#### **Access Information Window**

Allows you to specify access information for the servers in the managed domain.

NetWare for SAA Services Manager automatically opens the Access Information window for a NetWare for SAA server the first time you add the server to the managed domain. After that, NetWare for SAA Services Manager opens the Access Information window for a NetWare for SAA server only if you did not save the user name and password you previously specified.

| - Access I                    | nformation(SVE-VANCOUVER) 🔻 🔺 |  |  |  |
|-------------------------------|-------------------------------|--|--|--|
| Enter User Name and Password: |                               |  |  |  |
| User Name:                    | SUPERVISOR                    |  |  |  |
| Password:                     | ****                          |  |  |  |
| Save User Name and Password   |                               |  |  |  |
| OK Cancel                     |                               |  |  |  |
|                               |                               |  |  |  |

#### **Related Topics**

<u>Adding Servers</u> <u>Changed Managed Domain Window</u> <u>Redefining the Managed Domain</u>

#### **User Name**

Allows you to specify a user name. A NetWare system administrator must have assigned supervisor-equivalent privileges or file server console operator privileges to the name you specify. If the specified name has supervisor equivalency, you can use NetWare for SAA Services Manager to obtain server information and control NetWare for SAA servers and their resources. If the name has file server console operator privileges, you can use NetWare for SAA Services Manager to obtain server information, but you cannot use it to control servers or their resources.

#### Password

Allows you to specify a password if the NetWare system administrator assigned one to the user name specified in the User Name text box.

#### Save User Name and Password check box

Select this check box to save the specified user name and password so NetWare for SAA Services Manager can use that information the next time you access the same NetWare for SAA server.

#### **OK button**

Closes the Access Information window with the specified settings and causes NetWare for SAA Services Manager to attempt to log into the NetWare for SAA server.

#### **Cancel button**

Closes the Access Information window and returns you to the Active Domain window. The server associated with the Access Information window is removed from the managed domain.

#### **Active Domain Window**

Displays server icons or server names for the NetWare for SAA servers included in the active domain. You use this window to specify on which server NetWare for SAA Services Manager is to perform an operation.

You cannot close this window while running NetWare for SAA Services Manager.



#### **Related Topics**

About the Managed and Active Domains Arrange Icons Command Viewing Servers by Icon Viewing Servers by Name

# Change Managed Domain Icon

Opens the Change Managed Domain window.

# **Users** Icon

Opens the User Information window.

# Server Status Icon

Opens the Server Status window.

# Server Management Icon

Opens the Server Management Options window.

# View by Icon Icon

Displays server icons in the Active Domain window.

# View by Name Icon

Displays server names in the Active Domain window.

#### **Server Icons**

Represents the servers currently in the active domain. Select a server icon and then click an icon in the Tool Bar to access NetWare for SAA Services Manager server functions. You can also double-click a server name or icon to open the Server Status window.

## **Adapter Configuration Window**

Displays configuration data for adapters shown in the Server Status window. To access this window, either select an adapter and click the More Information icon or double-click an adapter.

| 😑 Information(Token Ring Driver 1,SVE-VANCOUVER) 🔽 🔺 |                       |  |  |
|--|-----------------------|--|--|
| Attributes:  |                       |  |  |
| Media Type:  | TOKEN-RING            |  |  |
| MAC Address:   | 400055550002          |  |  |
| Adapter Slot:  | 0                     |  |  |
| First I/O Address:                                   | 0420                  |  |  |
| First Memory Address:                                | 000D8000              |  |  |
| MLID Version:  | 0317                  |  |  |
| Second I/O Address:                                  | 0000                  |  |  |
| Card Name:   | Novell IBM Token-Ring |  |  |
| Second Memory Address:                               | 000CC000              |  |  |
| First Interrupt Line:                                | 9                     |  |  |
| Link Speed:  | 4 Mbps                |  |  |
|  |                       |  |  |
| 1  |                       |  |  |

Related Topics Adapter Configuration Data

# Media Type

Identifies the type of connection for the adapter.

### **MAC Address**

Media access control address of a LAN station. This is not applicable to SDLC or channel adapters.

#### **Adapter Slot**

Number of the slot in which the board is installed. This does not apply to Bus-Tech remote channel adapters.

### First I/O Address

Absolute primary base I/O port for the adapter. This does not apply to Bus-Tech remote channel adapters.

### **First Memory Address**

Absolute primary memory address for the adapter. This does not apply to Bus-Tech remote channel adapters.

#### **MLID Version**

Major and minor version numbers of the Multiple Link Interface Driver (MLID).

#### Second I/O Address

Absolute secondary base I/O port for the adapter. This does not apply to Bus-Tech channel adapters.

### **Card Name**

Name assigned to the LAN adapter by its manufacturer.

## **Second Memory Address**

Absolute secondary memory address for the adapter. This does not apply to Bus-Tech remote channel adapters.

## **First Interrupt Line**

Primary interrupt vector number. This does not apply to Bus-Tech remote channel adapters.

# Link Speed

Link speed the adapter supports. MSB=1 indicates Kbps; MSB=0 indicates Mbps.

# Audit Trail Detailed Information Window

| Displays details a                                      | Displays details about a record in the <u>audit trail log file</u> . |  |  |  |
|---|--|--|--|--|
| Detailed Information(Audit Trail Record, SVE-VANCOUVER) |  |  |  |  |
|   |  |  |  |  |
| Entry I me:   | U5/1U/93 at 14:24  |  |  |  |
| User ID:  | GMACHI   |  |  |  |
| Network Address:  | C1FA00000001B040CBA  |  |  |  |
| Action:   | BIND   |  |  |  |
| Profile:  | ES9000   |  |  |  |
| Logical Unit:   | 2  |  |  |  |
| Application Name:                                       | NVL1003  |  |  |  |
| Product ID:   | NWSAA  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |
| {   |  |  |  |  |
|   |  |  |  |  |

Related Topics Accessing Audit Trail Log Files Audit Trail Window

# **Entry Time**

Indicates the date and time the listed action was performed.

### **Network Address**

Identifies the network address of the user.

#### Action

Indicates the type of action performed. Possible values are BIND, CONNECT, DISCONNECT, GENERIC, LOGIN, LOGOUT, and UNBIND.

# **Product ID**

Indicates the application used at the time the connection is established. If the action is not CONNECT or DISCONNECT, this field does not appear.

#### **Profile**

If the action indicates a LOGIN, this identifies the NetWare for SAA service profile used. If the action is other than LOGIN, this field does not appear.

### **User ID**

Identifies the user's login name.

#### LU

Identifies the logical unit (LU) used.

### **Application Name**

Identifies the application used at the time of the listed action. If the action is other than BIND, this field does not appear.
## **Audit Trail Window**

| Provides access to a NetWare for SAA server's audit trail log file. |            |                      |         |         |    |                |
|---|------------|----------------------|---------|---------|----|----------------|
| 😑 Audit Trail(SVE-VANCOUVER) 🔽 🗖                                    |            |                      |         |         |    |                |
|   |            |                      |         |         |    |                |
|   |            |                      |         |         |    |                |
| Entry Time  | User ID    | Network Address      | Action  | Profile | LU | Application ID |
| 05/10/93 at 14:24   | SGOLDSTE   | C1FA000000001B040CBA | BIND    | ES9000  | В  | CNM01006       |
| 05/10/93 at 14:24   | SGOLDSTE   | C1FA000000001B040CBA | UNBIND  | ES9000  | В  |                |
| 05/10/93 at 14:24   | SGOLDSTE   | C1FA000000001B040CBA | BIND    | ES9000  | В  | CNM01          |
| 05/10/93 at 14:24   | SUPERVISOR | C1FA000000001B0414A8 | CONNECT |         |    |                |
| 05/10/93 at 14:24   | SGOLDSTE   | C1FA000000001B040CBA | CONNECT | ES9000  | В  |                |
| 05/10/93 at 14:24   | SGOLDSTE   | C1FA000000001B040CBA | LOGIN   |         |    |                |
| 05/10/93 at 14:24   | KWHITE     | C1FA000000001B040CBA | BIND    | ES9000  | 3  | NVL1004        |
| 05/10/93 at 14:24   | KWHITE     | C1FA000000001B040CBA | CONNECT | ES9000  | 3  |                |
| 05/10/93 at 14:24   | KWHITE     | C1FA000000001B040CBA | LOGIN   |         |    |                |
| 05/10/93 at 14:24   | GMACHI     | C1FA000000001B040CBA | BIND    | ES9000  | 2  | NVL1003        |
| 05/10/93 at 14:23   | GMACHI     | C1FA000000001B040CBA | CONNECT | ES9000  | 2  |                |
| 05/10/93 at 14:23   | GMACHI     | C1FA000000001B040CBA | LOGIN   |         |    |                |
| 05/10/93 at 14:23   | AVANWINK   | C1FA000000001B040CBA | BIND    | ES9000  | A  | CNM01005       |
| 05/10/93 at 14:23   | AVANWINK   | C1FA000000001B040CBA | UNBIND  | ES9000  | A  |                |
| 05/10/93 at 14:23   | AVANWINK   | C1FA000000001B040CBA | BIND    | ES9000  | A  | CNM01          |
| 05/10/93 at 14:23   | AVANWINK   | C1FA00000001B040CBA  | CONNECT | ES9000  | A  |                |
|   |            |                      |         |         |    |                |
| Done reading NetWare for SAA database file.                         |            |                      |         |         |    |                |

#### **Related Topics**

Accessing Audit Trail Log Files Audit Trail Detailed Information Window Server Management Options Window

# First Page Icon

Scrolls to the first page of available information.

# **Previous Page Icon**

Scrolls to the previous page of available information.

## Next Page Icon

Scrolls to the next page of available information.

## Last Page Icon

Scrolls to the last page of available information.

## More Information Icon

Opens the Audit Trail Detailed Information window for the selected record.

## **Entry Time**

Indicates the date and time the listed action was performed.

## **User ID**

Identifies the user's login name.

## **Network Address**

Identifies the network address of the user.

## Action

Indicates the type of action performed. Possible values are BIND, CONNECT, DISCONNECT, GENERIC, LOGIN, LOGOUT, and UNBIND.

## Profile

Identifies the NetWare for SAA service profile used.

## LU

Identifies the logical unit (LU) used.

# **Application ID**

Identifies the application used at the time of the listed action.

## **Change Managed Domain Window**

Displays a list of the available communication servers and allows you to specify which servers are included in the managed domain.



<u>Adding Servers</u> <u>Redefining the Managed Domain</u> <u>Removing Servers</u>

## **Delete Icon**

Removes the selected server(s) from the current list box.

## Add Icon

Adds the selected server(s) to a list box.

## **OK Icon**

Closes the current window and applies the specified settings.

#### Server Name text box

Allows you to specify the name of a server to be added to the managed domain. The server does not have to be currently available. When an unavailable server added to the managed domain becomes available, it will be added to the active domain.

## Managed Domain list box

Lists the NetWare for SAA servers included in the managed domain.

#### **Available Comm. Servers list box**

Lists the NetWare for SAA servers connected to the network. This list is obtained when the Change Managed Domain window is opened or when an active server in the managed domain becomes inactive and the time RECONNECTDELAY parameter expires.

## Save Domain List to Disk check box

Specifies whether the specified managed domain is saved so that it is used the next time NetWare for SAA Services Manager is started.

## **Detailed Information Windows**

NetWare for SAA Services Manager allows you to access several Detailed Information windows. Access these windows by either double-clicking a record or logical unit (LU) name or selecting a record or LU name and clicking the More Information icon.

Audit Trail Detailed Information Window

Event Record Detailed Information Window

LU 6.2 Detailed Information Window

SNA Session Detailed Information Window

## **NWSAA Services Manager Application Window**



#### **Related Topics**

Access Information Window Active Domain Window Arrange Icons Command NetWare for SAA Services Manager Menus Event Monitor Window

## File Menu

Accesses the Output command (<Alt+F+O>) and the Exit command (<Alt+F+X>).

## **Edit Menu**

Accesses the Copy command (<Alt+E+C>).

## Fault Menu

Accesses the Event Monitor command (<Alt+A+E>).

#### Window Menu

Accesses the Cascade command (<Alt+W+C>), the Tile command (<Alt+W+T>), the Arrange Icons command (<Alt+W+A>), and the Close All command (<Alt+W+L>). This menu also lists the names of any open windows.

## **Help Menu**

Access the following help commands:

Index command (<Alt+H+I>)

Commands command (<Alt+H+C>)

Overview command (<Alt+H+O>)

Using Help command (<Alt+H+U>) Alarms command (<Alt+H+L>)

Glossary command (<Alt+H+G>)

Procedures command (<Alt+H+P>)

About NetWare for SAA Services Manager command (<Alt+H+A>)

# Change Managed Domain icon

Opens the Change Managed Domain window.

# **Users** icon

Opens the User Information window.

## Server Status icon

Opens the Server Status window.

# Server Management icon

Opens the Server Management Options window.

# View by Icon icon

Displays server icons in the Active Domain window.

# View by Name icon

Displays server names in the Active Domain window.

## **Server icons**

Server icons for the servers currently in the active domain. Select a server icon and click an icon to access NetWare for SAA Services Manager server functions. You can also double-click a server icon to access the Server Status window.

## Active Domain Message Bar

List the messages associated with any actions performed in the Active Domain window.
# **Event Log icon**

Opens the Event Log file containing the selected event message.

#### **Remove Event icon**

Deletes the selected event from the Event Monitor list box.

#### More Information icon

Opens a Detailed Information window for the selected object.

## **Customize Event icon**

Opens the Customize Events window.

#### **Stop Scroll Check Box**

Toggles the scrolling of event messages in the Event Monitor list box.

#### **Critical Lock Check Box**

Toggles the critical lock setting. The critical lock controls how NetWare for SAA Services Manager deletes event messages when the Event list box is full of only critical messages.

#### **Servers**

Identifies the NetWare for SAA server on which the event occurred.

# Severity

Indicates the event severity level.

#### Date

Indicates the date the event occurred. This date is the date from the NetWare for SAA Services Manager workstation.

#### Time

Indicates the time the event occurred. This time is the time from the NetWare for SAA Services Manager workstation.

#### Source

Identifies the managed object that detected or generated the event.

## Description

Describes the cause of the event.

## **Event Monitor Message Bar**

Displays messages associated with actions performed in the Event Monitor window.

#### **Customize Events Window**

Allows you to specify how NetWare for SAA Services Manager notifies you of network events.

| •                                   | Customize Events |                   |               |  |  |  |  |  |  |
|-------------------------------------|------------------|-------------------|---------------|--|--|--|--|--|--|
| ✓                                   |                  |                   |               |  |  |  |  |  |  |
| Severity                            | Display          | Server Icon Color | Audible Alert |  |  |  |  |  |  |
| Critical                            | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Major                               | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Minor                               | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Warning                             | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Informational                       | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Indeterminate                       | $\boxtimes$      | $\boxtimes$       | $\boxtimes$   |  |  |  |  |  |  |
| Maximum Number of Local Events: [64 |                  |                   |               |  |  |  |  |  |  |
| Display with Colors                 |                  |                   |               |  |  |  |  |  |  |

#### **Related Topics**

Customizing the Displaying and Notification of Events Displaying Event Messages in Color Displaying Server Icons in Color Event Monitor Window Setting the Audible Alert Setting the Display Filter Specifying Number of Event Messages

#### Ok Icon

Closes the current window and applies the specified settings.

# **Severity Levels**

Lists the severity levels of event messages.

#### **Display Check Boxes**

Specifies the severity levels of the events for which NetWare for SAA Services Manager displays messages. This controls the display filter.

#### **Server Icon Color Check Boxes**

Specifies whether server icons in the Active Domain window change color to match the severity levels of the events sent to NetWare for SAA Services Manager.

Audible Alert Check Boxes Specifies which severity levels cause NetWare for SAA Services Manager to beep.

#### **Maximum Number of Local Events Text Box**

Determines the maximum number of events NetWare for SAA Services Manager can monitor. The default is 64; the maximum is 500.

#### **Display with Colors Check Box**

Specifies whether NetWare for SAA Services Manager displays event messages in color to indicate the severity of the events. The color indicates the most severe event message associated with a server.

# **Event Log Window**

Provides access to the records of a NetWare for SAA server's event log file.

| 0   | Event Log(SVE-VANCOUVER) |               |                    |  |  |  |  |
|-----|--------------------------|---------------|--------------------|--|--|--|--|
|     |                          |               |                    |  |  |  |  |
| Ē   | Entry Time               | Severity      | Source             | Description  |  |  |  |
| [0  | )5/10/93 at 14:52        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:52        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:52        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:47        | CRITICAL      | NW386 OS           | Error writing to file (file name not accessible) data stream 26. W |  |  |  |
| 0   | )5/10/93 at 14:47        | WARNING       | NW386 OS           | Intruder lock-out on account AVU [1234:56789].                     |  |  |  |
| 0   | )5/10/93 at 14:47        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:47        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:46        | MAJOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
|     | )5/10/93 at 14:46        | CRITICAL      | NW386 OS           | Error writing to file (file name not accessible) data stream 26. W |  |  |  |
|     | )5/10/93 at 14:46        | MAJOR         | NW386 OS           | Intruder lock-out on account AVU [1234:56789].                     |  |  |  |
| 0   | )5/10/93 at 14:46        | MINOR         | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:46        | WARNING       | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:46        | INFORMATIONAL | NW386 OS           | Station 5 attempted to use an unencrypted password call.           |  |  |  |
| 0   | )5/10/93 at 14:25        | MINOR         | NW386 OS           | Link lost: remote is not responding SAddr: 10005A7CEC74, S\$       |  |  |  |
| 0   | )5/10/93 at 14:25        | INFORMATIONAL | 802.2 Logical Link | Logical link disconnected.   |  |  |  |
| llo | )5/10/93 at 14:15        | WARNING       | NetWare for SAA S  | NWSAA: Abnormal UNBIND received.                                   |  |  |  |
|     |                          |               |                    |  |  |  |  |

Done reading NetWare for SAA database file.

#### **Related Topics**

Accessing Event Log Files Through the Event Monitor Window Accessing Event Log Files Through the Server Management Options Window Accessing Additional Event Record Information Event Monitor Window Event Record Detailed Information Window Server Management Options Window

## First Page Icon

Scrolls to the first page of available event record information.

# **Previous Page Icon**

Scrolls to the previous page of event records information.

## Next Page Icon

Scrolls to the next page of event records information.

## Last Page Icon

Scrolls to the last page of event record information.

#### More Information Icon

Opens the Event Record Detailed Information window and displays additional information about an event record.

#### Source

Identifies which managed object detected the event.

# Severity

Indicates the event's severity level.

#### **Entry Time**

Indicates the date and time the event occurred. This information is based on the NetWare for SAA Services Manager workstation date and time.

# Description

Provides a brief summary of the event.

#### **Event Monitor Window**

Provides access to network events. This allows you to clear <u>event messages</u>, to control the scrolling and discarding of event messages, and to open the Customize Events window and customize how NetWare for SAA Services Manager notifies you about network events.

|   | Event Monitor   |          |       |          |                             |  |  |  |
|---|-----------------|----------|-------|----------|-----------------------------|--|--|--|
|   |                 |          |       |          |                             |  |  |  |
| Stop Scroll   | 🛛 Critical Lock |          |       |          |                             |  |  |  |
| Servers   | Severity        | Date     | Time  | Source   | Description                 |  |  |  |
| SVE-VANCOUVER                                       | MAJOR           | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to us 🗲 |  |  |  |
| SVE-VANCOUVER                                       | MAJOR           | 05/10/93 | 15:50 | NW386 OS | Intruder lock-out on acco   |  |  |  |
| SVE-VANCOUVER                                       | MAJOR           | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to us   |  |  |  |
| SVE-VANCOUVER                                       | MINOR           | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to use  |  |  |  |
| SVE-VANCOUVER                                       | MAJOR           | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to us   |  |  |  |
| SVE-VANCOUVER                                       | WARNING         | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to us   |  |  |  |
| SVE-VANCOUVER                                       | INFORMATIONAL   | 05/10/93 | 15:50 | NW386 OS | Station 5 attempted to us 💌 |  |  |  |
| Total events received = 14. Events in listbox = 14. |                 |          |       |          |                             |  |  |  |

#### **Related Topics**

About Severity Levels Accessing Event Log Files Through the Event Monitor Window Accessing Additional Event Record Information Clearing Event Messages Customize Events Window Customizing the Displaying and Notification of Events Event Log Window Event Record Detailed Information Window Processing of Network Events Setting the Critical Lock Severity Level Colors Turning Off Automatic Scrolling

## Event Log Icon

Opens the Event Log window and displays the event log for the selected event.

## **Remove Icon**

Clears the selected event messages from the Event list box.

#### More Information Icon

Opens the Event Record Detailed Information window and displays additional information about the selected event.

#### **Customize Icon**

Opens the Customize Events window and allows you to customize how NetWare for SAA Services Manager notifies you about network events.
#### **Critical Lock Check Box**

Allows you to set the critical lock. The critical lock controls how NetWare for SAA Services Manager discards event messages when the list box becomes full of only critical messages.

### **Stop Scroll Check Box**

Controls the scrolling of events in the Event list box.

#### **Servers**

Identifies the NetWare for SAA server on which the event occurred.

# Severity

Indicates the severity level of the event.

#### Date

Indicates the date the event occurred. This date is based on the NetWare for SAA Services Manager workstation.

#### Time

Indicates the time the event occurred. This time is based on the NetWare for SAA Services Manager workstation.

### Source

Identifies the managed object that detected or generated the event.

# Description

Provides a brief summary of the cause of the event.

#### **Event Record Detailed Information Window**

Displays additional information about an <u>event message</u> listed in either the Event Log window or the Event Monitor window.

| e was        |
|--------------|
|              |
| iate NetWare |
|              |
|              |
|              |
|              |
| i            |

#### **Related Topics**

Accessing Event Log Files Through the Event Monitor Window Accessing Event Log Files Through the Server Management Options Window Accessing Additional Event Record Information Event Log Window Event Monitor Window

#### Server

Identifies the NetWare for SAA server on which the event occurred.

# Severity

Indicates the event severity level.

#### **Entry Time**

Indicates the date and time the event occurred. This is based on the date and time of the NetWare for SAA Services Manager.

### Source

Identifies the managed object that detected the event.

# Description

Provides a description of the cause of the event.

#### **Remedial Action**

Lists the recommended corrective action. This appears only when a corrective action is applicable.

### **File Server**

Identifies the name of the file server associated with the event. This appears only when a file server name is applicable to the event.

#### For Further Assistance Contact Information

Displays information specified in the Miscellaneous Information field of CSCON's Server Description window.

### Graph Settings Window

This window displays the available statistical attributes and graph setting options for the selected object.

| Graph Settings(NE2000 1,SVE-VANCOUVER)   |   |        |
|--|---|--------|
| ✓  |   |        |
| Statistical Attributes:  | Profile:  |        |
| MLID Receive Packets:<br>Overrun Packets:<br>Total Rx Misc Count:<br>Mutlicast Packets:<br>MLID Transmit Packets:<br>Excessive Collisions:<br>Trashed Packet Received: | Y-Range:<br>100<br>Style:<br>Solid Line<br>Interval (in minutes):<br>1<br>Total Samples:<br>100 | *<br>* |
| Reset Attribute Value  | Continuous Collecting   |        |

#### **OK Icon**

Closes the current window and applies the specified settings to the Graph Statistics window.

