified, an address must be specified on Element 2.

>   **Element 2: Address**

address
>   Specify the address from which distributions are to be forwarded. A maximum of 8 characters can be specified.

Indirect user (INDUSR)

Specifies whether the user is an indirect user. An indirect user is a local user who does not sign on the system to receive mail. Mail is automatically printed for the indirect user. Each indirect user must have a profile on the local system.

Note: Only an administrator can update this field.

*SAME
>   The indirect user indicator does not change.

*NO   The user is not an indirect user.

*YES   The user is an indirect user.

Print private mail (PRTPERS)

Specifies whether private mail for an indirect user is printed. Consideration should be given to restricting public access to the printer when private mail is printed.

Note: Only an administrator can update this field.

*SAME
           The print private mail indicator does not change.

*NO   Private mail is not printed for the indirect user.

*YES   Private mail is printed for the indirect user.

Print cover page (PRTCOVER)

Specifies whether a cover page is printed when a mail item is printed.

*SAME
           The print cover page indicator does not change.

*YES   A cover page is printed when a mail item is printed.

*NO   A cover page is not printed when a mail item is printed.

Mail notification (NFYMAIL)

Specifies whether the user is notified of the arrival of mail by receiving a message on the user's message queue.

*SAME
           The mail notification indicator does not change.

*SPECIFIC
           The user is notified only when the types of mail specified on the **Priority, private, important (NFYPTYPERS) parameter** and **Messages (NFYMSGS)** parameter arrive. These types of mail can include priority and personal mail, and messages.

*ALLMAIL
           The user is notified of the arrival of all types of mail.

*NOMAIL
           The user is not notified of the arrival of mail.

Priority, private, important (NFYPTYPERS)

Specifies whether the user is notified of the arrival of priority, private, and important mail. This parameter is ignored if *NOMAIL or *ALLMAIL is specified on the **Mail notification (NFYMAIL)** parameter.

*SAME
> The value does not change.

*YES   The user is notified of the arrival of priority, private, and important mail.

*NO   The user is not notified of the arrival of priority, private, and important mail.

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Messages (NFYMSGS)

Specifies whether the user is notified of the arrival of messages. This parameter is ignored if *NOMAIL or *ALLMAIL is specified on the **Mail notification (NFYMAIL)** parameter.

*SAME
> The mail messages indicator does not change.

*YES   The user is notified of the arrival of messages.

*NO   The user is not notified of the arrival of messages.

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Text (TEXT)

Specifies additional information to describe the directory entry.

*SAME
> The text does not change.

*NONE
> The text is changed to blanks.

description
> Specify a maximum of 50 characters of text to describe additional information about the user.

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Command character identifier (CMDCHRID)

Specifies the character identifier (graphic character set and code page) for the data being entered as command parameter values. The value you specify on this parameter applies to the **User identifier (USRID)** parameter, **System name (SYSNAME)** parameter, **Department (DEPT)** parameter, and to all of the X.400 O/R name parameters.

Note:
- Only the user ID and address, system name and group, department, and the X.400 O/R parameters are translated to the graphic character set identifier (GCID) specified on this parameter. All other parameter values that you specify are stored exactly as they are entered; the GCID value is stored with them.
- If this command is run interactively, the default GCID value is taken from the display device description. If it is run in batch, the default GCID value is taken from the QCHRID system value. You can override these values by specifying a specific character set and code page on this parameter.

Note: Double byte character set (DBCS) characters can be entered on the following system directory entry prompts:
- **User description (USRD)** parameter

- **Last name (LSTNAM)** parameter
- **First name (FSTNAM)** parameter
- **Middle name (MIDNAM)** parameter
- **Preferred name (PREFNAM)** parameter
- **Full name (FULNAM)** parameter
- **Department (DEPT)** parameter
- **Job title (TITLE)** parameter
- **Company (CMPNY)** parameter
- **Location (LOC)** parameter
- **Building (BLDG)** parameter
- **Office (OFC)** parameter
- **Address line 1 (ADDR1)** parameter
- **Address line 2 (ADDR2)** parameter
- **Address line 3 (ADDR3)** parameter
- **Address line 4 (ADDR4)** parameter
- **Text (TEXT)** parameter

Single values

*SYSVAL
> The system determines the graphic character set and code page values for the command parameters from the QCHRID system value.

*DEVD
> The system determines the graphic character set and code page values from the display device description where this command was entered. This option is valid only when entered from an interactive job. If this option is specified in a batch job, an error occurs.

Element 1: Graphic character set

1-32767
> Specify the graphic character set to use.

Element 2: Code page

1-32767
> Specify the code page to use.

Country or region. (COUNTRY)

Specifies the country or region name part of the X.400 Originator/Recipient (O/R) name.

*SAME
> The country or region name does not change.

*NONE
> The country or region name is changed to blanks.

country or region-code
> Specify an ISO 3166 Alpha-2 code or a CCITT country or region code from the ISO X.400 Code List Table. Refer to the COUNTRY parameter description in "Expanded descriptions" in the CL concepts and reference topic in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter for the ISO X.400 Code List Table.

Administration domain (ADMD)

Specifies the administration management domain part of the X.400 O/R name.

*SAME
> The administration management domain does not change.

*NONE
> The administrative management domain is changed to blanks.

administrative-management-domain
> Specify a maximum of 16 characters for the description of the administration management domain. An administration management domain is a public organization that handles a management domain, which is a set of message transfer agents and user agents that comprise a system capable of handling messages.

Private management domain (PRMD)

Specifies the private management domain part of the X.400 O/R name.

*SAME
> The private management domain does not change.

*NONE
> The private management domain is changed to blanks.

private-management-domain
> Specify a maximum of 16 characters for the description of the private management domain. A private management domain is a private company or noncommercial organization that handles a management domain, which is a set of message transfer agents and user agents that comprise a system capable of handling messages.

Surname (SURNAM)

Specifies the X.400 user last name part of the personal name within the X.400 O/R name.

Note: This parameter is required when a value is specified on the GIVENNAM, INITIALS or GENQUAL, parameter.

*SAME
> The surname does not change.

*NONE
> The surname is changed to blanks.

*LSTNAM
> The user last name specified in the directory entry is used as the surname.

surname
> Specify a maximum of 40 characters for the surname.

Given name (GIVENNAM)

Specifies the X.400 user first name part of the personal name within the X.400 O/R name.

Note: The SURNAM parameter is required when a value is specified on this parameter.

*SAME
> The given name does not change.

*NONE
> The given name is changed to blanks.

*FSTNAM
> The user first name specified in the directory entry is used as the given name. It is truncated to 16 characters.

given-name
> Specify a maximum of 16 characters for the given name.

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Initials (INITIALS)

Specifies the initials part of the personal name within the X.400 O/R name. For example, the initials for 'John Henry Smith' are 'JH.'

Note: The SURNAM parameter is required when a value is specified on this parameter.

*SAME
> The initials do not change.

*NONE
> The initials are changed to blanks.

initials
> Specify a maximum of 5 characters for the initials.

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Generation qualifier (GENQUAL)

Specifies the generation qualifier part of the personal name within the X.400 O/R name. For example, the generation qualifier in the name 'John R. Smith, III' is 'III.'

Note: The SURNAM parameter is required when a value is specified on this parameter.

*SAME
> The generation qualifier does not change.

*NONE
> The generation qualifier is changed to blanks.

generation-qualifier
> Specify a maximum of 3 characters for the generation qualifier.

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Organization (ORG)

Specifies the organization name part of the X.400 O/R name.

*SAME
> The organization name does not change.

*NONE
> The organization name is changed to blanks.

organization
> Specify a maximum of 64 characters for the organization name.

Organizational units (ORGUNIT)

Specifies the organization-defined unit part of the X.400 O/R name.

*SAME
> The organizational unit does not change.

*NONE
> The organizational unit is changed to blanks.

'organizational-unit'
> Specify a maximum of 32 characters for the name of an organizational unit. Up to 4
> organizational units can be listed in order of descending significance.

Domain-defined attributes (DMNDFNATR)

Specifies the type and value of a domain-defined attribute not specified by X.400 standards but allowed in the X.400 O/R name to accommodate existing systems of sending messages. A maximum of 4 sets of attributes can be specified.

Note: To specify an X.121 address, type X.121 in the Type field, and then type the X.121 address in the Value field. A maximum of 15 numeric characters can be specified for the X.121 address.

If you are specifying other domain-defined attributes, the X.121 pair must be the last attribute specified. You must also specify a value for the Country or region field if you specify an X.121 address.

X.121 is a CCITT Recommendation that provides a method for the international numbering of X.25 packet-switching data networks.

The possible **type** values are:

*SAME
> The type does not change.

*NONE
> The type is changed to blanks.

type   Specify a maximum of 8 characters for the type of domain-defined attribute.

The possible **value** values are:

*SAME
> The value does not change.

*NONE
>The value is changed to blanks.

value   Specify a maximum of 128 characters for the value of the domain-defined attribute.

User-defined fields (USRDFNFLD)

Specifies the user-defined field names and values. A list of these user-defined field names can be displayed using the CHGSYSDIRA command and prompting with the F4 key. Up to 100 user-defined fields can be specified. When you press F4, this field is not filled in with existing values when the size is over the maximum length. In this case, to see existing values, use the Work with Directory Entries (WRKDIRE) command. If the size of the existing values does not exceed the maximum length, this field is filled in with the existing values.

Note: The following SMTP user-defined fields are not always displayed when the CHGSYSDIRA command is prompted, but they can still be used in the user-defined field (USRDFNFLD) parameter to add SMTP information to the system distribution directory.

- SMTPAUSRID SMTP
- SMTPDMN SMTP
- SMTPRTE SMTP

*SAME
>The value does not change.

*NONE
>All of the user-defined field values for this user will be blanked out.

The possible User-Defined-Field Name value is:

field-name
>Specify up to 10 characters for the user-defined field name.

The possible User-Defined-Field Product ID values are:

*NONE
>No user-defined-field product ID is specified.

product-ID
>Specify up to 7 characters for the user-defined field product ID.

The possible User-Defined-Field Value value is:

'value'   Specify up to 512 characters for the value of the user-defined-field value. All the field will be replaced by the value specified here. Blanks will be padded on the right. Specifying a blank value will blank out the entire value.

Mail service level (MSFSRVLVL)

Specifies the mail server framework service level for a local user. This parameter is ignored for a remote user. It indicates where mail is stored on the system.

*SAME
>The value does not change.

*USRIDX

>   The mail is stored in a user index.

*SYSMS

>   The mail is stored in the Post Office Protocol (POP) mailbox, which can be accessed by POP clients on the personal computer through the iSeries POP server using the POP interface.

*DOMINO

>   The mail is stored in the Lotus Domino mail database.

The possible Mail Service Level Field-Name value is:

field-name

>   Specify a maximum of 10 characters for the field name. This value should contain a user-defined field in the system directory that has been defined by the CHGSYSDIRA command on the USRDFNFLD parameter with a field type of *MSFSRVLVL. The user-defined field specified here should then contain information needed by the mail server framework user exit program when the program is determining where to store the mail. The address resolution exit point name is QIBM_QZMFMSF_ADR_RSL. See the AnyMail/400 Mail Server Framework Support book, SC41-5411. for more information. This field could just be used as an indicator and the value does not have to be a user- defined field. It is recommended though, that the value specified here is a user-defined field.

The possible Mail Service Level Product-ID values are:

*NONE

>   No user-defined-field product ID is specified.

product-ID

>   Specify a maximum of 7 characters for the user-defined field product ID.

Preferred address (PREFADR)

Specifies the preferred address for a user. This tells the mail server framework what fields to use in the system distribution directory for the preferred address of a user. Specify *USRID for SNADS. SNADS handles all the distributions that go to a user index including the gateway for X.400 O/R names and for Simple Mail Transfer Protocol (SMTP) names.

The possible single values are:

*SAME

>   The value does not change.

*USRID

>   The user ID/address is the preferred address for this user.

*ORNAME

>   The X.400 O/R name is the preferred address for this user.

*SMTP

>   The SMTP name is the preferred address for this user.

The possible Preferred Address Field-Name value is:

field-name

>   Specify a maximum of characters for the field name. This value should contain an IBM-defined or a user-defined field in the system directory that has been defined by the CHGSYSDIRA command on the USRDFNFLD parameter with a field type of *ADDRESS. The field specified here should

then contain information needed by the mail server framework user exit program when the program is determining where to store the mail. This field could just be used as an indicator and the value does not have to be an IBM-defined or a user-defined field. Whenever possible, the value specified here should be an IBM-defined or a user-defined field.

The possible Preferred Address Product-ID values are:

*NONE
No user-defined field product ID is specified.

