



@server

iSeries

iSeries Navigator tasks on the Web

Version 5 Release 3





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Note

Before using this information and the product it supports, be sure to read the information in "Notices," on page 13.

Second 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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iSeries™ Navigator tasks on the Web

New in V5R3, you can now access and perform a subset of iSeries Navigator tasks through an Internet Web browser. The interface may look slightly different, but the tasks you can perform are the same. The following iSeries Navigator functions are available to work with on the Web:

- Messages, User Jobs, and Printer Output in Basic Operations
- Active Jobs, Server Jobs, Output Queues, and Subsystems in Work Management
- System Values and Time Management in Configuration and Service
- Database Objects in Database

After you start the HTTP server Administration instance on your system, all you need is a Web browser that can connect to your iSeries, and you can begin working with iSeries Navigator tasks on the Web. You can gain access to iSeries Navigator tasks on the Web from the iSeries Tasks page by visiting the following URL from a Web browser where **hostA** is your iSeries system:

http://hostA:2001

After you connect to iSeries Navigator tasks on the Web, you can add the Web address of any available iSeries Navigator function you want to regularly view and work with to your Web browser's list of favorite Web pages. Then, you can access these iSeries Navigator tasks like you would any of your favorite or bookmarked Web pages.

This information is intended to help you start using iSeries Navigator tasks on the Web by providing tips on how to set up and configure your server to run securely, and by giving you an overview of the functions available.

"What's new for V5R3" on page 2

iSeries Navigator tasks on the Web is a new way to work with iSeries Navigator functions from an Internet Web browser.

"Print this topic" on page 2

Download and print a PDF of this topic.

"Set up iSeries™ Navigator tasks on the Web" on page 2

Working with iSeries Navigator tasks on the Web is easy, but first make sure your HTTP Server Administration instance is running and that you have properly configured security to meet your needs. Also, learn how to grant and limit access to iSeries Navigator with Application Administration.

"Work with iSeries™ Navigator tasks on the Web" on page 7

Find out how to work with iSeries Navigator tasks from a Web browser, and find out more about the subset of iSeries Navigator functions that are available on the Web.

"iSeries™ Navigator tasks on the Web concepts" on page 8

While the tasks you can work with from the web are the same, the Web interface is different. Learn how predefined URL parameters and URL abbreviations can help you use the iSeries Navigator tasks on the Web interface more efficiently, and find out how to perform actions on iSeries Navigator functions from the Web.

What's new for V5R3

iSeries^(TM) Navigator tasks on the Web is a whole new way of working with iSeries Navigator functions from a Web browser. Only a subset of functions are available to work with in V5R3, including subsets of Basic Operations, Work Management, Configuration and Service, and Database.

Print this topic


To view or download the PDF version of this document, select iSeries^(TM) Navigator tasks on the Web (about 151 KB).

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1. Right-click the PDF in your browser (right-click the link above).
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Set up iSeries^(TM) Navigator tasks on the Web

Before you begin working with iSeries Navigator function from an Internet Web browser, you need to make sure that the iSeries Tasks page on the 2001 port is active, and that you have set up security to meet your needs.

“Set up iSeries^(TM) Navigator tasks on the Web: Prerequisites” on page 3

The Administration instance of the HTTP Server must be running on your system in order to connect to the iSeries Navigator tasks on the Web interface. View this topic for more details on starting the Administration instance.

“Configure security for iSeries^(TM) Navigator tasks on the Web” on page 3

If you are accessing the iSeries Navigator tasks on the Web interface over an external network, such as the Internet, it is recommended that you connect using a secure HTTP connection. Additionally, if the server hosting the iSeries Navigator Tasks on the Web interface resides outside of a firewall, or if you are managing a secondary system outside of a firewall, it is recommended that you also configure the IBM^(R) Toolbox for Java^(TM) to establish secure socket connections for data access.