#### **Statistical Attributes**

Lists the attributes available for the selected object or service component.

# **Profile**

Lists groups of predefined attributes. This may not be available for every object.

# **Y-Range**

Sets the range of values for the y axis to equal 100; 1,000; 10,000; or 100,000.

# Style

Sets the counter style to the selected style of dashed line (---), dotted line (...), dashed dot line (-.--), or dashed dotted dot line (-..-..).

#### Interval

Indicates the time in minutes between polling intervals.

#### **Total Samples**

Indicates the total number of intervals included in the graph. If the data received from the intervals exceeds what can be displayed in the graph, the data scrolls across the graph.

#### **Reset Attribute Value Check Box**

Determines whether attribute values are to be reset at the start of each interval.

#### **Continuous Collecting Check Box**

Allows continuous collecting of statistical data after the number specified in the total sample field is reached.

### **Graph Statistics Window**

Displays the statistical data for the specified object according to the specified graph settings.



# Graph Settings Icon

Closes the Graph Statistics window and returns you to the Graph Settings window.

# Sample Interval

Indicates the amount of time specified for the interval in the Graph Settings window.

# **Total Samples**

Displays the number of intervals included in the graph.

# **Time Polling**

Indicates the total amount of time polling has been in effect.

#### Vertical Axis Scale

Toggles more detail for the y axis values.

#### Vertical Axis Scale

Toggles less detail for the y axis values.

# Legend

Displays or hides the legend for the graph.

#### **Number Format Button**

Displays y axis data in numerical format.
# **Percentage Format Button**

Displays y axis values in percentage format.

# **Horizontal Grid**

Superimposes a horizontal grid on the display.

# LU6.2 Sessions Detailed Information Window

This window displays additional information for a logical unit (LU) selected in the LU6.2 Sessions window.

|   | Detailed Information(02,SVE-VANCOUVER) |         |                 |          |             |  |  |  |
|---|--|---------|-----------------|----------|-------------|--|--|--|
|   | Selected Ll                            | J6.2: 2 |                 |          |             |  |  |  |
|   | Partner                                | DLCType | DestinationAddr | Mode     | ActSessions |  |  |  |
|   | SYSTEM2                                | 802.2   | 4000FFFFFFFF    | QPCSUPP  | 0           |  |  |  |
|   |  |         |                 | SNASVCMG | 0           |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |
| ⊢ |  |         |                 |          |             |  |  |  |
|   |  |         |                 |          |             |  |  |  |

#### **Related Topics**

Displaying Session Information for LU6.2 LU6.2 Sessions Window

# Selected LU

Identifies the logical unit (LU) ID of the selected LU.

# Partner

Identifies the partner LU name.

# **DLC Type**

Identifies the type of data link connection (DLC) between the NetWare for SAA server and SNA node that houses the partner LU. Possible values are SDLC, QLLC, 802.2, CUSTOM, or ITRN (IBM Token Ring).

# DestinationAddr

Identifies the partner's media access control (MAC) address.

### Mode

Identifies the mode of the selected session. A session can be in either SNASVCMG mode or a user-defined mode. For details about the SNASVCMG mode, see your IBM LU6.2 documentation.

# ActSessions

Identifies how many sessions are active on the various nodes.

# **LU6.2 Sessions Window**

| Sessions(AS400,PU 2.1 Sessions 1,SVE-VANCOUVER) |         |          |           |        |           |  |
|---|---------|----------|-----------|--------|-----------|--|
|   |         |          |           |        |           |  |
| ld  | Name    | Status   | #Sessions | Slimit | #Partners |  |
| 01  | none    | DETACHED | 0         | 0      | 0         |  |
| 02  | MRKTNG1 | ATTACHED | 0         | 255    | 1         |  |
| 03  | none    | DETACHED | 0         | 0      | 0         |  |
| 04  | none    | DETACHED | 0         | 0      | 0         |  |
| 05  | none    | DETACHED | 0         | 0      | 0         |  |
| 06  | none    | DETACHED | 0         | 0      | 0         |  |
| 07  | none    | DETACHED | 0         | 0      | 0         |  |
| 08  | none    | DETACHED | 0         | 0      | 0         |  |
| 09  | none    | DETACHED | 0         | 0      | 0         |  |
| 0A  | none    | DETACHED | 0         | 0      | 0         |  |
| 0B  | none    | DETACHED | 0         | 0      | 0         |  |
| OC  | none    | DETACHED | 0         | 0      | 0         |  |
| DO  | none    | DETACHED | 0         | 0      | 0         |  |
| 0E  | none    | DETACHED | 0         | 0      | 0         |  |
|   |         |          |           |        |           |  |
| Done collecting LU6.2 information.              |         |          |           |        |           |  |

#### Displays information about a NetWare for SAA server's LU6.2 sessions.

#### **Related Topics**

Displaying Session Information for LU6.2 LU6.2 Sessions Detailed Information Window

# First Page Icon

Scrolls to the first page of LU6.2 data.

# **Previous Page Icon**

Scrolls to the previous page of LU6.2 data.

# Next Page Icon

Scrolls to the next page of LU6.2 data.

# Last Page Icon

Scrolls to the last page of LU6.2 data.

# **More Information Icon**

Opens the LU6.2 Detailed Information window and displays additional information about an LU that has at least one partner LU and is listed in the LU6.2 Sessions window.

# Update Icon

Updates the LU6.2 Sessions window with the most recent LU6.2 and session information.

# ID

Indicates the LU's ID (valid for only dependent LUs).

# Name

Identifies the LU's local name.

# **Status**

Indicates the LU's current status (ATTACHED or DETACHED).

# **Number of Sessions**

Indicates the number of active sessions.

# SLimit

Indicates the maximum number of sessions. This value is set by the PARTNER\_LU\_SESSION\_LIMIT parameter used by the ATTACH\_LU verb in your transaction program.

# **Number of Partners**

Indicates the current number of partners the LU has.

# **Output Window**

#### **Related Topics**

<u>Printing</u> <u>Saving Data to a File</u> <u>Saving Data to the Windows Clipboard</u>

# **Output To Options**

Specifies if the data is to be output to the printer, the Micorsoft Windows clipboard., or a local file.

# **Output From Options**

Specifies if the data is coming from the screen or the server's database. This option is available only when the Audit Trail window or Event Logs window is active.

# File Name Text Box

Specifies the name of the file to which the data is to be saved.

# **Output Button**

Prints or saves the data.

# **Cancel Button**

Closes the Output window and returns to the current window, without saving changes.

# **Override Existing Connection Window**

Allows you to specify whether you want to use a connection that is under a different user name than the one specified in the Access Information window.

|    | Override Existing Connection(NEWYORK)             | • |  |  |  |  |  |
|----|---|---|--|--|--|--|--|
|    |   |   |  |  |  |  |  |
| w  | Warning: Logging in as a new user will cause      |   |  |  |  |  |  |
|    | the current user to be logged out.                |   |  |  |  |  |  |
|    | Subsequently, all files will be closed, and       |   |  |  |  |  |  |
|    | all drives mapped to this server will be deleted. |   |  |  |  |  |  |
|    |   |   |  |  |  |  |  |
| Th | ne current user is: SUPERVISOR                    |   |  |  |  |  |  |
| Th | e new user is: GMACHI                             |   |  |  |  |  |  |
|    | New User Current User Cancel                      |   |  |  |  |  |  |

#### **Related Topics**

Access Information Window Overriding Existing Connections Retaining Previous Connections

### **New User Button**

Severs the previous connection to the NetWare server and then attempts to attach you to the NetWare for SAA server under the username specified in the Access Information window.

### **Current User Button**

Retains the previous connection to the NetWare server. It does not attach you to the NetWare for SAA server under the username specified in the Access Information window.

# **Cancel Button**

Removes the NetWare for SAA server from the managed domain and returns to the NetWare for SAA Services Manager application window.

# **Pie Settings Window**

Allows you to select statistical attributes and pie settings for the selected object.

| Pie Settings(NE2000 1,SVE-VANCOUVER)   |                                 |   |  |  |  |  |
|--|---------------------------------|---|--|--|--|--|
| ✓  |                                 |   |  |  |  |  |
| Statistical Attributes:  | Style:                          |   |  |  |  |  |
| MLID Receive Packets:<br>Overrun Packets:<br>Total Rx Misc Count:<br>Mutlicast Packets:<br>MLID Transmit Packets:<br>Excessive Collisions:<br>Trashed Packet Received: | 3-D<br>Interval (in minutes): 1 | * |  |  |  |  |

# **OK Icon**

Closes the Pie Settings window and opens the Pie Statistics window with the specified settings.

# **Statistical Attributes**

Lists the attributes available for the selected object or service component.

# Style

Sets the counter style to the selected style of 3-D or 2-D.
#### Interval

Indicates the time in minutes between polling intervals.

### **Pie Statistics Window**

Displays statistics in a pie chart.



#### **Pie Icon**

Closes the Pie Statistics window and returns you to the Pie Settings window.

### Sample Interval

Indicates the interval value specified in the Pie Settings window.

# **Time Polling**

Indicates the total amount of time polling has been in effect.

#### **Pie Chart Legend**

Describes the data and attribute settings used to represent the data. The Legend button displays or hides the legend.

### Legend Button

Displays or hides the legend for the pie chart.

#### **Number Button**

Displays y axis values in numerical format.

### **Percentage Button**

Displays y axis values in percentage format.

#### **Counter Clockwise Rotation Button**

Rotates the pie chart counterclockwise.

#### **3-D Orientation Button**

Changes the pie chart to three-dimensional view.

#### **2-D Orientation Button**

Changes the pie chart to two-dimensional view.

#### Server Management Options Window

Allows you to change network management options and to access a NetWare for SAA server's log files



#### **Related Topics**

Accessing Audit Trail Log Files Accessing Event Log Files Through the Server Management Options Window Audit Trail Window Changing Server Management Options Restarting or Bringing Down the Communication Executive v1.2 Event Log Window

# Event Log Icon

Opens the Event log file.

# Clear Log Icon

Removes all entries from the Event Log file.

# Audit Trail Log Icon

Opens the Audit Trail log file.

#### Ok Icon

Closes the Server Management Options window and saves the current settings.

#### **Management Options**

Determines whether the NetWare for SAA server maintains an event log file; maintains an audit trail log file; turns the trace facility on and off; turns the NetWare communications security feature on and off; and sets NetView alerts, commands, and security. NetView options are available only if NetView is enabled for the specified NetWare for SAA server.

#### **Event Forwarding Filter**

Determines the objects and severity levels for which the server will forward event messages to NetWare for SAA Services Manager. The default is all objects and severity levels selected.

#### Save Selected List to Disk Check Box

Saves the specified event forwarding filter settings to disk so they remain in effect until they are changed from the NetWare for SAA Services Manager workstation or the NetWare for SAA server. These settings default back to the CSCON settings the next time the Communication Executive is reloaded or restarted.

#### Server Management Options Window v1.2

Allows you to change server management options and access log files for NetWare for SAA v1.2 servers. This window also allows you to unload and restart the Communications Executive v1.2.



# Event Log Icon

Opens the Event Log file.

# Clear Log Icon

Removes all entries from the Event Log file.

# Audit Trail Log Icon

Opens the Audit Trail Log file.

### **CSDOWN** Icon

Brings down the NetWare for SAA v1.2 service.

### **CSRESTART** Icon

Restarts the NetWare for SAA v1.2 service.

#### Ok Icon

Closes the Server Management Options window and applies the current settings.

#### **Management Options**

Determines whether the NetWare for SAA server maintains an event log file; an audit trail log file; turns the trace facility on and off; turns the NetWare communications security feature on and off; and sets NetView alerts, commands, and security. NetView options are available only if NetView is enabled for the specified NetWare for SAA server.

#### **Event Forwarding Filter**

Determines the objects and severity levels for which the server will forward event messages to NetWare for SAA Services Manager. The default is all objects and severity levels selected.

#### Save Selected List to Disk Check Box

Saves the specified event forwarding filter settings to disk so they remain in effect until they are changed from the NetWare for SAA Services Manager workstation or the NetWare for SAA server. These settings default back to the CSCON settings the next time the Communication Executive is reloaded or restarted.

#### Server Status Window

Displays information about a NetWare for SAA server, service profiles, adapters, <u>NLMs</u>, <u>LLC</u> protocols (logical links), and <u>communications protocols</u>. This window also allows you to load or unload NLMs and protocols and to load, unload, or restart service profiles, display session information, and obtain configuration or statistical data.

| Server Status(SVE-VANCOUVER) |                |                     |   | • |
|------------------------------|----------------|---------------------|---|---|
| <b>*1</b>                    | S              |                     | ຯ ■ 4                                   |   |
| Gervices —                   |                |                     |   | 1 |
| Name                         | Туре           | Loaded On           | Profile Configuration                   |   |
| ES9000                       | NW/SAA         | 05/10/93 at 10:53   | SNA Host Link                           |   |
| AS400                        | NWSAA          | 05/10/93 at 12:19   | PU 2.0 Sessions                         |   |
|                              |                |                     | PU 2.1 Sessions                         |   |
| NWSAA Profile:               | ES9000         | Installed Products: | NetWare for SAA 🛓                       |   |
| Link Level Prot              | tocols in Use: | Adapters            | Link Speed                              | - |
| 802.2 Logical Link           | 1              | Token Ring Drive    | er 1 4 Mbps                             |   |
| 802.2 Logical Link           | 2              | Token Ring Drive    | er 2 4 Mbps                             |   |
|                              |                | NE2000 1            | 10 Mbps                                 |   |
| NIM Loader⁻                  |                |                     | rver Information:                       |   |
| Name:                        |                | Last Restarted:     | 05/10/93 at 08:54                       |   |
|                              |                | Up Time:            | 0 days 11:18 hrs                        |   |
| Argument:                    |                | Comm. Server Ve     | ersion: 1.3.18                          |   |
|                              |                | NetWare OS Ver      | rsion: 3.11.0                           |   |
|                              |                | Model Number:       | 00000000048633                          |   |
|                              |                | Serial Number:      | 000000000000000000000000000000000000000 |   |
|                              |                |                     |   |   |

#### **Related Topics**

Loading and Unloading NLMs or Protocols in v1.3 Loading and Unloading Protocols in v1.2 Loading, Unloading, or Restarting Services Server Status Window v1.2

### Service Profile Load Icon

Loads the specified service profile.

### Service Profile Unload Icon

Unloads the specified service profile.

### Service Profile Restart Icon

Restarts the specified service profile.

### **NLM Load Icon**

Loads the specified NLM.

### **NLM Unload Icon**

Unloads the specified NLM.
## **Graph Icon**

Opens the Graph Settings window for the selected object or service component.

#### **Pie Icon**

Opens the Pie Settings window for the selected object or service component.

#### More Information Icon

Opens a detailed information or configuration window for the selected object.

#### **Sessions Icon**

Opens a Sessions window for the selected profile component.

#### **Services List Box**

Lists the name, type, and date loaded for services loaded on the NetWare for SAA server.

# **Profile Configuration List Box**

Lists the components of the selected service profile.

#### **NWSAA Profile Text Box**

Specifies the NetWare for SAA service profile you want to load and the parameters you must specify when loading that service.

#### Installed Product List Box

Lists the NetWare for SAA services available on the NetWare for SAA server. If other communications services are installed on the server, the product names may also appear here.

#### Link Level Protocols in Use List Box

Lists the LLC protocols and communications protocols that a service is using.

## Adapters List Box

Lists the adapters installed in a NetWare for SAA server and the link speeds.

#### NLM Loader List Box

Specifies the NLM or protocol you want to load or unload and in the Argument text box, which specifies the parameters you can include when loading or unloading an NLM or protocol.

#### **Additional Server Information**

Indicates how long the NetWare for SAA server has been up and provides information about a NetWare for SAA server's hardware and software.

#### Server Status Window v1.2

If NetWare for SAA Services Manager is managing a server on which the Communication Executive v1.2 is loaded, the Server Status window v1.2 appears.

This window displays information about a NetWare for SAA server, service profiles, adapters, <u>LLC</u> protocols (logical links), and <u>communications protocols</u>. This window also allows you to bind or unbind protocols; and to load, unload, or restart service profiles; display session information; and obtain configuration or statistical data.

| Server Status(SVE-CHICAGO)     |                                      |                    |   |                     |   |                                |  |  |
|--------------------------------|--------------------------------------|--------------------|---|---------------------|---|--------------------------------|--|--|
| <b>91 1</b> 99                 | <b>X</b>                             |                    |   | ¢                   | • 🛃 🖻   | ļ                              |  |  |
| Services<br>Name               | Туре                                 | Loaded             | d On  |                     | Profile Configurat  | ion                            |  |  |
| SNA9370<br>SNA_TEST            | NWSAA<br>NWSAA                       | 04/20/9<br>04/20/9 | 3 at 17:51<br>3 at 17:51  |                     | PU 2.1 Sessions<br>PU 2.0 Sessions<br>SNA Host Link   |                                |  |  |
| NWSAA Profile:                 | SNA9370                              |                    | Adapters  |                     |   | Link Speed                     |  |  |
| Link Level P<br>SNA Token Ring | rotocols in Use:<br>g Logical Link 1 | $\neg \mid [$      | NE2000 1<br>IBM Token Rin   | g D                 | river 1   | 10 Mbps<br>4 Mbps              |  |  |
| Protocol:                      |                                      |                    | Additional S<br>Last Restarted<br>Up Time:<br>Comm. Server'<br>NetWare OS V<br>Model Number<br>Serial Number: | er<br>:<br>Ver<br>: | ver Information:<br>04/15/93 at 09:3<br>18 days 11:31 h<br>sion: 1.2.13<br>ion: 3.11.0<br>0000000000486<br>00000000000000 | 30<br>rs<br>33<br>000000000000 |  |  |
|                                |                                      |                    |   |                     |   |                                |  |  |

### Service Profile Load Icon

Loads the specified service profile.

### Service Profile Unload Icon

Unloads the specified service profile.

#### Service Profile Restart Icon

Restarts the specified service profile.

### **Bind Icon**

Links a protocol to a LAN driver and adapter.

#### **Unbind Icon**

Removes a protocol from an adapter's LAN driver.

## **Graph Icon**

Opens the Graph Settings window for the selected object or service component.

#### **Pie Icon**

Opens the Pie Settings window for the selected object or service component.

#### More Information Icon

Opens a detailed information window or a configuration window for the selected object.

#### **Sessions Icon**

Opens a Sessions window for the selected service profile configuration.

#### **Services List Box**

Lists the name, type, and date and time the service profiles were loaded on a NetWare for SAA server.

# **Profile Configuration List Box**

Lists the service profile components of the selected service profile.

### **NWSAA Profile Text Box**

Specifies the name of the service profile you want to control.

#### Link Level Protocols in Use Box

Lists the LLC protocols and communications protocols a service is using. The Protocol text box allows you to specify the communications protocol you want to load or unload.

# Adapters List Box

Lists the adapters installed in a NetWare for SAA server.

#### **Additional Server Information**

Indicates how long the NetWare for SAA server has been up and provides information about a NetWare for SAA server's hardware and software.

#### **Configuration Windows**

NetWare for SAA Services Manager enables you to display configuration data for adapters, host links, link level protocols, and service profiles.

Adapter Configuration Window Logical Link Configuration Window Service Profile Configuration Window SNA Host Link Configuration Window

## **SNA Host Link Configuration Window**

| Information(ES9000,S      | SNA Host Link 1,SVE-VANCOU | VER) 🔻 |
|---------------------------|----------------------------|--------|
| Attributes:               |                            |        |
| Host Link Type:           | 802.2                      |        |
| Max LUs:                  | 16                         |        |
| Protocol Stack:           | llc8022                    |        |
| Logical Adapter Name:     | IBMTOKEN                   |        |
| Adapter Type:             | PRIMARY                    |        |
| Host Destination Address: | 400037451601               |        |
| Link Station Role:        | SECONDARY                  |        |
| SDLC Encoding:            | No value                   |        |
| Destination SAP:          | 4                          |        |
| Source SAP:               | 4                          |        |
| PU ld:                    | 12013                      |        |
| Block Id:                 | 017                        |        |

#### **Related Topics**

Displaying Session Information for LU6.2 Displaying Session Information for NetWare for SAA LU6.2 Sessions Window Server Status Window SNA Sessions Window

## Host Link Type

Type of connection (SDLC, QLLC, ITRN (IBM Token Ring)) established between the host and the communications server.

#### **Maximum LUs**

Maximum logical units (LUs) for which the communications server is configured.

## **Protocol Stack**

Name of the protocol stack NLM.

## Adapter Name

Name that the NetWare Communication Services administrator assigns to the SNA adapter in CSCON.

## Adapter Type

Category specified for the adapter in CSCON. The adapter is classified as either primary or alternate.

### **Host Destination Address**

Address of the host destination node.
#### **Link Station Role**

NetWare for SAA server's role, which is either primary, secondary, or negotiable.

# **SDLC Encoding**

Indicator to determine what other data is encoded for NRZ or NRZI. (No value is listed for token ring connections.)

#### **Destination SAP**

Service access point (SAP) used at the destination end of the logical link.

#### **Source SAP**

Service access point (SAP) used at the logical end of the logical link.

#### **PU ID**

Unique, five-character SNA node ID that is defined when NetWare for SAA is configured in CSCON. This is the same ID that is assigned to that SNA node on the host.

#### **Block ID**

Unique, five-character SNA node ID assigned to the physical unit (PU) in CSCON. This is the same ID that is assigned to that PU on the host.

## Logical Link Configuration Window

Displays configuration data for the selected logical link protocol. The information that appears may vary depending on the type of protocol selected.

| 😑 Information(802.2 Logical Link 1,SVE-VANCOUVER) 💌 🔺 |                     |  |
|---|---------------------|--|
| Attributes:   |                     |  |
| Media Type:   | TOKEN RING          |  |
| Adapter Name:   | IBMTOKEN            |  |
| Protocol Stack Name:                                  | llc8022             |  |
| Source Address:                                       | 400055550002        |  |
| Local SAP Address:                                    | 4                   |  |
| Destination Address:                                  | 400037451601        |  |
| Remote SAP Address:                                   | 4                   |  |
| Link Station Role:                                    | Secondary           |  |
| Service Name:   | ES9000              |  |
| Host Link Name:                                       | ES9000              |  |
| Remote Node Type:                                     | Subarea Node Type 4 |  |
| Sequence Number Modules:                              | 128                 |  |
|   |                     |  |

# Media Type

Type of physical connection.

# Logical Adapter Name

Name that the NetWare Communication Services administrator assigned to the 802.2 adapter in CSCON.

### **Protocol Stack Name**

Name of the protocol stack NLM.

#### **Source Address**

Media access control (MAC) address of the local adapter.

## Local SAP Address

Service access point (SAP) used at the logical end of the logical link.

## **Destination Address**

Media access control (MAC) address of the remote node.

## **Remote SAP Address**

Service access point (SAP) at the remote end of the logical link.

#### **Link Station Role**

Communications server's role, which is either primary, secondary, or negotiable. Negotiable applies during only link setup.

#### Service Name

Name the NetWare Communication Services administrator assigned to the communication service in CSCON.

#### Host Link Name

Service profile name the NetWare Communication Services administrator assigned to the host in CSCON.

#### **Remote Node Type**

SNA node type of the computer to which the communications server is sending information. Peripheral Node Type 2.1 in this field indicates the remote node is an SNA peripheral node with a peer-to-peer connection. Subarea Node Type 4 in this field indicates the remote node is a controller. Subarea Node Type 5 in this field indicates the remote node is a host.