*IBM   The field name is an IBM-defined field in the system distribution directory. Allowed IBM-defined field names are:

- USER (user profile)
- CCMAILADR (cc:Mail address)
- FULNAM (full name)
- NETUSRID (network user ID)
- TELNBR1 (telephone number 1)
- TELNBR2 (telephone number 2)
- FAXTELNBR (facsimile telephone number)

product-ID
Specify a maximum of 7 characters for the user-defined field product ID.

The possible Preferred Address Address-Type value is:

address-type
Specify a maximum of 8 characters for the address type. The address type is a mail server framework type name that is specified in the Add Mail Framework Type Configuration (QzmfAddMailCfg) API. Whenever possible, this value should be one of the mail server framework configuration type names. When an address type is specified for a preferred address that is a special value, specify *N for the product ID.

cc:Mail address (CCMAILADR)

Specifies the cc:Mail address for this user.

*SAME
The value does not change.

*NONE
No cc:Mail address is specified.

'cc:Mail-address'
Specify the cc:Mail address. The address value has a maximum of 126 characters. If the address includes both a remote post office name and an alias name, the maximum number or characters is 126 characters for each, with a space separating them (a total of 253 characters). If the remote post office name contains spaces, the name needs to be enclosed in quotation marks. This adds two characters to the limit for a total of 128 characters or 255 characters with the alias name.

cc:Mail comment (CCMAILCMT)

Specifies the cc:Mail comment for this user.

*SAME
> The value does not change.

*NONE
> No cc:Mail comment is specified.

'cc:Mail-comment'
> Specify up to 126 characters for the cc:Mail comment value.

Allow synchronization (ALWSYNC)

Specifies whether synchronization of this entry with other directories should be allowed.

*SAME
> The value does not change.

*YES Synchronization is allowed.

*NO Synchronization is not allowed.

DLO owner (DLOOWN)

Specifies if the user profile or the group profile will be assigned the ownership of the Document Library Objects (DLOs) for this directory entry.

Note: If this directory entry does not have a user profile in the User profile field, the value in the DLO owner field will be ignored.

*SAME
> The value does not change.

*USRPRF
> The user profile associated with this directory entry is the owner of newly created DLOs.

*GRPPRF
> The group profile specified in the user profile associated with this directory entry is made the owner of newly created DLOs and has all authority to the DLOs. If the group profile value is *NONE in the user profile, then the owner of the DLO is the user profile.

Examples

Example 1: Changing a User's Telephone Number

```
CHGDIRE   USRID(HURST PAYROLL)  USER(*SAME)  TELNBR1('456-4489')
```

Assume the user who runs the command has user ID HURST PAYROLL and does not have security administrator authority. The primary telephone number for the user is changed. All other information remains the same. This command works the same if someone other than HURST PAYROLL runs the command and has security administrator authority. If the person running the command is not HURST PAYROLL and does not have security administrator authority, an error message is returned.

Example 2: Changing a User's Address, Telephone Number, and Text Information

```
CHGDIRE   USRID(BYRD NEWYORK)  USER(AJBYRD)  SYSNAME(*LCL)
          ADDR1('Dept55N/025-3')  ADDR2('IBM Rochester')
          ADDR3(*NONE)  ADDR4(*NONE)  TELNBR1('456-4489')
          LOC(Rochester)  TEXT('User transferred from Boca')
```

Assume the person running this command has security administrator authority. The user (BYRD NEWYORK) has transferred from a remote user to a local user. The profile name must now be specified since the user is now a local user. The user's address, telephone number, and text information are updated.

Example 3: Changing a User's Full Name, Department, and Office

```
CHGDIRE   USRID(JANE CHICAGO)  LSTNAM('Smith')  MIDNAM('Allen')
          FULNAM(*DFT)  DEPT(55N)  OFC(L305)
```

Assume the person running this command has security administrator authority. The user JANE CHICAGO has changed her name and at the same time has moved to a new office and department. Jane's full name is changed to 'Smith, Jane Allen'. If FULNAM(*SAME) is specified or is used as the default, Jane's full name remains the same, even though her first and middle names are changed.

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Error messages

*ESCAPE Messages

CPF8360
> Not enough storage for commitment control operation.

CPF89A3
> Operation not successful due to authority reasons.

CPF89A4
> Operation not successful due to data validation reasons.

CPF89AE
> Directory entry for network user ID &1 not changed.

CPF8AA1
> Library QUSRSYS not completely installed.

CPF90A8
> *SECADM special authority required to do requested operation.

CPF9024
> System cannot get correct record to finish operation.

CPF905C
> Error occurred trying to find a translation table.

CPF907E
> You can only change your own directory entry.

CPF907F
> Specified parameters not allowed.

CPF9083
> User ID and address &1 &2 not changed.

CPF9096
> Cannot use CMDCHRID(*DEVD), DOCCHRID(*DEVD) in batch job.

CPF9838
> User profile storage limit exceeded.

CPF9845

> Error occurred while opening file &1.

CPF9846

> Error while processing file &1 in library &2.

Change Directory Shadow System (CHGDIRSHD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Directory Shadow System (CHGDIRSHD) command changes a system that is defined to be shadowed.

Restriction:

To use this command, you must have security administrator (*SECADM) authority.

Parameters

Keyword	Description	Choices	Notes
SYSNAME	System name	*Character value*	Required, Key, Positional 1
NXTSHD	Next shadow	Single values: *CURRENT, *SCD, ***SAME** Other values: *Element list*	Optional
	Element 1: Date	*Date*	
	Element 2: Time	*Time*	
SCD	Scheduled shadow	Single values: *CURRENT, ***SAME** Other values: *Element list*	Optional
	Element 1: Date	*Date*	
	Element 2: Time	*Time*	
FRQ	Shadowing frequency	*DAILY, *WEEKLY, *BIWEEKLY, *MONTHLY, *MONTHLYREL, *HOURS, ***SAME**	Optional
HOURS	Intervals of hours	1-999, ***SAME**	Optional
SKIPDAY	Days to skip	Single values: *NONE, ***SAME** Other values (up to 5 repetitions): *SUN, *MON, *TUE, *WED, *THU, *FRI, *SAT	Optional
MONTHWK	Week of the month	4, *LAST, ***SAME**	Optional
REINZ	Reinitialize data	Single values: *NONE, *NONAPPC, ***SAME** Other values: *Element list*	Optional
	Element 1: Method	***APPC**	
	Element 2: Replace data	*NO, *YES, ***SAME**	
RMTLOCNAME	Remote location name	*Character value*, *SYSNAME, ***SAME**	Optional
MODE	Mode	*Character value*, *NETATR, ***SAME**	Optional
RMTNETID	Remote network identifier	*Character value*, *LOC, *NETATR, *NONE, ***SAME**	Optional
LCLLOCNAME	Local location name	*Character value*, *LOC, *NETATR, ***SAME**	Optional
TEXT	Text 'description'	*Character value*, *SYSNAME, ***SAME**	Optional

System name (SYSNAME)

Specifies the system that supplies data to the local system. A maximum of 8 characters can be specified for the name of the supplier system you are changing. You can specify uppercase letters A through Z, numbers 0 through 9, and special characters @, #, $, and embedded blanks. Embedded blanks must be enclosed in single quotation marks ('). Leading blanks are not allowed. The @, #, and $ characters are not recommended because they are not part of an invariant character set and are not available on all keyboards.

This is a required parameter.

Next shadow (NXTSHD)

Specifies the date and time when the next shadow will occur. This is the same as the scheduled shadow date unless a retry is performed or a next shadow date is specified in addition to the scheduled shadow date.

*SAME
> The value does not change.

*CURRENT
> The current date and time is used.

*SCD   The scheduled date and time is used.

The possible **Next Shadow Date** values are:

next-shadow-date
> Specify the date on which the system next begins shadowing data to your system. The date must be specified in the job date format.

The possible **Next Shadow Time** values are:

next-shadow-time
> Specify the time at which the system next begins shadowing data to your system.
>
> The time is specified in 24-hour format with or without a time separator as follows:
>
> * With a time separator, specify a string of 5 or 8 digits where the time separator separates the hours, minutes, and seconds. If this command is entered from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command fails.
> * Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where **hh** = hours, **mm** = minutes, and **ss** = seconds. Valid values for **hh** range from 00 through 23. Valid values for **mm** and **ss** range from 00 through 59.

This is a required parameter.

Scheduled shadow (SCD)

Specifies the date and time of the scheduled shadow.

*SAME
> The value does not change.

*CURRENT
        The system begins shadowing data at the current date and time.

The possible **Shadow Date** values are:

scheduled-shadow-date
        Specify the date on which the system begins shadowing data to your system. The date must be specified in the job date format.

The possible **Shadow Time** values are:

scheduled-shadow-time
        Specify the time at which the system begins shadowing data to your system.

        The time is specified in 24-hour format with or without a time separator as follows:

- With a time separator, specify a string of 5 or 8 digits where the time separator separates the hours, minutes, and seconds. If this command is entered from the command line, the string must be enclosed in apostrophes. If a time separator other than the separator specified for your job is used, this command fails.
- Without a time separator, specify a string of 4 or 6 digits (hhmm or hhmmss) where **hh** = hours, **mm** = minutes, and **ss** = seconds. Valid values for **hh** range from 00 through 23. Valid values for **mm** and **ss** range from 00 through 59.

This is a required parameter.

Shadowing frequency (FRQ)

Specifies the frequency with which the supplier system you are changing shadows data to your system, based on the value specified on the SCD parameter.

*SAME
        The value does not change.

*WEEKLY
        Shadowing occurs once a week.

*DAILY
        Shadowing occurs once a day.

*BIWEEKLY
        Shadowing occurs every other week.

*MONTHLY
        Shadowing occurs on the same date every month.

*MONTHLYREL
        Shadowing occurs on the same relative day of the same relative week of every month, such as the first Monday of the month.

*HOURS
        Shadowing occurs in the interval specified on the HOURS parameter.

Intervals of hours (HOURS)

Specifies the number of hours between shadows from the supplier system. This parameter is valid only when FRQ(*HOURS) is specified.

*SAME
> The value does not change.

number-of-hours
> Specify the number of hours between shadowing.

Days to skip (SKIPDAY)

Specifies the days of the week when shadowing does not occur. A maximum of five values, other than *NONE, can be specified.

This parameter is valid only when FRQ(*DAILY) is specified.

*SAME
> The value does not change.

*NONE
> No days are skipped.

*SUN   Sundays are skipped.

*MON
> Mondays are skipped.

*TUE   Tuesdays are skipped.

*WED   Wednesdays are skipped.

*THU   Thursdays are skipped.

*FRI   Fridays are skipped.

*SAT   Saturdays are skipped.

Week of the month (MONTHWK)

Specifies whether shadowing that occurs on the same relative day of the month is scheduled to occur in the fourth week or the last week of the month.

This parameter is valid only when FRQ(*MONTHLYREL) is specified and when the SCD parameter date is the 22nd, 23rd, or 24th.

*SAME
> The value does not change.

4   Shadowing occurs on the same relative day in the fourth week of the month.

*LAST
> Shadowing occurs on the same relative day in the last week of the month, whether or not the month has four or five weeks.

Reinitialize data (REINZ)

Specifies the method used if the first shadow is done again. The first shadow duplicates all of the data in the supplier system's distribution directory. Subsequent shadows include only data that has changed since the previous shadow.

The possible **Method** values are:

*SAME
> The value does not change.

*NONE
> The shadowed directory data is not reinitialized.

*NONAPPC
> The Copy to Directory (CPYTODIR) command is used to reinitialize the directory.

*APPC
> The first shadow occurs when this command is run using advanced program-to-program (APPC) communications. If you are adding a supplier system with a large directory, you may want to specify *NONAPPC to prevent the first shadow from monopolizing your communications lines.
>
> When *APPC is specified, Element 2 allows you to specify whether the data in the fields of a directory entry on your system is replaced by shadowed data if the same entry also exists in the supplier system's directory.

When *APPC is specified for the **Method** field, the possible **Replace Data** values are:

*SAME
> The value does not change.

*NO The data in the fields of existing directory entries on your system is not replaced with data from the supplier system.

*YES All shadowed data is added to your system distribution directory. The data in the fields of existing directory entries on your system is replaced with shadowed data if the same entry also exists in the supplier system's directory.

Remote location name (RMTLOCNAME)

Specifies the remote location name of the supplier system you are changing.

*SAME
> The value does not change.

*SYSNAME
> The value specified on the SYSNAME parameter is used for the remote location name.

remote-location-name
> Specify the name of a remote location.
>
> A maximum of 8 characters can be specified. The first character must be an uppercase letter A through Z, or special character $, #, or @. The name cannot contain a blank, plus sign (+), period (.), or an underscore (_). For more information, see the APPC Programmer's Guide.