“Configure Application Administration” on page 6

You can use Application Administration to grant and limit user access to the iSeries Navigator tasks on the Web application, and control access to servers managed from the Web interface. By default, only users with All Object (ALLOBJ) system privilege can access the iSeries Navigator Tasks on the Web application or manage this iSeries through a Web task.

Set up iSeries^(TM) Navigator tasks on the Web: Prerequisites

Before you begin working with iSeries Navigator functions from an Internet Web browser, the Administration instance of the HTTP Server must be running on your system. Check to see if you can connect to the 2001 port by visiting the following URL from a Web browser, where **hostA** is the system name:

http://hostA:2001

If you can connect to the 2001 port on your system and view the iSeries Tasks page, then the Administration instance is already running and you can begin “Configure security for iSeries^(TM) Navigator tasks on the Web.”

If you cannot connect to the 2001 port, start the HTTP Server Administration instance on your system by performing the following steps:

Start the HTTP Server Administration instance

1. Verify that you have an active connection from the computer with the browser to the iSeries server.
2. In iSeries Navigator, expand **My Connections** and expand your system.
3. Expand **Network** -> **Servers** -> **TCP/IP** and right-click **HTTP Administration**.
4. Click **Start Instance** -> **APACHEDFT**.
5. Open a Web browser, and confirm that the Administration instance is running by visiting **http://hostA:2001**, where **hostA** is the name of your system.

Set the WebSphere^(R) system instance to start when the ADMIN HTTP Server starts

After you start the HTTP Server Administration instance, you need to configure the WebSphere system instance to start with it. See the following topic for more details: Manage WebSphere Application Servers

Note: After you complete the above task, you will need to stop and restart the HTTP Server Administration instance.

Configure security for iSeries^(TM) Navigator tasks on the Web

It is important to consider the security configuration needed to adequately ensure protection of sensitive data such as userIDs and passwords. The iSeries Navigator tasks on the Web interface can be configured to require secure connections, not use secure connections, or somewhere in between. As shipped, the iSeries Navigator tasks on the Web interface is configured to send warning messages to the user if secure connections are not used. You should evaluate the security needs for your environment and either change the security configuration for the iSeries Navigator tasks on the Web interface, or configure secure connections.

There are two kinds of Secure Socket Layer (SSL) connections that you need to consider configuring in order to run iSeries Navigator tasks on the Web securely:

1. The first type of SSL connection is used in a connection between a Web browser and the iSeries system that is hosting iSeries Navigator tasks on the Web.
2. The second type of SSL connection is used by the iSeries Navigator tasks on the Web interface to retrieve data from the local iSeries and any managed secondary systems.

By default, iSeries Navigator tasks on the Web is configured to warn users if SSL is not used for all connections. You should evaluate your security requirements, and do one or both of the following:

- Configure and use one or both kinds of SSL connections.
- Change the iSeries Navigator tasks on the Web configuration parameters to treat non-secure connections differently. Options include making SSL connections required, not required, not used, or give a warning.

See the following topics for more information about each type of connection and options for using them:

“Configure Web browser connections to iSeries^(TM) Navigator tasks on the Web”

Ensure that iSeries Navigator Tasks on the Web is configured with the desired behavior for handling SSL or non-secure connections from browsers. Also, if you want to allow or require browser communications to run across a secure connection, you will need to configure SSL for the Administration instance of the HTTP Server

“Configure data-retrieval connections to the local system and managed secondary systems” on page 5

Any time iSeries Navigator tasks on the Web retrieves data from OS/400^(R), either on the local iSeries or any managed secondary systems, the IBM^(R) Toolbox for Java^(TM) is used to create a socket connection for data retrieval. These types of connections are always established between the iSeries Navigator tasks on the Web application and OS/400 on the local iSeries. They will also be established to any managed secondary systems. If the local system running the iSeries Navigator tasks on the Web interface is not behind a firewall, or if any managed secondary systems you want to access are not behind a firewall, you should configure and use SSL for the Java Toolbox socket connections. Also, ensure that iSeries Navigator Tasks on the Web is configured with the desired behavior for creating and using SSL or non-secure IBM Toolbox for Java connections.

