iSeries

System values

Version 5 Release 3

iSeries

System values

Version 5 Release 3

Note

Before using this information and the product it supports, read the information in "Notices," on page 57.

Fifth edition (August, 2005)

This edition applies to version 5, release 3, modification 0 of IBM Operating System/400 (product number 5722-SS1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

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Contents

i5/OS (TM) system values 1
What's new in V5R3 2
Print this topic 4
i5/OS (TM) system value finder 5
System value parameters 5
System value categories 27
i5/OS (TM) system values: Auditing overview . . 28
i5/OS (TM) system values: Date and time overview 29
i5/OS (TM) system values: Devices overview . . . 30
i5/OS (TM) system values: International overview 30
i5/OS (TM) system values: Jobs overview 32
i5/OS (TM) system values: Library lists overview 33
i5/OS (TM) system values: Messages and service overview 34
i5/OS (TM) system values: Password overview . . 35
i5/OS (TM) system values: Performance overview 36
i5/OS (TM) system values: Power control overview 37
i5/OS (TM) system values: Printing overview . . 38
i5/OS (TM) system values: Restart overview . . . 39
i5/OS (TM) system values: Save and restore overview 40
i5/OS (TM) system values: Security overview . . 41
i5/OS (TM) system values: Signon overview . . . 42
i5/OS (TM) system values: Storage overview . . . 43
i5/OS (TM) system values: System and user defaults overview 43
System value concepts 44
Lock function of security-related system values 44
Effects of system value settings on restore operations 46
Manage system values 48
Compare and update system values 49
Complete the security wizard 50
Lock and unlock security-related system values 50
Prepare system values for a restore operation . . 51
Plan system values for a restore operation . . 51
Configure system values for a restore operation 52
Run a restore command 52
Save system values 52
Secure system access levels 53
Work with system values inventory 55

Appendix. Notices 57
Trademarks 59
Terms and conditions for downloading and printing publications 59

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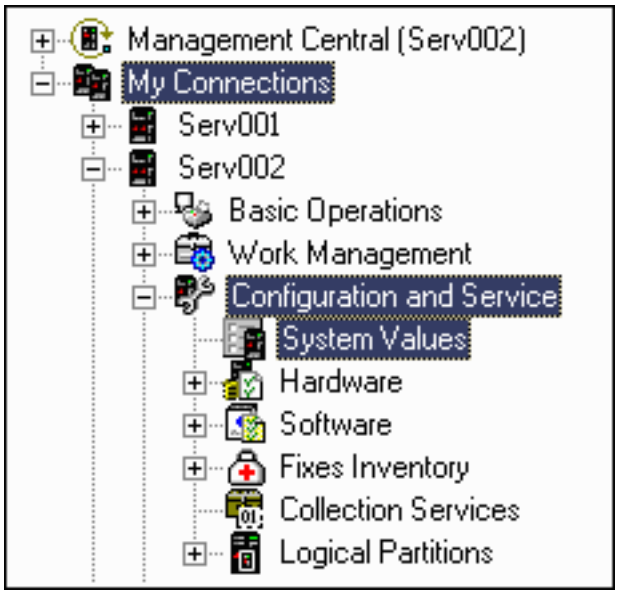
i5/OS (TM) system values

System values are pieces of information that affect the operating environment in the entire iSeries (TM) system. System values are not objects on the system. Rather, system values contain control information for the operation of certain parts of the system. You can use system values to change the system in order to define the working environment. For example, system date, library list, international characteristics, and certain security features are all set by system values.

You can manage system values using iSeries (TM) Navigator or the character-based interface. The image you see shows the location of the system values function in iSeries Navigator. Follow the highlighted path to access system values. After you select **System Values**, you may select one of the categories of system values.



To change system values, you need to have use (*USE) authority to the Change System Values (CHGSYSVAL) command. In addition, some system values require a special authority. If special authorities are needed, they are noted in the system value topics that follow. To learn more about system values, refer to any of the following topics:

- **"i5/OS (TM) system value finder" on page 5**
  Use the OS/400 (R) system value finder to locate information about a specific system value or category of system values. Use this tool to see where to find particular system values within iSeries (TM) Navigator and how to effectively use them. This tool is very useful for system administrators who are familiar with the character-based interface terms (such as QAUDCTL or QPWDLVL). The finder identifies the character-based interface term and the associated terminology used in the iSeries (TM) Navigator graphical interface. In addition, specific details about each system value are provided.
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  "System value parameters" on page 5
  View a complete list of all of the system values. In addition, you can find each system value's character-based parameter values, type, and length. Use the character-based values when writing a program that sets or retrieves a system value or if you are working with the character-based interface.

- **"System value categories" on page 27**
  iSeries Navigator groups system values into categories, beginning with auditing and ending with system control. Select this topic to find overviews of the system values contained within each category, including links to information about individual system values. You may also "Print this topic" on page 4 the entire system values topic.

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- **"System value concepts" on page 44**
  You can learn about specific system value concepts before setting your system values. Select this topic to find descriptions of how to lock and unlock system values and how system values affect a restore operation.
- **"Manage system values" on page 48**
  As an administrator, you can perform many tasks to help you manage system values. Select this topic to learn how to save, configure, and lock system values.

» In addition, you can manage system values using iSeries (TM) Navigator tasks on the Web. This allows you to work with system values using a Web browser. Not only can you work with the system values function of iSeries (TM) Navigator, but also the time management function that allows you to work with the time zone (QTIMZON) and time adjustment (QTIMADJ) system values. «

What's new in V5R3

V5R3 has exciting enhancements to further customize your system values. With each release, you are able to increase the functionality of your system values by using the enhancements to the existing system values and the new system values.

Web accessibility

You can manage system values using iSeries Navigator tasks on the Web. This allows you to work with system values using a Web browser. Not only can you work with the system values component of iSeries Navigator, but also the time management component that allows you to work with the time zone (QTIMZON) and time adjustment (QTIMADJ) system values.

Enhancements to the i5/OS (TM) system value finder

If you have previously worked with system values in the character-based interface, you may be familiar with their system names (such as QAUDCTL or QUSEADPAUT). If you have trouble finding these familiar names in iSeries (TM) Navigator, the "i5/OS (TM) system value finder" on page 5 makes it easy to find what you are looking for.

The system value finder includes a new category, Obsolete system values. This new category describes all of the system values that are no longer used by the i5/OS (TM) operating system.

New topic that contains character-based names and parameters (possible values)

To help you find character-based documentation for each system value, view "System value parameters" on page 5. This topic provides each system value's character-based information such as the type, length, and parameters (possible values).

In addition, the character-based special parameters (known as possible values in iSeries (TM) Navigator) are included in each system value topic. For the system values that have a list of possible values, the character-based parameter is enclosed in parenthesis after its associated iSeries (TM) Navigator possible value. For the system values that are either selected or not selected in iSeries Navigator, the associated parameter in the character-based interface is enclosed in parenthesis in the description of the system value.

New and changed system values

Many system values are either new or changed for V5R3. To identify the system value changes for V5R3, see the following table:

New system values

Auditing level extension	QAUDLVL2	Allows you to specify additional actions to audit. To audit more than 16 actions you must specify QAUDLVL and QAUDLVL2.
Use registered exit programs to scan the root (/), QOpenSys, and user-defined file systems	QSCANFS	Use this system value to specify whether objects in the root (/), QOpenSys, and user-defined file systems should be scanned by exit programs registered with any of the integrated file system scan-related exit points.
Scan control	QSCANFSCTL	Use this system value to specify scan control options.
Thread affinity	QTHDRSCAFN	Specifies whether secondary threads will have affinity to the same group of processors and memory as the initial thread or not.
Automatically adjust thread resources	QTHDRSCADJ	Specifies whether or not the system should dynamically make adjustments to the affinity of threads currently running on the system.
Date and Time	QDATETIME	Combines the date (QDATE) and time (QTIME) system values.
Maximum time for immediate end	QENDJOBLMT	Specifies the amount of time for application cleanup during the immediate ending of a job.
Time zone	QTIMZON	Specifies the time zone to be used on the system.
Time adjustment	QTIMADJ	Identifies the software to use to adjust the system clock to keep it synchronized with an external time source.
Save access paths	QSAVACCPTH	Specifies whether access paths are saved or not.
Changed system values		
Maximum time for immediate shutdown	QPWRDWNLMT	Default value changed to 900 seconds so that it works with the new Maximum time for immediate end (QENDJOBLMT) system value.
Offset from coordinated universal time (UTC)	QUTCOFFSET	This system value is not editable. It is determined by the new time zone (QTIMZON) system value.
Time of day	QTIME	If the system observes Daylight Saving Time, you cannot change the date and time to the hour that Daylight Saving Time affects. For example, if the system clock moves from 2:00 to 3:00 on April 6 for Daylight Saving Time, you cannot change the time to a value that is greater than or equal to 2:00 and less than 3:00 on April 6.

Allow scheduled restart	QIPLDATTIM	If the system observes Daylight Saving Time, you cannot change the date and time to the hour that Daylight Saving Time affects. For example, if the system clock moves from 2:00 to 3:00 on April 6 for Daylight Saving Time, you cannot change the time to a value that is greater than or equal to 2:00 and less than 3:00 on April 6.
Processor multitasking	QPRCMLTTSK	Added a new value, 2. A value of 2 indicates that the system determines whether processor multitasking in on or off. This system value is not in iSeries (TM) Navigator.

For more information on system values, see the "i5/OS (TM) system values," on page 1 topic in the iSeries (TM) Information Center.

What's new as of September 2006
The entry for the QDATE system value is updated in the "System value parameters" on page 5 topic.

What's new as of 30 June 2004
Additional security was added to the auditing system values. You are not able to view the auditing system values unless you have All object (*ALLOBJ) or Audit (*AUDIT) special authority. If you attempt to access the system values from iSeries (TM) Navigator without the proper authority, the Auditing category is not displayed. If you attempt to access an auditing system value in the character-based interface, a not available (*NOTAVL) value is displayed with the exception that -1 is displayed for QAUDFRCLVL. To learn more, see "i5/OS (TM) system values: Auditing overview" on page 28.

How to see what's new or changed

To help you see where technical changes have been made, this information uses:
- The » image to mark where new or changed information begins.
- The « image to mark where new or changed information ends.

» To find other information about what's new or changed this release, see the Memo to Users. «

Print this topic

To view or download the PDF version of the system values topic, select System Values (about » 2500 KB «).

» For optimal printing of the list of system values in the System value parameters topic, print it from a Web browser rather than the System Values PDF. To print the list of system values in the System value parameters topic, go to "System value parameters" on page 5 and select **File** —> **Print**. Ensure that the paper orientation is landscape. «

You can view or download these related topics:
- » Time Management «
- iSeries (TM) Security Reference

Saving PDF files

To save a PDF on your workstation for viewing or printing:

1. Right-click the PDF in your browser (right-click the link above).
2. Click **Save Target As...** if you are using Internet Explorer. Click **Save Link As...** if you are using Netscape (TM) Communicator.
3. Navigate to the directory in which you would like to save the PDF.
4. Click **Save**.

Downloading Adobe (TM) Acrobat Reader

You need Adobe Acrobat Reader to view or print these PDFs. You can download a copy from the Adobe Web site (www.adobe.com/products/acrobat/readstep.html) .

i5/OS (TM) system value finder

Use the i5/OS (TM) system value finder to find information about system values ***fast***. You can search for categories of system values as they appear in iSeries (TM) Navigator or for the system value names you used in the character-based interface.