Mode (MODE)

Specifies the name of the mode that defines the sessions on the device used when shadowing data from the supplier system.

*SAME
The value does not change.

*NETATR
The mode in the network attributes is used.

mode-name
Specify the mode name.

A maximum of 8 characters can be specified. The first character must be an uppercase letter A through Z, or special character $, #, or @. The name cannot contain a blank, plus sign (+), period (.), or an underscore (_). For more information, see the APPC Programmer's Guide.

Remote network identifier (RMTNETID)

Specifies the supplier system's remote network identifier (ID).

*SAME
The value does not change.

*LOC The remote network ID associated with the remote location is used. If several remote network IDs are associated with the remote location, the system determines which remote network ID is used.

*NETATR
The remote network identifier specified in the network attributes is used.

*NONE
No remote network ID is used.

remote-network-ID
Specify the remote network ID.

A maximum of 8 characters can be specified. The first character must be an uppercase letter A through Z, or special character $, #, or @. The name cannot contain a blank, plus sign (+), period (.), or an underscore (_). For more information, see the APPC Programmer's Guide.

Local location name (LCLLOCNAME)

Specifies the local location name. The local location name is used to identify your system to the supplier system you are changing.

*SAME
The value does not change.

*LOC The local location name associated with the remote location is used.

*NETATR
The LCLLOCNAME value specified in the system network attributes is used.

local-location-name
Specify the local location name.

A maximum of 8 characters can be specified. The first character must be an uppercase letter A through Z, or special character $, #, or @. The first character cannot contain a blank, plus sign (+), period (.), or an underscore (_). For more information, see the APPC Programmer's Guide.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
> The value does not change.

*SYSNAME
> The name specified on the SYSNAME parameter is used for the description.

'description'
> Specify no more than 50 characters of text, enclosed in apostrophes.

Examples

Example 1: Changing the Next Shadow Date and Time

```
CHGDIRSHD   SYSNAME(NYCITY)
            NXTSHD('93/05/01' '8:00:00')
```

This command changes the next shadowing occurrence for the system NYCITY. This does not effect the scheduled date and time. When the shadowing is completed for this system, the next date and time will be calculated from the scheduled date and time. This command is used for temporary changes to shadowing schedules.

Example 2: Changing the Shadow Date and Time

```
CHGDIRSHD   SYSNAME(NEWYORK)
            SCD('93/06/01' '20:00:00')
            FRQ(*BIWEEKLY)
```

This command changes the scheduled shadow date for system NEWYORK to June 1, 1993 at 8:00 PM. The frequency of the shadow is every 2 weeks.

Error messages

*ESCAPE Messages

CPF90A8
> *SECADM special authority required to do requested operation.

CPF90FE
> Add or change of shadow supplier &1 was not successful.

CPF905C
> Error occurred trying to find a translation table.

CPF9838
> User profile storage limit exceeded.

CPF9845

        Error occurred while opening file &1.

CPF9846

        Error while processing file &1 in library &2.

CPF9847

        Error occurred while closing file &1 in library &2.

Change Diskette File (CHGDKTF)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Diskette File (CHGDKTF) command changes the attributes of the specified diskette unit file.

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Parameters

Keyword	Description	Choices	Notes
FILE	File	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: File	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
DEV	Device	*Element list*	Optional, Positional 2
	Element 1: Diskette device	*Name*, ***SAME**, *NONE	
VOL	Volume identifier	Single values: ***SAME**, *NONE Other values (up to 50 repetitions): *Character value*	Optional
LABEL	Diskette label	*Character value*, ***SAME**, *NONE	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
EXCHTYPE	Diskette file exchange type	***SAME**, *STD, *BASIC, *H, *I	Optional
CODE	Code	***SAME**, *EBCDIC, *ASCII	Optional
CRTDATE	Creation date	*Date*, ***SAME**, *NONE	Optional
EXPDATE	File expiration date	*Date*, ***SAME**, *NONE, *PERM	Optional
SPOOL	Spool the data	***SAME**, *NO, *YES	Optional
OUTQ	Spooled output queue	Single values: ***SAME** Other values: *Qualified object name*	Optional
	Qualifier 1: Spooled output queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
MAXRCDS	Max spooled output records	1-500000, ***SAME**, *NOMAX	Optional
SCHEDULE	Spooled output schedule	***SAME**, *FILEEND, *JOBEND, *IMMED	Optional
HOLD	Hold spooled file	***SAME**, *NO, *YES	Optional
SAVE	Save spooled file	***SAME**, *NO, *YES	Optional
OUTPTY	Output priority (on OUTQ)	***SAME**, *JOB, 1, 2, 3, 4, 5, 6, 7, 8, 9	Optional
USRDTA	User data	*Character value*, ***SAME**, *BLANK	Optional
IGCDTA	User specified DBCS data	***SAME**, *NO, *YES	Optional
WAITFILE	Maximum file wait time	*Integer*, ***SAME**, *IMMED, *CLS	Optional
SHARE	Share open data path	***SAME**, *NO, *YES	Optional

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File (FILE)

Specifies the diskette file to be changed.

This is a required parameter.

Qualifier 1: DDM file

name   Specify the name of the file.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current job library is used to locate the file. If no library is specified as the current library for the job, QGPL is used.

name   Specify the library where the file is located.

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Device (DEV)

Specifies the name of the diskette unit that is used with this diskette file to perform input/output data operations. The device name of the IBM-supplied diskette unit description is QDKT, which is located in library QGPL. This parameter is ignored if SPOOL(*YES) is specified for the file when it is opened.

*SAME
> The device name does not change.

*NONE
> No device name is specified. The name of the diskette unit must be specified later in another CHGDKTF command, in an Override with Database File (OVRDKTF) command, or in the high-level language program that opens the file.

name   Specify the name of the diskette unit that is used with this diskette unit file.

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Volume identifier (VOL)

Specifies one or more volume identifiers of diskettes used by the diskette unit file.

Single values

*SAME
> The volume identifiers do not change.

*NONE
> No diskette volume identifiers are specified. They can be supplied before the device file is opened, either in the Override Diskette File (OVRDKTF) command, in another Change Diskette File (CHGDKTF) command, or in the high-level language program. If not specified, volume identifier checking is not done.

Other values (up to 50 repetitions)

character-value
> Specify the identifiers of one or more volumes in the order in which they are put on and used by this device file. Each identifier can be up to 6 alphanumeric characters long.

Diskette label (LABEL)

Specifies the data file identifier, or all the identifiers, of the data files on the diskette being shown. The data file identifier is stored in the volume label area of the diskette, and it specifies the identifier of the file that exists on the diskette.

*SAME
> The data file label does not change.

*NONE
> No data file label is specified. It must be supplied before the device file is opened, either in the Override Diskette File (OVRDKTF) command, in another Change Diskette File (CHGDKTF) command, or in the high-level language program.

character-value
> Specify the identifier (up to 8 characters in length) of the data file being used with this diskette unit file.

Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
> The text (if any) does not change.

*BLANK
> No text is specified.

character-value
> Specify no more than 50 characters of text, enclosed in apostrophes.

Diskette file exchange type (EXCHTYPE)

Specifies, for diskette output files only, the exchange type used by the device file when the system is writing diskette data.

*SAME
> The exchange type does not change.

*STD The BASIC exchange format is used for a type 1 or a type 2 diskette. The H exchange type is used for a type 2D diskette.

*BASIC
> The BASIC exchange type is used.

*H The H exchange type is used.

*I The I exchange type is used.

Code (CODE)

Specifies the type of character code used when diskette data is either read or written.

*SAME

> The type of character code does not change.

*EBCDIC

> The EBCDIC character code is used.

*ASCII

> The ASCII character code is used.

Creation date (CRTDATE)

Specifies when the diskette data file was created on diskette. If the creation date written on the diskette does not match the date specified for the device file when it is opened, an error message is sent to the user program.

*SAME

> The creation date of the diskette data file does not change.

*NONE

> The creation date of the diskette data file is not checked.

date   Specify the creation date of the diskette data file used by this device file. The date must be specified in the format defined by the job attributes, DATFMT and DATSEP. The diskette should be labeled yymmdd.

File expiration date (EXPDATE)

Specifies, for diskette output data files only, the expiration date of the data file used by this device file. If a date is specified, the data file is protected and cannot be written over until the day after the specified expiration date.

*SAME

> The expiration date of the data file does not change.

*NONE

> The data file is protected for only the day on which it is created on the diskette.

*PERM

> The data file is protected permanently. The date written on the diskette is 999999.

date   Specify the expiration date of the data file. The diskette should be labeled in the format yymmdd.

Spool the data (SPOOL)

Specifies whether the input or output data for the diskette device file is spooled. If *NO is specified, other spool-related parameters on this command are ignored.

*SAME

> The spool-related data value does not change.

*NO   The data is not spooled. If this file is opened for input, the data is read directly from the diskette. If this is an output file, the data is written directly to the diskette as it is processed by the program.

*YES   The data is spooled. If this file is opened for input, an inline data file having the specified name is processed; otherwise, the next unnamed inline spooled file is processed. More information on named and unnamed inline files is in the File systems and management information in the iSeries Information Center at http://www.ibm.com/eserver/iseries/infocenter. If this is an output file, the data is spooled for processing by a diskette or print writer.

Top

Spooled output queue (OUTQ)

Specifies the output queue used for spooled files that specify OUTQ(*JOB). This parameter applies only to printer files that have *JOB specified for the OUTQ parameter.

Single values

*SAME
> The output queue does not change.

Qualifier 1: Spooled output queue

name   Specify the name of the output queue.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

name   Specify the name of the library to be searched.

Top

Max spooled output records (MAXRCDS)

Specifies, for spooled output only, the maximum number of records that can be in the spooled output file for this diskette unit file.

*SAME
> The maximum number of records does not change.

*NOMAX
> The system maximum number of records (500000) is used.

1-500000
> Specify a maximum number of records.

Top

Spooled output schedule (SCHEDULE)

Specifies, for spooled output files only, when the spooled output file is made available to a diskette writer.

*SAME
> The time when spooled output starts does not change.

*JOBEND
> The spooled output file is made available after the job is completed.

*FILEEND
> The spooled output file is made available when the file is closed in the program.

*IMMED
> The spooled output file is made available to the writer as soon as the file is opened in the program.

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Hold spooled file (HOLD)

Specifies, for spooled output files only, whether the spooled file is held. The spooled file can be released by using the Release Spooled File (RLSSPLF) command.

*SAME
> The spooled file status does not change.

*NO The spooled output file is not held by the output queue.

*YES The spooled output file is held until it is released by the Release Spooled File (RLSSPLF) command.

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Save spooled file (SAVE)

Specifies, for spooled output files only, whether the spooled file is saved (kept on the output queue) after the output has been produced.

*SAME
> The spooled file status does not change.

*NO The spooled file data is not kept on the output queue.

*YES The spooled file data is kept on the output queue until the file is deleted.

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Output priority (on OUTQ) (OUTPTY)

Specifies the output priority for spooled output files that are produced by this job. The highest priority is 1 and the lowest priority is 9.

*SAME
> The output priority does not change.

*JOB The output priority associated with the job that created the spooled file is used.

1-9 Specify the output priority with a number ranging from 1 (high) through 9 (low).

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User data (USRDTA)

Specifies, for spooled output, user-specified data that identifies the file.

*SAME
> The user-specified data does not change.

*BLANK
> A value consisting of 10 blanks is used.

character-value
> Specify up to 10 characters of text.

User specified DBCS data (IGCDTA)

Specifies whether the file processes double-byte character set (DBCS) data.

*SAME
> The value does not change.

*NO   The file does not process double-byte character set (DBCS) data.

*YES   The file processes double-byte character set (DBCS) data.

Maximum file wait time (WAITFILE)

Specifies the number of seconds that the program waits for the file resources to be allocated when the file is opened. If the file resources cannot be allocated within the specified wait time, an error message is sent to the program.

*SAME
> The wait time does not change.

*IMMED
> The program does not wait. Immediate allocation of file resources is required.

*CLS   The job default wait time is used as the wait time for the file resources to be allocated.

1-32767
> Specify the number of seconds to wait for file resources to be allocated.

Share open data path (SHARE)

Specifies whether the open data path (ODP) is shared with other programs in the same routing step. When an ODP is shared, the programs accessing the file share facilities such as the file status and the buffer.

*SAME
> The ODP sharing determination does not change.

*NO   The ODP is not shared with other programs in the routing step. A new ODP for the file is created and used every time a program opens the file.

*YES   The same ODP is shared with each program in the job that also specifies *YES when it opens the file.