Configure Web browser connections to iSeries^(TM) Navigator tasks on the Web

If you do not use secure connections from Internet Web browsers to the iSeries Navigator tasks on the Web interface, your OS/400^(R) userID and password could be easily accessed by someone else on the network. If an external network, such as the Internet, can be used for browser connections to the iSeries Navigator tasks on the Web interface, you should use SSL. If you want to allow secure connections from Internet Web browsers to the iSeries Navigator tasks on the Web interface, you need to set up SSL for the Administration instance of the HTTP Server.

Configure how iSeries Navigator tasks on the Web handles HTTP SSL connections: iSeries Navigator tasks on the Web gives you the ability to require SSL connections from Internet Web browsers to the HTTP Server, or gives you the option to warn users if an SSL connection is not used. If your system is connected to the Internet, it is strongly recommended that you use SSL. In this case, you might want to just warn users if an SSL connection is not use, or require all browsers to use secure connections. If you are behind a firewall, you may choose to run without SSL. In this case, you can turn off the SSL warnings displayed, and SSL checking performed by the iSeries Navigator tasks on the Web user interface. If you want iSeries Navigator tasks on the Web to do something other than warn users if SSL connections are not used by Internet Web browsers, you need to modify the **httpSSL** parameter in the following file:

```
\QIBM\UserData\WebASE\ASE5\SYSINST\config\cells\LOCAL\applications
\iSeriesNavigatorforWeb.ear\deployments\iSeriesNavigatorforWeb
\iSeriesNavigator.war\WEB-INF\web.xml
```

Open **web.xml**, and change the contents inside the **<param-value>** tags to modify how SSL is used:

```
<!-- ===== -->
<!-- Http server SSL Configuration parameter: -->
<!-- Indicates whether SSL should be used, must -->
<!-- be used, or does not need to be used -->
<!-- for the browser to HTTP server connection -->
<!-- in order for iSeries Navigator Tasks on the Web -->
<!-- to accept incoming requests. -->
<!-- possible values: -->
<!-- warning, required, notrequired. -->
<!-- ===== -->
<init-param>
```

```

<param-name>httpSSL</param-name>
<param-value>warning</param-value>
<description>Whether SSL communication with the HTTP server is required.</description>
</init-param>

```

Use the following values to change how SSL is used in the above code example:

warning:

This is the default setting. When httpSSL is set to warning, the iSeries Navigator tasks on the Web interface will determine if SSL is being used during the current session. If not, it will display a warning message for several seconds, but it will still allow the user to connect. If SSL has been used by the browser for the connection to the ADMIN server, no warning will be displayed.

required:

When httpSSL is set to **required**, the iSeries Navigator tasks on the Web interface will determine if SSL is being used during the current session. If not, it will deny the user access to the application.

notrequired:

When httpSSL is set to **notrequired**, both secure or non-secure connections to the iSeries Navigator tasks on the Web interface will be accepted. The application will not check to see if SSL is being used during the current session

Configure data-retrieval connections to the local system and managed secondary systems

iSeriesTM Navigator tasks on the Web works with the IBM^(R) Toolbox for Java^(TM) to establish connections for communicating between OS/400^(R) and the iSeries Navigator tasks on the Web interface. These connections are used to access data on the local iSeries, as well as any managed secondary systems. If your iSeries running the iSeries Navigator tasks on the Web interface or any of your managed secondary systems are not behind a firewall or on an isolated network, you should use SSL for your IBM Toolbox for Java connections. To use SSL for data-access connections, you will need to Configure the Java Toolbox to establish a secure socket connection.