## **Sequence Number Modules**

Maximum number of frames the communications server can send before it waits for the remote node to send a RR (Receive Ready).

# Service Profile Configuration Window

This window provides additional information about the selected service profile.

| Information(E        | S9000,SVE-VANCOUVER) | ▼ ▲ |
|----------------------|----------------------|-----|
| Attributes:          |                      |     |
| Service Name:        | ES9000               |     |
| Version:             | 1.3.18               |     |
| Start Time:          | 06/02/93 at 16:10    |     |
| Service Description: | NetWare for SAA      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
|                      |                      |     |
| ·                    |                      | l   |
| L                    |                      |     |

## Service Name

Name of the service profile.

#### Version

Version number of the SAA service for which the profile is configured.

## **Start Time**

Date and time the service profile was loaded.

# **Service Description**

Full name of the SAA service for which the profile is configured (NetWare for SAA v1.3 only).

# **SNA Sessions Detailed Information Window**

Displays additional information about an <u>LU</u> listed in the SNA Sessions window.

| •                    | Detailed Information(LU ID#: 2,SVE-VANCOUVER) | ▼ ▲ |
|----------------------|---|-----|
|                      |   |     |
| LU ID:               | 2   |     |
| LU Type:             | 2   |     |
| LU 2 Model Number:   | 2   |     |
| User Name:           | GMACHI  |     |
| Net Address:         | C1FA00000001B040CBA                           |     |
| LU Pool Name:        | MARKETNG                                      |     |
| LU Status:           | UP-BND  |     |
| Host Application ID: | NVL1003                                       |     |
| Workstation Up Time: | 0 days 5:56 hrs                               |     |
| LU Category:         | POOLED  |     |
| VTAM LU Name:        | none  |     |
| Dedicated LU Name:   | none  |     |
|                      |   |     |
|                      |   |     |
|                      |   |     |
|                      |   |     |
|                      |   |     |

#### **Related Topics**

Displaying Session Information for NetWare for SAA SNA Sessions Window

#### LU ID

Identifies the local address of the LU. The NetWare for SAA services administrator assigns this number in CSCON.

# LU Type

Indicates whether the LU is type 0, 1, 2, 3, 6.2, or downstream. The number 6 represents LU6.2. The letter D indicates a downstream physical unit (PU).

## LU 2 Model Number

Indicates the type of screen model connected to the host.

#### **User Name**

Identifies the name of the user specified when logging in to the NetWare for SAA server.

## **Net Address**

Identifies the network address of the user's workstation.

## **LU Pool Name**

Identifies the name of the pool to which the LU is assigned. The NetWare for SAA services administrator assigns this name in CSCON.

## **LU Status**

Indicates the status of both the workstation software and the LU. The data will be one of the following:

| UP-BND | Workstation software is loaded, and the session is bound to an application.                                |
|--------|--|
| UP-ACT | Workstation is loaded, and NetWare for SAA has received an activate LU request (ACTLU).                    |
| UP-INA | Workstation software is loaded, but NetWare for<br>SAA has not received an activate LU request<br>(ACTLU). |
| DN-BND | Workstation software is not loaded, but the session is bound to an application.                            |
| DN-ACT | Workstation software is not loaded, but NetWare for SAA has received an activate LU request (ACTLU).       |
| DN-INA | Workstation software is not loaded, and NetWare for SAA has not received an activate LU request (ACTLU).   |

# **Host Application ID**

Identifies the host application to which the LU is bound.

# Workstation Up Time

Indicates how long the workstation has been connected to NetWare for SAA.

# LU Category

Indicates whether the LU is a dedicated LU, a public LU, or a downstream PU.

#### **VTAM LU Name**

Identifies the name assigned to the LU in the VTAM major node definition. The NetWare for SAA administrator should specify the same name that the host systems programmer assigns to the LU.
#### **Dedicated LU Name**

Identifies the name the NetWare for SAA server administrator assigned to a dedicated LU.

## **SNA Sessions Window**

| -                    | Displays information about a NetWare for SAA server's SNA sessions. |                |           |                |            |                |          |          |                 |
|----------------------|---|----------------|-----------|----------------|------------|----------------|----------|----------|-----------------|
|                      | Sessions(ES9000,PU 2.0 Sessions 1,SVE-VANCOUVER)                    |                |           |                |            |                |          |          | ▼ ▲             |
|                      |   |                |           |                |            | <b>N</b>       | Ê        |          | )               |
| ۱                    | /laxi   | imur           | m LUs:    | 16             |            | ┌ Session Dis  | play ——— |          |                 |
| Active LUs:          |   | Us:            | 12        |                | Display LU |                | 2        |          |                 |
| Host Connection Type |   | nnection Type: | 802.2     |                |            |                |          |          |                 |
| Host Link Status:    |   |                | k Status: | CONNECTED      |            | O Display Pool |          | POOL1    |                 |
| g                    | Sess  | sion           | #:        | 2 Session      | unlocked.  |                |          |          |                 |
| h                    | LU  | т              | User Name | Net Address    |            | LU Pool        | Status   | Appl ID  | WS Up Time      |
|                      | 2   | 2              | GMACHI    | C1FA000000001B | 040CBA     | MARKETNG       | UP-BND   | NVL1003  | 0 days 5:56 hrs |
| III                  | 3   | 2              | KWHITE    | C1FA000000001B | 040CBA     | MARKETNG       | UP-BND   | NVL1004  | 0 days 5:56 hrs |
| Ш                    | 4   | 2              | SSUESSER  | C1FA000000001B | 040CBA     | MARKETNG       | UP-BND   | NVL1005  | 0 days 5:56 hrs |
| Ш                    | 5   | 2              | WJAVIER   | C1FA000000001B | 040CBA     | MARKETNG       | UP-BND   | NVL1006  | 0 days 5:56 hrs |
| Ш                    | 6   | 1              | PRINTER   | C1FA000000001B | 3A58BE     | none           | UP-ACT   | No value | 0 days 6:06 hrs |
| Ш                    | 7   | 2              | PJONES    | C1FA000000001B | 3A58BE     | IS             | UP-BND   | CNM01004 | 0 days 6:06 hrs |
| Ш                    | 8   | 2              | RFROST    | C1FA000000001B | 3A58BE     | ENGINEER       | UP-ACT   | No value | 0 days 6:07 hrs |
| Ш                    | 9   | 2              | RIP       | C1FA000000001B | 3A58BE     | ENGINEER       | UP-ACT   | No value | 0 days 6:06 hrs |
| Ш                    | A   | 2              | AVANWINK  | C1FA000000001B | 040CBA     | ENGINEER       | UP-BND   | CNM01005 | 0 days 5:57 hrs |
| Ш                    | В   | 2              | SGOLDSTE  | C1FA000000001B | 040CBA     | ENGINEER       | UP-BND   | CNM01006 | 0 days 5:56 hrs |
|                      | С   | 2              | JSMITH    | C1FA000000001B | 3A58BE     | SALES          | UP-ACT   | No value | 0 days 6:05 hrs |
|                      | D   | 2              | MHUNTER   | C1FA00000001B  | 3A58BE     | SALES          | UP-ACT   | No value | 0 days 6:05 hrs |
| Ľ                    |   |                |           |                |            |                |          |          |                 |
| 1                    |   |                |           |                |            |                |          |          |                 |

#### **Related Topics**

<u>Controlling Sessions</u> <u>Displaying Session Information for NetWare for SAA</u> <u>Running SNA Traces</u> <u>SNA Sessions Detailed Information Window</u> <u>Trace Window</u>

## First Page Icon

Scrolls to the first page of available LU information.

# **Previous Page Icon**

Scrolls to the previous page of available LU information.

## Next Page Icon

Scrolls to the next page of available LU information.

## Last Page Icon

Scrolls to the last page of available LU information.

#### **More Information Icon**

Opens the SNA sessions Detailed Information window and displays additional information about the selected LU.

## **Update Icon**

Updates the SNA Sessions window with the most recent session information.

#### Lock Icon

Prevents users from using a session. Anyone using the session when you choose the Lock icon is disconnected from that session. (Lock is available only if the current session is unlocked.)

#### **Unlock Icon**

Gives users access to a session. (Unlock is available only if the current session is locked.)

#### **Sessions Softreset Icon**

Disconnects users from a session without terminating the assignment of the LU. After you choose this icon, an SNA TERM-SELF request is sent to the host and the user is returned to his or her initial login screen. The user can restart the session.

#### **Sessions Hardreset Icon**

Disconnects users from a session without terminating the assignment of the LU. The user can restart the session. The effect clicking this icon has depends on the application the user was running on the host.

## **Trace Icon**

Access the Trace window.

#### **Maximum LUs**

Indicates the maximum number of dependent LUs your copy of NetWare for SAA can support. For dependent LUs, the maximum number of sessions is the same as the maximum number of LUs.

#### **Active LUs**

Indicates how many LUs are activated by the host and are assigned to workstations.

## **Host Connection Type**

Identifies the type of link that exists between the NetWare or SAA server and the host as either SDLC, ITRN (IBM Token Ring), QLLC, 802.2, CUSTOM, or SELF TEST.

#### **Host Link Status**

Indicates whether the NetWare for SAA server and the host are connected or disconnected.

## **Session Number**

Indicates which session is selected.

#### **Session Status**

Indicates whether the session selected is locked or unlocked.

### **Session Display**

The Display LU option button displays session information for a single LU and the Display Pool option button displays session information for all the LUs in an LU pool.

#### LU

Identifies the local address of the LU. The NetWare for SAA services administrator assigns this number in CSCON.

## T (Type)

Indicates whether the LU is type 0, 1, 2, 3, 6.2 or downstream. The number 6 represents LU6.2 and the letter D indicates a downstream physical unit (PU).

#### **User Name**

Identifies the name the user specified when logging in to the NetWare for SAA server.

### **Net Address**

Identifies the network address of the user's workstation.

#### LU Pool

Identifies the name of the pool to which the LUs are assigned. The NetWare for SAA services administrator assigns this name in CSCON. This field is blank if the LU is not assigned to a pool.

#### **Status**

Indicates the status of both the workstation software and the LU. The data will be one of the following:

| UP-BIND | Workstation software is loaded, and the session is bound to an applications.                               |
|---------|--|
| UP-ACT  | Workstation is loaded, and NetWare for SAA has received an activate LU request (ACTLU).                    |
| UP-INA  | Workstation software is loaded, but NetWare for<br>SAA has not received an activate LU request<br>(ACTLU). |
| DN-BND  | Workstation software is not loaded, but the session is bound to an application.                            |
| DN-ACT  | Workstation software is not loaded, but NetWare for SAA has received an activate LU request (ACTLU).       |
| DN-INA  | Workstation software is not loaded, and NetWare for SAA has not received an activate LU request (ACTLU).   |

# **Application ID**

Identifies the name of the host application to which the LU is bound.

## Workstation Up Time

Indicates how long the workstation has been connected to NetWare for SAA.

#### **Trace Window**

| nace window               |  |               |
|---------------------------|--|---------------|
| Starts and stops SNA tr   | J 0, 1, 2, 3, or downstream PU sessions. |               |
| Trace(SV                  | VER)                                     |               |
|                           |  |               |
| C Options                 |  |               |
| ⊖ All LU's                | File size:                               | 100 Kilobytes |
| © (Single LU)<br>LU ID: 2 | Filename:                                | NWSAAMGR.TRC  |
| Trace agent initialized.  |  |               |

**Related Topics** 

Running SNA Traces SNA Sessions Window

## Start Trace Icon

Starts the trace process.

## Stop Trace Icon

Stops the trace process.

# Options

Specifies that all LUs or only one LU is to be traced and the number of the LU that you want to trace if you select Single LU.

### File Size Text Box

Specifies the trace file's size.

### File Name Text Box

Specifies the trace file's name

## **User Information Window**

Displays information about the users accessing <u>NetWare for SAA</u> server or services.

| User Information(SVE-VANCOUVER)     |                     |                  |          |                      |   |  |  |  |  |  |
|-------------------------------------|---------------------|------------------|----------|----------------------|---|--|--|--|--|--|
| <del>12</del><br>34                 |                     |                  |          |                      |   |  |  |  |  |  |
| Number of Users: 14                 |                     |                  |          |                      |   |  |  |  |  |  |
| User Name                           | Full Name           | Up Time          | Protocol | Network Address      |   |  |  |  |  |  |
| AVANWINK                            | Alan Van Winkle     | 0 days 5:50 hrs  | SPX      | C1FA000000001B040CBA | + |  |  |  |  |  |
| DownstreamPL                        | J N/A               | 0 days 11:18 hrs | N/A      | C1F0001F000000000000 |   |  |  |  |  |  |
| GMACHI                              | Gerry Machi         | 0 days 5:49 hrs  | SPX      | C1FA000000001B040CBA |   |  |  |  |  |  |
| JSMITH                              | John Smith          | 0 days 5:58 hrs  | SPX      | C1FA00000001B3A58BE  |   |  |  |  |  |  |
| KWHITE                              | Karen White         | 0 days 5:49 hrs  | SPX      | C1FA000000001B040CBA |   |  |  |  |  |  |
| MHUNTER                             | Mike Hunter         | 0 days 5:57 hrs  | SPX      | C1FA00000001B3A58BE  |   |  |  |  |  |  |
| PJONES                              | PaulJones           | 0 days 5:59 hrs  | SPX      | C1FA00000001B3A58BE  |   |  |  |  |  |  |
| PRINTER                             | Workstation printer | 0 days 5:58 hrs  | SPX      | C1FA00000001B3A58BE  |   |  |  |  |  |  |
| RFROST                              | Rick Frost          | 0 days 5:59 hrs  | SPX      | C1FA000000001B3A58BE | + |  |  |  |  |  |
| Profile                             | LU                  | Product ID       | Sta      | art Time             |   |  |  |  |  |  |
| ES900                               | 2                   | NWSAA            | 05/      | /10/93 at 14:23      |   |  |  |  |  |  |
|                                     |                     |                  |          |                      |   |  |  |  |  |  |
|                                     |                     |                  |          |                      |   |  |  |  |  |  |
|                                     |                     |                  |          |                      |   |  |  |  |  |  |
| Done collecting users' information. |                     |                  |          |                      |   |  |  |  |  |  |
|                                     |                     |                  |          |                      |   |  |  |  |  |  |

#### **Related Topic**

Obtaining User Information

## **Update Icon**

Updates the User Information window with the most recent user information.
# **Number of Users**

Indicates how many users are using the NetWare for SAA server.

### **User Name**

Identifies the ID assigned to the user on the NetWare for SAA server. Downstream PU and HOSTPRT appear as usernames for the Downstream PU and Host Print connections of the server.

# **Full Name**

Identifies the name assigned to the user on NetWare for SAA server.

# **Up Time**

Indicates how long the user has been using the NetWare for SAA service.

# Protocol

Indicates which network protocol the user's workstation is using.

# **Network Address**

Indicates the address of the user's workstation.

# **Profile**

Indicates the service profile for the selected user or service connection. This data appears when you double-click an entry in the user's list box.

### LU

Identifies the local address of the LU associated with the selected user or service. The NetWare for SAA administrator assigns this number in CSCON. This data appears when you double-click an entry in the user's list box.

### **Product ID**

Identifies the communications service product used by the selected user or service. This data appears when you double-click an entry in the user's list box.

### **Start Time**

Identifies when the LU connection was established for the selected user or service. This data appears when you double-click an entry in the users list box.

### **Accessing Audit Trail Log Files**

Access an <u>audit trail log file</u> to display information that identifies who uses which network resources, when, and for how long.

To access audit trail log files, take the following steps:

- 1. In the Active Domain window, select the server maintaining the audit trail log file you want to examine.
- 2. Click the Server Management Options icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Management Options window.

3. Click the Audit Trail Log icon in the Tool Bar.

NetWare for SAA Services Manager opens an Audit Trail window. This window lists the records made in the NetWare for SAA server's audit trail log file.

4. To display additional audit trail information, either select the record you want information about and click the More Information icon in the Tool Bar or double-click the record.

NetWare for SAA Services Manager opens an Audit Trail Detailed Information window, which lists additional information about the selected record.

#### **Related Topics**

Active Domain window Audit Trail Detailed Information Window Audit Trail Window Server Management Options Window

### Accessing Event Log Files Through the Event Monitor Window

Accessing an <u>event log file</u> allows you to obtain a chronological listing of all network events that occurred on the server and examine <u>event messages</u> recorded in the event log file but not listed in the Event Monitor window.

To access an event log file through the Event Monitor window, take the following steps:

1. In the Event Monitor window, select an event message recorded in the event log file you want to view.

Be sure to select a message describing an event detected by a NetWare for SAA server included in the active domain.

2. Click the Event Log icon in the Tool Bar.

NetWare for SAA Services Manager opens an Event Log window, which displays the event log file records of the NetWare for SAA server associated with the selected event message.

 To display additional record information, either select an event record and click the More Information icon in the Tool Bar or double-click the event record.
NetWare for SAA Services Manager opens an Event Record Detailed Information window.

You can also access a server's event log file through the Server Management Options window.

#### **Related Topics**

Accessing Event Log Files Through the Server Management Options Window Accessing Additional Event Record Information Event Log Window Event Monitor Window Event Record Detailed Information Window

# Accessing Event Log Files Through the Server Management Options Window

Accessing an <u>event log file</u> allows you to obtain a chronological listing of all network events that occurred on the server and examine <u>event messages</u> recorded in the event log file but not listed in the Event Monitor window.

To access an event log file through the Server Management Options window, take the following steps:

- 1. In the Active Domain window, select the server maintaining the event log file you want to view.
- 2. Click the Server Management Options icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Management Options window.

- Click the Event Log icon in the Tool Bar. NetWare for SAA Services Manager opens an Event Log window, which displays the records of the NetWare for SAA server's event log file.
- To access additional event record information, either select an event record and click the More Information icon in the Tool Bar or double-click the event record. NetWare for SAA Services Manager opens an Event Record Detailed Information window.

#### **Related Topics**

Accessing Event Log Files Through the Event Monitor Window Accessing Additional Event Record Information Event Log Window Event Record Detailed Information Window Server Management Options Window

### **Accessing Additional Event Record Information**

You can access additional event record information while examining event messages listed in the Event Monitor or Event Log window. If you access event records through the Event Log window, NetWare for SAA Services Manager obtains event record information from the NetWare for SAA server's database.

To access event records while examining an event log file, take the following steps:

- 1. In the Event Monitor or Event Log window, select the event message that describes the event you want more information about.
- 2. Either click the More Information icon in the Tool Bar or double-click the event message.

NetWare for SAA Services Manager opens an Event Record Detailed Information window.

#### **Related Topics**

Accessing Event Log Files Through the Event Monitor Window Accessing Event Log Files Through the Server Management Options Window Event Monitor Window Event Record Detailed Information Window Server Management Options Window

### Adding Servers to the Managed Domain

If you want NetWare for SAA Services Manager to manage or monitor a NetWare for SAA server, add the server to the <u>managed domain</u> by taking the following steps:

1. Click the Change Managed Domain icon in the Tool Bar.

NetWare for SAA Services Manager opens the Change Managed Domain window.

 Specify which NetWare for SAA servers you want to add. How you add a server depends on whether the server is listed in the Available Comm. Servers list box. (You must have supervisor-equivalent or file server console operator privileges on any available servers you want to add.)

• To add a server listed in the Available Comm. Servers list box, select the server's name from the Available Comm. Server's list box and then click the Add icon. You may also double-click the server's name in the Available Comm. Servers list box.

• To add a server that is not listed in the Available Comm. Servers list box, type the server's name in the Server Name text box and then press <Enter>. If the server is currently unavailable, it will be added to the active domain when it becomes available.

- When adding servers, you can select several server names at a time by holding down <Ctrl> while clicking the server names you want to add.
- 3. Repeat Step 2 until the Managed Domain list box contains the names of all the servers you want included in the managed domain.
- 4. Select the Save Managed Domain list box if you want to save the specified managed domain. Otherwise, clear the check box.
- 5. Click the OK icon.

NetWare for SAA Services Manager closes the Change Managed Domain window and then displays the Access Information window. In that window, specify user name and password information for those servers. After you specify a valid user name and password for a NetWare for SAA server, the Active Domain window displays server icons or only server names for the servers included in the active domain.

#### **Related Topics**

<u>Access Information Window</u> <u>Active and Managed Domains</u> <u>Change Managed Domain Window</u> <u>Redefining the Managed Domain</u> <u>Removing Servers from the Managed Domain</u>

### **Changing Server Management Options**

You can specify server management options that affect the processing of <u>NetView</u> commands or alerts, server log files, server security, trace facility, and the event forwarding filter.

**Note:** These options can also be set in <u>CSCON</u> (NetWare for SAA v1.2 or v1.3), <u>CSSET</u> (NetWare for SAA v1.2), or <u>CSSTATUS</u> (NetWare for SAA v1.3). The settings specified in NetWare for SAA Services Manager take effect immediately. However, they default back to the settings specified in CSCON if the <u>Communication</u> <u>Executive</u> is reloaded or restarted after the options are reset.

To change server management options with NetWare for SAA Services Manager, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server you want to configure.
- 2. Click the Server Management Options icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Management Options window.

- 3. If the server is to maintain an <u>event log file</u>, specify Event Log options by taking the following steps:
  - a. Select the Event Log State check box to enable logging. The default is Event Log State on.
  - b. If you want to delete the current contents of the event log file, click the Clear Event Log icon. Otherwise, new information will be appended to the log file. You will be unable to clear an event log file if another person is viewing the file at the same time that you are.
- 4. If the server is to maintain an <u>audit trail log file</u>, select the Audit Trail State check box. The default is Audit Trail State on.
- 5. If you want to be able to run SNA <u>traces</u>, select the Trace check box. Otherwise, clear that check box. The default is Trace on.
- 6. To turn on the <u>NetWare communications security feature</u>, select the Security check box. Otherwise, clear that check box. The default is security on.
- 7. If NetView is enabled in CSCON, you may select one or more of the following NetView options:

#### NetView Alerts

Select this option if NetView alerts occurring on a NetWare for SAA server are to be forwarded to the <u>IBM</u> NetView facility. The default is NetView Alerts on.

NetView Commands

Select this option if the NetWare for SAA server is to process commands issued by the NetView operator. The default is NetView Commands on.

NetView Security

Select this option if the NetWare for SAA server is to verify that NetView operators have permission to issue commands to the server from the host. The default is NetView Security on.

 To select the objects and severity levels for which the NetWare for SAA server is to forward events to NetWare for SAA Services Manager, select and deselect the event forwarding filter objects and severity levels. The default is all objects and severity levels selected.

To save the selected event forwarding filter settings, select the Save selected list to disk check box. The default is save settings.

9. To save the specified management options settings, click the OK icon. NetWare for SAA Services Manager saves the management options settings and closes the Server Management Options window.

#### **Related Topics**

Accessing Audit Trail Log Files Accessing Event Log Files Through the Event Monitor Window Accessing Event Log Files Through the Server Mangement Options Window Event Monitor Window Display and Event Forwarding Filters Running SNA Traces Server Management Options Window Server Management Options Window v1.2

# **Clearing Event Messages**

Clearing an <u>event message</u> deletes it from the Event list box of the Event Monitor window.

To clear an event message, select the message in the Event Monitor window's Event list box and then click the Remove Event icon.