Examples

Example 1: Data is Not Spooled

```
CHGDKTF    FILE(ACCREC/PRNTRPT)    SPOOL(*NO)
```

This command changes the diskette device file named PRNTRPT stored in the ACCREC library. The device file causes all input/output operations between the program and the diskette to be direct (without spooling). Other values in the file description do not change.

Example 2: Specifying DBCS Data Processing

```
CHGDKTF    FILE(IGCLIB/IGCDKT)    IGCDTA(*YES)
```

This command changes the diskette device file named IGCDKT, which is stored in the library IGCLIB, so that it processes double-byte character set data.

Error messages

*ESCAPE Messages

CPF7304

File &1 in &2 not changed.

Change DLO Auditing Level (CHGDLOAUD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Document Library Object Audit (CHGDLOAUD) command allows a user with *AUDIT special authority to change the auditing level of a document library object (DLO) or group of DLOs.

Notes:

1. Only the document library objects that exist when the command begins processing are changed. Objects created while the command is running might not be included in the change.

2. When changing objects in a folder (including the *ROOT level folder), the auditing level of the folder is changed first so any subsequent objects created into the folder inherit the containing folder's auditing level.

3. The *ROOT level folder is changed first when changing all objects on the system.

4. The default auditing level for newly created documents not contained in any folder is the value found in the QCRTOBJAUD system value. This system value should be changed to the desired auditing level prior to running the CHGDLOAUD command for documents not contained in any folder in order to ensure that all newly created documents not contained in any folder will inherit the proper auditing level.

Parameters

Keyword	Description	Choices	Notes
DLO	Document library object	*Character value*, *SYSOBJNAM, *ROOT, *ALL	Required, Positional 1
FLR	Folder	*Character value*, ***NONE**, *ANY, *ROOT	Optional, Positional 2
SYSOBJNAM	System object name	*Name*	Optional
AUDDLO	DLO auditing level	***SAME**, *NONE, *USRPRF, *CHANGE, *ALL	Optional
LEVEL	Level of list	***CURRENT**, *ALL	Optional

Document library object (DLO)

Specifies the name of the document or folder whose auditing level is changed.

The possible values are:

*ALL   The auditing level for all DLOs in the specified folder is changed.

*ROOT

> The auditing level for the *ROOT level folder is changed. The value specified on the AUDDLO parameter becomes the default auditing level for all new first-level folders.

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*SYSOBJNAM
> The auditing level for the document or folder with the system object name specified on the SYSOBJNAM parameter is changed.

document-library-object-name
> Specify the document library object for which the auditing level is changed.

Folder (FLR)

Specifies the folder containing the document library object whose auditing level is changed.

The possible values are:

*NONE
> The documents or folders that are not in a folder are changed.

*ANY   All document library objects are changed.

*ROOT
> All first-level folders are changed. The *ROOT level folder is also changed.

folder-name
> Specify the name of the folder that contains the document library object whose auditing level is changed. The folder specified on the command is also changed if DLO(*ALL) is specified.

System object name (SYSOBJNAM)

Specifies the system object name. This parameter is valid only when DLO(*SYSOBJNAM) is specified. Ten characters must be specified.

DLO auditing level (AUDDLO)

Specifies the auditing level for the document or folder changed.

The possible values are:

*SAME
> The level does not change.

*NONE
> No read or change auditing occurs for the document or folder.

*USRPRF
> The current user profile is used to determine whether an audit record is sent for this session.

*CHANGE
> All change access to this DLO is logged.

*ALL   All change and read access to this DLO is logged.

Level of list (LEVEL)

Specifies whether documents and folders at nested levels in the specified folder are changed.

The possible values are:

*CURRENT
> Only the documents and folders at the current level are included in the change.

*ALL   The documents and folders at all levels are included in the change.

Examples

Example 1: Changing an Auditing Level

```
CHGDLOAUD   DLO(MYDOC)  FLR(MYFLR)  AUDDLO(*ALL)
```

This command changes the auditing level of document MYDOC in folder MYFLR so all change or read access to this DLO is logged in the security journal.

Example 2: Changing a System Object Name Auditing Level

```
CHGDLOAUD   DLO(*SYSOBJNAM)  SYSOBJNAM(FMCM210974)
            AUDDLO(*ALL)
```

This command changes the auditing level of a document with the system object name FMCM210974 so all change or read access to this DLO is logged in the security journal.

Example 3: Changing the Auditing Level of All DLOs

```
CHGDLOAUD   DLO(*ALL)  FLR(*ANY)  AUDDLO(*ALL)
```

This command changes the auditing level of all the DLOs so all change or read access to the DLOs is logged in the security journal.

Error messages

*ESCAPE Messages

CPF22B0
> Not authorized to change the auditing value.

CPF89AF
> Auditing level not changed for some document library objects.

CPI905C
> &1 document library objects changed.

Change DLO Authority (CHGDLOAUT)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Document Library Object Authority (CHGDLOAUT) command allows you to change an existing user's authority to a document or folder. With this command, you can:

- Change an existing user's specific authority
- Change authority for users with no specific authority (*PUBLIC)
- Change the authorization list that specifies the object's security
- Change the existing security level, or change the security to that of a reference object.

Restriction: You must have *ALL authority, *ALLOBJ special authority, or be the owner of the objects.

Parameters

Keyword	Description	Choices	Notes
DLO	Document library object	*Character value*, *ALL, *SYSOBJNAM, *ROOT	Required, Positional 1
FLR	Folder	*Character value*, ***NONE**	Optional
USRAUT	User authority	Single values: ***SAME** Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: User profile	*Name*, *PUBLIC	
	Element 2: Authority level	*USE, *CHANGE, *EXCLUDE, *ALL, *AUTL	
AUTL	Authorization list	*Name*, ***SAME**, *NONE	Optional
SENSITIV	Sensitivity	***SAME**, *NONE, *PERSONAL, *PRIVATE, *CONFIDENTIAL	Optional
REFDLO	Reference DLO	*Character value*, ***NONE**, *REFSYSOBJ	Optional
REFFLR	Reference folder	*Character value*, ***NONE**	Optional
SYSOBJNAM	System object name	*Name*	Optional
REFSYSOBJ	Reference system object	*Name*	Optional
PERSONAL	Personal	***SAME**, *NO, *YES	Optional

Document library object (DLO)

Specifies the name of the document or folder for which user authority is changed.

This is a required parameter.

The possible values are:

*ALL User authority is changed for all objects in the specified folder. If *ALL is specified, a value must be specified on the **Folder** prompt (FLR parameter).

*SYSOBJNAM

The system object name specified on the **System object name** prompt (SYSOBJNAM parameter) has user authority changed.

*ROOT

The public authority value of the *ROOT folder is changed.

document-or-folder-name

Specify the user-assigned name of the document or folder object. A maximum of 12 characters can be specified.

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Folder (FLR)

Specifies the folder where the object specified for the **Document library object (DLO)** parameter is located.

The possible values are:

*NONE

A folder name is not specified.

folder-name

Specify the user-assigned name of the folder. The folder name can consist of a series of folder names if the object is located in a folder that is contained in another folder. A maximum of 63 characters can be specified.

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User authority (USRAUT)

Specifies the name of an existing user and the new user authority level.

When USRAUT((*PUBLIC *CHANGE)) is specified, all users can create first-level folders in the *ROOT folder. When USRAUT((*PUBLIC *USE)) is specified, only users with *ALLOBJ or *SECADM special authority can create first-level folders. Folder creation is the only function controlled by these values. Public authority is the only security value that can be specified for the *ROOT folder. Only *CHANGE and *USE public authorities can be specified for the *ROOT folder.

You can enter multiple values for this parameter.

The possible **user profile** values are:

*SAME

Existing user authority does not change.

*PUBLIC

Users with no specific authority and who are not on the authorization list have their authority changed.

user-profile-name

Specify the name of the user profile whose specific authority is changed.

The possible **authority level** values are:

*ALL The user can perform all operations except those limited to the owner or controlled by authorization list management (*AUTLMGT) authority. The user can control the object's existence,

specify the security for the object, change the object, and perform basic functions on the object. The user also can change ownership of the object.

*CHANGE

The user can perform all operations on the object except those limited to the owner or controlled by object existence (*OBJEXIST) and object management (*OBJMGT) authorities. The user can change and perform basic functions on the object. *CHANGE authority provides object operational (*OBJOPR) authority and all data authority. If the object is an authorization list, the user cannot add, change, or remove users.

*USE   The user can perform basic operations on the object, such as running a program or reading a file. The user cannot change the object. Use (*USE) authority provides object operational (*OBJOPR), read (*READ), and execute (*EXECUTE) authorities.

*EXCLUDE

The user cannot access the object.

*AUTL

The authority of the authorization list specified on the **Authorization list** prompt (AUTL parameter) is used for the document. The *AUTL value is valid only if *PUBLIC is also specified.

Authorization list (AUTL)

Specifies whether the existing authorization list is replaced by a different authorization list or removed from the document library object.

The possible values are:

*SAME

The authorization list does not change.

*NONE

The document library object will no longer be secured by an authorization list. If the public authority to the document library object is *AUTL, it is changed to *EXCLUDE.

authorization-list-name

Specify the name of the new authorization list whose authority determines the object's security.

Sensitivity (SENSITIV)

Specifies one of four levels of sensitivity as defined by the X.400 standard. The four levels include no sensitivity, personal, private and company confidential. Any document marked as private is still available to users who are normally authorized to it, but is unavailable to users who are working on your behalf (even though it may be available to them when they are not working on your behalf).

The possible values are:

*SAME

The value does not change.

*NONE

The document has no sensitivity restrictions.

*PERSONAL

The document is intended for the user as an individual.

*PRIVATE
> The document contains information that should be accessed only by the owner. This value cannot be specified if the access code zero (0) is assigned to the object.

*CONFIDENTIAL
> The document contains information that should be handled according to company procedures.

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Reference DLO (REFDLO)

Specifies that the user authorities to the existing document or folder are replaced by user authorities to the referred to document library object including specific authorities, authority given to users with no specific authorities, authorization list authority, access codes, and personal status.

The possible values are:

*NONE
> A referred to object name is not specified.

*REFSYSOBJ
> A referred to object is specified on the **Reference system object**prompt (REFSYSOBJ parameter). This is the system object name of a document or folder.

document-or-folder-name
> Specify the name of the document or folder that is referred to.

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Reference folder (REFFLR)

Specifies the folder in which the referred to object specified on the **Reference DLO**prompt (REFDLO parameter) is located.

The possible values are:

*NONE
> A folder name is not specified.

folder-name
> Specify the user-specified name of the referred to folder. The folder name can consist of a series of folder names if the object is located in a folder that is contained in another folder.

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System object name (SYSOBJNAM)

Specifies the system object name of the document or folder. This parameter is valid only when *SYSOBJNAM is specified on the **Document library object** prompt (DLO parameter).

object-name
> Specify the system object name of the document or folder using 10 characters.

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Reference system object (REFSYSOBJ)

Specifies the system object name of the referred to document library object.

object-name
> Specify the system object name of the referred to document library object using the entire 10 characters.

Personal (PERSONAL)

Specifies whether the document being changed is a personal document. If it is, only the owner or an authorized user can access it. Any document marked as private is still available to users who are normally authorized to it, but is unavailable to users who are working on your behalf (even though it may be available to them when they are not working on your behalf). This parameter is replaced by SENSITIV but the PERSONAL parameter can still be used. However, because this parameter may be removed in a later release, whenever possible use the SENSITIV parameter.

The possible values are:

*SAME
> The value does not change.

*NO Access is allowed when a user is working on behalf of another. This value will map to SENSITIV(*NONE).

*YES Access is not allowed when a user is working on behalf of another. PERSONAL(*YES) requires that USER(*PUBLIC) be *EXCLUDE. This value cannot be specified if the access code zero (0) is assigned to the object. This value will map to SENSITIV(*PRIVATE).

Examples

```
CHGDLOAUT  DLO(MYDOC)  FLR(MYFLR)  USRAUT((*PUBLIC *AUTL))
           AUTL(MYAUTL)
```

This command changes the authority of user *PUBLIC for document MYDOC in folder MYFLR. The authority specified on the authorization list for public (users with no specific authority for MYDOC, who are not on the authorization list MYAUTL, and whose user's group has no specific authority to MYDOC) is used to determine the public authority.

Error messages

*ESCAPE Messages

CPF8A75
> Not authorized to access folder &1.

CPF8A77
> Folder &1 not found.

CPF8A78
> Folder &1 in use.

CPF8A79

       Folder &1 is logically damaged.

CPF8A80

       Document &2 in use in folder &1.

CPF8A82

       Document &2 not found in folder &1.

CPF8A83

       Not authorized to access document &2 in folder &1.

CPF8A88

       Operation not allowed on document &2 in folder &1.

CPF8A89

       Document &2 in folder &1 is logically damaged.