Find by category

Search for a category of system values.

Auditing Date and Time Devices International Jobs Library Lists Message and Service Passwords Performance Power Control Printing Restart Save and Restore Security Signon Storage System and User Defaults Obsolete system values

Find by name

Find by name for individual system value names used in the character-based interface.

Example: Enter *QAUDCTL* or just *QAUD*.

Enter the name of the system value

System value parameters

System values can be set or viewed using iSeries (TM) Navigator. However, if you want to code a program to set or retrieve a system value, you need to use the character-based system value name and its associated special parameters. The character-based system value name corresponds to a system value field in iSeries (TM) Navigator and the character-based special parameter corresponds to a possible value in iSeries (TM) Navigator.

View the following table for a complete list of system values (using the character-based names) and their associated special parameters. The table provides a summary of information that you may need to work with the system value in the character-based interface. The types and lengths specified in this table apply to the CL commands. This differs from the Retrieve System Values (QWCRSVAL) API that uses binary types rather than decimal. For example, the Retrieve System Value (RTVSYSVAL) command expects decimal while the Retrieve System Values (QWCRSVAL) API returns binary. For more information about each system value and its special parameters, view each system value topic.

If you are familiar with the iSeries (TM) Navigator name (also referred to as a field on the iSeries Navigator interface) and cannot find the character-based system value name in the following table, use the "i5/OS (TM) system value finder" to display a category of system values. Each category identifies the iSeries (TM) Navigator system value names and the character-based names.

Note: For optimal printing of the list of system values in this topic, you need to print it from a Web browser. To print this topic from a Web browser, select **File** —> **Print**. Ensure that the paper orientation is landscape.

The following table identifies all of the system values using their character-based names and the character-based special parameters (possible values) for each system value:

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QABNORMSW	Previous system ending status	Restart	CHAR	1	0	0 - Normal. 1 - Abnormal.
QACGLVL	Journal accounting information	Auditing	CHAR	80	*NONE	*NONE - No journaling. *JOB - Journal job resource use. *PRINT - Journal printer output.
QACTJOB [1]	Allocate storage at restart for active jobs	Jobs	DECIMAL	(5 0)	20	0-100 jobs.
QADLACTJ [1]	Allocate additional storage as needed for active jobs	Jobs	DECIMAL	(5 0)	10	0-100 jobs.
QADLSPLA [2]	Additional storage to add to the spooling control block	Jobs	DECIMAL	(5 0)	N/A	Specifies the additional storage to add to the spooling control block.
QADLTOTJ [1]	Allocate additional storage as needed for total jobs	Jobs	DECIMAL	(5 0)	10	0-100 jobs.
QALWOBJRST	Allow restore of security sensitive objects	Save and restore	CHAR	150	*ALL	*ALL - All objects are restored. *NONE - Does not allow objects with security-sensitive attributes to be restored. *ALWSYSSTT - System-state and inherit-state attribute objects are restored. *ALWPGMADP - Programs and service programs with the adopt attribute are restored. *ALWPTF - Allow system-state or inherit-state programs, service programs, modules, objects that adopt authority, objects that have the S_ISUID (set-user-ID) attribute enabled, and objects that have the S_ISGID (set-group-ID) attribute enabled to be restored to the system during a PTF install. *ALWSETUID - Allow restore of files that have the S_ISUID (set-user-ID) attribute enabled. *ALWSETGID - Allow restore of files that have the S_ISGID (set-group-ID) attribute enabled. *ALWVLDERR - Allow objects with validation errors or suspected of having been tampered with to be restored.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QALWUSRDMN	Allow user domain objects in libraries	Security	CHAR	500	*ALL	*ALL - All libraries and integrated file system directories on the system can contain user domain objects. *DIR - Any SOM(TM) object in a directory in the integrated file system can contain user domain objects. *DIR does not apply to the QSYS and QDLS file systems. *DIR is mutually exclusive with *ALL. *library-name* - A list of library names that can contain user domain objects.
QASTLVL	Assistance level	Security	CHAR	10	*BASIC	*BASIC - Operational Assistant level. *INTERMED - Intermediate level. *ADVANCED - Advanced level.
QATNPGM	Attention program	System and user defaults	CHAR	20	*ASSIST	*ASSIST - Operational Assistant main menu. *NONE - No attention program. *program-name* - The specified program is used.
QAUDCTL [1]	Activate action auditing	Auditing	CHAR	50	*NONE	*NONE - No auditing. *OBJAUD- Objects are audited. *AUDLVL - Actions are audited. *NOQTEMP - QTEMP objects are not audited. *NOTAVL - The user is not allowed to view the auditing system value.
QAUDENDACN	Audit journal error action	Auditing	CHAR	10	*NOTIFY	*NOTIFY - Notification sent to security auditing journal. *PWRDWNSYS - System ends with a system reference code (SRC). *NOTAVL - The user is not allowed to view the auditing system value.
QAUDFRCLVL	Maximum journal entries before writing to auxiliary storage	Auditing	DECIMAL	(5 0)	*SYS	*SYS - System writes the journal entries to disk pool. Equivalent to the decimal value 0. -1 - The user is not allowed to view the auditing system value. 1-100 - Number of security auditing journal entries.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QAUDLVL [1]	Activate action auditing - available actions	Auditing	CHAR	160	*NONE	*AUDLVL2 - Both QAUDLVL and QAUDLVL2 system values will be used to determine the security actions to be audited. *AUTFAIL - Authorization failures. *CREATE - Object creations. *DELETE - Deletions of external objects on the system are audited. *JOBDTA - Actions that affect a job. *NETBAS - Network base functions. *NETCLU - Cluster resource group. *NETCMN - Networking and communications functions. *NETFAIL - Network failures. *NETSCK - Sockets tasks. *NONE - No actions are audited. *OBJMGT - Generic object tasks. *OFCSRV - OfficeVision(R) licensed program. *OPTICAL - Optical functions are audited. *PGMADP - Adopting authority from a program owner. *PGMFAIL - Integrity violations (for example, blocked instruction, validation value failure, and domain violation). *PRTDTA - Printing functions. *SAVRST - Save and restore information. *SECCFG - Security configuration. *SECDIRSRV - Directory service functions. *SECIPC - Interprocess communications. *SECNAS - Network authentication service actions. *SECRUN - Security run time functions. *SECSCKD - Socket descriptors. *SECURITY - Security-related functions. *SECVFY - Use of verification functions. *SECVLDL - Validation list objects. *SERVICE - Use of the system service tools. *SPLFDTA - Spool file. *SYSMGT - System management functions. *NOTAVL - The user is not allowed to view the auditing system value.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QAUDLVL2[1]	Auditing level extension	Auditing	CHAR	990	*NONE	*AUTFAIL - Authorization failures. *CREATE - Object creations. *DELETE - Deletions of external objects on the system are audited. *JOBDTA - Actions that affect a job. *NETBAS - Network base functions. *NETCLU - Cluster resource group. *NETCMN - Networking and communications functions. *NETFAIL - Network failures. *NETSCK - Sockets tasks. *NONE - No actions are audited. *OBJMGT - Generic object tasks. *OFCSRV - OfficeVision(R) licensed program. *OPTICAL - Optical functions are audited. *PGMADP - Adopting authority from a program owner. *PGMFAIL - Integrity violations (for example, blocked instruction, validation value failure, and domain violation). *PRTDTA - Printing functions. *SAVRST - Save and restore information. *SECCFG - Security configuration. *SECDIRSRV - Directory service functions. *SECIPC - Interprocess communications. *SECNAS - Network authentication service actions. *SECRUN - Security run time functions. *SECSCKD - Socket descriptors. *SECURITY - Security-related functions. *SECVFY - Use of verification functions. *SECVLDL - Validation list objects. *SERVICE - Use of the system service tools. *SPLFDTA - Spool file. *SYSMGT - System management functions. *NOTAVL - The user is not allowed to view the auditing system value.
QAUTOCFG	Local controllers and devices	Devices	CHAR	1	1	0 - Automatic configuration is off. 1 - Automatic configuration is on.
QAUTORMT	Remote controllers and devices	Devices	CHAR	1	1	0 - Automatic configuration is off. 1 - Automatic configuration is on.
QAUTOSPRPT [2]	Automatic system disabled reporting	System and user defaults	CHAR	1	0	0 - Reporting is off. 1 - Reporting is on.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QAUTOVRT	Pass-through devices and Telnet	Devices	DECIMAL	(5 0)	0	0 - Automatic configuration of virtual devices is off. 1-32500 - Number of virtual devices to have automatically configure. *NOMAX - No maximum number of virtual devices. Equivalent to the decimal value 32767. *REGFAC - The program registered for the Virtual Device Selection (QIBM_QPA_DEVSEL) exit point. Equivalent to the decimal value -1.
QBASACTLVL	Base memory pool maximum eligible threads	Performance	DECIMAL	(5 0)	6	1-32767 threads.
QBASPOOL	Base memory pool minimum size	Performance	DECIMAL	(10 0)	2000 KB	256-2147483647 MB.
QBOOKPATH [2]	Book path	System and user defaults	CHAR	315	'/QDLS/ QBKBOOKS/ BOOKS'	*directory-name*
QCCSID	Coded character set ID	International	DECIMAL	(5 0)	65535	1-65535
QCENTURY [1]	Century	Date and time	CHAR	1	None.	0 - Years 1928-1999. 1 - Years 2000-2053.
QCFGMSGQ	Message queue for lines, controllers and devices	Messages and service	CHAR	20	QSYSOPR QSYS	Message queue name and library name.
QCHRID	Graphic character set/Code page	International	CHAR	20	Varies for different countries/ regions.	1-32767 for the character set identifier and 1-32767 for the code page identifier.
QCHRIDCTL	Character identifier control	International	CHAR	10	*DEVD	*DEVD - The *DEVD special value performs the same function as on the CHRID command parameter. *JOBCCSID - The *JOBCCSID special value performs the same function as on the CHRID command parameter.