### **Related Topic**

Event Monitor Window

# **Collecting and Displaying Statistical Data**

Collect and display statistical data to obtain information that can help you measure network performance, identify network faults, and address potential performance problems before critical bottlenecks occur.

To collect and display statistical data about a host link, adapter, or link level control (LLC) protocol (logical link), take the following steps:

- 1. In the Active Domain window, select the server you want information about.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You may also double-click the server icon in the Active Domain window to access the Server Status window.

3. Select the host link, logical link, or adapter you want information about and click the Graph icon or Pie icon in the Tool Bar.

NetWare for SAA Services Manager opens a Pie Settings window or a Graph Settings window.

- 5. In the Settings window, select the attributes you want information about.
- 6. In the Interval text box, type the number of minutes you want to elapse between NetWare for SAA Services Manager statistical data requests.
- 7. In the Total Samples text box, type the maximum number of times you want NetWare for SAA Services Manager to collect data.
- 8. If you want to reset the value of the attributes listed in the Graphable Attributes list box, select the Reset Attributes check box. Otherwise, clear the check box.
- 9. Click the OK icon to start the data collection process.

NetWare for SAA Services Manager begins collecting the statistical data and then displays it in the Statistics window for the type of graphic you selected.

10. After NetWare for SAA Services Manager has collected all the information you want, stop the data collection process. To do this, either close the Statistics window or click the Graph or Pie icon in the Tool Bar to return to the Settings window.

**Note:** If you close the Graph or Pie Statistics window, you will lose the data NetWare for SAA Services Manager has collected.

#### **Related Topics**

<u>Statistical Attributes</u> <u>Graph Settings Window</u> <u>Graph Statistics Window</u> <u>Pie Settings Window</u> <u>Pie Statistics Window</u>

### **Controlling Sessions**

Control SNA sessions if you want to prevent workstation users from using a session, give workstation users access to a session, or force workstation users to quit an application they are using on the host.

To control sessions, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server establishing the session you want to control.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens a Server Status window. You can also double-click a server icon in the Active Domain window to access the Server Status window.

- In the Services list box, select the service profile providing the session you want to display information about and select PU 2.0 Sessions from the Profile Configuration list box.
- 4. Either click the Session icon in the Tool Bar or double-click PU 2.0 Sessions. NetWare for SAA Services Manager opens an SNA Sessions window.
- 5. Select the session you want to control.
- 6. Control the session by performing one of the following operations:

• Click the Lock icon to prevent users from using the session. Anyone using the session when you click this icon is disconnected from that session. (The Lock icon is available only if the current session is unlocked.)

• Click the Unlock icon to give workstation users access to the session. (Unlock is available only if the current session is locked.)

• Click the Sessions Softreset icon to disconnect the user from the session without terminating the assignment of the LU. The user can restart the session. After you click the Sessions Softreset icon, an SNA TERM-SELF request is sent to the host and the user is returned to his or her initial login screen.

• Click the Sessions Hardreset icon to disconnect the user from the session without terminating the assignment of the LU. After the user's workstation displays a communication error, the user can restart the session. The effect of clicking the Sessions Hardreset icon depends on the application the user was running on the host.

**Note:** Before controlling a session with the Sessions Hardreset icon, warn the session's users that you will be disconnecting them from the NetWare for SAA server.

#### **Related Topics**

Displaying Host Link Dependent Data Server Status Window SNA Sessions Window

### Copying

NetWare for SAA Services Manager allows you to copy the current data of a specific list box, option button, text box, or active NetWare for SAA Services Manager window. Copy such data if you want to copy data to another <u>Microsoft Windows</u> application that supports the <u>DDE</u> format, such as <u>Microsoft Excel</u>, or transfer the data to another Windows application that supports the Text format, such as Microsoft Word for Windows. To copy data, take the following steps:

- 1. Ensure that the window you want to copy information from is the active window.
- 2. Specify which data is to be copied by completing one of the following operations:

• To copy an option button or check box, select the option button or check box you want to copy. You cannot copy cleared option buttons or check boxes.

• To copy data included in a text box, position the pointer in the text box containing the data you want to copy.

• To copy data listed in a list box, select one of the items listed in the list box. If the list box is empty and you plan to establish a DDE link to that list box, copy the empty list box. (After the list box receives data, NetWare for SAA Services Manager will update the other Microsoft Windows application to which the DDE link is established.)

3. Choose the Edit menu and select Copy (**<Alt+E+C>**).

NetWare for SAA Services Manager copies the data specified in Step 2 to the Windows clipboard.

- 4. Switch to the Program Manager as discussed in your Microsoft Windows documentation.
- 5. Open the application to which you want to transfer the information, and use that program's commands to copy the information from the Windows clipboard to the appropriate place.

**Note:** If you use Microsoft Excel to establish DDE links, both NetWare for SAA Services Manager and Excel must be open to maintain the links.

#### **Related Topics**

<u>Edit Menu</u> <u>Output Window</u> <u>Saving Data to the Windows Clipboard</u>

### **Customizing the Displaying and Notification of Events**

Customize the displaying and notification of events to specify how many <u>event messages</u> NetWare for SAA Services Manager can monitor at the same time, set the display filter, control whether NetWare for SAA Services Manager displays event messages in color, specify which event severity levels the <u>server icons</u> indicate in color, and determine which events NetWare for SAA Services Manager notifies you about by beeping. To customize the displaying and notification of network events, take the following steps:

1. Click the Customize icon in the Tool Bar of the Event Monitor window.

NetWare for SAA Services Manager opens a Customize Events window.

2. In the Maximum Number of Local Events text box, type the maximum number of events that NetWare for SAA Services Manager can monitor at the same time.

You can specify any number from 1 to 500. The default is 64 messages.

- Set the display filter by selecting the Display check boxes that correspond to the severity levels of the events NetWare for SAA Services Manager is to display messages for.
- 4. If NetWare for SAA Services Manager is to indicate an event's severity by displaying event messages in color, select the Display with Colors check box. Otherwise, clear that check box.
- 5. Select the Server Icon Color check boxes that correspond to the severity levels you want NetWare for SAA Services Manager to indicate with color when displaying server icons.

If NetWare for SAA Services Manager receives an <u>event message</u>, it can indicate the event's severity by displaying the <u>server icon</u> in the Active Domain window in color. The colors will be the same as those used for the event messages. The server icon's color changes only if both of the following are true:

• The event's severity level is selected in the Server Icon Color check boxes.

• The event's severity level is higher than the severity level of events NetWare for SAA Services Manager previously received.

If the Event Monitor window is closed and then reopened, NetWare for SAA Services Manager will display server icons in green regardless of the NetWare for SAA server's status.

6. If you want NetWare for SAA Services Manager to beep whenever it receives event messages of a particular severity level, select the Audible Alert check box that matches the desired severity levels.

If you specify an audible alert for a severity level, you also must specify that NetWare for SAA Services Manager display events with that severity level.

7. Click the OK icon.

NetWare for SAA Services Manager saves the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### **Related Topics**

<u>Customize Events Window</u> <u>Displaying Event Messages in Color</u> <u>Displaying Server Icons in Color</u> <u>Event Monitor Window</u> <u>Setting the Audible Alert</u> <u>Setting the Display Filter</u> <u>Specifying Number of Event Messages</u>

### **Displaying Event Messages in Color**

NetWare for SAA Services Manager can display <u>event messages</u> in color, which helps you quickly identify the severity of a network event.

To display event messages in color, take the following steps:

1. Click the Customize icon in the Tool Bar from the Event Monitor window.

NetWare for SAA Services Manager opens the Customize Events window.

- 2. If NetWare for SAA Services Manager is to indicate an event's severity by displaying event messages in color, select the Display with Colors check box. Otherwise, clear that check box.
- 3. Click the OK icon.

NetWare for SAA Services Manager saves the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### **Related Topics**

<u>Customize Events Window</u> <u>Event Monitor Window</u> <u>Severity Level Colors</u>

# **Displaying the Percentage of Memory Used**

To display the percentage of memory NetWare for SAA Services Manager is using, choose the Help Menu and select About NetWare for SAA Services Manager (**Alt+H+A>**). The percentage of memory used along with version information is displayed.

**Related Topic** 

<u>Help Menu</u>

### **Displaying Server Icons in Color**

NetWare for SAA Services Manager can display <u>server icons</u> in color, which helps you quickly identify a NetWare for SAA server's status.

To display server icons in color, take the following steps:

1. Click the Customize icon in the Tool Bar from the Event Monitor window.

NetWare for SAA Services Manager opens the Customize Events window.

2. Select the Server Icon Color check boxes that correspond to the severity levels you want NetWare for SAA Services Manager to indicate with color when displaying server icons.

The colors will be the same as those used for event messages. The server icon's color changes only if both of the following are true:

• The event's severity level is selected in the Server Icon Color check boxes.

• The event's severity level is higher than the severity level of events NetWare for SAA Services Manager previously received.

If the Event Monitor window is closed and then reopened, NetWare for SAA Services Manager will display server icons in green regardless of the NetWare for SAA server's status.

3. Click the OK icon.

NetWare for SAA Services Manager will save the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### **Related Topics**

<u>Customize Events Window</u> <u>Event Monitor Window</u> <u>Severity Level Colors</u>

### **Displaying Session Information for LU6.2**

To display <u>LU</u>6.2 session information, take the following steps:

- 1. In the Active Domain window, select the server establishing the session you want to control.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens a Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

 In the Services list box, select the service profile providing the session you want to display information about and select PU 2.1 Sessions from the Profile Configuration list box. Either click the Sessions icon in the Tool Bar or double-click PU 2.1 Sessions.

NetWare for SAA Services Manager opens an LU6.2 Sessions window. That window displays information about the NetWare for SAA server's LU6.2 sessions.

SAA Services Manager does not automatically update the contents of the LU6.2 Sessions window as the LU6.2 session information changes. To keep the session information current, click the Update icon in the Tool Bar.

#### **Related Topics**

<u>LU 6.2 Detailed Information Window</u> <u>LU 6.2 Sessions Window</u> <u>Server Status Window</u>

### **Displaying Host Link Dependent Data**

You can display information for <u>NetWare for SAA</u> that provides you with data about SNA <u>LU</u> 0, 1, 2, and 3 sessions, and downstream <u>PU</u> sessions. To do so, take the following steps:

- 1. In the Active Domain window, select the server establishing the session you want to control.
- 2. Click the Server Status icon from the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

3. In the Services list box, select the service profile providing the session you want to display information about and select PU 2.0 Sessions from the Profile Configuration list box. Either click the Sessions icon in the Tool Bar or double-click PU 2.0 Sessions.

NetWare for SAA Services Manager opens an SNA Sessions window. This window displays information about a NetWare for SAA server's SNA LU 0, 1, 2, and 3 sessions and downstream PU sessions.

NetWare for SAA Services Manager does not automatically update the contents of the SNA Sessions window as the session information changes. To keep the session information current, click the Update icon in the Tool Bar.

#### **Related Topics**

<u>Controlling Sessions</u> <u>Server Status Window</u> <u>SNA Sessions Detailed Information Window</u> <u>SNA Sessions Window</u>

### Exiting NetWare for SAA Services Manager

Exit NetWare for SAA Services Manager whenever you no longer want to monitor or manage the NetWare for SAA servers specified in the managed domain. To exit NetWare for SAA Services Manager, choose the File menu and then select Exit (**<Alt+F+X>**) or close the application window.

When making configuration changes, such as redefining the managed domain or altering event filter settings, you are given the option of saving those changes. If you specified you wanted to save those changes, NetWare for SAA Services Manager saves the changes when you exit NetWare for SAA Services Manager.

#### **Related Topics**

<u>File Menu</u> NetWare for SAA Services Manager Application Window

### Loading, Unloading, or Restarting Services

NetWare for SAA Services Manager allows you to load, unload, or restart <u>service profiles</u>. To do so, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server running the service profile you want to control.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

- 3. Either select the name of the profile you want to control or type the name in the NWSAA Profile text box.
- 4. Load, unload, or restart the service profile by clicking the Load Service, Unload Service, or Restart Service icon in the Tool Bar.

**Note:** Before you continue to use NetWare for SAA Services Manager after restarting a service, verify that the service has restarted. If the service has restarted, NetWare for SAA Services Manager lists the service in the Server Status window. However, if the restart fails, NetWare for SAA Services Manager displays a <u>status message</u> that describes why the restart failed.

#### **Related Topic**

Server Status Window

### Loading and Unloading NLM Files or Protocols in v1.3

NetWare for SAA Services Manager allows you to load and unload <u>NLM files</u> or <u>LLC</u> protocols (logical links) on a <u>NetWare for SAA</u> v1.3 server.

To load or unload NLM files or protocols, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server on which you want to load or unload an NLM or protocol.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

3. In the NLM Loader text box, type the filename of the NLM or protocol you want to load or unload.

If you are unsure of an NLM filename, see the documentation for that NLM.

Typically you specify a protocol by typing the filename listed in the Link Level Protocols in Use list box.

4. In the NLM Loader text box, also type any arguments or parameters that you must specify when loading or unloading the NLM.

For details on which parameters you need to specify, see the documentation for the NLM you want to load or unload.

If you specify an incomplete set of parameters when loading an NLM, a prompt for the missing parameters appears on the server console. The NLM does not begin operating until the missing information is entered at the server console. You are not notified on the NetWare for SAA Services Manager workstation about the missing parameters and you may not be aware that the NLM is not operating.

- 5. Perform one of the following operations:
- Load the NLM by clicking the NLM Load icon.
  - Unload the NLM by clicking the NLM Unload icon.

An NLM will not be unloaded if that NLM is exporting functions and symbols to another NLM. If an NLM fails to unload, a message appears on the system console. You are not notified on the NetWare for SAA Services Manager workstation about the failure and may not be aware that the NLM is not operating.

#### **Related Topics**

Loading and Unloading Protocols in v1.2 Server Status Window

### Loading and Unloading Protocols in v1.2

NetWare for SAA Services Manager allows you to load and unload link level protocols loaded on a NetWare for SAA server on which the <u>Communication Executive</u> v1.2 and NetWare for SAA v1.2 are loaded. These link level protocols provide the Communication Executive support for IPX, SPX, TCP/IP, AppleTalk drivers.

To load or unload protocols, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. Verify that the adapter and its driver are installed on the NetWare for SAA server.
- 2. In the Active Domain window, select the server you want information about.
- 3. Click the Server Status icon in the Tool Bar.

SAA Services Manage opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

- In the Protocol text box, type the name of the protocol you want to load or unload. The Protocols list box will not include SPX, TCP/IP, or <u>AppleTalk</u> even if those protocols are being used.
- 5. In the Tool Bar,:

• Click the Bind icon to load the logical link protocol and link a <u>LAN</u> driver and adapter to the protocol.

• Click the Unbind icon to unload the logical link protocol remove it from an adapter's LAN driver.

#### **Related Topics**

Loading and Unloading NLMs or Protocols in v1.3 Server Status Window

### **Obtaining Configuration Data**

To obtain and display configuration information for a service profile, host link, adapter, or logical link, take the following steps:

- 1. In the Active Domain window, select the server you want information about.
- 2. Click the Server Status icon from the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

- 3. Specify whether you want to obtain information about a service, profile, host link, adapter, or LLC protocol (logical link).
- 4. Either select the object you want configuration data for and click the More Information icon in the Tool Bar or double-click the object.

NetWare for SAA Services Manager opens a Configuration window, which contains the configuration data of the service profile, host link, adapter, or protocol you selected in Step 3 .

#### **Related Topics**

<u>Configuration Data</u> <u>Server Status Window</u>

### **Obtaining User Information**

Obtain user information to find out who is using a <u>NetWare for SAA</u> server or service, what their NetWare addresses are, and which <u>LAN</u> protocol and services they are using. To obtain user information, take the following steps.

- 1. In the Active Domain window, select the server you want information about.
- 2. Click the Users icon in the Tool Bar.

NetWare for SAA Services Manager opens the User Information window.

- 3. Double-click an entry in the services list box to display additional user information.
- NetWare for SAA Services Manager does not automatically update the contents of the list boxes as user information changes. To keep the user information current, click the Update icon in the Tool Bar.

#### **Related Topic**

User Information Window

### **Overriding Existing Connections**

When NetWare for SAA Services Manager displays the Override Existing Connection window, you may establish a connection to the NetWare for SAA server under a username different from the one that is currently establishing a connection. Do so if you want to sever an existing connection and then establish a new connection under a name that provides you operator or supervisor-equivalent privileges.

To override an existing connection, click the New User button from the Override Existing Connection window. To retain the previous connection, click the Current User button. Clicking Cancel removes the server from the managed domain and returns to the NetWare for SAA Services Manager application window.

#### **Related Topics**

<u>Access Information Window</u> <u>Override Existing Connection Window</u> <u>Retaining Previous Connections</u>
## Printing

NetWare for SAA Services Manager allows you to print data recorded in a NetWare for SAA server's log files or data displayed in the active NetWare for SAA Services Manager window.

To print, take the following steps:

- 1. Ensure that the window you want to print from is the active window.
- Choose the File menu and select the Output command (<Alt+F+O>). NetWare for SAA Services Manager opens the Output window.
- 3. Specify the type of information you want to print by selecting Screen or Server's Database option button. (The Server's Database option button is available only when the Audit Trail window or Event Log window is active.)

The effect of selecting Server's Database depends on whether the Audit Trail or Event Logs window is active. If you select Server's Database when the Audit Trail window is active, NetWare for SAA Services Manager prints the server's <u>audit trail</u> <u>log file</u>. If you select Server's Database when the Event Logs window is active, NetWare for SAA Services Manager prints all the event log records stored in the server's database.

- 4. Select Printer from the Output To list.
- 5. Click the Output button.

NetWare for SAA Services Manager sends the specified information to the selected printed.

#### **Related Topics**

<u>File Menu</u> Output Window

## **Redefining the Managed Domain**

Redefine the <u>managed domain</u> as the network or your needs change. To redefine the managed domain, take the following steps:

- Click the Change Managed Domain icon in the Tool Bar. NetWare for SAA Services Manager opens the Change Managed Domain window.
- 2. Specify which NetWare for SAA servers you want to add or remove by adding servers to or removing servers from the Managed Domain list box.

How you add a server depends on whether the server is listed in the Available Comm. Servers list box. (You must have supervisor-equivalent or file server console operator privileges on any available servers you want to add.)

• To add a server listed in the Available Comm. Servers list box, select the server's name from the Available Comm. Server's list box and then click the Add icon. You can also double-click the server name in the Available Comm. Servers list box.

• To add a server that is not listed in the Available Comm. Servers list box, type the server's name in the Server Name text box and then press <Enter>. If a server is currently unavailable, it is added to the managed domain when it becomes available.

To remove a server, select that server's name from the Managed Domain list box and then click the Delete icon. You can also double-click the server name in the Managed Domain list box.

Removing a server from the managed domain also deletes the user name and password that you may have saved when specifying information in the server's Access Information window.

When adding or removing servers, you can select more than one server at a time by holding down <Ctrl> while clicking the server names.

3. Repeat Step 2 until the Managed Domain list box contains the names of all the servers you want included in the managed domain.

If NetWare for SAA Services Manager is to manage more than 20 servers, you must increase the number of SPX connections specified in either the NET.CFG file. When setting the SPX parameter, take into consideration how many SPX connections are being used by other <u>LAN</u> applications.

- 4. Select the Save Domain list to Disk check box if you want to save the specified managed domain. Otherwise, clear the check box.
- 5. Click the OK icon.

NetWare for SAA Services Manager closes the Change Managed Domain window. The Active Domain window no longer contains those servers you removed from the managed domain. NetWare for SAA Services Manager displays an Access Information window for each server you added to the managed domain. You specify access information as you did the first time you started NetWare for SAA Services Manager. After you provide valid access information for a server, NetWare for SAA Services Manager displays a server icon or only a server name for that server in the Active Domain window.

#### **Related Topics**

Access Information Window Active and Managed Domains Adding Servers to the Managed Domain Change Managed Domain Window Removing Servers from the Managed Domain

### **Removing Servers from the Managed Domain**

If you no longer need to monitor or manage a NetWare for SAA server, remove it from the <u>managed domain</u> by taking the following steps:

- Click the Change Managed Domain icon in the Tool Bar. NetWare for SAA Services Manager opens the Change Managed Domain window.
- 2. Remove a server by selecting its name from the Managed Domain list box and then clicking the Delete icon or double-clicking the server's name.
- 3. Repeat Step 2 until you have removed all the servers that you no longer want NetWare for SAA Services Manager to manage or monitor.
- 4. Select the Save Domain list to Disk check box if you want to save the specified managed domain. Otherwise, clear the check box.
- 5. Click the OK icon.

NetWare for SAA Services Manager closes the Change Managed Domain window and removes the deleted servers from the Active Domain window.

#### **Related Topics**

Active and Managed Domains Adding Servers to the Managed Domain Change Managed Domain Window Redefining the Managed Domain

### **Restarting or Bringing Down the Communication Executive v1.2**

NetWare for SAA Services Manager can restart or bring down the Communication Executive loaded on a NetWare for SAA server running <u>NetWare for SAA</u> v1.2. You can also control the NetWare for SAA v1.3 server by loading and unloading the related NLM files. However, you must ensure all the correct NLM files are loaded and unloaded properly.

**Note:** Restarting or bringing down a server's <u>Communication Executive</u> restarts or brings down that server's <u>NetWare</u> Communication Services products. Any sessions established through those products will be lost.

The following procedure describes how to issue <u>CSRESTART</u> and <u>CSDOWN</u> from the NetWare for SAA Services Manager workstation. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server that the Communication Executive you want to bring down is loaded on.
- 2. Click the Server Management icon in the Tool Bar.

NetWare for SAA Services Manager opens a Server Management Options window.

3. Click either the CSRESTART icon or the CSDOWN icon.

• Click the CSRESTART icon if you need to restart the Communication Executive without bringing down the NetWare server.

If you click the CSRESTART icon, NetWare for SAA Services Manager prompts you to verify whether you want to restart the Communication Executive. When you restart the Communication Executive, all its modules and all the service profiles are unloaded and then reloaded. You will not be able to control the Communication Executive if the restart fails.

• Click the CSDOWN icon if you want to unload all the Communication Executive's modules and all the service profiles. If you click the CSDOWN icon, NetWare for SAA Services Manager prompts you to verify whether you want to bring down the Communication Executive.

**Note:** A Communication Executive brought down with the CSDOWN icon can be restarted only from the NetWare server console.

After you restart or bring down the Communication Executive, the network management options NetWare for SAA Services Manager can control revert to the settings specified in <u>CSCON</u>.

#### **Related Topic**

Server Management Options Window v1.2

## **Retaining Existing Connections**

When NetWare for SAA Services Manager displays the Override Existing Connection window, you may retain a previous connection to a NetWare server.

Do this if you want to retain the previous connection to a NetWare server. You will not, however, be attached to the NetWare for SAA server under the username specified in the Access Information window.

To retain an existing connection, click the Current User button on the Override Existing Connection window.

#### **Related Topics**

<u>Access Information Window</u> <u>Override Existing Connection Window</u> <u>Overriding Existing Connections</u>

## **Running SNA Traces**

While NetWare for SAA Services Manager is displaying SNA <u>LU</u> 0, 1, 2, or 3 information or downstream <u>PU</u> information, you may run a <u>trace</u> on a single LU or all LUs. Run a trace if you suspect a problem with the connection between <u>NetWare for SAA</u> and the host or between a workstation and a NetWare for SAA server. Only one trace at a time can be run. You cannot run a trace on LU6.2 sessions.