CPF90BA

       Authority request for document library object failed.

CPF90B8

       No authority to specify a reference object for document library object &1.

CPF901F

       *AUTL was specified for a user other than *PUBLIC.

CPF9073

       No authority to view or change the security of document library object &1.

CPF908A

       Requester &1 not enrolled.

CPF908B

       Document library object not found.

CPF908E

       &1 objects changed; &2 objects not changed.

CPF909A

       Document &2 in folder &1 is damaged.

CPF9095

       Folder &1 is damaged.

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Change DLO Owner (CHGDLOOWN)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Document Library Object Owner (CHGDLOOWN) command allows you to transfer document or folder ownership from one user to another user. The first owner no longer owns the object and the second user becomes the owner. The new owner must be enrolled in the system distribution directory. The authorities of other users to the document do not change.

Restrictions: To transfer ownership of a document or folder, *ALLOBJ authority is required or the requester must be the owner of the document or folder.

Parameters

Keyword	Description	Choices	Notes
DLO	Document library object, or	*Character value*, *SYSOBJNAM	Optional, Positional 1
OWNER	Current owner	*Element list*	Optional, Positional 2
	Element 1: User profile	*Name*	
NEWOWN	New owner	*Element list*	Optional
	Element 1: User profile	*Name*	
FLR	Folder	*Character value*, ***NONE**	Optional
CUROWNAUT	Current owner authority	***REVOKE**, *SAME	Optional
SYSOBJNAM	System object name	*Name*	Optional

Document library object, or (DLO)

Specifies the name of the document or folder object that is assigned to a new owner. When the **Current owner** prompt (OWNER parameter) is specified, the **Document library object, or** prompt (DLO parameter) cannot be specified.

The possible values are:

document-or-folder-name
> Specify the name of the document or folder assigned by the user. A maximum of 12 characters can be specified.

*SYSOBJNAM
> The object is identified using the system object name. The object name is specified on the **System object name** prompt (SYSOBJNAM parameter).

Current owner (OWNER)

Specifies the user profile name of the current owner from whom all documents or folders are transferred. All documents or folders owned by this user are assigned a new owner. When the **Document library object, or** prompt (DLO parameter) is specified, the **Current owner** prompt (OWNER parameter) cannot be specified.

user-profile-name
> Specify the name of the user profile by which the current owner is known on the system.

New owner (NEWOWN)

Specifies the user profile of the new owner to whom the documents or folders are transferred.

user-profile-name
> Specify the name of the user profile by which the new owner is known on the system.

Folder (FLR)

Specifies the name of the folder where objects identified on the **Document library object, or** prompt (DLO parameter) are located.

The possible values are:

*NONE
> No folder name is specified.

folder-name
> Specify the user-assigned name of the folder. The folder name can consist of a series of folder names if the object is located in a folder that is contained in another folder. A maximum of 63 characters can be specified.

Current owner authority (CUROWNAUT)

Specifies whether the authorities for the current owner are revoked when ownership is changed.

The possible values are:

*REVOKE
> The authority of the current owner is revoked when the object is changed to the new owner.

*SAME
> The authority of the current owner is not changed when the object to the new owner.

System object name (SYSOBJNAM)

Specifies the system object name of the document or folder. This parameter is ignored if an object name is specified on the **Document library object, or** prompt (DLO parameter).

object-name
> Specify the system object name of the document or folder using the entire 10 characters.

Examples

Example 1: Transferring Folder Ownership

```
CHGDLOOWN   DLO(MYFLR)   NEWOWN(ANN)
```

This command assigns ownership of folder MYFLR to a new owner named ANN. The authority is revoked from the current owner.

Example 2: Transferring Ownership of All Documents and Folders

```
CHGDLOOWN   OWNER(ANDERSON)   NEWOWN(SMITH)
```

This command assigns ownership of all documents and folders owned by ANDERSON to the new owner SMITH. The authority is revoked from the current owner.

Error messages

*ESCAPE Messages

CPF2204
> User profile &1 not found.

CPF2232
> Not authorized to user profile &1.

CPF2233
> No delete authority to user profile &1.

CPF8A49
> New owner &1 does not have a uid.

CPF8360
> Not enough storage for commitment control operation.

CPF897E
> Name &1 already exists for document list owned by &2 &3.

CPF9005
> System resource required to complete this request not available.

CPF9006
> User not enrolled in system distribution directory.

CPF9009
> System requires file &1 in &2 be journaled.

CPF9012
> Start of document interchange session not successful for &1.

CPF9029
> Not allowed to specify owner profile &1.

CPF9032
> Document interchange session not started.

CPF9048

   Ownership of &2 document library objects changed to profile &1; &3 not changed.

CPF908A

   Requester &1 not enrolled.

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Change DLO Primary Group (CHGDLOPGP)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Document Library Object Primary Group (CHGDLOPGP) command transfers documents or folders from one primary group to another primary group. The second group profile becomes the primary group. The new primary group must be in the system distribution directory. The authorities that other users have to the document or folder are not changed.

The old primary group's authority to the object is revoked unless *NO is specified for the RVKOLDAUT parameter.

Note: The system does not determine document or folder primary group by checking a group profile if one is specified in the user profile.

Restriction: To transfer the primary group of a document or folder, the user must have *ALLOBJ authority or be the owner of the document or folder. The user must have delete authority to the old primary group profile and add authority to the new primary group profile

Parameters

Keyword	Description	Choices	Notes
DLO	Document library object, or	*Character value*, *SYSOBJNAM, *ALL	Optional, Positional 1
CURPGP	Current primary group	*Name*	Optional, Positional 2
NEWPGP	New primary group	*Name*, ***NONE**	Optional
NEWPGPAUT	New primary group authority	***OLDPGP**, *PRIVATE, *ALL, *CHANGE, *USE, *EXCLUDE	Optional
FLR	Folder	*Character value*, ***NONE**	Optional
RVKOLDAUT	Revoke old authority	***YES**, *NO	Optional
SYSOBJNAM	System object name	*Name*	Optional

Document library object, or (DLO)

Specifies the name of the document or folder object that is assigned to a new primary group. The DLO parameter and the CURPGP parameter are mutually exclusive.

The possible values are:

*SYSOBJNAM
> The object is identified using the system object name. Object name is specified by the SYSOBJNAM parameter.

*ALL   The primary group is changed for all objects in the specified folder. If *ALL is specified, a value must be specified on the Folder (FLR) parameter.

document-library-object-name
Specify the name of the document or folder assigned by the user. A maximum of 12 characters can be specified.

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Current primary group (CURPGP)

Specifies the primary group profile name of the current primary group from whom all documents or folders are transferred. All documents or folders assigned to this primary group are assigned a new primary group. The CURPGP parameter and the DLO parameter are mutually exclusive.

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New primary group (NEWPGP)

Specifies the primary group profile name of the new primary group to which the documents or folders are being transferred. The group profile must already exist and have a group ID number (gid) assigned to it.

The possible values are:

*NONE
The object does not have a primary group.

primary-group
Specify the new primary group name.

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New primary group authority (NEWPGPAUT)

Specifies what authority the new primary group has to the object.

The possible values are:

*OLDPGP
The new primary group has whatever authority the old primary group had to the object.

*PRIVATE
The new primary group has the same private authority to the object. If the old primary group did not have a private authority to the object, the new primary group has no authority to the object.

*ALL   The new primary group is given *ALL authority to the object.

*CHANGE
The new primary group is given *CHANGE authority to the object.

*USE   The new primary group is given *USE authority to the object.

*EXCLUDE
The new primary group is given *EXCLUDE authority to the object.

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Folder (FLR)

Specifies the name of the folder that contains the document.

The possible values are:

*NONE
　　　　No folder name is specified.

folder-name
　　　　Specify the user-assigned name of the folder. The folder name can consist of a series of folder names if the object specified in the DLO parameter is located in a folder that is contained in another folder. A maximum of 63 characters can be specified.

Revoke old authority (RVKOLDAUT)

Specifies whether the current primary group's authority is revoked when the primary group is transferred to the new primary group specified on the NEWPGP parameter.

The possible values are:

*YES　The current primary group's authority is revoked when the object is transferred to the new primary group.

*NO　The authority for the current primary group is not revoked when the primary group is changed to the new primary group.

System object name (SYSOBJNAM)

Specifies the system object name of the document or folder. This parameter is valid only when DLO(*SYSOBJNAM) or DOCL(*SYSOBJNAM) is specified. A full ten characters must be specified.

Examples

Example 1: Transferring Folder Primary Group

```
CHGDLOPGP   DLO(MYFLR)   NEWPGP(GROUP1)
```

This command assigns primary group of folder MYFLR to a new primary group named GROUP1. The authority is revoked from the current primary group.

Example 2: Transferring Primary Group of All Documents and Folders

```
CHGDLOPGP   CURPGP(GROUP1)   NEWPGP(GROUP2)
```

This command assigns a new primary group for all documents and folders assigned to primary group GROUP1 to the new primary group GROUP2. The authority is revoked from current primary group.

Error messages

None

Change DNS Server Attributes (CHGDNSA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

Parameters
Examples
Error messages

(CHGDNSA) Use this command to set or change the DNS Server Attributes: AUTOSTART and DBGLVL

If multiple DNS servers are configured on the same system, you can specify whether you want the attributes changed for all of the configured DNS server instances, or just for a particular DNS server instance.

The changes take effect the next time the DNS server is started.

Restriction:

You must have *IOSYSCFG special authority to use this command.

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Parameters

Keyword	Description	Choices	Notes
DNSSVR	Server instance	*Character value*, ***ALL**	Optional, Key, Positional 1
AUTOSTART	Autostart server	*YES, *NO, ***SAME**	Optional
DBGLVL	Debug level	0-11, ***SAME**, *DFT	Optional

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Autostart server (AUTOSTART)

The AUTOSTART attribute determines whether or not the DNS server starts automatically when TCP/IP is started using the STRTCP command, or when the STRTCPSVR SERVER(*AUTOSTART) command is issued.

This attribute is only used by the STRTCPSVR command if STRTCPSVR *AUTOSTART is specified. STRTCPSVR *DNS or STRTCPSVR *ALL will start the DNS server regardless of the value of the AUTOSTART attribute.

The possible values are:

*SAME
Specify *SAME if you do not want to change the AUTOSTART value from the previous setting. If you specify *SAME and this value was not previously set, the value *NO will be used.

*YES   Specify a value of *YES if you want the DNS server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

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*NO   Specify *NO if you do not want the DNS server to start automatically each time TCP/IP is started by the STRTCP command, or each time the TCP/IP servers are started by the STRTCPSVR *AUTOSTART command.

When the value is set to *NO, only the STRTCPSVR *DNS command or the STRTCPSVR *ALL command will start the DNS server.

If you do not intend to use the DNS server, set AUTOSTART to *NO.

Debug level (DBGLVL)

The debug level (DBGLVL) attribute determines how much diagnostic (debug) information the DNS server gathers and writes to a log file. The debug information is used by IBM Service and Development to assist you to solve DNS problems that you cannot solve.

It is recommended that you normally run your DNS server with a DBGLVL value of 0. DBGLVL 0 means that the debug function is turned off and no debug information is logged.

If you have a DNS problem that you cannot solve and an IBM service representative determines that debug information is needed to help solve the problem, the IBM representative will assist you to set the DBGLVL value.

The default debug level is 0. As the numeric value increases from 1 to 11, the amount of debug information written to the DBGLVL log also increases. High DBGLVL values also cause the DNS server to take a greater amount of time to initialize.

Debug information is written to an Integrated File System file. The name and location of the file depends on how DNS is configured on the system. The file continues to grow as long as the DNS server continues to run, and can use large amounts of disk storage space. Therefore, care should be taken to set this value back to 0 as soon as there is no further need for debug information.

If the DBGLVL is changed for a DNS server that is already running, that DNS server will need to end and be started again for the new value to be used.

The possible values for the DBGLVL attribute are:

*SAME
The DBGLVL value does not change if it was previously set. Otherwise a value of 0 (debug off) is used.

*DFT   Use the default debug value of 0 (off).

0-11   Specify a number within the range of 0-11 to specify how much diagnostic information you want the DNS server to log. The amount of debug information stored in the debug log increases as the DBGLVL value increases. 0 equals no debug information. 11 equals maximum debug information.

Examples

Error messages

Unknown

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Change Document Description (CHGDOCD)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Document Description (CHGDOCD) command allows you to change the information describing a document that was filed previously.

Restrictions:

1. To change the document profile values, you must have at least *CHANGE authority to the document, *ALLOBJ authority, or be working on behalf of a user who is authorized to the document.

2. To change the security values (for example, ACC, USRAUT, PERSONAL, AUTL), the checkout flag, and the allow replacement flag, you must be the owner of the document, have *ALL or *ALLOBJ authority, or be working on behalf of a user who is authorized to the document.