QCMNARB	Communications arbiter jobs, at restart	Performance	CHAR	10	*CALC	*CALC - Operating system calculates the number of communication arbiter jobs. 0-99 - Number of communication arbiter jobs.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QCMNRCYLMT	Communications configuration recovery	Performance	CHAR	20	0 0	The first 10 characters contain the count limit right-justified. The last 10 characters contain the time interval right-justified.
QCNTRYID	Country/Region	International	CHAR	2	Varies for different countries/ regions.	Country/Region ID.
QCONSOLE	Console name	System and user defaults	CHAR	10	QCONSOLE	QCONSOLE or specified name.
QCRTAUT	Default authority for newly created objects in QSYS.LIB file system	System and user defaults	CHAR	10	*CHANGE	*CHANGE - Allows you to change the contents of an object. *ALL - Allows you to read, change, delete, and manage the security of an object. *USE - Allows you to create an object, to display the contents of an object, or to refer to the contents of an attached object when a command being requested must access attached objects and their contents. *EXCLUDE - Allows no access to an object.
QCRTOBJAUD	Default auditing for newly created objects	Auditing	CHAR	10	*NONE	*NONE - No auditing. *USRPRF - Auditing depends on the user profile. *CHANGE - Audits changes. *ALL - Audits when used or changed. *NOTAVL - The user is not allowed to view the auditing system value.
QCTLSBSD	Controlling subsystem/library	Restart	CHAR	20	QBASE QSYS	The first 10 characters contain the subsystem description name right-justified. The last 10 characters contain the library name right-justified.
QCURSYM	Currency symbol	International	CHAR	1	Varies for different countries/ regions.	Any character except blank, hyphen (-), ampersand (&), asterisk (*), or zero (0).
QDATE[1]	Date	Date and time	CHAR	» 6 «	No shipped value.	Depends on the date format being used.
QDATETIME[1]	Date and time	Date and time	CHAR	20	No shipped value.	Specifies QDATE and QTIME.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QDATFMT [1]	Date format	Date and time	CHAR	3	Varies for different countries/ regions.	This system value can be YMD, MDY, DMY, or JUL (Julian format), where Y equals year, M equals month, and D equals day.
QDATSEP [1]	Date separator	Date and time	CHAR	1	Varies for different countries/ regions.	Slash (/), dash (-), period (.), comma (,), or blank
QDAY [1]	Day	Date and time	CHAR	3	No shipped value.	1-366
QDAYOFWEEK [1]	Day of the week	Date and time	CHAR	4	No shipped value.	*SUN - Sunday *MON - Monday *TUE - Tuesday *WED - Wednesday *THU - Thursday *FRI - Friday *SAT - Saturday
QDBFSTCCOL	Allow background database statistics collection	Performance	CHAR	10	*ALL	*ALL - User and system requests. *USER - User requests. *SYSTEM - System requests. *NONE - No requests.
QDBRCVYWT	Wait for database recovery before completing restart	Restart	CHAR	1	0	0 - Does not wait for database recovery. 1 - Waits for database recovery.
QDECFMT[1]	Decimal format	Date and time	CHAR	1	Varies for different countries/ regions.	blank - Uses a period for a decimal point, a comma for a 3-digit grouping character, and zero-suppress to the left of the decimal point. J - Uses a comma for a decimal point and a period for a 3-digit grouping character. The zero-suppression character is in the second position (rather than the first) to the left of the decimal notation. Balances with zero values to the left of the comma are written with one leading zero (0,04). The J entry also overrides any edit codes that might suppress the leading zero. I - Uses a comma for a decimal point, a period for a 3-digit grouping character, and zero-suppress to the left of the decimal point.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QDEVNAMING	Device naming convention	Devices	CHAR	10	*NORMAL	*NORMAL - Naming conventions should follow iSeries (TM) standards. *S36 - Naming conventions should follow System/36(TM) standards. *DEVADR - Device names are derived from the device address.
QDEVRCYACN	Action to take when a device error occurs on the workstation	Devices	CHAR	20	*DSCMSG	*MSG - Signals the I/O error message to the user's application program. *DSCENDRQS - Disconnects the job. When signing on again, a cancel request function is performed to return control of the job back to the last request level. *DSCMSG - Disconnects the job. When signing on again, an error message is sent to the user's application. *ENDJOB - Ends the job. A job log is produced for the job. *ENDJOBNOLIST - Ends the job. A job log is not produced for the job.
QDSCJOBITV	Time-out interval for disconnected jobs	Jobs	CHAR	10	240	5-1440 - The range of the disconnect interval. *NONE - There is no disconnect interval.
QDSPSGNINF	Display signon information	Signon	CHAR	1	0	0 - No. 1 - Yes.
QDYNPTYADJ	Dynamically adjust job priorities of interactive jobs	Performance	CHAR	1	1	0 - Off. 1 - On.
QDYNPTYSCD	Dynamically adjust job priorities within priority bands	Performance	CHAR	1	1	0 - Off. 1 - On.
QENDJOBLMT	Maximum time for immediate end	Jobs	DECIMAL	(5 0)	120	30-3600 seconds.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QFRCCVNRST	Convert objects during restore	Save and restore	CHAR	1	7	0 - Do not convert anything. 1 - Objects with validation errors will be converted. 2 - Objects requiring conversion to be used on the current version of the operating system and objects with validation errors will be converted. 3 - Objects suspected of having been tampered with, objects containing validation errors, and objects requiring conversion to be used by the current version of the operating system will be converted. 4 - Objects that contain sufficient creation data to be converted and do not have valid digital signatures will be converted. 5 - Objects that contain sufficient creation data will be converted. 6 - All objects that do not have valid digital signatures will be converted. 7 - All objects will be converted.
QHOUR [1]	Hour	Date and time	CHAR	2	No shipped value.	00-23
QHSTLOGSIZ	Maximum records in history log	Messages and service	DECIMAL	(5 0)	5000	1-65535 records.
QIGC	Double-byte capable	International	CHAR	1	1	0 - A DBCS version is not installed. 1 - A DBCS version is installed.
QIGCCDEFNT	Coded font name	International	CHAR	20	Varies for different countries/ regions.	First 10 characters contain the coded font name and the last 10 characters contain the library name. *NONE - No coded font is identified to the system.
QIGCFNTSIZ	Coded font point size	International	DECIMAL	(4 1)	*NONE	*NONE - There is no defined double-byte coded font point size. Equivalent to the decimal value 0. 1-9999 - The double-byte coded font point size in tenths. For example, a value of 9999 in binary would be 999.9.
QINACTITV	Time-out interval for inactive jobs	Jobs	CHAR	10	*NONE	*NONE - The system does not check for inactive interactive jobs. 5-300 - The number of minutes a job can be inactive before action is taken.
QINACTMSGQ	When a job reaches time-out	Jobs	CHAR	20	*NONE	*DSCJOB - Interactive job is disconnected. *ENDJOB - Interactive job is ended.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QIPLDATTIM	Allow scheduled restart	Restart	CHAR	20	*NONE	*NONE - No automatic IPL. CYYMMDDHHMMSS - where C is the century, YY is the year, MM is the month, DD is the day, HH is the hour, MM is the minute, and SS is the second. A 0 for the century flag indicates years 19xx, and a 1 indicates years 20xx.
QIPLSTS	Previous restart type	Restart	CHAR	1	0	0 - Operator panel IPL. 1 - Automatic IPL after power restored. 2 - Restart IPL. 3 - Time-of-day IPL. 4 - Remote IPL.
QIPLTYPE	Type of restart	Restart	CHAR	1	0	0 - Unattended. 1 - Attended with dedicated service tools. 2 - Attended with console in debug mode.
QJOBMSGQFL	When maximum size is reached	Jobs	CHAR	10	*NOWRAP	*NOWRAP - Do not wrap. *WRAP - Wrap to the beginning and start filling again. *PRTWRAP - Wrap the message queue and print the messages that are being overlaid because of the wrapping.
QJOBMSGQMX	Maximum job log size	Jobs	DECIMAL	(5 0)	16	8-64 MB.
QJOBMSGQSZ [2]	Job message queue initial size	Jobs	DECIMAL	(5 0)	N/A	1-16384
QJOBMSGQTL [2]	Job message queue maximum initial size	Jobs	DECIMAL	(5 0)	N/A	1-16384
QJOBSPLA	Initial printer output block size	Jobs	DECIMAL	(5 0)	3516	3516 - 32767 bytes.
QKBDBUF	Default system keyboard	System and user defaults	CHAR	10	*TYPEAHEAD	*TYPEAHEAD - Type-ahead is on and Attention key buffering is off. *NO - Type-ahead and Attention key are off. *YES - Type-ahead and Attention key are on.
QKBDTYPE	Default system keyboard	System and user defaults	CHAR	3	Varies for different countries/ regions.	Specifies the language character set for the keyboard.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QLANGID	Language	International	CHAR	3	Varies for different countries/ regions.	Specifies the language identifier.
QLEAPADJ	Leap year adjustment	Date and time	DECIMAL	(5 0)	Varies for different countries/ regions.	0 - Gregorian. 1-3 - Adjustment in years.
QLIBLCKLVL	Lock libraries in a user job's library search list	Performance	CHAR	1	1	0 - Not locked. 1 - Locked.
QLMTDEVSSN	Limit each user to one device session	Signon	CHAR	1	0	0 - No limit. 1 - Limit to one device.
QLMTSECOFR	Restrict privileged users to specific device sessions	Signon	CHAR	1	1	0 - A user with *ALLOBJ or *SERVICE special authority can signon any device. 1 - A user with *ALLOBJ or *SERVICE special authority can signon only at a device to which they have explicit authority.
QLOCALE	Locale	International	CHAR	1024	Varies for different countries/ regions.	*NONE - No locale object is specified. *C - A predefined locale object is to be used. *POSIX - A predefined locale object is to be used.
QMAXACTLVL	Maximum eligible threads	Performance	DECIMAL	(5 0)	*NOMAX	*NOMAX - No maximum. Equivalent to the decimal value 32767. 2-32767
QMAXJOB	Maximum jobs	Jobs	DECIMAL	(10 0)	163520	32000 - 485000 jobs.
QMAXSGNACN	When maximum is reached	Signon	CHAR	1	3	1 - Varies off the device. 2 - Disables the user profile. 3 - Varies off the device and disables the user profile.
QMAXSIGN	Incorrect signon attempts	Signon	CHAR	6	3	1-25 - Maximum number of signon attempts allowed. *NOMAX - No maximum number of signon attempts.
QMAXSPLF	Maximum printer output files	Jobs	DECIMAL	(10 0)	9999	9999 - 999999 files.
QMCHPOOL	Machine memory pool size	Performance	DECIMAL	(10 0)	20	Pool size in megabytes (MB).