To run an SNA trace, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server establishing the session you want to control.
- 2. Click the Server Status icon in the Tool Bar.

NetWare for SAA Services Manager opens the Server Status window. You can also access the Server Status window by double-clicking a server icon in the Active Domain window.

 In the Services list box, select the service profile providing the session you want to display information about and select PU 2.0 Sessions from the Profile Configuration list box. Either click the Sessions icon in the Tool Bar or double-click PU 2.0 Sessions.

NetWare for SAA Services Manager opens an SNA Sessions window. This window displays information about a NetWare for SAA server's SNA sessions.

6. Click the Trace icon in the Tool Bar.

NetWare for SAA Services Manager opens a Trace window.

- 7. Specify whether you want to trace a single LU by selecting the Single LU option button or all LUs by selecting the All LUs option button.
- 8. If you selected Trace single LU, type the number of the LU you want to trace in the LU ID text box. Otherwise, skip this step.
- 9. In the File size text box, type the number of kilobytes you want allocated for the trace file.
- 10. In the Filename text box, type the name of the trace file.

The filename can be up to 32 characters long. The trace file is saved in the NetWare for SAA server's root directory. NetWare for SAA Services Manager warns you if you specify an existing filename. If you receive a warning, you need to specify another filename because NetWare for SAA does not overwrite existing trace files.

- 11. Click the Trace Start icon in the Tool Bar.
- 12. When you want to stop the trace, click the Trace Stop icon.

After running the trace, you can convert the trace binary file to ASCII by using the TRFORMAT utility as discussed in your *NetWare for SAA v1.3 Administration Guide*.

#### **Related Topics**

<u>Changing Server Management Options</u> <u>SNA Sessions Window</u> <u>Trace Window</u>

## Saving Data to a File

NetWare for SAA Services Manager allows you to save data stored in a NetWare for SAA server's log files or data currently displayed in the active NetWare for SAA Services Manager window to a file.

To save information to a file, take the following steps:

- 1. Ensure that the window containing the information you want to save is the active window.
- Choose the File menu and then select the Output command (<Alt+F+O>).

NetWare for SAA Services Manager opens the Output window.

- 3. Specify the type of information you want to save by selecting Screen or Server's Database.
- Select Screen to save the window's current data.

• The effect of selecting Server's Database depends on whether the Audit Trail or Event Log window is active. If you select Server's Database when the Audit Trail window is active, NetWare for SAA Services Manager will save the contents of the server's audit trail log file. If you select Server's Database when the Event Log window is active, NetWare for SAA Services Manager saves all the event log records stored in the server's database.

- 4. Select Local File from the Output To list.
- 5. In the Filename text box, type the name of the file the information will be saved in.
- 6. Click the Output button.

NetWare for SAA Services Manager saves the information in text format to the file specified in Step 5.

#### **Related Topics**

<u>File Menu</u> <u>Output Window</u> <u>Saving Data to the Windows Clipboard</u>

## Saving Data to the Windows Clipboard

Data displayed in a window can be saved to the <u>Microsoft Windows</u> clipboard and then transferred to another Windows application that supports the text format. (You cannot save to the clipboard data listed in the list boxes of the Audit Trail or Event Log windows.)

**Note:** NetWare for SAA Services Manager also allows you to copy data to the Windows clipboard rather than save it to the clipboard. Copying data allows you to transfer data to another Windows application that supports the text or <u>DDE</u> format.

To save data to the Windows clipboard and then transfer that data to another Windows application, take the following steps:

- 1. Ensure that the window containing the information you want to save is the active window.
- Choose the File menu and select the Output command (<Alt+F+O>).
  NetWare for SAA Services Manager opens the Output window.
- 3. Select Screen from the Output From list.
- 4. Select Clipboard from the Output To list.
- 5. Click the Output button.

NetWare for SAA Services Manager copies the current data of the active window to the Windows clipboard.

- 6. Switch to the Program Manager as discussed in your Microsoft Windows documentation.
- 7. Open the application that you want to transfer the information to, and use that program's commands to copy the information from the Windows clipboard to the appropriate place.

#### **Related Topics**

<u>Copying</u> <u>File Menu</u> <u>Output Window</u> Saving Data to a File

## Setting the Event Forwarding Filter

Set the event forwarding filter to specify for which objects and severity levels a NetWare for SAA server sends network events to NetWare for SAA Services Manager. To set an event forwarding filter, take the following steps. (Supervisor-equivalent privileges are required.)

- 1. In the Active Domain window, select the server whose filter you want to set.
- 2. Click the Server Management icon in the Tool Bar.
  - NetWare for SAA Services Manager opens the Server Management Options window.
- 3. Specify which objects you want NetWare for SAA Services Manager to monitor by selecting them or deselecting them in the Management Options list box. By default, all available objects are selected.
- 4. Specify the filter's severity levels by selecting or clearing the check boxes in the Event Forwarding Filter list box.

If you want the server to forward events of a specific severity level, select that level's check box. Otherwise, clear the check box.

- 5. Save your changes by performing one of the following operations:
- Select the Save Selected list to disk check box and click the OK icon. Perform this operation if you want to save the specified settings to be used whenever NetWare for SAA Services Manager is running.
- Clear the Save Selected list to disk check box and then click the OK icon. Perform this operation if you want your changes to be temporary. If you use this procedure, changes made to the severity level check boxes remain effective until you exit NetWare for SAA Services Manager.

However, changes made to the objects remain effective until you exit NetWare for SAA Services Manager or until an object NetWare for SAA Services Manager can manage is installed or loaded on the NetWare for SAA server. If you perform this operation and then install or load a manageable object on the NetWare for SAA server, the new object will be highlighted even if you removed it in Step 4.

#### **Related Topics**

Display and Event Forwarding Filters Server Management Options Window

## **Setting the Audible Alert**

Set the audible alert if you want NetWare for SAA Services Manager to beep whenever it receives <u>event messages</u> of a particular severity level. To set the audible alert, take the following steps:

1. Click the Customize icon in the Tool Bar from the Event Monitor window.

NetWare for SAA Services Manager opens the Customize Events window.

2. Select the Audible Alert check box that matches the severity level of the messages you want NetWare for SAA Services Manager to notify you of.

**Note:** If you specify an audible alert for a severity level, you also must specify that NetWare for SAA Services Manager display events with that severity level.

3. Click the OK icon.

NetWare for SAA Services Manager will save the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### Related Topic

Customize Events Window

## **Setting the Critical Lock**

The critical lock affects how NetWare for SAA Services Manager discards critical <u>event</u> <u>messages</u> after the Event Monitor window's Event list box is full with only critical event messages.

If the critical lock is on, NetWare for SAA Services Manager discards any new message including critical event messages and retains all the currently listed critical messages. If the critical lock is off, NetWare for SAA Services Manager replaces the oldest critical event message with any new message, no matter what severity level the new message has.

To turn the critical lock on, select the Critical Lock check box in the Event Monitor window. The default setting is on.

To turn the critical lock off, clear the Critical Lock check box.

#### **Related Topics**

Event Monitor Window Processing of Network Events

## **Setting the Display Filter**

The display filter allows you to specify the severity levels for which NetWare for SAA Services Manager displays event messages in the Event Monitor window.

To set the display filter, take the following steps:

1. Click the Customize icon in the Tool Bar from the Event Monitor window.

SAA Services Manger opens the Customize Events window.

- Set the display filter by selecting the Display check boxes that correspond to the severity levels of the events for which NetWare for SAA Services Manager is to display messages.
- 3. Click the OK icon.

NetWare for SAA Services Manager saves the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### **Related Topics**

<u>Customize Events Window</u> <u>Display and Event Forwarding Filters</u>

## **Specifying the Number of Event Messages**

To specify the maximum number of event messages that NetWare for SAA Services Manager can monitor at the same time, take the following steps:

- 1. Click the Customize icon in the Tool Bar from the Event Monitor window. NetWare for SAA Services Manager opens the Customize Events window.
- 2. In the Maximum Number of Local Events text box, type the maximum number of events that NetWare for SAA Services Manager can monitor at the same time.

You can specify any number from 1 to 500. The default is 64 messages.

3. Click the OK icon.

NetWare for SAA Services Manager saves the specified settings so that they are used the next time NetWare for SAA Services Manager is started.

#### **Related Topic**

Customize Events Window

### **Turning Off Automatic Scrolling**

Automatic scrolling affects how NetWare for SAA Services Manager displays <u>event</u> <u>messages</u> while the Event Monitor window's Event list box contains more messages than those currently in view. When automatic scroll in on, any new messages appear at the top of the list box and the old messages scroll downward.

To activate the automatic scroll feature, ensure the Stop Scroll check box in the Event Monitor window is selected.

Automatic scroll does not affect the Event Monitor window's list box when the list box becomes full. When the list box becomes full, NetWare for SAA Services Manager automatically scrolls as it discards old messages and displays new messages, depending on the critical lock setting.

#### **Related Topic**

Event Monitor Window Setting the Critical Lock

## **Viewing Servers by Icon**

To view servers in the Active Domain window by icon, click the View By Icon icon in the Tool Bar from the Active Domain window.

#### **Related Topic**

Active Domain Window

## Viewing Servers by Name

To view servers in the Active Domain window by name, click the View By Name icon in the Tool Bar from the Active Domain window.

#### **Related Topic**

Active Domain Window

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | Α                                       | В | С | D | E | F | G | Η | Ι | J | κ | L | м |
| # | Ν                                       | 0 | Р | Q | R | S | Т | U | ۷ | W | X | Y | Ζ |

3C503 3C505 3C523 802.2 Logical Link

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
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Abort Errors Active Domain Adapter Reset Count Adapter Slot Adapter Summary Count Adapter Type AppleTalk Audit Trail Log File

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
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Block ID Bus-out Checks Bytes Received (SNA) Bytes Sent (SNA)

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
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Card Name Channel Resets Circuit Type Command Rejects Communication Executive Communications Protocols Connection Type CSCON CSDOWN CSRESTART CSSET CSSTATUS CTS Custom Logical Link

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | Α                                       | В | С | D | E | F | G | Η | Ι | J | κ | L | М |
| D | Ν                                       | 0 | Р | Q | R | S | Т | U | ۷ | W | X | Y | Ζ |

Data Character Size Data Checks DCE Errors Delayed Received Packets Delayed Transmit Packets Dependent LU Destination Address Destination Name Destination SAP DLPI Errors Downstream PU DTR Dynamic Data Exchange (DDE)

|   | Clie | :k a | let | ter 1 | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |  |  |  |  |
|---|------|------|-----|-------|---|---|---|---|---|---|---|---|---|--|--|--|--|
| _ | Α    | В    | С   | D     | E                                       | F | G | Η | Ι | J | κ | L | м |  |  |  |  |
| Ε | Ν    | 0    | Р   | Q     | R                                       | S | Т | U | ۷ | W | X | Y | Ζ |  |  |  |  |

Equipment Checks Event Log File Event Message Event Records Excessive Collisions

|   | Click a letter to jump to that section. |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| _ | A                                       | В | C | D | E | F | G | Η | Ι | J | κ | L | м |
| F | Ν                                       | 0 | Р | Q | R | S | Т | U | ۷ | W | X | Υ | Ζ |

Fatal RetransmissionsFCS ErrorsFirst Interrupt LineFirst I/O AddressFirst Memory AddressFrame AbortsFrame Lost Errors

G.

There are no entries for this letter.

# H۰

Halt I/Os Host Application Host Buffer Count Host Buffer Size Host Destination Address Host Link Name Host Link Type HostPrint Services •

IBM IBM SDLC IBM Token Ring Driver Idle Timeouts Inactivity Timeouts Independent LU Interventions Required J۰

There are no glossary terms for this letter.



There are no glossary terms for this letter.

# L۰

LAN LCN Link Speed Link Station Role LLC Receive Bytes LLC Receive Errors LLC Receive Packets LLC Transmit Bytes LLC Transmit Errors LLC Transmit Packets LOCal DTE Address Local SAP Address Local SAP Address Logic Link Control (LLC) Logical Adapter Name Logical Unit (LU)

## М.

MAC Address Managed Domain Max LUS Media Type Microsoft Microsoft Excel MLID Receive Packets MLID Transmit Packets MLID Version MS Windows Mulitcast Packets Multidrop Link

## Ν.

Negative Responses Sent NetView NetWare NetWare Communications Security Feature NetWare for SAA Service NetWare HostPrint Services NetWare Loadable Module (NLM) NE1000 NE2000 NE2000 NE3200 NE/2 NE/2 NE/2-32 No ECBs Available Non-Productive Timeouts **O** •

Outstanding Frames Overrun Packets Overruns

## **P** •

Physical Unit (PU) Print Job Printer LU Session Promiscuous Packets Protocol Stack Name PU PU ID PU 2.0 Sessions PU 2.1 Sessions **Q** •

<u>QLLC Logical Link</u> <u>Query Name Requests</u> <u>Queue Depth</u>

# R۰

Raw Sends Receive Bytes Receive Congestion Errors Receive Errors Remote DTE Address Remote Node Type Remote SAP Reply Timeouts Request RUs Received Request RUs Sent R2\_SDLC R3\_SDLC
# **S** •

<u>SAA</u> SDLC Address SDLC Encoding SDLC Logical Link Second I/O Address Second Memory Address Sequence Number Modulus Server Resources Server Icon Service Description Service Name Service Profile SNA Host Link SNA Token Ring Logical Link Source Address Source SAP Specific Name Start Time Status Message Streaming Timeouts System Application Architecture (SAA)

## Τ.

Timeout Sends Token Errors Total Rx Misc Count Total Tx Misc Count Trace Trashed Packets Received Transmit Bytes

# U۰

Underrun Packets Underruns Up-Active LUs Up-Bound LUs Up-Inactive LUs



There are no glossary items for this letter.



<u>Write Retries</u> <u>Write Timeouts</u>



There are no glossary entries for this letter.



There are no glossary entries for this letter.



There are no glossary entries for this letter.

#### 3C503

Represents a driver that facilitates the communication between a 3C503 adapter and a workstation. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### 3C505

Represents a driver that facilitates the communication between a 3C505 adapter and a workstation. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### 3C523

Represents a driver that facilitates the communication between a 3C523 adapter and a workstation. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

## 802.2 Logical Link

Logical end point on an 802.2 link. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **Active Domain**

The set of communications servers that are available and included in the managed domain. This set of servers is displayed in the Active Domain window.

## AppleTalk

The protocol used for communications between Apple computers. AppleTalk is a registered trademark of Apple Computer, Inc.

## Audit Trail Log File

File in which NetWare for SAA records information that identifies who uses which server resources and for how long.

#### **Communication Protocols**

Software that determines how data is transported from one computer to another.

## CSCON

Utility that configures NetWare for SAA.

### **CSDOWN**

NetWare Communication Services command that brings down the Communication Executive.

### CSRESTART

NetWare Communication Services command that restarts the Communication Executive.

#### CSSET

NetWare Communication Services command that configures NetWare Communication Services in Communication Executive v1.2.

## CSSTATUS

The NetWare for SAA status utility.

## Dynamic Data Exchange (DDE)

A feature of MS Windows that links data between Windows applications.

## Event Log File

File in which a NetWare Communication Services product records network event information.

## Event Message

Message describing a network event.

#### **Event Records**

Information recorded in an event log file. Event records include a complete event message and may also provide a brief explanation of what occurred and a recommended action.

## IBM

IBM is a registered trademark of International Business Machines Corporation.

### LAN

Local area network. Computers linked so users can share hard disks, printers, and other peripherals.

## Logical Link Control (LLC)

Link level control protocol also known as link station.

## Logical Unit (LU)

A user port into an SNA network. LU types 0, 1, 2, 3, 4, and 7 can communicate with host applications. LU type 6.2 can only communicate with other LUs of the same type.

#### **Managed Domain**

The set of servers NetWare for SAA Services Manager can manage and monitor. You specify this set of servers the first time NetWare for SAA Services Manager is started, but you can redefine it at any time.

### Microsoft

Microsoft is a registered trademark of Microsoft Corporation.

### Microsoft Excel

Microsoft is a registered trademark and Excel is a trademark of Microsoft Corporation.

#### **MS Windows**

NetWare for SAA Services Manager requires MS Windows 3.1 or higher.

#### **NetView**

Host-based network management application. NetView is a registered trademark of International Business Machines Corporation.

#### NetWare

NetWare is a registered trademark of Novell, Inc.

#### **NetWare for SAA Service**

A communication service that provides communication between a NetWare local area network (LAN) and an IBM System Application Architecture (SAA) environment. SAA is a registered trademark of International Business Machines Corporation.
#### **NetWare Loadable Modules (NLM)**

A program that provides communication services for NetWare and can be loaded onto a server without affecting current server operations. NetWare Loadable Module and NLM are trademarks of Novell, Inc.

## Physical Unit (PU)

A node in an SNA network that supports one or more logical units (LUs).

#### **NetWare Communications Security Feature**

When this security feature is active, a NetWare for SAA server's users must be valid NetWare users with permission to use the session they have requested.

#### Server Icon

The graphic representation of a NetWare for SAA server that NetWare for SAA Services Manager is managing. NetWare for SAA Services Manager displays server icons in the Active Domain window.

#### Server Resources

The services, protocols, files, and adapters a NetWare for SAA server manages.

#### **Service Profile**

A collection of information about the server's connection to the host and the sessions to be obtained through that connection.

#### **Status Message**

Messages that indicate NetWare for SAA Services Manager is performing an operation or has completed an operation or that explain why NetWare for SAA Services Manager cannot complete an operation. NetWare for SAA Services Manager displays status messages in the message box at the bottom of NetWare for SAA Services Manager windows.

#### Trace

A record of the SNA data stream between a NetWare for SAA server and an IBM host and between a workstation and a NetWare for SAA server.

#### **Abort Errors**

Number of times the abort delimiter was transmitted. This delimiter is transmitted if a transient error or hard error internal to the ring station is detected or if the third byte of a free token is not an ending delimiter.

# Adapter Summary Count

Number of errors detected by the SDLC driver.

## Adapter Type

Category specified for the adapter in CSCON. The adapter is classified as either Primary or Alternate.

#### **Block ID**

Unique, three-character, SNA node ID assigned to the physical unit (PU) in CSCON. This is the same ID that is assigned to the PU on the host.

## **Bytes Received**

Number of bytes contained in all request units (RUs) received from the host.

## **Bytes Sent**

Number of bytes contained in all request units (RUs) sent to the host.

### **Command Rejects**

For SDLC logical links, this is the number of command rejects (REJ) that were issued to request transmission or retransmission of numbered information (I) frames.

For Bus-Tech channel adapters, this is the number of command reject errors that were detected on the channel and reported to the mainframe with a unit check status.

## **DCE Errors**

Number of data circuit terminating equipment (DCE) errors.

#### **Destination SAP**

The service access point (SAP) used at the destination end of the logical link.

## **Excessive Collisions**

Number of transmissions that were aborted because of excessive collisions on the wire.

#### **Fatal Retransmissions**

Number of times there was no response to a FREE BUFFER ENQUIRY after the maximum number of retries had been reached.

## FCS Errors

Number of errors detected by the frame check sequence (FCS) field.

#### Frame Aborts

Number of times data was not completely transmitted.

#### Frame Lost Errors

Number of times the NetWare for SAA server transmitted frames that failed to return to the server.

#### Idle Timeouts

Number of times the protracted idle condition has been detected.

## Inactivity Timeouts

Number of timeouts that occurred because bits that did not result in frames were received by the logical link control (LLC).

## LLC Receive Bytes

Number of in-sequence bytes the logical link control (LLC) received.

#### **LLC Receive Errors**

For SDLC logical links, the number of out-of-sequence data frames the logical link control (LLC) received.

For SNA token ring logical links, the number of erroneous information (I) frames the logical link control (LLC) received.

## LLC Receive Packets

Number of packets the logical link control (LLC) received.

# LLC Transmit Bytes

Number of bytes the logical link control (LLC) transmitted.

#### LLC Transmit Errors

For SDLC logical links, the number of data frames the logical link control (LLC) retransmitted.

For SNA token ring logical links, the number of erroneous information (I) frames the logical link control (LLC) transmitted.

#### LLC Transmit Packets

For SDLC logical links, the number of data frames the logical link control (LLC) transmitted.

For SNA token ring logical links, the number of packets the logical link control (LLC) transmitted.

## MLID Receive Packets

Number of packets received by the Multiple Link Interface Driver (MLID).

### MLID Transmit Packets

Number of packets transmitted by the Multiple Link Interface Driver (MLID).

#### **Multicast Packets**

Number of packets that have multidestination addresses, which are associated with one or more stations on a given network.

## Negative Responses Sent

Number of negative responses sent to the host.

#### **Non-Productive Timeouts**

Number of timeouts that occurred because the SDLC driver received bits that did not result in frames.

## **Outstanding Frames**

Number of frames not yet acknowledged by the remote link station to which they were transmitted.
### **Overrun Packets**

Number of packets the Network Interface Controller (NIC) could not accept because the receive buffers were unavailable.

#### **Overruns**

For SDLC logical links, the number of times a new frame was received before the previous frame was completely processed.

For Bus-Tech channel adapters, the number of data overrun errors detected on the channel and reported to the mainframe with a unit check status.

### **Promiscuous Packets**

Number of packets the Network Interface Controller (NIC) received because the adapter is in a promiscuous mode to receive all packets with a physical address.

### **PU ID**

Unique, five-character, SNA node ID that is defined when NetWare for SAA is configured in CSCON. This is the same ID that is assigned to that SNA node on the host.

## Query Name Requests

Number of requests to query sent to a general or specific port name.

### **Raw Sends**

Number of packets the protocol stack formatted.

## **Receive Congestion Errors**

Number of times packets were discarded because no more buffers were available.

### **Receive Errors**

Number of times packets were discarded because a receive error [such as cyclical redundancy check (CRC) or frame alignment] was detected.

## **Reply Timeouts**

Number of times a remote station failed to respond to a link station's command poll.

## **Request RUs Received**

Number of request units (RUs) received from the host.

## **Request RUs Sent**

Number of request units (RUs) sent to the host.

## **SDLC Encoding**

Indicates whether the data is encoded for NRZ or NRZI. (No value is listed for token ring connections.)

### Source SAP

The service access point (SAP) used at the local end of the logical link.

### **Timeout Sends**

Number of times a transmit packet times out waiting for a workstation to acknowledge a FREE BUFFER ENQUIRY.

### **Token Errors**

Number of errors that required a token to be transmitted. These errors indicate that there is a circulating priority token, a circulating frame, or a lost frame or token.

### **Trashed Packets Received**

Number of malformed packets the NetWare for SAA server received.

### **Underrun Packets**

Number of packets not sent because the Network Interface Controller (NIC) could not access the bus before the first in first out (FIFO) queue was empty.

### Underruns

Number of times data was not completely transmitted because the data was not available.

# **Up-Active LUs**

Number of active LUs not yet bound to an application.

# **Up-Bound LUs**

Number of active LUs that have received a BIND command, which provides access to an application.

# **Up-Inactive LUs**

Number of LUs the host has not yet activated.

### **Write Retries**

Number of retransmissions of SDLC information (I) packets. The value of this attribute will always be 0.

### Write Timeouts

Number of timeouts that occurred during write operations. The value of this attribute will always be 0.

## Adapter Slot

Number of the slot in which the board is installed.