Configure how iSeries Navigator tasks on the Web uses SSL connections with the IBM Toolbox for Java:

iSeries Navigator tasks on the Web gives you the ability to require SSL connections for communicating between the iSeries Navigator tasks on the Web interface and OS/400, to attempt to use SSL if possible, to not use SSL, and to warn users if SSL is not used. The configuration of your network will determine which setting is right for you. These connections are only used to send data between the iSeries Navigator tasks on the Web application and OS/400 on the local and any managed secondary systems. If your local iSeries and any managed secondary iSeries systems are behind a firewall, you may choose to not use SSL connections. If you are in a mixed environment with some managed secondary systems behind a firewall and some not, you may want to attempt SSL connections if possible. If you want iSeries Navigator tasks on the Web to do something other than always attempt to make SSL connections and warn users if SSL connections are not used, you need to modify the

SocketConnectionSSL parameter in the following file:

```

\QIBM\UserData\WebASE\ASE5\SYSINST\config\cells\LOCAL\applications
\iSeriesNavigatorforWeb.ear\deployments\iSeriesNavigatorforWeb
\iSeriesNavigator.war\WEB-INF\web.xml

```

Open **web.xml**, and change the contents inside the <param-value> tags to modify how SSL is used:

```

<!-- ===== -->
<!-- Socket Connection SSL Configuration pparameter -->
<!-- Indicates whether SSL should be used, must -->
<!-- be used, or will not be used for the socket -->
<!-- connections used to retrieve data from the -->

```

```

<!-- target iSeries system for an iSeries Navigator -->
<!-- Task. -->
<!-- possible values: -->
<!-- warning, required, attemptbutnotrequired, notused. -->
<!-- ===== -->
<init-param>
  <param-name>SocketConnectionSSL</param-name>
  <param-value>warning</param-value>
  <description>Whether SSL socket connections with the target iSeries are required.</description>
</init-param>

```

If you make changes to **web.xml**, you need to end and restart the WebSphere^(R) system instance in order for your changes to take effect. Use the following values to change how SSL is used in the above code example:

warning:

This is the default setting. When **SocketConnectionSSL** is set to **warning**, iSeries Navigator tasks on the Web uses the Java Toolbox to establish a secure socket connection. If a secure connection is established, no warning message displays. If a secure connection cannot be made, a warning message will appear for several seconds, but it will still allow the user to connect. This setting will display one warning per session per managed system that a user connects to. A user must log out and log back in to see the warning message again.

required:

When **SocketConnectionSSL** is set to **required**, iSeries Navigator tasks on the Web uses the Java Toolbox to establish a secure socket connection. If a secure connection is established, no warning message displays. If a secure connection cannot be made, an error message will appear and the connection will be denied. The user will not be allowed to continue with the requested task.

attemptbutnotrequired:

When **SocketConnectionSSL** is set to **attemptbutnotrequired**, no warning message will be displayed, but iSeries Navigator tasks on the Web will still attempt to establish a secure socket connection using the IBM Toolbox for Java. If a secure connection cannot be established, a non-secure connection will be made.

notrequired:

When **SocketConnectionSSL** is set to **notrequired**, a secure connection is not required and iSeries Navigator tasks on the Web will **not** attempt to establish a secure socket connection using the IBM Toolbox for Java. A non-secure connection will be made.

Configure Application Administration

You can grant and limit access to iSeries^(TM) Navigator tasks on the Web with Application Administration by following these steps:

1. In iSeries Navigator, expand **My Connections**
2. Right-click your system and select **Application Administration** —>**Local Settings** .
3. Select the **Host Applications** tab and expand **iSeries Navigator tasks on the Web**

Under iSeries Navigator tasks on the Web, you can grant or limit access for the following:

Manage Server Through Web Interface

Specifies that this system can be managed through any iSeries Navigator task performed from the Web, regardless of which system is hosting the iSeries Navigator Tasks on the Web application. The default is set to All Object Access.

Use of iSeries Navigator Web Interface

Specify to grant or limit access to the iSeries Navigator Web application. The default is set to All Object Access.

For more detailed information on how to grant and limit user access to iSeries Navigator functions, see Application Administration.