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QMINUTE [1]	Minute	Date and time	CHAR	2	No shipped value.	0-59
QMLTTHDACN	When a function in a multi-threaded job is not threadsafe	Jobs	CHAR	1	2	1 - Perform the function that is not threadsafe without sending a message. 2 - Perform the function that is not threadsafe and send an informational message. 3 - Do not perform the function that is not threadsafe.
QMODEL	Model number	System and user defaults	CHAR	4	No shipped value.	4 character value that specifies the model number.
QMONTH [1]	Month	Date and time	CHAR	2	No shipped value.	1-12
QPASTHRSVR	Available display station pass-through server jobs	Performance	CHAR	10	*CALC	*CALC - Operating system calculates the number of server jobs. 0-100 - Number of server jobs.
QPFRADJ	Automatically adjust memory pools and activity levels	Performance	CHAR	1	2	0 - No performance adjustment. 1 - Performance adjustment at IPL. 2 - Performance adjustment at IPL and dynamically. 3 - Dynamic performance adjustment.
QPRBFTR	Problem log filter	Messages and service	CHAR	20	*NONE	Character list of up to two 10-character values in which the first value is the problem filter name and the second is the library name. *NONE - No problem filter is in use.
QPRBHLDITV	Minimum retention	Messages and service	DECIMAL	(5 0)	30	0-999 days.
QPRCFEAT	Processor feature code	System and user defaults	CHAR	4	No shipped value.	4 character value in user-written programs.
QPRCMLTTSK	Processor multitasking	System and user defaults	CHAR	2	» 2 «	0 - Multitasking is off. 1 - Multitasking is on. » 2 - System controlled. «
QPRTDEV	Default printer	Printing	CHAR	10	PRT01	Specifies the default printer.
QPRTKEYFMT	Format when using Print key	Printing	CHAR	10	*PRTHDR	*NONE - Border and header information is not included. *PRTBDR - Border information is included. *PRTHDR - Header information is included. *PRTALL - Border and header information is included.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QPRTTXT	Printed page footer	Printing	CHAR	30	*BLANK	0-30 characters of text for page footer *NONE - No page footer text.
QPWDEXPITV	Password expiration	Password	CHAR	6	*NOMAX	*NOMAX - A password can be used an unlimited number of days. 1-366 - The number of days before a password cannot be used.
QPWDLMTAJC	Restrict consecutive digits	Password	CHAR	1	0	0 - Adjacent digits are allowed. 1 - Adjacent digits are not allowed.
QPWDLMTCHR	Restricted characters	Password	CHAR	10	*NONE	Specified characters are restricted *NONE - No characters are restricted.
QPWDLMTREP	Restrict repeating characters	Password	CHAR	1	0	0 - Characters can be used more than once. 1 - Characters cannot be used more than once. 2 - Characters can be used more than once but cannot be repeated consecutively.
QPWDLVL	Password level	Password	DECIMAL	(5 0)	0	0 - Passwords with 1-10 characters are supported. 1 - Passwords with 1-10 characters are supported and NetServer passwords are removed. 2 - Passwords with 1-128 characters are supported. 3 - Passwords with 1-128 characters are supported and NetServer passwords are removed.
QPWDMAXLEN	Maximum password length	Password	DECIMAL	(5 0)	8	1-10 if QPWDLVL is 0 or 1 1-128 if QPWDLVL is 2 or 3
QPWDMINLEN	Minimum password length	Password	DECIMAL	(5 0)	6	1-10 if QPWDLVL is 0 or 1 1-128 if QPWDLVL is 2 or 3
QPWDPOSDIF	Require a new character in each position	Password	CHAR	1	0	0 - The same characters can be used in a position corresponding to the same position in the previous password. 1 - The same characters cannot be used in a position corresponding to the same position in the previous password.
QPWDRQDDGT	Require at least one digit	Password	CHAR	1	0	0 - A numeric digit is not required. 1 - A numeric digit is required.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QPWDRQDDIF	Password reuse cycle	Password	CHAR	1	0	0 - Can be the same. 1 - Different than previous 32 passwords. 2 - Different than previous 24 passwords. 3 - Different than previous 18 passwords. 4 - Different than previous 12 passwords. 5 - Different than previous 10 passwords. 6 - Different than previous 8 passwords. 7 - Different than previous 6 passwords. 8 - Different than previous 4 passwords.
QPWDVLDPGM	Password validation program	Password	CHAR	20	*NONE	*NONE - No validation program is used. *REGFAC - The validation program name is retrieved from the registration facility. *program-specification* - The name of the validation program. This option is only valid if the system is operating at QPWDLVL 0 or 1.
QPWRDWNLMT	Maximum time for immediate shutdown	Restart	DECIMAL	(5 0)	900 seconds.	1-32767 seconds.
QPWRRSTIPL	Allow auto-restart after power failure	Restart	CHAR	1	0	0 - Automatic IPL is not allowed. 1 - Automatic IPL is allowed.
QQRYDEGREE	Parallel processing for queries and indexes	Performance	CHAR	10	*NONE	*NONE - No parallel processing is allowed. *IO - Any number of tasks may be used when the database query optimizer chooses to use I/O parallel processing for queries. *OPTIMIZE - The query optimizer can choose to use any number of tasks for either I/O or SMP parallel processing to process the query. *MAX - The query optimizer can choose to use either I/O or SMP parallel processing to process the query.
QQRYTIMLMT	Database query time limit	Performance	CHAR	10	*NOMAX	*NOMAX - No maximum number. 0-2147352578 - Number of seconds.
QRCLSPLSTG	Automatically clean up unused printer output storage	Storage	CHAR	10	*NOMAX	*NOMAX - No maximum retention interval. *NONE - No retention interval. 1-366 - Number of days empty spool database members are kept for new spooled file use.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QRETSVRSEC	Allow server security information to be retained	Security	CHAR	1	0	0 - Do not retain the security-related information. 1 - Retain the security-related information.
QRMTIPL	Allow remote power-on and restart	Restart	CHAR	1	0	0 - Remote power on and IPL are not allowed. 1 - Remote power on and IPL are allowed.
QRMTSIGN	Allow remote power-on and restart	Restart	CHAR	20	*FRCSIGNON	*FRCSIGNON - All remote signon sessions are required to go through normal signon processing. *SAMEPRF - When the source and target user profile names are the same, the signon may be bypassed for remote signon attempts. *VERIFY - After verifying that the user has access to the system, the system allows the user to bypass the signon. *REJECT - No remote signon is allowed.
QRMTSRVATR	Allow remote service of system	Messages and service	CHAR	1	0	0 - Remote service attribute is off. 1 - Remote service attribute is on.
QSAVACCPTH	Save access paths	Save and restore	CHAR	1	0	0 - Do not save access paths. 1 - Save access paths.
QSCANFS	Use registered exit programs to scan the root(/), QOpenSys, and user-defined file systems	Security	CHAR	200	*ROOTOPNUD	*NONE - No file system objects are scanned. *ROOTOPNUD - Root (/), QOpenSys and user-defined file system objects are scanned.
QSCANFSCTL	Scan control options	Security	CHAR	200	*NONE	*NONE - Default controls are used. *ERRFAIL - Fail operation if exit program errors are encountered. *FSVRONLY - Only scan accesses through file servers. *NOFAILCLO - Close requests are not failed if there is a scan failure. *NOPOSTRST - Objects are scanned when changed, not just because they are restored. *NOWRTUPG - System does not attempt to upgrade the access to include write. *USEOCOATR - Scanning depends on the object change only attribute.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QSCPFCONS	If console problem occurs	Restart	CHAR	1	1	0 - End system. 1 - Continue the IPL unattended.
QSECOND [1]	Second	Date and time	CHAR	2	No shipped value.	00-59
QSECURITY	Security level	Security	CHAR	2	40	10 - The system does not require a password to signon. 20 - The system requires a password to signon. 30 - The system requires a password to signon, and users must have authority to access objects and system resources. 40 - The system requires a password to signon, and users must have authority to access objects and system resources. 50 - The system requires a password to signon, and users must have authority to access objects and system resources. Security and integrity of the QTEMP library and user domain (*USRxxx) objects are enforced.
QSETJOBATR	Set job attributes based on locale	International	CHAR	160	*NONE	*NONE - No attributes are set. *CCSID - Coded character set identifier *DATFMT - Date format *DATSEP - Date separator *DECFMT - Decimal format *SRTSEQ - Sort sequence *TIMSEP - Time separator
QSFWERRLOG	Log software problems detected by the system	Messages and service	CHAR	10	*LOG	*LOG - Software errors are logged. *NOLOG - No logging occurs.
QSHRMEMCTL	Allow use of shared or mapped memory with write capability	Security	CHAR	1	1	0 - Not allowed. 1 - Allowed.
QSPCENV	Default user environment	System and user defaults	CHAR	10	*NONE	*NONE - iSeries (TM) environment is used. *S36 - System/36 environment is used.
QSPLFACN	Detach printer output after jobs have ended	Jobs	CHAR	10	*KEEP	*KEEP - Do not detach. *DETACH - Detach.
QSRLNBR	Serial number	System and user defaults	CHAR	8	No shipped value.	8 character serial number.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QSRTSEQ	Sort sequence	International	CHAR	20	*HEX	*HEX - No sort sequence table. *LANGIDSHR - Table can contain the same weight for multiple characters. *LANGIDUNQ - Table must contain a unique weight for each character. sort sequence table name - Name and library of the table.
QSRVDMP	Service log for unmonitored escape messages	Messages and service	CHAR	10	*DMPUSRJOB	*DMPALLJOB - Service logs will be created for all jobs. *DMPSYSJOB - Service logs will be created for only system jobs, not user jobs. *DMPUSRJOB - Service logs are created for only user jobs, not system jobs. System jobs include the system arbiter, subsystem monitors, LU services process, spool readers and writers, and the start-control-program-function (SCPF) job. *NONE - Do not request logs for any jobs.
QSTGLOWACN	When maximum usage is reached	Storage	CHAR	10	*MSG	*MSG - Message CPI099C is sent to the QSYSMSG and the QSYSOPR message queues. *CRITMSG - Message CPI099B is sent to the user who is specified by the Critical messages to user service attribute. Service attributes can be changed by using the Change Service Attributes (CHGSRVA) command. *REGFAC - A job is submitted to run any exit programs that are registered for the QIBM_QWC_QSTGLOWACN exit point. *ENDSYS - The system is ended and left in the restricted state. *PWRDWNSYS - The system is powered down immediately and restarted.
QSTGLOWLMT[3]	Percentage of storage to remain available	Storage	DECIMAL	(7 4)	5	0-100 percent.
QSTRPRTWTR	Previous restart - printers started	Restart	CHAR	1	1	0 - Printer writers not started. 1 - Printer writers started.
QSTRUPPGM	Start-up program to set up system	Restart	CHAR	20	*QSTRUP QSYS	*NONE - No program called. *program-name* - The first 10 characters contain the program name, and the last 10 characters contain the library name.
QSTSMSG	Display status messages	Messages and service	CHAR	10	*NORMAL	*NORMAL - Status messages are displayed. *NONE - Status messages are not displayed.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QSVRAUTITV[2]	Server authentication interval	System and user defaults	DECIMAL	(6 0)	2880	0-108000 minutes.
QSYSLIBL	System library list	Library lists	CHAR	150	QSYS, QSYS2, QHLPSYS, QUSRSYS	Up to 10 characters for each library name.
QTHDRSCADJ	Automatically adjust thread resources	Performance	CHAR	1	1	0 - No automatic adjustment. 1 - Thread resources are automatically adjusted.
QTHDRSCAFN	Thread affinity	Performance	CHAR	20	*NOGROUP *NORMAL	*NOGROUP - No grouping of threads. *GROUP - Secondary threads are grouped. *NORMAL - Threads can use any resources. *HIGH - Threads only use resources it has affinity to.
QTIMADJ	Time adjustment	Date and time	CHAR	30	*NONE	*NONE - No software identified. *identifier-name*.
QTIME	System time	Date and time	CHAR	9	No shipped value.	Specifies the hour, minutes, and seconds.
QTIMSEP[1]	Time separator	Date and time	CHAR	1	Varies for different countries/ regions.	1 - Colon (:) 2 - Period (.) 3 - Comma (,) 4 - Blank
QTIMZON	Time zone	Date and time	CHAR	10	Varies for different countries/ regions.	*time-zone-identifier* - 10 character identifier name.
QTOTJOB [1]	Total jobs	Jobs	DECIMAL	(5 0)	30	A number value less than 480000.
QTSEPOOL	Move interactive jobs to base pool at end of time slice	Performance	CHAR	10	*NONE	*NONE - Jobs are not moved to the base storage pool when time-slice end is reached. *BASE - Jobs are moved to the base pool when time-slice end is reached.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QUPSDLYTIM	When power failure occurs	Power control	CHAR	20	*CALC	*BASIC - Powers only the PRC, IOP cards, and Load Source direct-access storage device. The appropriate wait time, in seconds, is calculated. *CALC - Calculates the appropriate wait time. In a secondary partition, the calculated wait time, rather than *CALC, is returned. *NOMAX - Starts no action. 0 - Automatically powers down the system. 1-99999 - Powers down the system after the specified number of seconds.
QUPSMSGQ	Message queue and library	Power control	CHAR	20	QSYSOPR QSYS	Message queue name and library name.
QUSEADPAUT	Users who can cause programs to use adopted authority from calling programs	Security	CHAR	10	*NONE	*NONE - All users can create, change, and update programs and service programs that use adopted authority. *authorization list name* - Authorization list that a user must have at least *USE authority to in order to create, change, and update programs and service programs that use adopted authority.
QUSRLIBL	User library list	Library lists	CHAR	250	QGPL QTEMP	Up to 10 characters for each library name.
QUTCOFFSET	Offset from UTC	Date and time	CHAR	5	+0000	Depends on the version and release of the system.