### Card Name

Name assigned to the LAN adapter by its manufacturer.

## Circuit Type

Type of circuit being used. The possible values for this field are SVC (switched virtual circuit) or PVC (permanent virtual circuit).

## **Connection Type**

Type of SDLC connection (switched or non-switched) established between the host and the NetWare for SAA server.

# CTS

Number of Clear-to-Send (CTS) signals detected.

### Data Character Size

Length of character transmitted through the port. This size can be 5, 6, 7, or 8 bits.

### **Destination Address**

The media access control (MAC) address of the remote node.

### **Destination Name**

The remote address as required by the custom protocol stack. This is the entry specified in CSCON's Data Link Custom Data field.

# DTR

Number of Data Terminal Ready signals detected.

## **First Interrupt Line**

The primary interrupt vector number.

### First I/O Address

The absolute primary base I/O port for the adapter.

## First Memory Address

The adapter's absolute primary memory address.

## **Host Destination Address**

Address of the host destination node.
### Host Link Name

The service profile name the NetWare Communication Services administrator assigned to the host in CSCON.

### Host Link Type

Type of connection [SDLC, QLLC, or ITRN (IBM Token Ring)] established between the host and the NetWare for SAA server.

#### LCN

The logical channel number assigned to a virtual circuit. A logical channel is a communication path between two X.25 nodes.

# Link Speed

Link speed the adapter supports.

#### Link Station Role

The NetWare for SAA server's role, which is either primary, secondary, or negotiable.

#### Local SAP Address

The service access point (SAP) used at the local end of the logical link.

#### Local DTE Address

The Data Terminal Equipment (DTE) address that other nodes on an X.25 network use to transmit frames to or receive frames from the local node.

### Logical Adapter Name

Name that the NetWare Communication Services administrator assigns to the SNA, 802.2, QLLC, SDLC, or custom adapter in CSCON.

#### MAC Address

Media access control address of a LAN station. (Not applicable to an SDLC adapter.)

#### Max LUs

Maximum number of LUs for which the NetWare for SAA server is configured.

# Media Type

Type of physical connection (token ring, Ethernet, SDLC, ARCnet, or X.25).

#### **MLID Version**

Major and minor version numbers of the MLID.

### Multidrop Link

Indicates whether NetWare for SAA is a station on a multi-drop link.

#### **Protocol Stack Name**

Name of the protocol stack NetWare Loadable Module (NLM). (The name of custom protocol stack NLMs can be assigned in CSCON.)

#### **Remote DTE Address**

The Data Terminal Equipment (DTE) address of the remote node.

### Remote Node Type

The SNA node type of the computer to which the NetWare for SAA server is sending information. Peripheral Node Type 2.1 in this field indicates the remote node is an SNA peripheral node with a peer-to-peer connection. Subarea Node Type 4 in this field indicates the remote node is a controller. Subarea Node Type 5 in this field indicates the remote node is a host.

#### **Remote SAP**

The service access point (SAP) used at the remote end of the logical link.

### SDLC Address

The SDLC station address currently in use.

#### Second I/O Address

The absolute secondary base I/O port for the adapter.

### Second Memory Address

The adapter's absolute secondary memory address.

#### Service Name

The name the NetWare Communication Services administrator assigned to the communication service in CSCON.

# Sequence Number Modulus

Maximum number of frames the NetWare for SAA server can send before it waits for the remote node to send an RR (Receive Ready).

#### Source Address

The media access control (MAC) address of the local adapter.

### Specific Name

The specific name assigned to the port by the NetWare Communication Services administrator. This is a unique name users can specify to access the port.

#### **NE/2**

Represents a driver that establishes an Ethernet connection between a workstation and a NetWare for SAA server. (NE/2 is a trademark of Novell, Inc.) This is an object NetWare for SAA Services Manager can either manage or obtain information about.

### **Custom Logical Link**

Logical end point on a custom-protocol link. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **Communication Executive**

A set of NetWare Loadable Modules (NLMs) that supplies tracing, security, connectivity, network management, and other NetWare for SAA services. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### IBM\_SDLC

Driver that helps establish an SDLC host link between IBM equipment and NetWare for SAA. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **IBM Token Ring Driver**

Driver that facilitates communication between an IBM Token Ring adapter and NetWare Communication Services. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### NE/2-32

Represents a driver that establishes an Ethernet connection between a workstation and a NetWare for SAA server. (NE/2-32 is a trademark of Novell, Inc.) This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### NE1000

Represents a driver that establishes an Ethernet connection between a workstation and a NetWare for AAA server. (NE1000 is a trademark of Novell, Inc.) This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### NE2000

Represents a driver that establishes an Ethernet connection between a workstation and a NetWare for SAA server. (NE2000 is a trademark of Novell, Inc.) This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **NE3200**

Represents a driver that establishes an Ethernet connection between a workstation and a NetWare for SAA server. (NE3200 is a trademark of Novell, Inc.) This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### NW 386 OS

NetWare operating system. This is an object NetWare for SAA Services Manager can either manage and obtain information about.

#### **NetWare for SAA Service**

A communication service that provides communication between a NetWare local area network (LAN) and an IBM System Application Architecture (SAA) environment. SAA is a registered trademark of International Business Machines Corporation. This is an object NetWare for SAA Services Manager can either manage and obtain information about.

### **QLLC Logical Link**

Logical end point on a QLLC link. This is an object NetWare for SAA Services Manager can either manage or obtain information about.
### R2\_SDLC

Driver that helps establish an SDLC host link between IBM equipment and NetWare for SAA. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

## R3\_SDLC

Driver that helps establish an SDLC host link between IBM equipment and NetWare for SAA. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

## **SDLC Logical Link**

Logical end point on an SDLC link. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **SNA Host Link**

Logical link between a NetWare for SAA server and the host. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### **PU 2.0 Sessions**

SNA LU x, 1, 2, or downstream physical unit (PU). These are objects NetWare for SAA Services Manager can either manage or obtain information about.

### PU 2.1 Sessions

SNA LU6.2 sessions. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

## **SNA Token Ring Logical Link**

Logical end point on a token ring logical link. This is an object NetWare for SAA Services Manager can either manage or obtain information about.

#### No ECBs Available

Number of times the adapter was unable to allocate a buffer during its first attempt.

### Total Tx Misc Count

Number of errors detected while transmitting to the channel.

### Total Rx Misc Count

Number of errors detected while receiving from the channel.

## **Transmit Bytes**

Number of bytes transmitted to the channel (low order).

# **Receive Bytes**

Number of bytes received from the channel (low order).

## Adapter Reset Count

Number of times the adapter was reset.

## **Queue Depth**

Number of packets waiting to be transmitted to the channel.

## Halt I/Os

Number of halt I/Os detected on the channel.

## Streaming Timeouts

Number of times a channel data transfer encountered a streaming timeout.

## **Channel Resets**

Number of system resets detected on the channel.

## **Interventions Required**

Number of intervention-required errors detected on the channel and reported to the mainframe with a unit check status.

#### **Bus-out Checks**

Number of bus-out check errors detected on the channel and reported to the mainframe with a unit check status.

## **Equipment Checks**

Number of equipment check errors detected on the channel and reported to the mainframe with a unit check status.

#### **Data Checks**

Number of data check errors detected on the channel and reported to the mainframe with a unit check status.

### **DLPI Errors**

Number of errors detected in the protocol between the adapter driver and NetWare for SAA.

## **Delayed Transmit Packets**

Number of packets received from the channel that were delayed momentarily because of a flow control condition in the channel adapter.

## **Delayed Received Packets**

Number of packets received from the channel that were delayed momentarily because of a flow control condition in NetWare for SAA.

#### **Host Buffer Count**

Number of buffers provided by the mainframe in each CCW chain.

## Host Buffer Size

Size of each mainframe buffer.

### Start Time

Date and time the service profile was loaded.

## **Service Description**

Full name of the SAA service for which the profile is configured.

#### **Downstream PU**

A physical unit (PU) located downstream from a VTAM host. In the NetWare for SAA environment, a downstream PU is further downstream than the NetWare for SAA server. NetWare for SAA has the ability to pass dependent logical unit (LU) traffic to these downstream PUs. The downstream PUs are transparent to the host -- it sees only the NetWare for SAA server.

#### **Dependent LU**

A logical unit (LU) that is dependent upon a connection to a host and is activated and controlled by a system services control point (SSCP) in order to engage a session.

#### **Independent LU**

A logical unit (LU) that is not dependent upon a connection to a host. It allows communication with anything running APPC, whether it is an upstream system such as an AS/400, or another server running NetWare for SAA.

### System Application Architecture (SAA)

An application architecture used to develop application programs for the IBM Systems Network Architecture (SNA) environment. SAA is a registered trademark of International Business Machines Corporation.

## **Active and Managed Domains**

When you access the Change Managed Domain window, NetWare for SAA Services Manager displays a list of the available NetWare for SAA servers attached to the network from the server specified by the PREFERREDBINDERY parameter. You define which servers (available and unavailable) you want NetWare for SAA Services Manager to manage and monitor. This list of servers to be managed is called the managed domain.

The active domain contains all the currently active NetWare for SAA servers in the managed domain. In addition, servers that become active after NetWare for SAA Services Manager is started are added to the active domain. Servers that become unavailable or removed from the managed domain after NetWare for SAA Services Manager is started are removed from the active domain.

#### **Related Topics**

<u>Adding Servers</u> <u>Active Domain Window</u> <u>Redefining the Managed Domain</u> <u>Removing Servers</u>

#### Commands

NetWare for SAA Services Manager provides a Menu Bar as a way of invoking commands. To invoke a command, make the desired window active and select a command from the Menu Bar. You can also access NetWare for SAA Services Manager functions by selecting a server and clicking an icon in the Tool Bar.

#### **Related Topics**

<u>Commands</u> <u>Menus</u> <u>Icons</u>

# **Configuration Attributes**

NetWare for SAA Services Manager allows you to obtain configuration data for the following objects:

802.2 Logical LinkConfiguration Attributes Adapter Configuration Attributes Custom Logical Link Configuration Attributes QLLC Logical Link Configuration Attributes SDLC Logical Link Configuration Attributes Service Profile Configuration Attributes SNA Host Link v1.2 Configuration Attributes SNA Host Link v1.3 Configuration Attributes

#### **Related Topics**

Adapter Configuration Window Obtaining Configuration Data Logical Link Configuration Window Service Profile Configuration Window SNA Host Link Configuration Window
## **802.2 Logical Link Configuration Attributes**

Destination Address Host Link Name Link Station Role Local SAP Logical Adapter Name Media Type Protocol Stack Name Remote Node Type Remote SAP Sequence Number Modulus Service Name Source Address

## **Destination Address**

Media access control (MAC) address of the remote node.

## Host Link Name

Service profile name assigned in CSCON.

## Link Station Role

Primary, secondary, or negotiable server role.

## Local SAP

Service access point (SAP) used at the local end of the logical link.

# Logical Adapter Name

Name assigned to the 802.2 adapter in CSCON.

# Media Type

Type of physical connection.

## **Protocol Stack Name**

Name of the protocol stack NetWare Loadable Module (NLM).

**Remote Node Type** SNA node type to which the server is sending information.

#### **Remote SAP**

Services access point (SAP) used at the remote end of the logical link.

## **Sequence Number Modulus**

Maximum number of frames the server can send before it waits for the remote node to send a Receive Ready (RR).

## **Service Name**

Name assigned to the communication service in CSCON.

## **Source Address**

Media access control (MAC) address of the local adapter.

## **Adapter Configuration Attributes**

Adapter Slot Card Name First Interrupt Line First I/O Address First Memory Address Link Speed MAC Address Media Type MLID Version Second I/O Address Second Memory Address

# Adapter Slot

Number of the slot in which the board is installed.

# **Card Name**

Name assigned to the adapter by the manufacturer.

# **First Interrupt Line**

Primary interrupt vector number.

## First I/O Address

Absolute primary base I/O port for the adapter.

# First Memory Address

Absolute primary memory address.

# Link Speed

Link speed the adapter supports. MSB=1 indicates Kbps; MSB=0 indicates Mbps.

## **MAC Address**

Media access control (MAC) address of a LAN station.

#### **MLID Version**

Major and minor version numbers of the multiple link interface driver (MLID).

## Second I/O Address

Absolute secondary base I/O port for the adapter.

# Second Memory Address

Absolute secondary memory address.

# **Custom Logical Link Configuration Attributes**

Host Link Name Link Station Role Logical Adapter Name Media Type Protocol Stack Name Remote DTE Address Remote Node Type Service Name

#### **Remote DTE Address**

Remote node address required by the custom protocol stack. This is the entry specified in CSCON's Data Link Custom Data field.

## **QLLC Logical Link Configuration Attributes**

Circuit Type Host Link Name Link Station Role Local DTE Address Logical Adapter Name Logical Channel Number (LCN) Media Type Protocol Stack Name Remote DTE Address Remote Node Type Service Name

# **Circuit Type**

Type of circuit used, switched virtual circuit (SVC) or permanent virtual circuit (PVC).

## Logical Channel Number

Logical channel number assigned to a virtual circuit. A logical channel is a communication path between two X.25 nodes.

## Local DTE Address

Data terminal equipment (DTE) address that other X.25 nodes use to transmit and receive frames.

## **SDLC Logical Link Configuration Attributes**

Connection Type Duplex Mode Host Link Name Link Station Role Logical Adapter Name Media Type Multidrop Link Protocol Stack Name Remote Node Type SDLC Address Sequence Number Modulus Service Name

# **Connection Type**

Type of SDLC connection (switched or nonswitched) established between the host and the server.

# **Duplex Mode**

Data transmission mode (half duplex or full duplex).

# Multidrop Link

Indicates (yes/no) whether NetWare for SAA is a station on a multidrop link.

## **SDLC Address**

SDLC station address currently in use.

# **Service Profile Configuration Attributes**

Service Description Service Name Start Time Version
## **Service Description**

Full name of the SAA service for which the profile is configured. (NetWare for SAA v1.3 only)

### Service Name

Name of the service profile.

## **Start Time**

Date and time the service profile was loaded.

#### Version

Version number of the SAA service for which the profile is configured.

# **SNA Host Link v1.2 Configuration Attributes**

<u>Host Link Type</u> <u>Max LUs</u>

## Host Link Type

Type of connection (SDLC, QLLC, or ITRN (IBM Token Ring)) established between the host and the server.

#### Max LUs

Maximum number of dependent LUs your copy of NetWare for SAA can support. For dependent LUs, this is also the maximum number of sessions.

# SNA Host Link v1.3 Configuration Attributes

Adapter Type Block ID Destination SAP Host Destination Address Host Link Type Link Station Role Logical Adapter Name Max LUS Physical Unit (PU) ID Protocol Stack Name SDLC Encoding Source SAP

# Adapter Type

Adapter category specified in CSCON. Categories are either primary or alternate.

#### **Block ID**

Unique, three-character SNA node ID assigned to the physical unit (PU) in CSCON. This is the same ID assigned to that PU on the host.

#### **Destination SAP**

Service access point (SAP) used at the destination end of the logical link.

#### **Host Destination Address**

Address of the host destination node.

## Physical Unit (PU) ID

Unique, five-character SNA node ID defined when NetWare for SAA is configured in CSCON. This is the same ID assigned to the SNA node on the host.

## **SDLC Encoding**

Indicator to determine what other data is encoded for NRZ or NRZI. (No value is listed for token ring connections.

#### **Source SAP**

Service access point (SAP) used at the local end of the logical link.

#### **Display and Event Forwarding Filters**

NetWare for SAA Services Manager enables you to customize for which objects and severity levels event messages are forwarded to and displayed in the Event Monitor window. You use the display filter to determine for which severity levels NetWare for SAA Services Manager will display network events. You use the event forwarding filter to determine for which objects and severity levels a server forwards events to NetWare for SAA Services Manager.

Display filter

This filter determines whether NetWare for SAA Services Manager displays a forwarded event message. From the Customize Events window, you select the severity levels of the events you want NetWare for SAA Services Manager to display in the Event Monitor's list box. If an event message is forwarded to NetWare for SAA Services Manager and the event severity does not match one of the selected severity levels, NetWare for SAA Services Manager does not notify you of the event.

Event Forwarding filter

From the Server Management Options window, this filter specifies for which objects and severity levels a server forwards messages to NetWare for SAA Services Manager. The objects you can include in a NetWare for SAA server's event forwarding filter depend on that server's hardware and software, and are listed below.

- <u>802.2 Logical Link</u>
- <u>Communication Executive</u>
- <u>Custom Logical Link</u>
- IBM Token Ring Driver
- NetWare for SAA Service
- QLLC Logical Link
- SDLC Logical Link
- <u>SNA Host Link</u>
- <u>SNA Token Ring Logical Link</u>

#### **Related Topics**

<u>Processing of Network Events</u> <u>Setting the Event Forwarding Filter</u> <u>Setting the Display Filter</u> <u>Severity Levels</u>

#### **Graphic Display of Statistical Data**

NetWare for SAA Services Manager allows you to display statistical data in graphs or pie charts. You can display statistical data for SNA Host Link service component, PU 2.0 Sessions, PU 2.1 Sessions, adapters, and LLC protocols (logical links). NetWare for SAA Services Manager allows you to specify the statistical attributes to graph and the graphic display options. You display statistical data by selecting an object or service component in the Server Status window and clicking the Graph icon or Pie icon.

#### **Related Topics**

Collecting and Displaying Statistics Graph Setting Window Graph Statistics Window Pie Settings Window Pie Statistics Window Server Status Window Statistical Attributes

#### **NetWare for SAA Link Management**

NetWare for SAA Services Manager allows you to collect and display statistical and configuration data for the physical units (PUs), logical link (LLC) protocols (logical links), and adapters used for the SAA links on the NetWare for SAA server you are managing. This allows you to monitor and evaluate the performance of your NetWare for SAA links through the following data:

Statistics and configuration data for PU 2.0 connections

• LLC protocol (logical link) statistics and configuration data for the logical link sublayer functions

• Adapter statistics and configuration data for the media access control (MAC) sublayer functions

This data can help you establish performance standards for the NetWare for SAA server links and can assist you in narrowing the scope and cause of connection problems.

#### **Related Topics**

<u>Collecting and Displaying Statistical Data</u> <u>Configuration Attributes</u> <u>Obtaining Configuration Data</u> <u>Statistical Attributes</u>

#### **Objects That Provide Information**

Whenever NetWare for SAA Services Manager is monitoring network events, managing NetWare for SAA servers or their <u>resources</u>, or accessing a server's log files, it obtains information from the following objects.

3C503 <u>3C505</u> 3C523 802.2 Logical Link **Communication Executive** Custom Logical Link IBM\_SDLC IBM Token Ring Driver NE/2 NE/2-32 <u>NE1000</u> <u>NE2000</u> <u>NE3200</u> NetWare for SAA Service PU 2.0 Sessions PU 2.1 Sessions **QLLC Logical Link** R2 SDLC R3 SDLC SDLC Logical Link SNA Host Link SNA Token Ring Logical Link

#### **Processing of Network Events**

NetWare for SAA Services Manager processes network events in the following manner:

- A NetWare for SAA server detects an event.
  - A NetWare for SAA server uses the event forwarding filter to determine whether the <u>event message</u> is forwarded to NetWare for SAA Services Manager. If the event forwarding filter is set for the related object and severity level, the server forwards the event to NetWare for SAA Services Manager. Otherwise, the message is not forwarded.

• When NetWare for SAA Services Manager receives an event message, it checks its display filter to determine whether to display the event message. If the display filter is set for the related severity level, NetWare for SAA Services Manager displays the event message in the Event Monitor window. Otherwise, it is not displayed.

If the server's Event Log State setting is on, event messages are logged in the server's event log file independently of the event forwarding filter and display filter settings.

#### **Related Topics**

Display and Event Forwarding Filters Event Monitor Window Setting the Critical Lock Setting the Display Filter Setting the Event Forwarding Filter Severity Levels

#### **Severity Levels**

The following table describes the various severity levels of network events. Levels are presented in the order of their severity.

# Severit Description y Level

| Critical          | Indicates a managed<br>object is out of service.<br>Respond to critical events<br>immediately.  |
|-------------------|---|
| Major             | Indicates performance<br>degradation of a<br>managed object. It is<br>urgent that you respond<br>to major events.   |
| Minor             | Indicates problems that<br>do not seriously affect a<br>managed object's service<br>or operation. Respond to<br>minor events as soon as<br>possible.  |
| Warning           | Indicates a potential<br>problem has been<br>detected before there are<br>any noticeable effects.<br>Respond to warning<br>events as soon as<br>possible to prevent them<br>from affecting a managed<br>object. |
| Informat<br>ional | Does not indicate a<br>problem but provides<br>status or other data you<br>may want to know about.<br>You need not respond to<br>informational events.  |
| Indeter<br>minate | Indicates NetWare for<br>SAA Services Manager<br>could not assess the<br>impact of the event.<br>Examine indeterminate<br>events to determine<br>whether any action is<br>necessary.                            |

#### **Related Topics**

Processing of Network Events Setting the Critical Lock

#### Severity Level Colors

### **Severity Level Colors**

To help you quickly identify the severity level of network events, NetWare for SAA Services Manager can display <u>event messages</u> and <u>server icons</u> in the following severity level colors:

| Color   | Severity Level                     |
|---------|------------------------------------|
| Red     | Critical                           |
| Brown   | Major                              |
| Yellow  | Minor                              |
| Magenta | Warning                            |
| Green   | Informational and<br>Indeterminate |

#### **Related Topics**

Displaying Event Messages in Color Displaying Server Icons In Color Severity Levels

#### **Statistical Attributes**

NetWare for SAA Services Manager enables you to collect and display statistical attributes for the following adapters, host links, and logical links.

802.2 Logical Link Statistical AttributesBus-Tech Channel Adapter Statistical AttributesCustom Logical Link Statistical AttributesEthernet Adapter Statistical AttributesOther Adapter Statistical AttributesQLLC Logical Link Statistical AttributesSDLC Adapter Statistical AttributesSDLC Logical Link Statistical Attributes v1.2SDLC Logical Link Statistical Attributes v1.3SNA Host Link Statistical AttributesSNA Token Ring Logical Link Statistical AttributesToken Ring Adapter Statistical Attributes

#### **Related Topics**

Collecting and Displaying Statistical Data Graph Setting Window Graph Statistics Window NetWare for SAA Link Management Pie Settings Window Pie Statistics Window

#### **802.2 Logical Link Statistical Attributes**

LLC Receive Bytes LLC Receive Errors LLC Receive Packets LLC Transmit Bytes LLC Transmit Errors LLC Transmit Packets Outstanding Frames Reply Timeouts

# LLC Receive Bytes

Number of in-sequence bytes the LLC received.

#### **LLC Receive Errors**

Number of out-of-sequence data frames the LLC received.

#### **LLC Receive Packets**

Number of in-sequence data frames the LLC received.

# LLC Transmit Bytes

Number of bytes the LLC transmitted.

#### LLC Transmit Errors

Number of data frames the LLC retransmitted.

#### **LLC Transmit Packets**

Number of data frames the LLC transmitted.

# **Outstanding Frames**

Number of frames not yet acknowledged by the remote logical link that they were transmitted to.

## **Reply Timeouts**

Number of times a remote station failed to respond to a logical link's command poll.