Work with iSeriesTM Navigator tasks on the Web

After you “Set up iSeriesTM Navigator tasks on the Web” on page 2 you can begin working with a subset of iSeries Navigator function from a Web browser. If you are familiar with iSeries Navigator, then you will recognize that the functions available to work with on the web are the same functions available on the installed PC client. While the function is the same, there are differences between navigating and performing actions on the Web, and navigating and performing actions on the installed PC client. For more information on how to use the graphical interface on the Web, see the following concept articles:

“URL parameters and URL abbreviations” on page 8

Each iSeries Navigator task that you work with has its own unique URL that displays in your Internet browser’s Address field. Each URL is created by following a predefined set of conventions that includes the host system name, the port, the application name, and the name of the task you want to work with.

“Performing actions on the Web” on page 10

While you can work with the same function on the Web as you can on the installed client, the interface used to work with iSeries navigator tasks on the Web is different than the interface you are familiar with on the installed client. This topic provides a better understanding of how to perform actions from the Web.

If you want more information on the iSeries Navigator functions available on the Web, see the following Information Center topics:

Basic Operations

- Messages
- Work with printer output
- Jobs

Work Management

- Manage jobs and threads
- Manage output queues
- Manage subsystems

Configuration and Service

- System Values
- Time Management

Database

You can access the following database objects and most of their associated iSeries Navigator - Database functions using the Web interface:

- Schemas
- Tables
- Table partitions
- Aliases
- Indexes

- Journals
- Journal Receivers
- Sequences
- Distinct types
- Functions
- Packages
- SQL Procedures
- Triggers
- Constraints

For more information about these objects, see Database administration.

iSeries^(TM) Navigator tasks on the Web concepts

Concepts:

“URL parameters and URL abbreviations”

Each iSeries Navigator task that you work with has its own unique URL that displays in your Internet browser’s Address field. Each URL is created by following a predefined set of conventions that includes the host system name, the port, the application name, and the name of the task you want to work with.

“Performing actions on the Web” on page 10

While you can work with the same function on the Web as you can on the installed client, the interface used to work with iSeries navigator tasks on the Web is different than the interface you are familiar with on the installed client. This topic provides a better understanding of how to perform actions from the Web.

URL parameters and URL abbreviations

Each iSeries^(TM) Navigator task that you work with has its own unique URL that displays in your Internet browser’s Address field. Each URL is created by following a predefined set of conventions that includes the host system name, the port, the application name, and the name of the task you want to work with.

URL Parameters

Parameter name	Description	Example
Task	The “URL task abbreviations” on page 9 you want to perform	If you wanted to work with active jobs on hostA: http://hostA:2001/webnav/WnServlet? task=actjob
System	Specifies the system you want to manage. This parameter is optional, and needs to be specified only if you want to work with tasks on a secondary host.	If you want to use iSeries Navigator tasks on the Web on hostA but work with active jobs on hostB: http://hostA:2001/webnav/WnServlet? task=actjob&system=hostB
User	Allows you to specify a different user ID if you are working on a secondary host system.	If you want to use a different user ID on a secondary host system: http://hostA:2001/webnav/WnServlet? task=actjob&system=hostB&user=userB

Parameter name	Description	Example
Filter and sort	You can specify to allow or cancel both filter and sort on a selected task	If you want to turn off the capability to filter and sort: http://hostA:2001/webnav/WnServlet? task=actjob&filter-allowed=false&sort-allowed=false
Table size	Specifies the number of items per page you want to display in an online table	If you want to change the number of active jobs displayed per page from 20 to 100: http://hostA:2001/webnav/WnServlet? task=actjob&table-size=100
Single TaskMode	Specifies whether or not a new URL request in the same browser session closes the previous request automatically. The Default setting is WnSTM=True	If you want to use a Web browser that shares the same session (e.g., Netscape), this parameter must be set to false to launch more than one task at a time.: http://hostA:2001/webnav/WnServlet? task=actjob&WnSTM=false