3. Authority to work on behalf of others is granted with the Grant User Permission (GRTUSRPMN) command.

Parameters

Keyword	Description	Choices	Notes
DOC	Document	*Character value*, *DOCID	Required, Positional 1
FLR	Folder	*Character value*, ***NONE**	Optional, Positional 3
USRID	User identifier	Single values: ***CURRENT** Other values: *Element list*	Optional, Positional 2
	Element 1: User ID	*Character value*	
	Element 2: Address	*Character value*	
DOCID	Document identifier	*Character value*, ***NONE**	Optional
SENSITIV	Sensitivity	***SAME**, *NONE, *PERSONAL, *PRIVATE, *CONFIDENTIAL	Optional
DOCD	Document description	*Character value*, ***SAME**	Optional
DOCDATE	Document date	*Date*, ***SAME**, *RMV	Optional
EXPDATE	Expiration date	*Date*, ***SAME**, *RMV	Optional
ACTDATE	Action due date	*Date*, ***SAME**, *RMV	Optional
CMPDATE	Completion date	*Date*, ***SAME**, *RMV	Optional
REFERENCE	Reference	*Character value*, ***SAME**, *RMV	Optional
STATUS	Status	*Character value*, ***SAME**, *RMV	Optional
PROJECT	Project	*Character value*, ***SAME**, *RMV	Optional
ACC	Access code	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Access code	1-2047	
	Element 2: Add or remove access code	*ADD, *RMV	
AUTL	Authorization list	*Name*, ***SAME**, *RMV	Optional

Keyword	Description	Choices	Notes
USRAUT	User authority	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: User profile	*Name*, *PUBLIC	
	Element 2: Authority level	*USE, *CHANGE, *ALL, *EXCLUDE, *AUTL, *RMV	
MARK	Mark for offline	Single values: ***SAME**, *NO Other values: *Element list*	Optional
	Element 1: Mark for offline	*YES	
	Element 2: Offline type	***KEEP**, *RMVTXT, *RMVALL	
ALWRPL	Allow replacement	***SAME**, *NO	Optional
CHKOUT	Check out	***SAME**, *NO	Optional
AUTHOR	Author	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Author	*Character value*	
	Element 2: New author	*Character value*, *ADD, *RMV	
DOCCLS	Document class	*Character value*, ***SAME**, *RMV	Optional
KWD	Keyword	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Keyword	*Character value*	
	Element 2: New keyword	*Character value*, *ADD, *RMV	
SUBJECT	Subject	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Subject	*Character value*	
	Element 2: New subject	*Character value*, *ADD, *RMV	
FILCAB	File cabinet location	*Character value*, ***SAME**, *RMV	Optional
CPYLST	Copy list	Single values: ***SAME**, *RMVALL Other values (up to 50 repetitions): *Element list*	Optional
	Element 1: Copy list	*Character value*	
	Element 2: New copy list	*Character value*, *ADD, *RMV	
CMDCHRID	Command character identifier	Single values: ***SYSVAL**, *DEVD Other values: *Element list*	Optional
	Element 1: Graphic character set	*Integer*	
	Element 2: Code page	*Integer*	
DOCCHRID	Document character identifier	Single values: ***SAME**, *SYSVAL, *DEVD Other values: *Element list*	Optional
	Element 1: Graphic character set	*Integer*	
	Element 2: Code page	*Integer*	
DOCLANGID	Language ID	*Character value*, ***SAME**, *JOB	Optional
DOCCNTRYID	Country or region ID	*Character value*, ***SAME**, *JOB	Optional
PERSONAL	Personal	***SAME**, *NO, *YES	Optional

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Document (DOC)

Specifies the name of the document for which descriptive information is to be changed on the local system.

This is a required parameter.

The possible values are:

*DOCID
> The document being changed is identified by the library-assigned document name specified on the **Document identifier** prompt (DOCID parameter).

document-name
> Specify the user-assigned name of the document being changed. A maximum of 12 characters can be specified.

Folder (FLR)

Specifies the name of the folder that contains the document to be changed. This parameter must be specified if a user-assigned document name is specified on the **Document** prompt (DOC parameter).

The possible values are:

*NONE
> No folder is specified when the document is identified on the **Document identifier** prompt (DOCID parameter).

folder-name
> Specify the user-assigned name of the folder that contains the document to be changed. The folder name can consist of a series of folder names (FLR1/FLR2/etc.) if the document is located in a folder that is contained in another folder. A maximum of 63 characters can be specified. This value is required when DOC(*document-name*) is specified.

User identifier (USRID)

Specifies which user ID and user ID address should be associated with the request.

The possible values are:

*CURRENT
> You are performing the request for yourself.

user-ID
> Specify another user's user ID or your user ID. You must have been given permission to work on behalf of another user or have *ALLOBJ authority.

user-ID-address
> Specify another user's address or your address. You must have been given permission to work on behalf of another user or have *ALLOBJ authority.

Document identifier (DOCID)

Specifies the library-assigned name of the document. This is the name assigned to the document by the system when it was created. Documents filed outside the local system have only library-assigned document names. The library-assigned document names can be determined by using the Query Document Library (QRYDOCLIB) command or by the message returned from the File Document (FILDOC) command.

Library-assigned document names are 24 characters in length with the following format:

YYYYMMDDHHMNSSHSSNSNSNSN

where:

```
     YYYY = year
       MM = month
       DD = day
       HH = hour
       MN = minute
       SS = second
       HS = hundredths of a second
  SNSNSNSN = system name
```

The possible values are:

*NONE
> No library-assigned document name is required when the document is identified on the **Document** prompt (DOC parameter).

library-assigned-document-name
> Specify the library-assigned document name of the document to be changed.

Sensitivity (SENSITIV)

Specifies the level of sensitivity defined by the X.400 standard. The four levels include no sensitivity, personal, private and company confidential. Any document marked as private is still available to users who are normally authorized to it, but is unavailable to users who are working on your behalf (even though it may be available to them when they are not working on your behalf).

The possible values are:

*SAME
> The value does not change.

*NONE
> The document has no sensitivity restrictions.

*PERSONAL
> The distribution is intended for the user as an individual.

*PRIVATE
> The document contains information that should be accessed only by the owner.

*CONFIDENTIAL
> The document contains information that should be handled according to company procedures.

Document description (DOCD)

Specifies the description for the document being changed. This is the Document Interchange Architecture Profile document name field.

The possible values are:

*SAME
The document description does not change.

document-description
Specify the new description of the document. A maximum of 44 characters can be specified.

Document date (DOCDATE)

Specifies any date the user wants to assign to the document.

The possible values are:

*SAME
The document date does not change.

*RMV The document date is removed from the filed document.

document-date
Specify the document date to be added or replaced. The date must be specified in the job date format.

Expiration date (EXPDATE)

Specifies the date when the document is no longer needed.

The possible values are:

*SAME
The expiration date does not change.

*RMV The expiration date is removed from the filed document.

expiration-date
Specify the expiration date of the document to be replaced or added. The date must be specified in the job date format.

Action due date (ACTDATE)

Specifies the date when the action requested is due.

The possible values are:

*SAME
The action due date does not change.

*RMV The action due date is removed from the filed document.

action-due-date
> Specify the action due date to be replaced or added. The date must be specified in the job's date format.

Completion date (CMPDATE)

Specifies the date when the action requested is completed.

The possible values are:

*SAME
> The completion date does not change.

*RMV The completion date is removed from the filed document.

date-complete
> Specify the completion date to be replaced or added. The date must be specified in the job date format.

Reference (REFERENCE)

Specifies a reference associated with the document.

The possible values are:

*SAME
> The reference field does not change.

*RMV The document reference is removed from the filed document.

reference
> Specify the document reference to be replaced or added. A maximum of 60 characters can be used.

Status (STATUS)

Specifies the user-defined status of the document. Examples of status are: In Process, Pending Approval, or Retired.

The possible values are:

*SAME
> The document status does not change.

*RMV The document status is removed from the information for the filed document.

status Specify the status of the document being replaced or added. A maximum of 20 characters can be specified.

Project (PROJECT)

Specifies the name of the project with which the document is associated.

The possible values are:

*SAME
The project name does not change.

*RMV The document project name is removed from the information for the filed document.

project
Specify the document project name to substitute or add. A maximum of 10 characters can be specified.

Access code (ACC)

Specifies that access codes are to be added or deleted. Access codes must be added on the system with the Add Access Code (ADDACC) command.

You can enter multiple values for this parameter.

The possible **access code** values are:

*SAME
The access codes do not change.

*RMVALL
All access codes are removed from the filed document.

access-code
Specify the access codes, ranging from 1 through 2047, that are to be added or deleted.

The possible **add or remove access code** values are:

*ADD The access code specified is added to the access codes for the filed document being changed.

*RMV The access code specified is removed from the access codes for the filed document being changed.

Authorization list (AUTL)

Specifies that the authority for the document named on the **Document** prompt (DOC parameter) or **Document identifier** prompt (DOCID parameter) comes from the authorization list.

The possible values are:

*SAME
The authorization list does not change.

*RMV The current authorization list is removed from the filed document.

authorization-list-name
Specify the name of the authorization list whose authority replaces the current authorization list or adds an authorization list if one does not currently exist.

User authority (USRAUT)

Specifies the user ID and address of the users that can access the document and the authority each user has. This parameter is used to change the authorizations for this document by removing a user's authority for the document or changing the user's authority.

You can enter multiple values for this parameter.

The possible **user profile** values are:

*SAME

The list of users who have access to the document does not change.

*RMVALL

All users are removed from the authorization list for the filed document.

*PUBLIC

The authority given to users or user groups who do not have specific authority to the document, or who are not on the authorization list is changed.

user-profile-name

Specify the user profile name of a user deleted from the specific user access list or whose authority is to be changed.

The possible **authority level** values are:

*ALL   The user can perform all operations except those limited to the owner or controlled by authorization list management (*AUTLMGT) authority. The user can control the object's existence, specify the security for the object, change the object, and perform basic functions on the object. The user also can change ownership of the object.

*CHANGE

The user can perform all operations on the object except those limited to the owner or controlled by object existence (*OBJEXIST) and object management (*OBJMGT) authorities. The user can change and perform basic functions on the object. *CHANGE authority provides object operational (*OBJOPR) authority and all data authority. If the object is an authorization list, the user cannot add, change, or remove users.

*USE   The user can perform basic operations on the object, such as running a program or reading a file. The user cannot change the object. Use (*USE) authority provides object operational (*OBJOPR), read (*READ), and execute (*EXECUTE) authorities.

*EXCLUDE

The user cannot access the object.

*AUTL

The authority of the authorization list specified in the AUTL parameter **Authorization list** prompt (AUTL parameter) is used for the document. *AUTL is valid only if *PUBLIC is also specified.

*RMV   The user's specific authorization for the filed document is removed.

Mark for offline (MARK)

Specifies whether the document should be saved offline. Mark is a function of the Save Document Library Object (SAVDLO) command where documents that have been marked for offline (MARK(*YES) specified) are saved on disk, diskette, or tape.

The possible **mark for offline** values are:

*SAME
> The mark for offline value does not change.

*NO   The mark for offline is turned off and the document is not saved offline by the SAVDLO command.

*YES   The mark for offline is turned on and the document is saved offline by the SAVDLO command.

The possible values **that can be specified with *YES** are:

*KEEP
> When the document is saved to disk, diskette, or tape, the document is also kept for online use.

*RMVTXT
> When the document is saved to disk, diskette, or tape, the document content is deleted but the document profile is kept online for document library searches.

*RMVALL
> When the document is saved to disk, diskette, or tape, the document is deleted. No trace of the document is left online for the document library searches.

Allow replacement (ALWRPL)

Specifies whether to allow replacement of the document content. Once a document is changed so that it cannot be replaced, it cannot be changed back to a document that can be replaced. You must have *ALL authority to the document to request this change.

The possible values are:

*SAME
> The document content replacement value does not change.

*NO   The document content cannot be changed after this request is complete.

Check out (CHKOUT)

Specifies the setting for the checkout value. This value can be set only for documents that can be replaced. With this parameter, you can reset the checkout status of a document already checked out by a retrieve request (RTVDOC). A document cannot be checked out for update with this parameter. This parameter is ignored for a document that cannot be replaced. Only the document owner or users with *ALL authority can request the checkout value be set off.

The possible values are:

*SAME
> The checkout flag does not change.

*NO   The checkout flag is set to off.

Author (AUTHOR)

Specifies the author of the document.

You can enter multiple values for this parameter.

If you want to specify a value in mixed case, the value must be enclosed in apostrophes.

The possible **author** values are:

*SAME
> The author of the document does not change.