System value	iSeries Navigator name	Category	Type	Length	Shipped value	Possible values
QVFYOBJRST	Verify object signatures during restore	Save and restore	CHAR	1	3	1 - Do not verify signatures on restore. Restore all objects regardless of their signature. 2 - Verify signatures on restore. Restore unsigned commands and user-state objects. Restore signed commands and user-state objects, even if the signatures are not valid. Restore inherit-state and system-state objects only if they have valid signatures. 3 - Verify signatures on restore. Restore unsigned commands and user-state objects. Restore signed commands and user-state objects only if the signatures are valid. Restore inherit-state and system-state objects only if they have valid signatures. 4 - Verify signatures on restore. Do not restore unsigned commands and user-state objects. Restore signed commands and user-state objects, even if the signatures are not valid. Restore inherit-state and system-state objects only if they have valid signatures. 5 - Verify signatures on restore. Do not restore unsigned commands and user-state objects. Restore signed user-state objects only if the signatures are valid. Restore inherit-state and system-state objects only if they have valid signatures.
QYEAR[1]	Year	Date and time	CHAR	2	No shipped value.	0-99

Notes:

1
In iSeries (TM) Navigator, this system value is grouped with other character-based system values. Therefore, the topic specific to this system value discusses all of the system values associated with it in iSeries Navigator. For example, QTIME is called **Time of day** in iSeries Navigator and it uses QTIME, QDATETIME, QHOUR, QMINUTE, and QSECOND.

2
The operating system no longer uses this system value. For a complete list of system values no longer used by the operating system, see Obsolete system values.

3
In iSeries Navigator, this is the **Maximum system disk pool usage** (0-100 percent) system value. In the character-based interface, this system value specifies the disk pool **lower** limit versus the **maximum** allowed.

For more information, see the Retrieve System Values API.

System value categories

iSeries (TM) Navigator groups system values into categories to streamline system value management. You can use iSeries (TM) Navigator to work with the following categories of system values:

"i5/OS (TM) system values: Auditing overview" on page 28
Changes the auditing values.

"i5/OS (TM) system values: Date and time overview" on page 29
Changes the date, time, and time zone information.

"i5/OS (TM) system values: Devices overview" on page 30
Changes device auto-configuration and recovery values.

"i5/OS (TM) system values: International overview" on page 30
Changes locale settings and format of numbers, currency, dates, and time.

"i5/OS (TM) system values: Jobs overview" on page 32
Changes system level job limits and default job priorities.

"i5/OS (TM) system values: Library lists overview" on page 33
Changes the default system and user library lists.

"i5/OS (TM) system values: Messages and service overview" on page 34
Changes messages, logging, and service information.

"i5/OS (TM) system values: Password overview" on page 35
Changes password expiration and composition rules.

"i5/OS (TM) system values: Performance overview" on page 36
Changes priority, performance adjustments, and processing values for the system.

"i5/OS (TM) system values: Power control overview" on page 37
Changes power supply values.

"i5/OS (TM) system values: Printing overview" on page 38
Changes basic printing values and format of printer output.

"i5/OS (TM) system values: Restart overview" on page 39
Changes initial setup values and settings that affect restart.

"i5/OS (TM) system values: Save and restore overview" on page 40
Changes restore and save values.

"i5/OS (TM) system values: Security overview" on page 41
Changes object, user, and system security values.

"i5/OS (TM) system values: Signon overview" on page 42
Changes signon values.

"i5/OS (TM) system values: Storage overview" on page 43
Changes values for system storage.

"i5/OS (TM) system values: System and user defaults overview" on page 43
Displays system identification information and changes system level values.

These system values help you control your system. The proper settings will benefit you in many ways. For example, you are able to control how much memory is allocated for specific jobs. This allows you to prioritize various jobs. In addition, you can use a combination of the system values to control the security of the system.

» These system value categories are different from the categories used in the character-based interface. To compare the iSeries (TM) Navigator categories with the character-based categories (grouped by the type (*TYPE) parameter), see Character-based types versus iSeries (TM) Navigator categories. «

» For more information about the system values that are no longer used by the operating system, see Obsolete system values. «

To learn more about system values, see the "i5/OS (TM) system value finder" on page 5.

i5/OS (TM) system values: Auditing overview

Use i5/OS (TM) auditing system values to control a variety of auditing and other record-keeping events. To access the auditing category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries Navigator uses descriptive words to describe the system values. For a quick overview of the auditing system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

» To view the auditing system values, you must have All object (*ALLOBJ) or Audit (*AUDIT) special authority. If you do not have the proper authority, the Auditing category of system values is not available. In iSeries Navigator, the Auditing category is not displayed. In the character-based interface, the auditing system values display a not available (*NOTAVL) value with the exception that QAUDFRCLVL displays -1. Therefore, you need All object (*ALLOBJ) or Audit (*AUDIT) special authority to view the auditing system values and Audit (*AUDIT) authority to change the auditing system values. «

Auditing system values:

Name in iSeries (TM) Navigator	**Description of system value**	**Name in character-based interface**
Activate action auditing	Sets action auditing and specifies the auditing level for specific functions.	QAUDCTL QAUDLVL » QAUDLVL2 «
Audit journal error action	Specifies the action for the system to take when audit records cannot be sent to the auditing journal because of errors that occur when the journal entry is sent.	QAUDENDACN
Maximum journal entries before writing to auxiliary storage	Sets the number of journal entries written to the auditing journal before the journal entry data moves to auxiliary storage.	QAUDFRCLVL
Default auditing for newly created objects	Sets the default object auditing value used when new objects are created into a library.	QCRTOBJAUD

To learn more about these and other system values that you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Date and time overview

Use i5/OS (TM) date and time system values to control the system's date, time, and time zone information. To access the date and time category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive words to describe the system values. For a quick overview of the date and time system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Date and time system values:

Name in iSeries (TM) Navigator	**Description of system value**	**Name in character-based interface**
System date	Sets the date for system.	» QDATETIME «, QCENTURY, QDAYOFWEEK, QDATE, QDAY, QMONTH, QYEAR
Leap year adjustment	Specifies the leap year adjustment.	QLEAPADJ
Time of day	Specifies the time of the day.	» QDATETIME, « QTIME, QHOUR, QMINUTE, QSECOND
Offset from UTC	Sets the offset from UTC.	QUTCOFFSET
» Time zone	Specifies the time zone for the system.	QTIMZON «
» Time adjustment	Identifies the application to use for time maintenance.	QTIMADJ «

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

Time management
» View this topic to learn about Time management's time zone and time adjustment functions. Use Time management to work with the time zone (QTIMZON) and time adjustment (QTIMADJ) system values. «

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Devices overview

Use Oi5/OS (TM) devices system values to control the system's device auto-configuration and recovery values. To access the devices category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive words to describe the system values. For a quick overview of the devices system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Devices system values:

Name in iSeries Navigator	Description of system value	Name in character-based interface
Local controllers and devices	Sets auto configuration for local controllers and devices.	QAUTOCFG
Device naming convention	Specifies the device naming convention.	QDEVNAMING
Remote controllers and devices	Sets automatic configuration for remote controllers and devices.	QAUTORMT
Pass-through devices and Telnet	Sets automatic configuration for pass-through devices and Telnet.	QAUTOVRT
Action to take when a device error occurs on the workstation	Sets the action to take when an error occurs.	QDEVRCYACN

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: International overview

Use i5/OS (TM) international system values to view and change the system's locale values and how numbers, currencies, dates, and time are displayed. To access the international category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive words to describe the system values. For a quick overview of the international system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

International system values:

Name in iSeries Navigator	Description of system value	Name in character-based interface
Date and time	Sets the format to use when displaying the date. You may also specify the symbol used to separate the date and time values.	QDATFMT, QTIMSEP, QDATSEP
Decimal format	Specifies the format used when displaying numbers.	QDECFMT
Currency symbol	Sets the symbol to use when displaying currency values.	QCURSYM
Language	Sets the language to be used on the system.	QLANGID
Country/Region	Sets the country/region used by the system.	QCNTRYID
Default system keyboard	Sets the keyboard type used on the system.	QKBDTYPE
Coded character set ID	Specifies the coded character set ID.	QCCSID
Graphic character set/Code page	Sets graphic character set and code page for the system.	QCHRID
Character identifier control	Sets the character identifier control.	QCHRIDCTL
Sort sequence	Specifies the sort sequence used on the system.	QSRTSEQ
Coded font name	Specifies the coded font name to be used on the system.	QIGCCDEFNT
Coded font point size	Specifies the coded font point size to be used on the system.	QIGCFNTSIZ
Locale	Specifies the locale to be used on the system.	QLOCALE
Set job attributes based on locale	Sets specific job attributes based on locale.	QSETJOBATR
Double-byte capable	Specifies whether double-byte coded character (DBCS) version of the system is installed.	QIGC

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Jobs overview

Use i5/OS (TM) jobs system values to view or change system level job limits and other job defaults. To access the jobs category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the jobs system values available in iSeries Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Jobs system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Allocate storage at restart	Specifies the storage used at restart for active and total jobs.	QACTJOB, QTOTJOB
Allocate additional storage as needed	Specifies the storage allocated as needed.	QADLACTJ, QADLTOTJ
Maximum jobs	Specifies the maximum number of jobs.	QMAXJOB
Initial printer output block size	Controls the initial size of an internal control block (SCB).	QJOBSPLA
Maximum printer output files	Specifies the maximum number of printer output files allowed for a job.	QMAXSPLF
Maximum job log size	Specifies the maximum job log size.	QJOBMSGQMX
When a maximum size is reached	Specifies the action to take when the maximum job log size is reached.	QJOBMSGQFL
Time-out interval for inactive jobs	Specifies the time-out interval for inactive jobs.	QINACTITV
When job reaches time-out	Specifies the action to take when an inactive job reaches time-out.	QINACTMSGQ
Time-out interval for disconnected jobs	Specifies the time-out interval for disconnected jobs.	QDSCJOBITV
When a function in a multi-threaded job is not threadsafe	Specifies the action to take when a function is not threadsafe.	QMLTTHDACN

Detach printer output after jobs have ended	Specifies whether spooled files are kept with a job or detached from the job.	QSPLFACN
Maximum time for immediate end	Specifies the maximum amount of time for application cleanup during the immediate ending of a job.	QENDJOBLMT

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Library lists overview

Use i5/OS (TM) library lists system values to view or change system level job limits and other job defaults. To access the library lists category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the OS/400 character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the library lists system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Library lists system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
System library list	Specifies the initial value for the system portion of a job's library list.	QSYSLIBL
User library list	Specifies the initial value for the user portion of a job's library list.	QUSRLIBL

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Messages and service overview

Use i5/OS (TM) messages and service system values to change and view the system's message, logging, and service information. To access the messages and service category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive words to describe the system values. For a quick overview of the messages and service system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Messages and service system values:

Name in iSeries Navigator	Description of system value	Name in character-based interface
Maximum records in history log	Specifies the maximum records in history log.	QHSTLOGSIZ
Display status messages	Specifies if status messages are displayed on line 24 of the character-based interface.	QSTSMSG
Message queue	Specifies the message queue for lines, controllers and devices.	QCFGMSGQ
Journal accounting information	Specifies whether to journal job usage, printer output and printer usage or not.	QACGLVL
Problem log filter	Specifies whether to filter the problem log or not.	QPRBFTR
Minimum retention	Sets the minimum period for holding problem log entries.	QPRBHLDITV
Log software problems detected by system	Specifies whether or not to log software problems that are detected by the system.	QSFWERRLOG
Service log for unmonitored escape messages	Specifies whether to create a service log for unmonitored escape messages or not.	QSRVDMP
Allow remote service of system	Specifies remote service for the system.	QRMTSRVATR

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Password overview

Use i5/OS (TM) password system values to control the password values and password restrictions. To access the password category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the password system values available in iSeries Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Password system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Password level	Sets the password level for the system.	QPWDLVL
Minimum password length	Sets the minimum length for a password.	QPWDMINLEN
Maximum password length	Sets the maximum length for a password.	QPWDMAXLEN
Require at least one digit	Sets the passwords used on the system to use at least one digit.	QPWDRQDDGT
Restrict consecutive digits	Sets the passwords on the system to restrict consecutive digits.	QPWDLMTAJC
Restricted characters	Specifies the characters to be restricted.	QPWDLMTCHR
Restrict repeating characters	Specifies whether to restrict repeating characters or not.	QPWDLMTREP
Require a new character in each position	Sets the passwords on the system to require a new character in each position.	QPWDPOSDIF
Password reuse cycle	Specifies when a password can be used again.	QPWDRQDDIF
Password expiration	Specifies when a password expires.	QPWDEXPITV
Not in iSeries (TM) Navigator	Specifies whether a user-written program will do additional validation on passwords or not.	QPWDVLDPGM

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"Secure system access levels" on page 53
Describes how to configure your password system value settings to restrict signon access. This is another way to enforce and secure your security policy.

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Performance overview

Use i5/OS (TM) performance system values to view and change priority, performance adjustments, and processing values for the system. To access the performance category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the performance system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Performance system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Dynamically adjust job priorities of interactive jobs	Sets the job priorities of interactive jobs	QDYNPTYADJ
Dynamically adjust job priorities within priority bands	Sets job priorities within priority bands to be dynamically adjusted.	QDYNPTYSCD
Automatically adjust memory pools and activity levels	Specifies when to automatically adjust memory pools and activity levels.	QPFRADJ
Maximum eligible threads	Specifies the maximum number of eligible threads.	QMAXACTLVL
Machine memory pool size	Specifies the size of the machine memory pool.	QMCHPOOL
Base memory pool minimum size	Specifies the minimum base memory pool.	QBASPOOL
Base memory pool maximum eligible threads	Specifies maximum number of eligible threads.	QBASACTLVL
Move interactive jobs to base pool at end of time slice	Specifies whether to move interactive jobs to base pool at the end of the time slice or not.	QTSEPOOL
Communications configuration recovery	Specifies whether or not recovery attempts are made and how many attempts to take.	QCMNRCYLMT
Communications arbiter jobs, at restart	Specifies the number of communications arbiter system jobs that are available to process work for controllers and devices.	QCMNARB

Available display station pass-through server jobs	Specifies the number of target display station pass-through server jobs that are available to process i5/OS (TM) display station pass-through, iSeries (TM) Access workstation function (WSF), and other 5250 emulation programs on programmable workstations.	QPASTHRSVR
Parallel processing for queries and indexes	Specifies whether to use parallel processing and what to use it for.	QQRYDEGREE
Database query time limit	Sets the time limit for a database query.	QQRYTIMLMT
Lock libraries in a user job's library search list	Prevents other jobs from deleting or renaming the libraries in the search list.	QLIBLCKLVL
Allow background database statistics collection	Specifies what requests are allowed to be processed by system job, QDBFSTCCOL.	QDBFSTCCOL
Thread affinity	Specifies whether or not secondary threads will have affinity to the same group of processors and memory as the initial thread.	QTHDRSCAFN
Automatically adjust thread resources	Specifies whether or not the system should dynamically make adjustments to the affinity of threads currently running on the system.	QTHDRSCADJ

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Power control overview

Use i5/OS (TM) power control system values to control the system's power supply values. To access the power control category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries Navigator uses descriptive names for the system values. For a quick overview of the power control system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Power control system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
When power failure occurs	Specifies the action to take when a power failure occurs.	QUPSDLYTIM
Message queue and library	Specifies the message queue and library.	QUPSMSGQ

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Printing overview

Use i5/OS (TM) printing system values to control how the system's printer output is formatted and the default device description. To access the printing category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the printing system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Printing system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Default printer	Sets the default printer for the system.	QPRTDEV
Format when using Print key	Specifies whether border or header information is included when using the Print key.	QPRTKEYFMT
Printed page footer	Specifies the page footer for the system.	QPRTTXT

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Restart overview

Use i5/OS (TM) restart system values to change and view when to restart the system and what will happen when the system is restarted. These system values include values that apply to IPL (initial program load). To access the restart category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the OS/400 character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the restart system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Restart system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Type of restart	Specifies the type of restart for your system.	QIPLTYPE
Allow auto-restart after power failure	Specifies whether to allow auto-restart when a power failure occurs or not.	QPWRRSTIPL
Allow remote power-on and restart	Specifies whether to allow remote power-on and restart or not.	QRMTIPL
Allow scheduled restart	Sets the date and time for a scheduled restart.	QIPLDATTIM
Maximum time for immediate shutdown	Specifies the time limit before an immediate shutdown occurs.	QPWRDWNLMT
Start-up program to set up system	Specifies the program used to set up the system.	QSTRUPPGM
Controlling subsystem/library	Specifies the controlling subsystem and the library.	QCTLSBSD
If console problem occurs	Specifies the action to take when a console problem occurs.	QSCPFCONS
Wait for database recovery before completing restart	Specifies whether to wait for database recovery before completing the restart or not.	QDBRCVYWT
Previous system ending status	States the previous ending status.	QABNORMSW
Previous restart type	Specifies how the previous restart occurred.	QIPLSTS
Printers started	Specifies whether printers were started at the time of the previous restart or not.	QSTRPRTWTR

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Save and restore overview

Use i5/OS (TM) save and restore system values to control specific restore properties. To access the save and restore category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the save and restore system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Save and restore system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Convert objects during restore	Specifies which objects are converted before being restored.	QFRCCVNRST
Allow restore of security sensitive objects	Specifies the objects to be restored and if they can be restored while installing software fixes.	QALWOBJRST
Verify object signatures during restore	Specifies whether objects without signatures and/or with signatures that are not valid are restored.	QVFYOBJRST
Save access paths	Specifies whether to save access paths or not.	QSAVACCPTH

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"Effects of system value settings on restore operations" on page 46
Find information on how to examine the different system value settings to ensure that your restore operation will perform properly.

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Security overview

Use i5/OS (TM) security system values to control object, user, and system security values. To access the security category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the security system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Security system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Security level	Sets the level of security for your system.	QSECURITY
Allow server security information to be retained	Sets server security information to be retained.	QRETSVRSEC
Users who can cause programs to use adopted authority from calling programs	Specifies which users can work with programs with adopted authorities.	QUSEADPAUT
Default authority for newly created objects in QSYS.LIB file system	Specifies the default authority for objects that do not specify the authority.	QCRTAUT
Allow use of shared or mapped memory with write capability	Specifies whether users are allowed to use shared memory or mapped memory stream files or not.	QSHRMEMCTL
Allow these objects in . . .	Specifies where to allow user domain objects that bypass authority checking and cannot be audited.	QALWUSRDMN
Use registered exit programs to scan the root (/), QOpenSys, and user-defined file systems	Specifies whether to scan file systems or not.	QSCANFS
Scan control	Specifies scan control options.	QSCANFSCTL

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

iSeries Security Reference

View this book to learn more about general security information and the security system values.

i5/OS (TM) system values: Signon overview

Use i5/OS (TM) signon system values to control the signon values and other initial values for all users. To access the signon category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the signon system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Signon system values:

Name in iSeries (TM) Navigator	**Description of system value**	**Name in command interface**
Incorrect signon attempts	Sets how many incorrect signon attempts a user is allowed.	QMAXSIGN
When maximum is reached	Specifies the action to take when the maximum number of signon attempts is reached.	QMAXSGNACN
Display signon information	Specifies if signon information is displayed when signing on to a system.	QDSPSGNINF
Restrict privileged users to specific device sessions	Specifies whether users with all object (*ALLOBJ) and service (*SERVICE) special authority need explicit authority to specific workstations or not.	QLMTSECOFR
Limit each user to one device session	Sets the limit for device sessions.	QLMTDEVSSN
Remote signon	Specifies information regarding remote signons.	QRMTSIGN

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: Storage overview

Use i5/OS (TM) storage system values to change the system's storage behavior values. To access the storage category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are familiar with the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the storage system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), refer to the following table. Follow the links to learn more about each system value.

Storage system values:

Name in iSeries (TM) Navigator	Description of system value	Name in character-based interface
Maximum system disk pool usage	Specifies the maximum amount of storage space that can be used.	QSTGLOWLMT
When maximum usage is reached	Specifies the action to take when the storage pool has reached its maximum.	QSTGLOWACN
Automatically clean up unused printer output storage	Sets automatic clean up for unused printer output storage and specifies the retention period.	QRCLSPLSTG

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

i5/OS (TM) system values: System and user defaults overview

Use i5/OS (TM) system and user defaults system values to control system level values. To access the system and user defaults category of system values, select **Configuration and Services** in iSeries (TM) Navigator. Then, select **System Values**.

If you are used to using the i5/OS (TM) character-based interface, you will notice that iSeries (TM) Navigator uses descriptive names for the system values. For a quick overview of the system and user defaults system values available in iSeries (TM) Navigator (and their counterparts in the character-based interface), take a look at the following table. Follow the links to learn more about each system value.

System and user defaults system values:

Name in iSeries (TM) Navigator	Description of system value	Name in command interface
Model number	Displays the model number of your system.	QMODEL

Serial number	Displays the serial number for your system.	QSRLNBR
Processor feature code	Displays the processor feature code for your system.	QPRCFEAT
Console name	Displays the console name for your system.	QCONSOLE
Assistance level	Sets the assistance level for you system.	QASTLVL
Attention program	Specifies the attention program to be used on your system.	QATNPGM
Default user environment	Sets the default user environment.	QSPCENV
Use type-ahead feature	Sets the type-ahead function. You may also select to use the Attention key buffering option.	QKBDBUF
Processor multi-tasking	Specifies whether processor multi-tasking is on, off, or determined by the system.	QPRCMLTTSK

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

System value concepts

Before working with system value settings, you should become familiar with the following concepts:

- "Lock function of security-related system values"
  Find information about how to lock and unlock system values. Only some system values can be locked. This will provide you with a description of the lock function, what system values can be locked, and how to lock and unlock them.
- "Effects of system value settings on restore operations" on page 46
  Describes how to properly set the restore system values so they are compatible during a restore operation. This topic also describes how the three restore system values work together when a restore is performed.