URL task abbreviations

The task abbreviations that are used in the URLs were selected with the goal of keeping them similar to OS/400[™] commands. The following table shows the URL abbreviations for the iSeries Navigator tasks that are available on the Web in V5R3:

Name of task	URL abbreviation
Home Page	home
Messages	msg
Send a Message	sndmsg
System Operator Messages	sysoprmsg
Output Queues	outq
Printer Output	prtout
Active Jobs	actjob
Server Jobs	svrjob
User Jobs	usrjob
Delete Job	dltjob
Display Job properties	jobprop
Display Job call stack	callstack
Display Job library list	liblist
Display Job locked objects	lockobj
Display Job open files	openfiles
Display Job threads	threads
Display Job performance statistics	perfstats
Job Log	joblog
Job Properties	jobprop
Hold Job	hldjob
Move Job	movjob
Release Job	rlsjob
Work with a Job	wrkjob
Subsystems	sbs

Name of task	URL abbreviation
System Values	sysval
Time Management	timemgmt
Database: Select which schemas to work with	db.selschema
Database: Work with all objects in a schema	db.allobj
Database: Work with aliases in a schema	db.alias
Database: Manage constraints in a schema	db.mngcst
Database: Work with distinct types in a schema	db.typ
Database: Work with functions in a schema	db.func
Database: Work with indexes in a schema	db.idx
Database: Work with journals in a schema	db.jrn
Database: Work with journal receivers in a schema	db.jrnrcv
Database: Work with SQL procedures in a schema	db.proc
Database: Work with sequences in a schema	db.seq
Database: Work with SQL packages in a schema	db.pkg
Database: Work with tables in a schema	db.tbl
Database: Work with tables partitions in a schema	db.tblpart
Database: Work with triggers in a schema	db.trg
Database: Work with views in a schema	db.view
Database: Create alias	db.crtalias
Database: Create distinct type	db.crttyp
Database: Create index	db.crtidx
Database: Create schema	db.crtschema
Database: Create sequence	db.crtseq
Database: Create table	db.crttbl

Performing actions on the Web

The following information describes how to take action on an iSeries^(TM) Navigator task or function from a Web browser, and also provides tips for how to change the way iSeries Navigator items are displayed in the online list view.

Note: It is important to logout after you are finished using iSeries Navigator tasks on the Web. When you logout, the system has a chance to close connections and free resources, which will make more memory available to other applications.

Taking action on an iSeries Navigator item in a list

To perform an action, select an item from the table list. The item you want to work is now highlighted. The actions available to take on the item that you selected is now displayed in the **Select Action** field. Select the action you want to take and click **Go**. When performing actions on the web, if you want to change how content is displayed online, the following tips can be helpful:

Viewing all iSeries Navigator items in a list

Each online list view displays only a limited number of entries on a single page, and in order to see all the iSeries Navigator objects available for you to take action on, you may need to click the arrow button at the bottom left of the table to move to the next page. A table will indicate how many pages of data it is displaying; for example: Page 1 of 3. You can also directly enter the page you want to jump to by

entering the page number in the box to the right of the page number. If you want to modify the the number of entries per page that will display in a list, you can use the **Table size** parameter described in “URL parameters and URL abbreviations” on page 8.

Customizing how iSeries Navigator items display in a list using Include and Filter

You can customize the list using either **Include** or **Filter** from the **Select Action** field. Filtering a table changes only the items that display while the filter row is actively selected. Changing the items you include in a list changes what objects are included in the list obtained from the server.

- **Include**

Selecting **Include** launches a page that allows you to select the type of objects you want to include in the list that is obtained from the server. Your selections are saved and will be applied in future Web sessions until you change them.

- **Filter**

Selecting **Show Filter Row** displays a new row beneath each column header that defaults to a setting of **None**. Clicking **None** beneath the column you want to filter launches the filter page. Select the criteria you want to filter on and the condition you want to filter for, and then click **OK**. These settings are not saved for use in future Web sessions.

Appendix. Notices

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