*RMVALL
> All author names are removed.

author Specify the name of the current author that is to be removed or replaced, or the author that is to be added.

The possible **new author** values are:

new-author-name
> Specify the new author name to replace the current author name.

*ADD The user is added as author for the filed document.

*RMV The user is removed as author for the filed document.

Document class (DOCCLS)

Specifies the class associated with this document.

The possible values are:

*SAME
> The document class does not change.

*RMV The document class for the filed document is removed.

document-class
> Specify the document class to replace the existing document class or the document class to be added. A maximum of 16 characters can be specified.

Keyword (KWD)

Specifies the keywords that can be used to describe the document.

You can enter multiple values for this parameter.

If you want to specify a value in mixed case, the value must be enclosed in apostrophes.

The possible **keyword** values are:

*SAME
> The keywords do not change.

*RMVALL
> All keywords are removed for the filed document.

keyword
> Specify a current keyword to be removed or replaced, or a keyword to be added.

The possible **new keyword** values are:

new-keyword
> Specify a new keyword to replace the current keyword. A maximum of 60 characters can be specified, enclosed in apostrophes.

*ADD The keyword for the filed document is added.

*RMV The keyword for the filed document is removed.

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Subject (SUBJECT)

Specifies the subject of the document.

You can enter multiple values for this parameter.

If you want to specify a value in mixed case, the value must be enclosed in apostrophes.

The possible **subject** values are:

*SAME
> The subject does not change.

*RMVALL
> All subjects are removed for the filed document.

subject
> Specify a current subject to be removed or replaced, or a subject to be added.

The possible **new subject** values are:

new-subject
> Specify a new subject to replace the current subject.

*ADD The subject for the filed document is added.

*RMV The subject for the filed document is removed.

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File cabinet location (FILCAB)

Specifies the location where the document is stored. This parameter is intended for printed documents. All that changes is the interchange document profile (IDP) that refers to the printed document.

The possible values are:

*SAME
> The file cabinet reference does not change.

*RMV The file cabinet reference for the filed document is removed.

filing-cabinet-reference
>   Specify the file cabinet reference to be added or replaced. A maximum of 60 characters can be
>   specified.

Copy list (CPYLST)

Specifies names or addresses of users who receive this document.

You can enter multiple values for this parameter.

If you want to specify a value in mixed case, the value must be enclosed in apostrophes.

The possible **copy list** values are:

*SAME
>   The copy list does not change.

*RMVALL
>   All copy list entries are removed from the filed document.

copy-list
>   Specify a current copy list entry that is to be removed or replaced, or a new copy list entry to be
>   added.

The possible **new copy list** values are:

new-copy-list
>   Specify the new copy list entry to replace the current copy list entry.

*ADD The copy list entry is added for the filed document.

*RMV The copy list entry is removed for the filed document.

Command character identifier (CMDCHRID)

Specifies the character identifier (graphic character set and code page) for the data being entered as
command parameter values. The character identifier is related to the display device used to enter the
command.

Single values

*SYSVAL
>   The system determines the graphic character set and code page values for the command
>   parameters from the QCHRID system value.

*DEVD
>   The system determines the graphic character set and code page values from the display device
>   description where this command was entered. This option is valid only when entered from an
>   interactive job. If this option is specified in a batch job, an error occurs.

Element 1: Graphic character set

1-32767
>   Specify the graphic character set to use.

Element 2: Code page

1-32767
> Specify the code page to use.

Document character identifier (DOCCHRID)

Specifies the character identifier (graphic character set and code page) for the document data being used. The character identifier is related to the display device used to create the document data.

The possible values are:

*SAME
> The character identifier does not change.

*SYSVAL
> The system determines the graphic character set and code page values for the command parameters from the QCHRID system value.

*DEVD
> The system determines the graphic character set and code page values from the display device description where this command was entered. This option is valid only when entered from an interactive job. If this option is specified in a batch job, an error occurs.

graphic-character-set code-page
> Specify the graphic character set and code page values used to create the data.

Note: Both parts can be up to 5 digits in length.

Language ID (DOCLANGID)

Specifies the language identifier to be placed in this document's interchange document profile (IDP).

This parameter can be used to add a language identifier to the document's IDP if the identifier has not been specified previously, or to change the value of an existing language identifier.

Note: If you specify a value on this parameter and no value has previously been specified on the **Country or region ID** prompt (DOCCNTRYID parameter), you must also specify a country or region identifier.

The possible values are:

*SAME
> The language identifier does not change.

*JOB   The language identifier specified for the job in which this command is entered is used.

language-identifier
> Specify a language identifier. Press the PF4 key from the **Language ID** prompt (DOCLANGID parameter) to see a list of valid identifiers.

Country or region ID (DOCCNTRYID)

Specifies the country or region identifier to be placed in this document's interchange document profile (IDP).

This parameter can be used to add a country or region identifier to the document's IDP if an identifier has not been specified previously, or to change the value of an existing country or region identifier.

Note: If you specify a value on this parameter and no value has previously been specified on the **Language ID** prompt (DOCLANGID parameter), you must also specify a language identifier.

The possible values are:

*SAME
> The country or region identifier does not change.

*JOB The country or region identifier specified for the job in which this command is entered is used.

country-or-region-ID
> Specify a country or region identifier. Press the PF4 key from the **Country or region ID** prompt (DOCCNTRYID parameter) to see a list of valid identifiers.

Personal (PERSONAL)

Specifies whether the document being changed is a personal document. If it is, only the owner or an authorized user can access it. Any document marked as private is still available to users who are normally authorized to it, but is unavailable to users who are working on your behalf (even though it may be available to them when they are not working on your behalf). This parameter is replaced by SENSITIV but the PERSONAL parameter can still be used. However, because this parameter may be removed in a later release, whenever possible use the SENSITIV parameter.

The possible values are:

*SAME
> The value does not change.

*NO The document is not a personal document. This value will map to SENSITIV(*NONE).

*YES The document is a personal document. This value will map to SENSITIV(*PRIVATE).

Examples

```
CHGDOCD   DOC(DOC1)  FLR(FLR1)  SENSITIV(*PRIVATE)
          AUTL(USERAUTL)  ALWRPL(*NO)  AUTHOR('AUTHOR1' *RMV)
```

This command changes document DOC1, which is located in folder FLR1, to a private document. This document is no longer a document that can be replaced. AUTHOR1 is removed from the list of authors. If an authorization list already exists, it is replaced with authorization list USERAUTL. If an authorization list does not exist, USERAUTL is added as the authorization list for the document. The remaining information associated with the document does not change.

Error messages

CPF900B

    User ID and address &1 &2 not in System Distribution Directory.

CPF900C

    Sign on and verify of user failed.

CPF902B

    Authority of *AUTL is allowed only with USRAUT(*PUBLIC).

CPF905C

    Error occurred trying to find a translation table.

CPF905E

    Cannot specify *RMV when USRAUT(*PUBLIC) is specified.

CPF9096

    Cannot use CMDCHRID(*DEVD), DOCCHRID(*DEVD) in batch job.

CPF9099

    Document description not changed.

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Change Display File (CHGDSPF)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Display File (CHGDSPF) command changes the attributes of the specified display device file.

Only the information specified in this command can be changed. If the data description specifications (DDS) used to create the file are changed, the display device file must be created again for the changes to be made in the file.

Parameters

Keyword	Description	Choices	Notes
FILE	File	*Qualified object name*	Required, Key, Positional 1
	Qualifier 1: File	*Generic name, name*, *ALL	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB, *ALL, *ALLUSR, *USRLIBL	
DEV	Display device	Single values: ***SAME**, *NONE Other values (up to 50 repetitions): *Name*, *REQUESTER	Optional, Positional 2
MAXDEV	Maximum devices	1-256, ***SAME**	Optional
LVLCHK	Record format level check	***SAME**, *YES, *NO	Optional
TEXT	Text 'description'	*Character value*, ***SAME**, *BLANK	Optional
ENHDSP	Enhanced display	***SAME**, *YES, *NO	Optional
RSTDSP	Restore display	***SAME**, *NO, *YES	Optional
DFRWRT	Defer write	***SAME**, *YES, *NO	Optional
CHRID	Character identifier	Single values: ***SAME**, *DEVD, *SYSVAL, *JOBCCSID, *CHRIDCTL Other values: *Element list*	Optional
	Element 1: Graphic character set	*Integer*	
	Element 2: Code page	*Integer*	
DECFMT	Decimal format	***SAME**, *FILE, *JOB	Optional
SFLENDTXT	SFLEND text	***SAME**, *FILE, *MSG	Optional
IGCDTA	User specified DBCS data	***SAME**, *NO, *YES	Optional
IGCEXNCHR	DBCS extension characters	***SAME**, *YES, *NO	Optional
WAITFILE	Maximum file wait time	*Integer*, ***SAME**, *CLS, *IMMED	Optional
WAITRCD	Maximum record wait time	*Integer*, ***SAME**, *IMMED, *NOMAX	Optional
DTAQ	Data queue	Single values: ***SAME**, *NONE Other values: *Qualified object name*	Optional
	Qualifier 1: Data queue	*Name*	
	Qualifier 2: Library	*Name*, ***LIBL**, *CURLIB	
SHARE	Share open data path	***SAME**, *NO, *YES	Optional

File (FILE)

Specifies the display device file to be changed.

This is a required parameter.

Qualifier 1: File

*ALL   All of the display device files are changed in the specified libraries.

generic-name
> Specify the generic name of the display files to be changed. A generic name is a character string that contains one or more characters followed by an asterisk (*).

name   Specify the name of the display file to be changed.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

*USRLIBL
> If a current library entry exists in the library list for the current thread, the current library and the libraries in the user portion of the library list are searched. If there is no current library entry, only the libraries in the user portion of the library list are searched.

*ALLUSR
> All user libraries are searched. All libraries with names that do not begin with the letter Q are searched except for the following:

#CGULIB	#DSULIB	#SEULIB
#COBLIB	#RPGLIB	
#DFULIB	#SDALIB	

> Although the following Qxxx libraries are provided by IBM, they typically contain user data that changes frequently. Therefore, these libraries are considered user libraries and are also searched:

QDSNX	QRCLxxxxx	QUSRIJS	QUSRVxRxMx
QGPL	QSRVAGT	QUSRINFSKR	
QGPL38	QSYS2	QUSRNOTES	
QMGTC	QSYS2xxxxx	QUSROND	
QMGTC2	QS36F	QUSRPOSGS	
QMPGDATA	QUSER38	QUSRPOSSA	
QMQMDATA	QUSRADSM	QUSRPYMSVR	
QMQMPROC	QUSRBRM	QUSRRDARS	
QPFRDATA	QUSRDIRCL	QUSRSYS	
QRCL	QUSRDIRDB	QUSRVI	

> 1. 'xxxxx' is the number of a primary auxiliary storage pool (ASP).
>
> 2. A different library name, in the format QUSRVxRxMx, can be created by the user for each previous release supported by IBM to contain any user commands to be compiled in a CL program for the previous release. For the QUSRVxRxMx user library, VxRxMx is the version, release, and modification level of a previous release that IBM continues to support.

*ALL   All libraries in the system, including QSYS, are searched.

name   Specify the name of the library to be searched.

Display device (DEV)

Specifies the names of one or more display devices that are used with this display device file to pass data records between the users of the display devices and their jobs. The device name specified in the display device file supplied by IBM is *REQUESTER.

Single values

*SAME
> The display device names do not change.

*NONE
> No display device name is specified. The name of the display device must be specified later in a Change Display File (CHGDSPF) command or Override with Display File (OVRDSPF) command, or in the high-level language program that opens the file.

Other values (up to 50 repetitions)

*REQUESTER
> The display device from which the program is called is the device assigned to the file when the file is opened.

name   Specify the names of one or more display devices. *REQUESTER can be specified as one of the names. A maximum of 50 device names (including *REQUESTER) can be specified, but the total number cannot exceed the number specified for the **Maximum devices (MAXDEV)** parameter when the file is opened.

Maximum devices (MAXDEV)

Specifies the maximum number of display devices that can be connected to the display device file at the same time while the file is open. However, if a CL program is written to get access to more than one work station through the same file (through a single running of the program), this parameter must specify a value greater than 1.

The names of the devices are specified in the DEV parameter of this command, in a later CHGDSPF or OVRDSPF command, or in the HLL program that opens the file.

*SAME
> The maximum number of display devices that can be connected to the display device file does not change.

1-256   Specify the maximum number of display devices that can be connected to this display device file at the same time.

Record format level check (LVLCHK)

Specifies whether the level identifiers of the record formats in this device file are checked when the file is opened by a program. If so, the record format identifiers in the program must match those in the device file. Because the same record format name can exist in more than one file, each record format is given an internal system identifier when it is created.