Lock function of security-related system values

Most security system values can be altered only by a user with Security administrator (*SECADM) and All object (*ALLOBJ) special authorities. To prevent even these users from changing these system values during normal operation, system service tools (SST) and dedicated service tools (DST) provide an option to lock these security values.

The default value is **Yes**; therefore, users can change security-related system values.

The following table identifies the system values that are affected by this option (Both the iSeries (TM) Navigator name and the character-based name are specified.):

Lockable system values	
Auditing system values	
Activate action auditing	QAUDLVL QAUDLVL2
Activate object auditing	QAUDCTL
Audit journal error action	QAUDENACN
Default auditing for newly created objects	QCRTOBJAUD
Maximum number of journal entries in auxiliary storage	QAUDFRCLVL
Device system values	
Local controllers and devices	QAUTOCFG
Pass-through devices and Telnet	QAUTOVRT
Action to take when a device error occurs	QDEVRCYACN
Remote controllers and devices	QAUTORMT
Jobs system values	
Time-out interval	QDSCJOBITV
When job reaches time-out	QINACTMSGQ
Password system values	
Password expiration	QPWDEXPITV
Restrict consecutive digits	QPWDLMTAJC
Restricted characters	QPWDLMTCHR
Restrict repeating characters	QPWDLMTREP
Password level	QPWDLVL
Maximum password length	QPWDMAXLEN
Minimum password length	QPWDMINLEN
Require a new character in each position	QPWDPOSDIF
Require at least one digit	QPWDRQDDGT
Password reuse cycle	QPWDRQDDIF
Password validation program	QPWDVLDPGM
Messages and service system values	
Allow remote service of system	QRMTSRVATR
Save and restore system values	
Verify object signatures on restore	QVFYOBJRST
Convert objects during restore	QFRCCVNRST
Allow restore of security sensitive objects	QALWOBJRST
Security system values	
Security level	QSECURITY
Allow server security information to be retained	QRETSVRSEC
Users who can work with programs with adopted authority	QUSEADPAUT
Default authority for newly created objects in QSYS.LIB file system	QCRTAUT
Allow use of shared or mapped memory with write capability	QSHRMEMCTL
Allow these objects in . . .	QALWUSRDMN
Use registered exit programs to scan the root (/), QOpenSys, and user-defined file systems	QSCANFS
Scan control	QSCANFSCTL
Signon system values	
Remote signon	QRMTSIGN
Display signon information	QDSPSGNINF
Restrict privileged users to specific device session	QLMTSECOFR

Lockable system values	
Limit each user to one device session	QLMTDEVSSN
Incorrect signon attempts	QMAXSIGN
When maximum is reached	QMAXSGNACN

If you specify **No** for **Allow security-related system values changes**, users cannot change security-related system values. If you need to change a security-related system value, the Allow security-related system values changes parameter must be changed to **Yes** in SST.

If you specify **Yes** for **Allow security-related system values changes**, users with the proper authorities can change security-related system values. Even though the security-related system values are unlocked, you still need Security administrator (*SECADM) and All object (*ALLOBJ) special authorities to change them. If you do not want to allow users to change a security-related system value, the Allow security-related system values changes parameter must be changed to **No** in SST.

Where can I find more information?

"Lock and unlock security-related system values" on page 50
Find information about how to lock and unlock security-related system values by using the Start System Service Tools (STRSST) command. If you are in recovery mode, you need to lock and unlock security-related system values using Dedicated Service Tools (STRDST).

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

Effects of system value settings on restore operations

When preparing for a restore operation, it is important to know and understand how the following system values work together to restore objects.

- Verify object signatures during restore (QVFYOBJRST)
- Convert objects during restore (QFRCCVNRST)
- Allow restore of security-sensitive objects (QALWOBJRST)

When an attempt is made to restore an object onto the system, these three system values work together as filters to determine if the object is allowed to be restored, or if it is converted during the restore. The first filter is the Verify object on restore (QVFYOBJRST) system value. It is used to control the restore of some objects that can be digitally signed. The second filter is the Convert objects during restore (QFRCCVNRST) system value. This system value allows you to specify whether or not to convert programs, service programs, SQL packages, and module objects during the restore. It can also prevent some objects from being restored. Only objects that can get past the first two filters are processed by the third filter. The third filter is the Allow restore of security-sensitive objects (QALWOBJRST) system value. It specifies whether or not objects with security-sensitive attributes can be restored.

When a restore operation is performed, you must set the **Force object conversion** (FRCOBJCVN) parameter and the **Convert objects during restore** system value to compatible settings. Otherwise, you will receive an error message and the restore will fail. The following table identifies which settings are compatible and which ones will fail.

FRCOBJCVN parameter	QFRCCVNRST system value	Outcome of restore command
*SYSVAL	0,1,2,3,4,5,6, or 7	The **Convert objects during restore** (QFRCCVNRST) system value is used.
*NO	0	No objects are converted and everything is restored without conversion.
*NO	1	Only objects with validation errors are converted and everything else is restored without conversion.
*NO	2-7	Not compatible. An error message is sent to the system administrator and nothing is restored and nothing is converted.
*YES *RQD	0, 1 or 2	Only objects with validation errors or objects that require conversion to be used on the current release are converted.
*YES *RQD	3-7	Not compatible. An error message is sent to the system administrator and nothing is restored and nothing is converted.
*YES *ALL	0, 1, 2, 3, 4, 5, 6 or 7	FRCOBJCVN (*YES *ALL) overrides any QFRCCVNRST value and all objects are converted and restored if they are successfully converted.

In order for an object to be restored successfully, it must pass the three system values that work together during a restore operation: **Verify object signatures during restore** (QVFYOBJRST), **Force conversion on restore** (QFRCCVNRST) and **Allow restore of security-sensitive objects** (QALWOBJRST). However, if the **Force object conversion** (FRCOBJCVN) parameter and **Force conversion on restore** (QFRCCVNRST) system value are not compatible, no conversion will occur and nothing is restored.

Force object conversion (FRCOBJCVN)

The following are possible values for the **Force object conversion** (FRCOBJCVN) parameter:

- ***SYSVAL**
  The objects are converted based on the value of the **Force conversion on restore** (QFRCCVNRST) system value. This is the default value.
- ***YES *ALL**
  All objects are converted regardless of their current format. However, if the objects do not have the data required for machine translation, the objects are not restored. Conversion increases the time of the restore operation, but avoids the need to convert the objects when they are first used. This setting overrides the **Force object conversion** system value.
- ***YES *RQD**
  The objects are converted only if they require conversion to be used by the current operating system. If the objects require conversion but do not have the data required for machine translation, the objects are not restored. Conversion increases the time of the restore operation, but avoids the need to convert the objects when they are first used.
- ***NO**
  No objects are converted during the restore operation.

Convert objects during restore (QFRCCVNRST)

The following are possible values for the **Convert objects during restore** (QFRCCVNRST) system value:

- **Level 0 (0)**
  Restore all objects without conversion.
- **Level 1 (1)**
  Objects with validation errors are converted.
- **Level 2 (2)**
  Objects that must be converted to be used on the current version of the operating system and objects with validation errors are converted.
- **Level 3 (3)**
  Objects that are suspected of having been tampered with, must be converted to be used on the current version of the operating system, or have validation errors are converted.
- **Level 4 (4)**
  Objects that contain validation errors, require conversion for use, or are suspected of having been tampered with will be converted. Objects that contain sufficient creation data and do not have a valid digital signature will also be converted.
- **Level 5 (5)**
  Objects that contain validation errors, require conversion for use, are suspected of having been tampered with, or contain sufficient creation data will be converted.
- **Level 6 (6)**
  Objects that contain validation errors, require conversion for use, are suspected of having been tampered with, or do not have a valid digital signature will be converted.
- **Level 7 (7)**
  All objects are converted.

For all levels, if an object meets a requirement to be converted but fails conversion, it will not restore. Objects that do not need to be converted will restore without conversion. When an object is converted, the digital signature of the object will be removed. Also, any object that is converted will be changed to user state, its validation errors will be corrected, and it will no longer be suspected of having been tampered with.

Where can I find more information?

"Prepare system values for a restore operation" on page 51
Find information on planning, configuring, and running a restore operation with the proper system value settings. These tasks will take you through the steps to prepare the system values for a restore operation. In addition, you will find a reference for more information because when performing a restore operation there are other precautions to be aware of.

"i5/OS (TM) system value finder" on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

"System value categories" on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

Manage system values

To experience the full benefit of system value capabilities, you may perform one of many tasks. The following tasks help you manage system values.

- “Compare and update system values”
  Find information about how to compare and update system values.
- “Complete the security wizard” on page 50
  Use this tool to plan how to set your system value settings to meet your company’s security level. This is particularly useful if you are unsure of how to set your password system values. The wizard will provide recommended settings and then you can manually configure the settings.
- “Lock and unlock security-related system values” on page 50
  Find information on how to have more control of security-related system values by locking and unlocking system values.
- “Prepare system values for a restore operation” on page 51
  System values play a vital role in restore operations. It is essential that you plan and configure the system values that are affected by a restore operation. See the following topics for more information:
  - “Plan system values for a restore operation” on page 51
    Provides a list of questions to help you plan how to configure your system value settings. This is particularly useful if you are unsure of which system values work together when a restore operation is performed.
  - “Configure system values for a restore operation” on page 52
    Describes how to configure the system values that affect how a restore operation is handled.
  - “Run a restore command” on page 52
    Provides a link to the Backup and Recovery book that will help run a restore command. You will need to reference this book after you have set the system values that are affected by a restore command. This book provides other steps that need to be taken when restoring an object. System values are just one part of the restore process.
- Retrieve System Values (QWCRSVAL) API
  Use the retrieve System Values (QWCRSVAL) API to find specifications on system value lengths.
- “Save system values” on page 52
  Find information on how to save system values. Every time you change a system value, you should save the system value settings.
- “Secure system access levels” on page 53
  Provides details of how all the password system values work together to secure signon access. In addition, it provides recommended settings for a moderately strict company and you can alter the settings to meet the security level for your company.
- “Work with system values inventory” on page 55
  Provides details of how you can work with system values inventory.

In addition, you can manage system values using iSeries (TM) Navigator tasks on the Web. This allows you to work with system values using a Web browser. Not only can you work with the system values function of iSeries (TM) Navigator, but also the time management function that allows you to work with the time zone (QTIMZON) and time adjustment (QTIMADJ) system values.

Compare and update system values

Use iSeries (TM) Navigator to compare and update your “i5/OS (TM) system values,” on page 1 across multiple systems in your network. As an administrator, you can manage system values across multiple systems. You can compare the system values on a model system to one or more target systems and then update the target system values to match the values of the model system. If you prefer, you can generate a list that shows the differences in values between the model system and the target system rather than actually changing the values on the target system.

Be sure you have current system value inventories on your target systems. It is possible to have your model system be a target system if you have collected inventory for the model system. You can also export “Work with system values inventory” on page 55 to a PC file. These PC files provide a history of the inventory and allow you to work with the data in a spreadsheet program or other application.

To compare and update your system values, follow these steps:

1. In iSeries (TM) Navigator, expand **Management Central** —> **Endpoint Systems**, **System Groups**, or **My Connections**.
2. Right-click an endpoint system or a system group that you want to be your target system, select **System Values**, and then select **Compare and Update**.
3. Complete the fields on the **Compare and Update** dialog.
   - Select the name of the model system against which you want to compare the target system or systems.
   - Select the categories and values that you want to include in the compare. For each system value that you want to update on the target system, select that item from the **Update** column.
   - Verify the target system or systems that are selected.
4. Click **OK** to perform the task immediately or click **Schedule** to run the task at a later time.