#### **Bus-Tech Channel Adapter Statistical Attributes**

Adapter Reset Count Bus-out Checks Channel Resets Command Rejects Data Checks **Delayed Received Packets Delayed Transmit Packets** DLPI Errors Equipment Checks <u>Halt I/Os</u> Host Buffer Count Host Buffer Size Interventions Required MLID Receive Packets MLID Transmit Packets No ECBs Available <u>Overruns</u> Queue Depth Receive Bytes Streaming Timeouts Total Rx Misc Count Total Tx Misc Count Transmit Bytes

# Adapter Reset Count

Number of times the adapter was reset.

#### **Bus-out Checks**

Number of bus-out check errors detected on the channel and reported to the host with a unit check status.
#### **Channel Resets**

Number of system resets detected on the channel.

## **Command Rejects**

Number of command reject errors detected on the channel and reported to the host with a unit check status.

#### **Data Checks**

Number of data check errors detected on the channel and reported to the host with a unit check status.

## **Delayed Received Packets**

Number of packets received from the channel that were delayed because of a flow control condition in the channel adapter.

## **Delayed Transmit Packets**

Number of packets transmitted to the channel that were delayed because of a flow control condition in the channel adapter.

#### **DLPI Errors**

Number of errors detected in the protocol between the adapter driver and NetWare for SAA.

## **Equipment Checks**

Number of equipment check errors detected on the channel and reported to the host with a unit check status.

### Halt I/Os

Number of halt I/Os detected on the channel.

#### **Host Buffer Count**

Number of buffers provided by the host in each CCW chain.

### **Host Buffer Size**

Size of each host buffer.

# **Interventions Required**

Number of intervention required errors detected on the channel and reported to the host with a unit check status.

#### **MLID Receive Packets**

Number of packets received from the channel.

#### **MLID Transmit Packets**

Number of packets transmitted to the channel.

## **No ECBs Available**

Number of times the adapter was unable to allocate a buffer during its first attempt.

#### **Overruns**

Number of data overrun errors detected on the channel and reported to the host with a unit check status.

## **Queue Depth**

Number of packets waiting to be transmitted to the channel.

## **Receive Bytes**

Number of bytes received from the channel (low order).

## **Streaming Timeouts**

Number of times a channel data transfer encountered a streaming timeout.

#### **Total Rx Misc Count**

Number of errors detected while receiving from the channel.

#### **Total Tx Misc Count**

Number of errors detected while transmitting to the channel.

## **Transmit Bytes**

Number of bytes transmitted to the channel (low order).

#### **Custom Logical Link Statistical Attributes**

LLC Receive Bytes LLC Receive Errors LLC Receive Packets LLC Transmit Bytes LLC Transmit Errors LLC Transmit Packets

### **Ethernet Adapter Statistical Attributes**

Excessive Collisions MLID Receive Packets MLID Transmit Packets Multicast Packets Overrun Packets Promiscuous Packets Receive Errors Trashed Packets Received Underrun Packets

#### **Excessive Collisions**

Number of transmissions aborted because of excessive collisions.

#### **MLID Receive Packets**

Number of packets received by the multiple link interface drvier (MLID).

#### **MLID Transmit Packets**

Number of packets transmitted by the multiple link interface driver (MLID).

#### **Multicast Packets**

Number of packets with multidestination addresses, which are associated with one or more stations on a given network.

#### **Overrun Packets**

Number of packets the Network Interface Controller (NIC) could not accept because the receive buffers were all unavailable.

#### **Promiscuous Packets**

Number of packets the Network Interface Controller (NIC) received because the adapter is in a promiscuous mode to receive all packets with a physical address.

#### **Receive Errors**

Number of times packets were discarded because a receive error (such as cyclical redundancy check (CRC) or frame alignment) was detected.

### **Trashed Packets Received**

Number of malformed packets the server received.

#### **Underrun Packets**

Number of packets not sent because the Network Interface Controller (NIC) could not access the bus before the first-in-first-out (FIFO) was empty.

## **Other Adapter Statistical Attributes**

MLID Receive Packets MLID Transmit Packets Receive Congestion Error

## **Receive Congestion Errors**

Number of times packets were discarded because no more buffers were available.

### **QLLC Logical Link Statistical Attributes**

LLC Receive Bytes LLC Receive Errors LLC Receive Packets LLC Transmit Bytes LLC Transmit Errors LLC Transmit Packets

## **SDLC Adapter Statistical Attributes**

MLID Receive Packets MLID Transmit Packets
## SDLC Logical Link Statistical Attributes v1.2

Adapter Summary CountCommand RejectsConnection RetriesDCE ErrorsFCS ErrorsFrame AbortsIdle TimeoutsLLC Receive PacketsLLC Transmit PacketsNon-Productive TimeoutsOverrunsUnderrunsWrite RetriesWrite Timeouts

# Adapter Summary Count

Number of errors detected by the SDLC driver.

## **Command Rejects**

Number of command rejects (REJ) issued to request transmission or retransmission of numbered information (I) frames.

## **Connection Retries**

Number of connection problems, such as loss of carrier. The value of this attribute is always 0.

## **DCE Errors**

Number of data circuit terminating equipment (DCE) errors.

## **FCS Errors**

Number of errors detected by the FCS field.

## **Frame Aborts**

Number of times data was not completely transmitted.

## **Idle Timeouts**

Number of times the protracted idle condition was detected.

## **Non-Productive Timeouts**

Number of timeouts that occurred because the SDLC driver received bits that did not result in frames.

### **Overruns**

Number of times a new frame was received before the previous frame was completely processed.

### Underruns

Number of times data was not completely transmitted because the data was not available.

## **Write Retries**

Number of retransmissions of SDLC information (I) packets. The value of this attribute is always 0.

## **Write Timeouts**

Number of timeouts that occurred during write operations. The value of this attribute is always 0.

## SDLC Logical Link Statistical Attributes v1.3

Command Rejects Connection Retries DCE Errors FCS Errors Frame Aborts Idle Timeouts LLC Receive Bytes LLC Receive Errors LLC Receive Packets LLC Transmit Bytes LLC Transmit Errors LLC Transmit Packets Non-Productive Timeouts Outstanding Frames <u>Overruns</u> Reply Timeouts <u>Underruns</u> Write Retries Write Timeouts

## **SNA Host Link Statistical Attributes**

Bytes Received Bytes Sent Negative Responses Sent Request RUs Received Request RUs Sent Up-Active LUs Up-Bound LUs Up-Inactive LUs

## **Bytes Received**

Number of bytes contained in all request units (RUs) received from the host.

## **Bytes Sent**

Number of bytes contained in all RUs sent to the host.

# Negative Responses Sent

Number of negative responses sent to the host.

## **Request RUs Received**

Number of request units (RUs) received from the host.

## **Request RUs Sent**

Number of request units (RUs) sent to the host.

# **Up-Active LUs**

Number of active LUs not yet bound to an application.

## **Up-Bound LUs**

Number of LUs that have received a BIND command, which provides access to an application.

## **Up-Inactive LUs**

Number of LUs that the host has not yet activated.

# **SNA Token Ring Logical Link Statistical Attributes**

Inactivity Timeouts
LLC Receive Errors
LLC Receive Packets
LLC Transmit Errors
LLC Transmit Packets

## **Inactivity Timeouts**

Number of timeouts that occurred because bits that did not result in frames were received by the LLC.

## **Token Ring Adapter Statistical Attributes**

Abort Errors Frame Lost Errors MLID Receive Packets MLID Transmit Packets Receive Congestion Errors Token Errors

#### **Abort Errors**

Number of times the abort delimiter was transmitted. This delimiter is transmitted if a transient error or hard error internal to the ring station is detected or if the third byte of a free token is not an ending delimiter.

## Frame Lost Errors

Number of times the server transmitted frames that failed to return to the server.

### **Token Errors**

Number of errors that required a token to be transmitted. These errors indicate that there is a circulating priority token, a circulating frame, or a lost frame or token.

### What Is NetWare for SAA Services Manager?

NetWare for SAA Services Manager is network management software that allows you to

 Monitor and manage NetWare for SAA servers and NetWare for SAA services over Novell LANs and WANs

- Load, unload, and restart NetWare for SAA service profiles
- Load and unload NLM files and protocols
- Display and control host link (<u>PU</u> 2.0) sessions for LU types 0, 1, 2, and 3
- Start and stop a trace on a host link (<u>PU</u> 2.0) session
- Lock and unlock LUs
- Display LU6.2 session data
- Obtain and display configuration data for SNA Host Links, logical links, and adapters
- Collect and graphically display statistical data for SNA Host Links, logical links, and adapters
- Dynamically change server management options
- Customize the display of real-time notification of network events

• Control, through an event forwarding filter, which events a NetWare for SAA server forwards to NetWare for SAA Services Manager

- Link data to other Windows applications through Dynamic Data Exchange (DDE).
- Access a NetWare for SAA server event log file and audit trail log file.
- Print, save, and copy NetWare for SAA Services Manager information
- Access online help for each NetWare for SAA Services Manager window and other

important product information

#### **Related Topics**

Accessing Audit Trail Log File

Accessing Event Log File Through the Event Monitor Window

Accessing Event Log File Through the Server Management Options Window

Changing Server Management Options

Collecting and Displaying Statistical Data

**Controlling Sessions** 

<u>Copying</u>

Displaying Host Link Dependent Data

Displaying Session Information for LU6.2

Event Monitor Window

Loading and Unloading NLMs or Protocols in v1.3

Loading and Unloading Protocols in v1.2

Loading, Unloading, or Restarting Services

**Obtaining Configuration Data** 

Obtaining User Information

<u>Printing</u>

Running SNA Traces

<u>Saving Data to a File</u>

Saving Data to the Windows Clipboard

### About NetWare for SAA Services Manager

Displays version and product information along with the percentage of memory used (<Alt><H><A>).

**Related Topics** 

Displaying the Percentage of Memory Used Help Menu

#### **Alarms Command**

Accesses the Help file for NetWare for SAA Services Manager alarms or event messages (<Alt> <H> <L>).

#### **Related Topics**

Commands Command Glossary Command Index Command Overview Command Procedures Command

#### **Arrange Icons Command**

Arranges the <u>server icons</u> of the Active Domain window in rows. This command is particularly useful when you need to display many server icons in the Active Domain window. You choose Arrange Icons from the Window menu (<**Alt**> <**W**> <**A**>).

#### **Related Topics**

Active Domain Window Cascade Command Tile Command

## **Cascade Command**

Arranges all open windows one in front of the other. You choose Cascade from the Window menu (**<Alt> <W> <C>**).

#### **Related Topics**

Arrange Icons Command Tile Command

#### **Close All Command**

Closes all NetWare for SAA Services Manager windows open at the time you choose the command <Alt> <W> <L>. However, this command does not close the Active Domain window. The Active Domain window must remain open while you are running NetWare for SAA Services Manager.

#### **Related Topic**

Exiting NetWare for SAA Services Manager
### **Commands Command**

Opens the Help file for NetWare for SAA Services Manager commands command(**<Alt> <H> <C>**).

#### **Related Topics**

<u>Alarms Command</u> <u>Glossary Command</u> <u>Index Command</u> <u>Overview Command</u> <u>Procedures Command</u>

### **Copy Command**

Copies information displayed in a NetWare for SAA Services Manager window to the Microsoft Windows clipboard. You choose Copy from the Edit menu (<**Alt**> <**E**> <**C**>).

#### **Related Topics**

<u>Copying</u> <u>Output window</u> <u>Printing</u> <u>Saving Data to a File</u> <u>Saving Data to the Windows Clipboard</u>

### **Event Monitor Command**

Opens the Event Monitor window (**<Alt> <A> <E>**). **Related Topic** <u>Event Monitor Window</u>

### **Exit Command**

Exits NetWare for SAA Services Manager. You choose the Exit command from the File menu (**<Alt> <F> <X>**).

### **Related Topic**

Exiting NetWare for SAA Services Manager

### **Index Command**

Accesses the Help file index (**Alt> <H> <I>**). **Related Topics** <u>Alarms Command</u> <u>Commands Command</u> <u>Glossary Command</u> <u>Overview Command</u> <u>Procedures Command</u>

## **Glossary Command**

Accesses the Help file glossary (<Alt> <H> <G>). Related Topics <u>Alarms Command</u> <u>Commands Command</u> <u>Index Command</u> <u>Overview Command</u> <u>Procedures Command</u>

### **Output Command**

Opens the Output window, which allows you to print, copy, and save information included in NetWare for SAA Services Manager windows. You choose Output from the File menu (<**Alt**> <**F**> <**O**>).

#### **Related Topics**

<u>Copy Command</u> <u>Output Window</u> <u>Printing</u> <u>Saving Data to a File</u> <u>Saving Data to the Windows Clipboard</u>

### **Overview Command**

Accesses the Help file overview of NetWare for SAA Services Manager features and functions (**<Alt> <H> <O>**).

### **Related Topics**

Alarms Command Commands Command Glossary Command Index Command Procedures Command

### **Procedures Command**

Accesses the Help file for NetWare for SAA Services Manager procedures (**<Alt> <H> <P>**).

### **Related Topics**

Alarms Command Commands Command Glossary Command Index Command Overview Command

### **Tile Command**

Arranges all open windows in rows and columns so that you can view them all at the same time. You choose Tile from the Windows menu (<Alt> <W> <T>).

Related Topic Arrange Icons Command Cascade Command

## **NWSAA Services Manager Menu Bar**

The NetWare for SAA Services Manager provides a Menu Bar that accesses pull-down menus for the following topics. <u>Edit Menu</u> <u>Fault Menu</u> <u>File Menu</u> <u>Help Menu</u> <u>Window Menu</u>

### **Edit Menu**

The Edit menu includes the Copy command, which copies information displayed in a NetWare for SAA Services Manager window to the <u>Microsoft Windows</u> clipboard. The keyboard shortcut for Copy is <**Alt+E+C**>.

#### **Related Topics**

<u>Copying</u> <u>Copy Command</u> <u>Saving Data to the Windows Clipboard</u>

### Fault Menu

The Fault Menu accesses the command for opening the Event Monitor window **<Alt+A+E>**.

#### **Related Topics**

Event Monitor Command Event Monitor Window

### **File Menu**

The File menu includes the commands described in the following table:

| Comman<br>d | Function  |
|-------------|---|
| Output      | Opens the Output window,<br>which you can use to print<br>and save information<br>included in SAA Services<br>Manager windows<br><b><alt+f+o></alt+f+o></b> . |
| Exit        | Exits NetWare for SAA<br>Services Manager<br>< <b>Alt+F+X&gt;</b> .   |

#### **Related Topics**

Exiting NetWare for SAA Services Manager Output Window Printing Saving Data to a File Saving Data to the Windows Clipboard

### **Help Menu**

The Help Menu provides access to commands to open and browse the NetWare for SAA Services Manager help file.

The File menu includes the commands described in the following table:

| Command                                      | Function   |
|--|--|
| About NetWare<br>for SAA Services<br>Manager | Displays product inform-<br>ation as well as the<br>percentage of memory<br>used <b><alt+h+a></alt+h+a></b> .  |
| About Help                                   | Displays Windows help<br>information. <b><alt+h+u></alt+h+u></b>   |
| Alarms                                       | Opens the Help file for<br>alarms or event messages<br>< <b>Alt+H+L&gt;</b> .  |
| Commands                                     | Opens the Help file for commands <b><alt+h+c></alt+h+c></b> .  |
| Glossary                                     | Opens the Help file<br>glossary <b><alt+h+g></alt+h+g></b> .   |
| Index  | Opens the Help file index <a>href="https://www.englighted-scalar-commutation-commu<br/>commutation-commutation-commutation-commutation-commutation-commutation-commutation-commutation-commutation-commu</a> |
| Overview                                     | Opens the Help file<br>overview of NetWare for<br>SAA Services Manager<br>functions <b><alt+h+o< b="">&gt;.</alt+h+o<></b>   |
| Procedures                                   | Opens the Help file for procedures <b><alt+h+p></alt+h+p></b> .  |

### Window Menu

The Window menu includes the commands described in the following table. The Window menu also lists the names of all open NetWare for SAA Services Manager windows. A check mark indicates that a window is active.

### **Comman Function**

d

| Arrange<br>Icons | Arranges the <u>server icons</u> of<br>the Active Domain window in<br>rows <b><alt+w+a< b="">&gt;.</alt+w+a<></b>   |
|------------------|---|
| Cascade          | Arranges all open windows one in front of the other <b><alt+w+c></alt+w+c></b> .  |
| Close All        | Closes all NetWare for SAA<br>Services Manager windows<br>open at the time you choose<br>the command. However, this<br>command does not close the<br>Active Domain window<br><b><alt+w+l></alt+w+l></b> . |
| Tile             | Arranges all open windows in  |

rows and columns <Alt+W+T>.

#### **Related Topics**

Active Domain Window Application Window Event Monitor Window Server Status Window

# Add icon

Adds the selected item(s) to a list box.

# Audit Trail Log icon

Opens the Audit Trail Log file.

## **Bind icon**

Loads a communications protocol to an adapter.

# Change Managed Domain icon

Opens the Change Managed Domain window.

# Clear Log icon

Removes all entries from the Event Log file.

# Server Management icon

Opens the Server Management Options window.

## **CSDOWN** icon

Brings down the NetWare for SAA v1.2 service.

## **CSRESTART** icon

Restarts the NetWare for SAA v1.2 service.

# Customize icon

Opens the Customize Events window.

## **Delete icon**

Removes the selected item(s) from a list box.

# Event Log icon

Opens the Event Log file.

# First Page icon

Scrolls to the first page of available information.

# Graph icon

Opens the Graph Settings window.

### **Sessions Hardreset icon**

Performs a hardreset on the selected logical unit (LU). This disconnects the user from the selected session without terminating the assignment of the LU. A communication error is displayed in the Operator Information Area (OIA) on the user's workstation. The user can restart the session.

# Last Page icon

Scrolls to the last page of available information.

# Load Service icon

Loads the specified service profile.

### Locked icon

Locks the selected logical unit (LU). This prevents anyone from using the selected session. Anyone using the session when you click this icon is disconnected from the session.

### **More Information icon**

Opens a Detailed Information window with additional record information for event log and audit trail log entries or configuration information for service profiles, SNA Host Link, logical links, or adapters.
## Next Page icon

Scrolls to the next page of available information.

## Load NLM icon

Loads the specified NLM.

## **Unload NLM icon**

Unloads the specified NLM.

### Ok icon

Closes the current window and applies the specified settings.

### Pie icon

Opens the Pie Settings window.

# Previous Page icon

Scrolls to the previous page of available information.

### **Restart Service icon**

Restarts the specified service profile.

### **Remove Event icon**

Deletes the selected event from the Event Log file.

### Server Status icon

Opens the Server Status window.

### **Session icon**

Opens a Sessions window for the selected profile configuration.

### **Sessions Softreset icon**

Performs a softreset on the selected logical unit (LU). This disconnects the user from the session without terminating the assignment of the LU. An SNA TERM-SELF request is sent to the host and the user is returned to the initial log on screen. The user can restart the session.

### **Trace Start icon**

Starts a trace for all logical units (LUs) or the specified LU.

# Trace Stop icon

Stops a trace for all logical units (LUs) or the specified LU.

### Trace icon

Opens the Trace window for the selected logical unit (LU).

# View by Icon icon

Displays server icons in the Active Domain window.

# View by Name icon

Displays server names in the Active Domain window.

### **Unbind icon**

Unloads a communications protocol from an adapter.

### **Unload Service icon**

Unloads the specified service profile.

### **Unlock icon**

Unlocks the specified logical unit (LU).

# Update icon

Replaces the displayed information with the most recent data.

### **Users icon**

Opens the User Information window.

### Log File is full

#### **Explanation:**

The NetWare Communication Executive's Event Log file is full and the oldest Event Log entry is overwritten by the next new entry. Each additional new entry also overwrites the oldest entry.

#### **Default Severity:**

Informational.

#### Action:

If the operator intend to save the old Event Log file, he/she may use NetWare for SAA Services Manager to reset the Event Log file.

### **Run Command received**

#### Explanation:

The NetWare Communication Executive received a Run Command from a NetView host.

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

## **Run Command response received**

#### **Explanation:**

The NetWare Communication Executive executed a NetView Run Command. A response to the Run Command was sent to the host.

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

### **Run Command filter error**

#### Explanation:

The NetView Run Command filter file SYS:\SYSTEM\COMMEXEC\NVCMDS.DB contained a syntax error. Possible errors are:

- 1) Invalid action name.
- 2) Invalid resource name.
- 3) Invalid attributes.
- 4) Run Command entry syntax error.

#### **Default Severity:**

Informational.

#### Action:

Verify the entry in the Run Command filter file is correct.

### **Communication service loaded**

#### Explanation:

A NetWare communication service profile was loaded.

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

# **Communication service unloaded**

#### Explanation:

The NetWare communication service profile was unloaded.

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

### Security agent - open route failed

#### Explanation:

The NetWare Communication Executive failed to open a datagram route to a service agent. This could result from the following reasons:

- 1) Service agent did not exist.
- 2) Agent ID was not in ACL list.
- 3) Server was out of memory.
- 4) Agent instance did not exist.
- 5) User did not register with Security Agent of Communication Executive.

#### **Default Severity:**

Critical.

#### Action:

Check the route failure code, then contact local LAN administrator.

# Security agent - unauthorized user

### Explanation:

The user was denied access to a host session because the user was not included in CSCON's Access Control List(ACL). The user could not access the resource.

#### **Default Severity:**

Critical.

#### Action:

Contact the local LAN administrator to ensure the user is in the Access Control List of the NetWare for SAA's CSCON.

### Security agent - login request failed

#### Explanation:

The user connection request was denied because the login failed. Login may have failed because of the following reasons:

- 1) Illegal password was specified.
- 2) Login to server was disabled.
- 3) User did not exist in the network and security was on, or the agent did not exist.
- 4) No agent name existed.
- 5) Login was made as guest and guest was not in bindery in NetWare 3.1x.

#### **Default Severity:**

Informational.

#### Action:

Check login failure code, then either ensure the correct password is specified, or contact the local LAN administrator.

## **Error message logged**

#### **Explanation:**

A NetWare Communication Executive application generated an event. This event was logged into the Event Log file.

#### **Default Severity:**

Informational.

#### Action:

Check the error message from the Alarm Monitor summary field for appropriate action.

### Link connected

#### **Explanation:**

A link to the host was established. This event was generated from the NetWare for SAA's Data Link Manager(DLM).

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

## Link disconnected

#### Explanation:

A link to the host was disconnected. This event was generated from NetWare for SAA's Data Link Manager(DLM).

#### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

## **Session level send error**

#### Explanation:

NetWare for SAA issued a session level send error. Application specific error data was generated as a result of a SEND\_ERROR, MC\_SEND\_ERROR, DEALLOCATE, or MC\_DEALLOCATE.

#### **Default Severity:**

Minor.

#### Action:

Because the error pertains to the application, consult the application developer or the application manual to determine the problem.

## Session level OAF address duplication

#### Explanation:

NetWare for SAA received a duplicate Origin Address Field (OAF) on Destination Address Field (DAF). A session activation request was received for a session that is already active.

#### **Default Severity:**

Minor.

#### Action:

Restart the session on which the problem occurred.
## **Route request failed**

#### **Explanation:**

NetWare for SAA was unable to perform a route request to an LU due to an invalid LU name or network addressable unit (NAU).

#### **Default Severity:**

Minor.

#### Action:

Check the configuration parameters for the LU and restart the session.

## Too many session requests

### Explanation:

NetWare for SAA rejected a request to activate more sessions than configured for the specified LU.