*SAME
> The value does not change.

*YES   The level identifiers are checked when the file is opened. If the level identifiers do not all match, an error message is sent to the program that requested opening of the file.

*NO   The level identifiers are not checked when the file is opened.

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Text 'description' (TEXT)

Specifies the text that briefly describes the object.

*SAME
The text (if any) does not change.

*BLANK
No text is specified.

character-value
Specify no more than 50 characters of text, enclosed in apostrophes.

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Enhanced display (ENHDSP)

Specifies whether the data being shown at a display station by this display file is using the enhanced capabilities available on the display station.

*SAME
This value does not change.

*YES   The data for the display file is shown using any enhanced capabilities available on the display station. These capabilities can include mnemonics, selection cursor, and graphical window borders.

*NO   The data for this display file is shown as it would be on a 5250 display station. No enhanced capabilities that are available on the display, such as mnemonics, selection cursor, or graphical window borders, are used. This value is normally used to preserve character-based interaction across all display stations.

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Restore display (RSTDSP)

Specifies whether data being shown at a display device by this display file is saved at the time the file is suspended (made temporarily inactive) so that a different display file can be used to show different data on the same device. If the data for this file is saved, it is restored to the display of the device when the file is used again.

*SAME
The value does not change.

*NO   The data being shown by this file is not saved when the file is suspended.

*YES   The data being shown when the file is suspended is saved so it can be restored to the display of the device when the file is used again.

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Defer write (DFRWRT)

Specifies that the writing of data is delayed until it can be shown with other data when a read request is made. Control is returned to the program immediately after the data is received. This may result in improved performance.

*SAME
The value specified in the device file does not change.

*NO   After a write operation, the user program does not regain control until the input/output operation is completed.

*YES   When the program issues a write request, control is returned to that program after the buffer is processed. The data may not be shown immediately; the actual display of the data may take place later when a read or combined write/read operation is performed. The buffer is then available to be prepared for the next read or combined write/read operation.

Character identifier (CHRID)

Specifies the type of character conversions that may occur for the display file. When necessary, the system converts character data sent to and received from the device. This ensures that the correct hexadecimal byte values of characters are sent to the device and are returned to the application program.

Single values

*SAME
The value does not change.

*DEVD
Specifies the CHRID of the device is used to represent the CCSID of the field data for every named field with the CHRID DDS keyword. No conversion will ever occur since the CCSID of the field data will always be the same as the CHRID of the device.

*SYSVAL
Specifies the QCHRID system value is used to represent the CCSID of the field data for every named field with the CHRID DDS keyword. Conversion will only occur for these specific fields when CCSID of the field data is different than the CHRID of the device.

*JOBCCSID
Specify character conversion occurs when a difference exists between the device CHRID, job CCSID or display file CCSID values. On input, character data is converted from the device CHRID to the job CCSID when necessary. On output, character data is converted from the job CCSID to the device CHRID when necessary. On output, constant character data in the display file is converted from the display file CCSID to the device CHRID when necessary.

Note: The *JOBCCSID special value, either specified directly on the CHRID command parameter or on the CHRIDCTL job attribute when the *CHRIDCTL special value is specified for the CHRID command parameter, is not allowed if the file was created on a system at an earlier release level than V2R3M0. A file created prior to V2R3M0 will not be tagged with a CCSID and can not be used in combination with the *JOBCCSID support.

*CHRIDCTL
Specifies that the system checks the CHRIDCTL job attribute to determine whether to use the *JOBCCSID or *DEVD special values on the CHRID command parameter for this display file.

Element 1: Graphic character set

integer
>Specify the number of the graphic character set to be used. Valid values range from 1 through 32767.

Element 2: Code page

integer
>Specify the number of the code page to be used. Valid values range from 1 through 32767.

Note: The graphic character set and code page specifies the value used to represent the CCSID of the field data for every named field with the CHRID DDS keyword. Conversion will only occur for these specific fields when CCSID of the field data is different than the CHRID of the device.

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Decimal format (DECFMT)

Specifies which decimal format value is used when editing numeric fields with the EDTCDE DDS keyword. The decimal format value determines the use of commas and periods for the decimal position and three digit positional separators on edited fields.

*SAME
>The decimal format value does not change.

*FILE Use the decimal format value stored with the file when the file was created.

*JOB Use the decimal format value from the DECFMT job attribute when the file is opened.

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SFLEND text (SFLENDTXT)

Specifies where the 'More...' and 'Bottom' text is retrieved from when displaying a subfile. The 'More...' and 'Bottom' text is displayed in a subfile when the SFLEND(*MORE) DDS keyword is specified on the subfile control record.

*SAME
>The SFLEND text value does not change.

*FILE Use the 'More...' and 'Bottom' text that is stored in the file during file creation. This text was retrieved from messages CPX6AB1 and CPX6AB2 which exist in the active language of the system when the file was created.

*MSG Use the 'More...' and 'Bottom' text retrieved from messages CPX6AB1 and CPX6AB2 which exist in the current active language of the system when the file is opened.

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User specified DBCS data (IGCDTA)

Specifies, for program-described files, whether the file processes double-byte character set (DBCS) data. Specifies, for externally described files, the DBCS attributes of the file.

For program-described files

*SAME
>The value does not change.

*NO The file does not process double-byte character set (DBCS) data.

*YES   The file processes DBCS data.

For externally-described files

*SAME

> The value does not change.

*NO   The DBCS attributes of the file are defined in the data description specifications (DDS).

*YES   DBCS attributes, in addition to those defined in the DDS, include (1) putting the DDS keyword IGCALTTYP into effect, and (2) identifying DBCS attributes of fields or messages in the DDS.

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DBCS extension characters (IGCEXNCHR)

Specifies whether the system processes double-byte character set (DBCS) extended characters. When processing DBCS extended characters, the device requires the assistance of the system. The system must tell the device what the character looks like before the device can display or print the character. Extended characters are stored in a DBCS font table, not in the DBCS device. Extended character processing is a function of the operating system that is required to make characters stored in a DBCS font table available to a DBCS device.

*SAME

> The value does not change.

*YES   The system processes DBCS extended characters.

*NO   The system does not process DBCS extended characters; it displays extended characters as the undefined character.

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Maximum file wait time (WAITFILE)

Specifies the number of seconds that the program waits for the file resources to be allocated when the file is opened. If the file resources cannot be allocated within the specified wait time, an error message is sent to the program.

*SAME

> The wait time does not change.

*IMMED

> The program does not wait. Immediate allocation of file resources is required.

*CLS   The job default wait time is used as the wait time for the file resources to be allocated.

1-32767

> Specify the number of seconds to wait for file resources to be allocated.

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Maximum record wait time (WAITRCD)

Specifies the number of seconds the program waits for the completion of a read-from-invited-devices operation to a multiple device file in a high-level language program. Refer to the high-level language reference manual to determine when a file is treated as a multiple device file. The program performing the read operation waits for the input form all invited devices currently accessing the file. If a record is

not returned from any of the invited program devices in the specified amount of time, a notify message is sent to the program. This parameter has no effect on an input operation directed to a single device.

*SAME
> The wait record value does not change.

*NOMAX
> There is no limit on the amount of time the program waits for completion of the read-from-invited device operation.

*IMMED
> The program does not wait. If a record is not available when the read-from-invited-devices operation is done, a notify message is sent to the program.

1-32767
> Specify the number of seconds that the program waits for completion of the read-from-invited-device operation.

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Data queue (DTAQ)

Specifies the data queue on which entries are placed. The specified data queue must have a minimum length of 80 characters. The data queue need not exist when the display file is created since the name specified for this parameter is not evaluated until the file is used.

Note: Keyed data queues are not supported for this parameter. If a keyed data queue is specified, a run-time error will occur; but because it is not required that a data queue exist at the time the command is issued, the error will not be flagged.

Single values

*SAME
> The data queue name does not change.

*NONE
> No data queue is specified.

Qualifier 1: Data queue

name   Specify the name of the data queue on which entries are placed.

Qualifier 2: Library

*LIBL   All libraries in the library list for the current thread are searched until the first match is found.

*CURLIB
> The current library for the thread is searched. If no library is specified as the current library for the thread, the QGPL library is searched.

name   Specify the name of the library to be searched.

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Share open data path (SHARE)

Specifies whether the open data path (ODP) is shared with other programs in the same routing step. When an ODP is shared, the programs accessing the file share facilities such as the file status and the buffer.

*SAME
> The value does not change.

*NO The ODP is not shared with other programs in the routing step. A new ODP for the file is created and used every time a program opens the file.

*YES The same ODP is shared with each program in the job that also specifies *YES when it opens the file.

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Examples

Example 1: Specifying Multiple Display Devices

```
CHGDSPF   FILE(ORDENT)  DEV(WS1 WS2 WS3)  MAXDEV(3)
```

This command changes the description of the display device file named ORDENT. The file is located through the library list. The devices used with this file are the work stations WS1, WS2, and WS3. All three of the devices can be used at the same time with this display file.

Example 2: Delaying Writing of Data

```
CHGDSPF   FILE(ACCREC/*ALL)  DFRWRT(*YES)
```

This command changes the description of all display files in library ACCREC to delay writing data until a read request is made.

Example 3: Specifying DBCS Data Processing

```
CHGDSPF   FILE(IGCLIB/IGCDSP)  IGCDTA(*YES)
```

This command changes the display device file IGCDSP, which is stored in the library IGCLIB, so that it processes double-byte character set data.

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Error messages

*ESCAPE Messages

CPF7304
> File &1 in &2 not changed.

CPF7308
> &5 files not changed for &1 in &2. &4 files changed.

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Change Distribution Attributes (CHGDSTA)

Where allowed to run: All environments (*ALL)
Threadsafe: No

The Change Distribution Attributes (CHGDSTA) command changes the content of message services attributes (X.400 support) for mail distributions and the OfficeVision/400 program.

Restriction: You need security administrator (*SECADM) authority to use this command.

Parameters

Keyword	Description	Choices	Notes
KEEPRCP	Keep recipients	***SAME**, *BCC, *ALL, *NONE	Optional, Positional 1
USEMSFLCL	Use MSF for local	***SAME**, *NO, *YES	Optional
SMTPRTE	Route to SMTP gateway	Single values: ***SAME**, *NONE Other values: *Element list*	Optional
	Element 1: User ID	*Character value*	
	Element 2: Address	*Character value*	

Keep recipients (KEEPRCP)

Specifies the recipient information that is stored and sent within each mail distribution. Information can be stored and sent for the primary recipient and the copy recipients.

The number of recipients that will be kept (stored and sent within each mail distribution) is limited to 1000. This is not a limit on the number of recipients that a mail item can be sent to, only the number of recipients that are kept.

When KEEPRCP(*BCC) is specified and more than 1000 recipients exist in the blind copy list, the recipients are not kept.

When KEEPRCP(*ALL) is specified and more than 1000 recipients exist for the mail item, the recipients are not kept.

*SAME
> The value does not change.

*BCC The copy recipients that are not identified on the distribution are stored and sent within each mail distribution. This is the default value at the time of system installation.

*ALL All recipients of the distribution, whether or not they are identified on the distribution, are stored and sent within each mail distribution.

*NONE
> The recipients are not stored or sent within mail distributions.

Use MSF for local (USEMSFLCL)

Specifies if the mail service framework (MSF) will be used by the office mail services for local-to-local mail.

*SAME
The value does not change.

*NO Local-to-local mail will be distributed directly by the mail services and will not use the mail service framework (MSF). This is the default value at the time of system installation.

*YES Local-to-local mail will use the mail service framework (MSF) for distribution of mail.

Route to SMTP gateway (SMTPRTE)

Specifies the User ID and Address that the mail services will use to route mail, within this system and/or the SNADS network to the SMTP/MIME gateway, that have an internet address as recipients. Within the SNADS network, this User ID and Address should appear to be on the node where the TCP/IP SMTP/MIME gateway is active. At the gateway node, this User ID and Address must have a preferred address of PREFADR(NETUSRID *IBM ATCONTXT) in the system distribution directory entry.

*SAME
The value does not change.

*NONE
There is no route to the SMTP/MIME gateway defined on this system. When this is specified, internet addresses cannot be entered on the SNDDST command or on the office products send panels.

The possible User ID value is:

user-ID
Specify the user ID of the route to the SMTP/MIME gateway.

The possible Address value is:

address
Specify the address of the route to the SMTP/MIME gateway. This address must be specified if a User ID is specified.

Examples

```
CHGDSTA   KEEPRCP(*ALL)  SMTPRTE(INET USERS)
```

This command changes the distribution attribute so that all recipients of the distribution are stored and sent within each mail distribution. It also sets the Internet address route to the User ID and Address, INET USERS.

Error messages

None

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