Complete the security wizard

If you are unsure about how to properly set security-related system values or want to examine your current security policy, complete the Security wizard. This wizard can automatically configure your system to the correct system value settings for your company. You are provided with many options of how to carry out your configuration. The following are some options that the wizard allows you to do:

- Automatically configure your system's system values based on the information you provide
- Save your report so you can configure your system at a later date
- Print a report that includes the recommended system value settings for your system with the implications of such settings

To access the Security wizard, complete the following steps:

1. In iSeries (TM) Navigator, select your system.
2. Right-click **Security**.
3. Select **Configure**.
4. Then, complete the Security wizard.

Lock and unlock security-related system values

To prevent users from changing security-related system values during normal operation, system service tools (SST) and dedicated service tools (DST) provide an option to lock these security values. You must use DST if you are in recovery mode because SST is not available during this mode. Otherwise, use SST to lock or unlock the security-related system values.

To lock or unlock security-related system values with the Start System Service Tools (STRSST) command, follow these steps:

1. Open a character-based interface.
2. On the command line, type `STRSST`.
3. Type your service tools user name and password.
4. Select option 7 (Work with system security).
5. Type **1** to unlock security-related system values or **2** to lock security-related system values in the **Allow security-related system values changes** parameter.

Note: You must have a service tool profile and password to lock or unlock the security-related system values.

» To lock or unlock security-related system values using dedicated service tools (DST) during an attended IPL of a system recovery, follow these steps:

1. From the **IPL** or **Install the System** display, select option 3 to Use Dedicated Service Tools.

Note: This step assumes that you are in recovery mode and are performing an attended IPL.

2. Sign on to DST using your service tools user name and password.
3. Select option 13 (Work with system security).
4. Type **1** to unlock security-related system values or **2** to lock security-related system values in the **Allow security-related system values changes** parameter.

To view a list of system values are controlled by this lock function, see "Lock function of security-related system values" on page 44.

Prepare system values for a restore operation

System values play a vital role in restore operations. It is essential that you plan and configure the system values that affect a restore operation. There are necessary precautions to consider for a successful restore. See the following topics for more information:

- "Plan system values for a restore operation"
  Provides a list of questions to help you plan how to configure your system value settings. This is useful if you are unsure of which system values work together when a restore operation is performed.
- "Configure system values for a restore operation" on page 52
  Describes how to configure the system values that affect how a restore operation is handled.
- "Run a restore command" on page 52
  Provides a link to the Backup and Recovery book that will help run a restore command. You will need to refer to this book after you have set the system values that are affected by a restore command. This book provides other steps that need to be taken when restoring an object. System values are just one part of the restore process.

Plan system values for a restore operation

Before running a restore operation, you must plan what type of restore you want to perform. Then, configure your system values to the proper settings to meet your needs. Then, when a restore operation is performed, you will have the correct settings specified on your system.

To plan how you want objects restored on the system, answer the following questions based on your company's needs:

1. How cautious do you want to be about what is restored?
   - Setting **Convert objects during restore** to **Level 0** (0) is the least restrictive state and **Level 7** (7) is the most restrictive.
2. What objects do you want to allow to be restored?
3. Do you want to allow the Force object conversion (FRCOBJCVN) parameter to override the **Convert objects during restore** system value?

   Convert objects during restore may be overridden. To see a list of compatible values for the **Convert objects during restore** system value and the Force object conversion parameter on the restore command, see the "Effects of system value settings on restore operations" on page 46 topic.
4. What checking do you want performed for object signatures?
5. Do you want to save access paths?
6. Do you want to scan objects on the next access after the restore is complete? This additional scan impacts the performance of the system and may not be necessary. You need to consider what objects you are restoring and what kind of performance impact the scan will cause. Before determining whether or not to scan objects consider the following:

- Scanning may not be necessary if you are restoring your own objects which were saved with the option to scan objects and not save objects that failed the scan.
- Scanning may not be necessary if you are restoring objects that are coming from a trusted source.

Now that you have planned how you want the system values to handle a restore operation, you are ready to "Configure system values for a restore operation."

Configure system values for a restore operation

After you plan how you want a restore operation to function, use iSeries (TM) Navigator to set the system values to reflect how to handle the restore operation. Then, your system is ready for a restore command. To set the proper system values in iSeries (TM) Navigator, complete the following steps:

1. In iSeries (TM) Navigator, expand your system —> **Configuration and Service** —> **System Values**.
2. Select **Save and Restore**.
3. On the **Conversion** page, set the Convert objects during restore system value to the way you want to handle object conversion.
4. On the **Signatures** page, set the Verify object signatures on restore system value to the way you want to handle signatures of objects.
5. On the **Objects** page, select the objects you want to allow to be restored in the Allow restore of security sensitive objects system value.
6. On the **Access paths** page, select whether access paths are saved in the Save access paths system value.
7. Click **OK** to close the Save and Restore system values.
8. If you want to scan objects on the next access after the object is restored, complete the following:
   a. Select **Security** to open the Security system values.
   b. On the **Scan** page, select **Use registered exit programs to scan the root (/), QOpenSys, and user-defined file systems**. For more information on registering exit programs, see Scan option.
   c. Select **Use specified scan control options**.
   d. Select the **Scan on next access after object has been restored** option.
   e. Click **OK** to close the Security system values.

After you configure your system values settings, you are ready to run a restore operation that uses these system value settings. However, to restore single objects or an entire system, there are more precautions to take. See how to "Run a restore command," for more information.

Run a restore command

After you plan how you want a restore handled and configure your system values to handle the restore properly, you are ready to run the restore command.

Before performing a restore operation, verify that the **Force conversion on restore** system value to a setting that is compatible with the **Force object conversion** parameter on the restore command. For more information on the compatibility of these two settings, see the "Effects of system value settings on restore operations" on page 46 topic.

See the iSeries (TM) Backup and Recovery book to properly run the restore operation.

Save system values

Each time you change a system value, you need to save the system values. Saving the system values is critical to your system if any of the following situations occur:

- You have a disaster and have to restore your entire system.

- A system value or all system values become damaged.

In any situation, if you save your current system values settings, you will not lose your system value information.

System values are stored in the system library, QSYS. You save the QSYS library when you do the following:
- Use the Go Save command menu and select option 21 (Entire system) to save the entire system.
- Use the Go Save command menu and select option 22 (System data only) to save only system data.
- If using Backup Recovery and Media Services for i5/OS (TM) plug-in, use *SYSTEM (backs up the entire system) or *SYSGRP (backs up all system data) backup policies.

If you need to recover your entire system, you will automatically restore your system values when you restore your operating system. For more information, see the **iSeries (TM) Backup and Recovery** book.

Secure system access levels

To help you implement the proper level of security for your company, you may wish to restrict system access by using the password system values. A company can control the level of security by setting the password system values properly.

For example, if your company has recently added a server that runs highly confidential financial applications, you should probably reassess your company's system security policy. In general, your company follows a moderately strict security policy. So, rather than completely rewriting the policy, you decide to restrict signon access to the new Finance system by tightening the password rules.

To secure entry into the Finance system, you must do the following:
- Set a policy that states that passwords must not be trivial and must not be shared.
- Set system values to help you enforce the new policy. (See Table 1.)

In addition, you may also want to provide users with this information:
- A list of the criteria for passwords.
- Examples of passwords that are and are not valid. (See Table 2.)
- Suggestions for how to think of a good password.

Table 1: System value settings

The following table lists the recommended password system value settings to implement your new password requirements (These values can be changed depending on how strict you want to control signon access.):

Name in iSeries (TM) Navigator	Recommended value	Name in character-based interface
Password expiration	60 days	QPWDEXPITV
Restrict consecutive digits	Yes	QPWDLMTAJC
Password level	3 (See note 1.)	QPWDLVL
Maximum password length	8 characters	QPWDMAXLEN
Minimum password length	6 characters	QPWDMINLEN

Name in iSeries (TM) Navigator	Recommended value	Name in character-based interface
Require a new character in each position	Yes	QPWDPOSDIF
Require at least one digit	Yes	QPWDRQDDGT
Password reuse cycle	10 passwords	QPWDRQDDIF
Password validation program	None (See note 2.)	QPWDVLDPGM
Restrict repeating characters	Characters may not be used consecutively	QPWDLMTREP
Restricted characters	A,E,I,O,U,@,#, and $	QPWDLMTCHR

Note 1: You may not be able to use password level 3 (Long passwords using an unlimited character set. Disable iSeries (TM) NetServer on Windows 95/98/ME clients.) if you need to connect to or from a server at V5R1 or earlier or a server that does not support long passwords.

Note 2: To change this system value, you must use the character-based interface. It is not in iSeries (TM) Navigator. Open a character-based interface and type

```
CHGSYSVAL VALUE(QPWDVLDPGM) VALUE('*NONE')
```

Table 2: Example passwords

The following table provides examples of good and bad passwords:

Password	Details
JohnDoe	Bad. Do not use a name. Also, no digits are used.
112000	Bad. Do not use a date that can be identified with you.
aaaxyz	Bad. Uses more than 2 consecutive characters and uses a character that is not allowed (a). Also, no digit is used.
cm2s0j	Good. Meets all the criteria for a good password.
c0mptr	Good. Meets all the criteria for a good password.
Mfc1RB	Good. Meets all the criteria for a good password. The stategy for this password uses the first letter of each word in a sentence, 'My favorite color is Royal Blue.' It also replaces the vowel with a number and uses a combination of upper and lower case characters.

By completing these steps, you have tightened signon access to the finance system by changing the password system values. You can alter the values for each of the password system values to meet the security level for your company. This example has provided one way that the password system values can work together to produce a moderately strict environment.

To learn more about these and other system values you can view and change in iSeries (TM) Navigator, see the following:

“i5/OS (TM) system values: Password overview” on page 35
Describes all password system values. In addition, you will find links to specific password articles that describe the different settings for each system value.

“i5/OS (TM) system value finder” on page 5
Use this tool to find system values in iSeries (TM) Navigator. The i5/OS (TM) system value finder can be particularly helpful if you are trying to make the switch from the system value terms that were used in the character-based interface to the terms that are now used in iSeries (TM) Navigator.

“System value categories” on page 27
Find an introduction to all the categories of system values found in iSeries (TM) Navigator.

Work with system values inventory

You can collect an inventory of the system values on any endpoint system that is running OS/400 V5R1 or later. Once you have collected these inventories, use iSeries (TM) Navigator to “Compare and update system values” on page 49 on a model system to those on selected target systems. You can even choose to update the system values on the target systems to match those on the model system.

You will want to make sure that your system values inventories are current before doing a compare and update of system values on your systems. The **Compare and Update** window shows the date and time that the system values inventory was last collected on the target systems. You need a current inventory because the inventory data for the endpoints is used to do the compare and update. To collect inventory on a system or group, just right-click the endpoint system or system group, select **Inventory**, and then select **Collect**.

You can also export your system values inventory to a PC file. These PC files provide a history of the inventory and allow you to work with the data in a spreadsheet program or other application. To export a system values inventory, right-click the endpoint system or system group, select **System Values**, and then select **Export**. You can also click the **Export** button from the Compare and Update window.

Appendix. Notices

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