#### **Default Severity:**

Minor.

#### Action:

If more sessions are needed, have the application issue an ATTACH\_LU verb for the LU allowing more sessions.

# No Begin Bracket bit

#### **Explanation:**

NetWare for SAA detected a Begin Bracket bit not set in Request Header (RH). The Partner LU did not set the required Begin Bracket bit in the RH.

#### **Default Severity:**

Minor.

#### Action:

Ensure that the Partner LU software is compatible with the NetWare for SAA. The Partner LU software should set the Begin Bracket in the RH.

## **Unexpected request**

### Explanation:

NetWare for SAA detected a "Request to Receive" sent in a wrong state by the Partner LU.

#### **Default Severity:**

Minor.

#### Action:

Ensure the Partner LU software sends "Request to Receive" in the appropriate state as specified in the SNA protocol.

## **Unexpected BIS reply**

### Explanation:

NetWare for SAA received an unexpected BRACKET INITIATION STOPPED (BIS) reply. The Partner LU sent NetWare for SAA a BIS reply even though NetWare for SAA never sent a BIS request.

#### **Default Severity:**

Minor.

#### Action:

Ensure that the Partner LU software sends BIS replies as specified in the SNA protocol.

## Error in basic conversation

#### **Explanation:**

NetWare for SAA detected an error in the Basic Conversation protocol. The Partner LU on a basic conversation violated the SNA protocol.

#### **Default Severity:**

Minor.

#### Action:

## Error in mapped conversation

### Explanation:

NetWare for SAA detected an error in the Mapped Conversation protocol. The Partner LU on a mapped conversation violated the SNA protocol.

#### **Default Severity:**

Minor.

#### Action:

## **Bad bind response**

#### Explanation:

A BIND response was received for a session that NetWare for SAA did not send a BIND request for.

#### **Default Severity:**

Minor.

#### Action:

No action is necessary unless it appears that the unrequested BIND response is related to other network problems.

### **Received bad network services request or response**

#### **Explanation:**

NetWare for SAA received an unsupported or unrecognized SNA Network Services (NS) request or response. NetWare for SAA ignores any unsupported or unrecognized NS requests or response it receives.

#### **Default Severity:**

Minor.

#### Action:

Ensure the host sends only valid NS requests and responses.

## **Bad unbind request**

#### **Explanation:**

NetWare for SAA received an UNBIND request with a syntax error. The Partner LU violated the SNA protocol by sending an UNBIND request with invalid syntax.

#### **Default Severity:**

Minor.

#### Action:

### **Format error**

#### Explanation:

NetWare for SAA received Session Control Request with a format error. The Partner LU violated the SNA protocol by sending a Session Control Request with a format error.

#### **Default Severity:**

Minor.

#### Action:

## **Unexpected unbind response**

### Explanation:

NetWare for SAA received an unexpected UNBIND response. An UNBIND response was received for a session that NetWare for SAA did not send an UNBIND request for.

#### **Default Severity:**

Minor.

#### Action:

No action is necessary unless it appears that the unrequested UNBIND response is related to other network problems.

## Bad initialization self response

#### Explanation:

NetWare for SAA received an unrequested INIT-SELF response. The host sent NetWare for SAA an INIT-SELF response even though NetWare for SAA never sent an INIT-SELF request.

#### **Default Severity:**

Minor.

#### Action:

Ensure the host software does not send unrequested INIT-SELF response.

## **Bad bind request**

#### Explanation:

NetWare for SAA received a BIND request with a syntax, state, or semantic error. The Partner LU violated the SNA protocol by sending a BIND request with a syntax, state, or semantic error.

#### **Default Severity:**

Minor.

#### Action:

## **Unexpected BIS request**

### Explanation:

NetWare for SAA received an unexpected BRACKET INITIATION STOPPED (BIS) request. The Partner LU violated the SNA protocol by sending a BIS request in the wrong state.

#### **Default Severity:**

Minor.

#### Action:

### **Invalid NS record**

#### Explanation:

NetWare for SAA received an invalid Network Services (NS) record. The host violated the SNA protocol by sending an invalid NS record to the NetWare for SAA.

#### **Default Severity:**

Minor.

#### Action:

Ensure the host software follows the SNA protocol.

## Session level protocol violation

#### Explanation:

NetWare for SAA detected an error in Session Level protocol. NetWare for SAA detected a violation of the SNA protocol causing by the Partner LU.

#### **Default Severity:**

Minor.

#### Action:

### **Bad frame**

#### **Explanation:**

NetWare for SAA Data Link control (DLC) sent an invalid transmission header or frame size. The SNA transmission header was either invalid or the frame size was too small to be a valid SNA frame.

#### **Default Severity:**

Minor.

#### Action:

Verify the operation and the frame size of the local and remote DLCs. Also, verify that the remote system is configured for SNA.

## **Bracket error**

#### Explanation:

NetWare for SAA received a Bracket error. The Partner LU violated the SNA protocol by incorrectly setting the Begin Bracket indicator.

#### **Default Severity:**

Minor.

#### Action:

## **Bad GDS variable**

#### Explanation:

NetWare for SAA received an erroneous General Data Stream (GDS) variable from a Partner LU on a mapped conversation.

#### **Default Severity:**

Minor.

#### Action:

## Session security error

### Explanation:

NetWare for SAA received a session level security error. The session could not be bound because of the session level security error.

#### **Default Severity:**

Minor.

#### Action:

Ensure the application supplies the correct LU-LU password.

## **Conversation security error**

#### **Explanation:**

NetWare for SAA received a conversation level security error. The conversation could not be bound because of the error in the conversation level security.

#### **Default Severity:**

Minor.

#### Action:

Allocate the conversation again, and specify the correct conversation level security information.

## Link error

#### **Explanation:**

NetWare for SAA link level error occurred. NetWare for SAA could not establish a data link with a host or another node.

#### **Default Severity:**

Minor.

#### Action:

Check the physical connection between the local system and the remote system. Also, verify that the remote system is operational.

### Bad transfer MS data

#### **Explanation:**

NetWare for SAA Network Management Vector Transport (NMVT) message provided by a TRANSFER\_MS\_DATA verb was too large for the Request/Response Unit (RU) size. Because the NMVT was too large for the RU size, it was not sent to the SSCP.

#### **Default Severity:**

Minor.

#### Action:

Reduce the size of the data being sent or increase the RU size so it is adequate.

## **Abnormal unbind**

#### **Explanation:**

NetWare for SAA received an abnormal UNBIND. The Partner LU abnormally terminated a session by sending an UNBIND.

#### **Default Severity:**

Minor.

#### Action:

Determine the cause of the UNBIND and correct the condition by using the sense data included with the UNBIND.

### **Create TP error**

#### Explanation:

NetWare for SAA detected a Transaction Program (TP) error. The application subsystem Create\_TP exit returned the error to the NetWare for SAA. Therefore, NetWare for SAA rejected the incoming allocate..

#### **Default Severity:**

Minor.

#### Action:

Refer to the application for the cause of the rejection.

### **Access password error**

#### Explanation:

NetWare for SAA Access detected a password error. NetWare for SAA was unable to access a password for the session level security, therefore a session could not be bound.

#### **Default Severity:**

Minor.

#### Action:

Change the application so it provides a password to NetWare for SAA through the ACCESS\_LU\_LU\_PW verb.

### **Abnormal termination**

#### **Explanation:**

NetWare for SAA terminated itself abnormally. The possible causes are insufficient server memory, in-proper installation, or configuration error.

#### **Default Severity:**

Major.

#### Action:

Verify that sufficient memory is available for NetWare for SAA to function, the installation was completed properly, and the configuration using CSCON utility was done properly.

## **Host link connected**

#### Explanation:

NetWare for SAA established a host link using the profile requested by the user.

### **Default Severity:**

Informational.

#### Action:

This message is for information only. No action is required.

### Host link disconnected

#### Explanation:

NetWare for SAA disconnected the host link.

#### **Default Severity:**

Informational.

#### Action:

Refer to the error status code and check the documentation for the cause of link disconnection. Take the appropriate corrective action. If the host link was removed by unloading the profile, then no action is required.

### **Serial Number Violation**

#### Explanation:

NetWare for SAA detected a serial number violation. The violation was caused by running an unauthorized copy of NetWare for SAA on a NetWare server. It is possible that one copy of NetWare for SAA was installed on two or more NetWare servers and executed simultaneously.

#### **Default Severity:**

Critical.

#### Action:

Unload the unauthorized copy or copies of NetWare for SAA.

## Adapter Detected a Beaconing Condition

#### Explanation:

Adapter detected a beaconing condition on the ring during the insertion process.

#### **Default Severity:**

Major.

### Action:

Retry 30 seconds. If the error persists, contact the local LAN administrator.

## **Adapter Detected Another Station with the Same Address**

### Explanation:

Adapter detected another station with the same address during the installation process.

#### **Default Severity:**

Warning.

#### Action:

Change the adapter address or locate and remove the station with the same address.

### Adapter Detected a Problem on its Lobe During Installation Process

#### **Explanation:**

Adapter detected a problem on its lobe during the installation process.

#### **Default Severity:**

Major.

#### Action:

Retry 30 seconds. If the error persists, contact the local LAN administrator.

## Adapter Received a Remove Adapter Command

#### Explanation:

Adapter received a Remove Adapter command and left the ring.

#### **Default Severity:**

Informational.

#### Action:

Review the link data. If the error persists, contact the local LAN administrator.

# Adapter Recieved a Remove Ring Station MAC Frame

#### Explanation:

Adapter received a Remove Ring Station MAC frame during the installation process.

#### **Default Severity:**

Warning.

#### Action:

Review the link data. If the error persists, contact the local LAN administrator.
## Wire-Fault Condition Detected on Ring

#### Explanation:

Wire-fault condition detected on the ring.

#### **Default Severity:**

Major.

## Action:

Check your cable connections.

## Adapter Left Ring as Part of Automatic Recovery Process

#### Explanation:

Adapter left ring as part of the beacon automatic recovery process.

#### **Default Severity:**

Warning.

#### Action:

Review link data. If the error persists, contact the local LAN administrator.

## **Ring Beaconing and Inoperative**

#### Explanation:

Ring is beaconing and is inoperative.

#### **Default Severity:**

Major.

#### Action:

Review link data. If the error persists, contact the local LAN administrator.

## **Unknown Error Detected During Insertion Process**

#### Explanation:

Unknown error was detected during the insertion process. The insertion process was not completed.

#### **Default Severity:**

Warning.

#### Action:

Review link data. If the error persists, contact the local LAN administrator.

## Link Disconnected: Link in Data Transfer Mode When SABME Sent

#### Explanation:

SABME mode requested by the remote station while data was already being sent in that mode.

#### **Default Severity:**

Warning.

#### Action:

## Link Disconnected: Invalid Command or Response Sent by Local Station

#### **Explanation:**

The local station sent a command or response that is not supported by the remote station. The remote station sent a frame reject.

#### **Default Severity:**

Warning.

#### Action:

## Link Disconnected: Information Field Sent at the Wrong Time by Local Station

#### **Explanation:**

The local station sent an information field when it was not permitted to do so. The remote station sent a frame.

#### **Default Severity:**

Warning.

#### Action:

### Link Disconnected: Frames Received from Local Station Do Not Match Frames Sent

#### **Explanation:**

There is a discrepancy between the number of frames the remote station received and the number or frames the local station sent.

#### **Default Severity:**

Warning.

#### Action:

## Link Disconnected: Information Field Sent by Local Station Too Long

#### Explanation:

The local station sent an information field that was larger than the frame size specified on the remote station.

#### **Default Severity:**

Warning.

#### Action:

Ensure that NetWare for SAA's frame size matches the frame size specified on the remote station.

## Link Disconnected: Invalid Command or Response Sent by Remote Station

#### Explanation:

A remote station sent a command or response that is not supported by the local station. The local station sent a frame reject.

#### **Default Severity:**

Warning.

#### Action:

## Link Disconnected: Information Field Sent at Wrong Time by Remote Station

#### **Explanation:**

A remote station sent an information field when it was not permitted to do so. The local station sent a frame. reject.

#### **Default Severity:**

Warning.

#### Action:

### Link Disconnected: Frames Received from Remote Station Do Not Match Frames Sent

#### **Explanation:**

There is a discrepancy between the number of frames the local station received and the number of frames the remote station sent.

#### **Default Severity:**

Warning.

#### Action:

## Link Disconnected: Information Field Sent by Remote Station Too Long

#### Explanation:

The remote station sent an information field that was larger than the frame size specified for NetWare for SAA.

#### **Default Severity:**

Warning.

#### Action:

Ensure NetWare for SAA frame size matches the frame size specified on the remote station.

## Link Disconnected: Inactive Remote Station Warning

#### Explanation:

The remote station does not respond to polling because it is either down or has a connection problem.

#### **Default Severity:**

Warning.

#### Action:

Verify that the remote station is inactive. If it is active, check the connection between the stations.

## Link Disconnected: Disconnect Mode (DM) Sent by Remote Station

#### **Explanation:**

A remote station issued a DM, which severed the logical connection between the remote station and the local station.

#### **Default Severity:**

Informational.

#### Action:

Reactivate the remote station. If the problem persists, contact the SNA network administrator.

## Link Disconnected: SNRM Sent by Remote Station When Station Was in Use

#### **Explanation:**

Set Normal Response Mode (SNRM) requested by the remote station while data was already being sent in Normal Response Mode.

#### **Default Severity:**

Warning.

#### Action:

### Link Disconnected: Receive Window Size Exceeded Because of Too Many Remote Station Information (I) Frames

#### **Explanation:**

A remote station sent more information (I) frames than specified by the receive window size.

#### **Default Severity:**

Warning.

#### Action:

Check the remote station's window size. If necessary, reconfigure the receive window size as discussed in the remote station's documentation.

## Link Disconnected: Inactivity Time of Local Station Expired

#### **Explanation:**

The local station did not receive anything during the period of time specified by the local station's inactivity timer.

#### **Default Severity:**

Warning.

#### Action:

Verify there is an active remote station and check the physical connections.

## Link Disconnected: Exchange Station ID (IXID) Retry Limit Exceed on Local Station

#### **Explanation:**

The local station sent an XID, but the remote station either did not receive it or ignored it.

#### **Default Severity:**

Warning.

#### Action:

Verify there is an active remote station and check its physical connections.

## Link Disconnected: Remote Station Rejected a Frame without Including Why

#### Explanation:

Remote station rejected a frame without including information about why it rejected the frame.

#### **Default Severity:**

Warning.

#### Action:

Contact the SNA network administrator.

## Logical Link Connected

#### Explanation:

Logical link established between NetWare for SAA server and host.

#### **Default Severity:**

Informational.

#### Action:

No action required.

## **Logical Link Disconnected**

#### Explanation:

Logical link between NetWare for SAA server and host disconnected.

#### **Default Severity:**

Informational.

#### Action:

No action required.

## Link Disconnected: Disconnect Mode Sent by Remote Station

#### Explanation:

A remote station issued a DM, which severed the logical connection between the remote station and the local station.

#### **Default Severity:**

Informational.

#### Action:

Reactivate the remote station. If the problem persists, contact the SNA network administrator.

# NWSAA Services Manager Help

The following NetWare for SAA Services Manager help topics are available. Click an icon to get help information for that topic.

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Alarms Help







**Overview Help** 

Icons Help

Keyboard Help

Procedures Help

**NWSAA Services** Manager Windows Help

For Help on Help, Press F1

### NWSAA Services Manager Alarms

This window lists the possible alarms you may receive while running NetWare for SAA Services Manager.

Abnormal Termination Abnormal Unbind

Access Password Error

Adapter Detected a Beaconing Condition

Adapter Detected Another Station with the Same Address

Adapter Detected a Problem on Its Lobe During the Installation Process

Adapter Left Ring as Part of the Automatic Recovery Process

Adapter Received a Remove Adapter Command

Adapter Received a Remove Ring Station MAC Frame

Bad Bind Request

Bad Bind Response

Bad Frame

Bad GDS Variable

Bad Initialization Self Response

Bad Transfer MS Data

Bad Unbind Request

Bracket Error

Communication Service Loaded

Communication Service Unloaded

Conversation Security Error

Create TP Error

Error in Basic Conversation

Error in Mapped Conversation

Error Message Logged

Format Error

Host Link Connected

Host Link Disconnected

HostPrint has lost contact with remote file server\_

HostPrint reconnect to remote file server failed.

HostPrint reconnect to remote file server was successful

HostPrint Session Connect failed\_

HostPrint Session Connect was successful

Invalid NS Record

Link Connected

Link Disconnected

Link Disconnected: Disconnect Mode Sent by Remote Station

Link Disconnected: Exchange Station ID (IXID Retry Limit Exceeded on Local Station

Link Disconnected: Frames Received from Local Station Do Not Match Frames Sent

Link Disconnected: Frames Received from Remote Station Do Not Match Frames Sent

Link Disconnected: Inactive Remote Station Warning

Link Disconnected: Inactivity Time of Local Station Expired

Link Disconnected: Information Field Sent at the Wrong Time by Local Station

Link Disconnected: Information Field Sent at Wrong Time by Remote Station

Link Disconnected: Information Field Sent by Local Station Too Long

Link Disconnected: Information Field Sent by Remote Station Too Long

Link Disconnected: Invalid Command or Response Sent by Local Station

Link Disconnected: Invalid Command or Response Sent by Remote Station

Link Disconnected: Link in Data Transfer Mode When SABME Sent

Link Disconnected: Receive Window Size Exceeded Because of Too Many Remote Station Information Frames

Link Disconnected: Remote Station Rejected a Frame without Including Why

Link Disconnected: SNRM Sent by Remote Station When Station Was in Use

<u>Link Error</u>

<u>Log File is Full</u>

Logical Link Connected

Logical Link Disconnected

No Begin Bracket Bit

Received Bad Network Services Request or Response

Ring Beaconing and Inoperative

Route Request Failed

Run Command Filter Error

Run Command Received

Run Command Response Received

Security Agent - Login Request Failed

Security Agent - Open Route Failed

Security Agent - Unauthorized User

Serial Number Violation

Session Level Origin Address Field Address Duplication

Session Level Protocol Violation

Session Level Send Error

Session Security Error

Too Many Session Requests Unxpected Bracket Initiation Stopped (BIS) Reply Unexpected Bracket Initiation Stopped (BIS) Request Unexpected Request Unexpected Unbind Response Unknown Error Detected During Insertion Process Wire-Fault Condition Detected on Ring

## NWSAA Services Manager Commands

NetWare for SAA Services Manager offers the following commands: About NetWare for SAA Services Manager Alarms Command Arrange Icons Command Cascade Command Close All Command Commands Command Copy Command Event Monitor Command Exit Command Glossary Command Index Command Output Command Overview Command Procedures Command <u>Tile Command</u>

## • NWSAA Services Manager Icons







### NWSAA Services Manager Keyboard Shortcuts

The following table indicates the keyboard shortcut for each NetWare for SAA Services Manager command and summarizes the command functions:

| Shortcut | Corresponding command<br>and description  |
|----------|---|
| Alt+A +E | Fault > Event Monitor<br>Opens the Event Monitor<br>window.   |
| Alt+E+C  | Edit > Copy<br>Copies information displayed<br>in a NetWare for SAA<br>Services Manager window<br>to the Microsoft Windows<br>clipboard.                    |
| Alt+F+X  | File > Exit<br>Exits NetWare for SAA<br>Services Manager.   |
| Alt+F+O  | File > Output<br>Opens the Output window,<br>which you can use to print<br>and save information<br>included in NetWare for SAA<br>Services Manager windows. |
| Alt+H+A  | Help > About NWSAA<br>Services Manager<br>Displays product and version<br>information as well as the<br>percentage of memory used.                          |
| Alt+H+C  | Help > Commands<br>Accesses the Help file for<br>commands.  |
| Alt+H+I  | Help > Index<br>Accesses the Help file index.   |
| Alt+H+L  | Help > Alarms<br>Accesses the Help file for<br>NetWare for SAA Services<br>Manager alarm messages.  |
| Alt+H+G  | Help > Glossary<br>Accesses the Help file<br>glossary.  |
| Alt+H+O  | Help > Overview<br>Accesses the Help file for an<br>overview of NetWare for SAA<br>Services Manager functions.  |
| Alt+H+P  | Help > Procedures<br>Accesses the Help file for<br>procedures.  |

- Alt+W+A Window > Arrange Icons Arranges the server icons of the Active Domain window in a row.
- Alt+W+C Window > Cascade Arranges all open windows in a cascading fashion: all windows overlap one another.
- Alt+W+L Window > Close All Closes all NetWare for SAA Services Manager windows open at the time you choose the command. However, this command does not close the Active Domain window
- Alt+W+T Window > Tile Arranges all open windows in a tile fashion: all windows stacked in rows and columns.

### NWSAA Services Manager Overview

NetWare for SAA Services Manager allows you to monitor and manage NetWare for SAA services and servers over Novell LANs and WANs. This window shows a list of the topics helpful to new users.

Active and Managed Domains Commands Configuration Attributes Display and Event Forwarding Filters Graphic Display of Statistical Data HostPrint Menu Bar NetWare for SAA Link Management Objects That Provide Information Processing of Network Events Severity Levels Severity Levels Statistical Attributes What is NetWare for SAA Services Manager

### NWSAA Services Manager Procedures

This is a list of NetWare for SAA Services Manager procedures. Accessing Additional Event Record Information Accessing Audit Trail Log Files Accessing Event Log Files Through the Event Monitor Window Accessing Event Log Files Through the Server Management Options Window Adding Servers to the Managed Domain Canceling Print Data Changing a Print Job Changing Server Management Options Clearing Event Messages Collecting and Displaying Statistical Data Controlling Sessions Copying Customizing the Display and Notification of Events **Displaying Event Messages in Color Displaying Host Link Dependent Data** Displaying the Percentage of Memory Used Displaying Server Icons in Color Displaying Session Information for LU6.2 Exiting NetWare for SAA Services Manager Formatting a Print lob Listing Printer LU Sessions Loading and Unloading NLMs in v1.3 **Obtaining Configuration Data** Loading and Unloading Protocols in v1.2 Loading, Unloading, or Restarting Services Managing Printer LU Sessions **Obtaining User Information Overriding Existing Connections** Printing Redefining the Managed Domain Removing Servers from the Managed Domain Resetting a Printer LU Session Restarting or Bringing Down the Communication Executive v1.2 Retaining Existing Connections Running SNA Traces
<u>Saving Data to a File</u>

Saving Data to the Windows Clipboard

Sending a PA1 or PA2 Signal

Setting the Audible Alert

Setting the Critical Lock

Setting the Display Filter

Setting the Event Forwarding Filter

Specifying the Number of Event Messages

Starting HostPrint Management

Turning Off Automatic Scrolling

Viewing Servers By Icon

Viewing Servers By Name

### NWSAA Services Manager Windows

The following windows are available in NetWare for SAA Services Manager. Access Information Window Active Domain Window Audit Trail Window Change Managed Domain Window Configuration Windows Adapter Configuration Window Logical Link Configuration Window Service Profile Configuration Window SNA Host Link Configuration Window Configure Printer LU Window Customize Events Window Detailed Information Windows Audit Trail Detailed Information Window Event Record Detailed Information Window LU 6.2 Detailed Information Window SNA Sessions Detailed Information Window Event Log Window Event Monitor Window Graph Settings Window Graph Statistics Window LU 6.2 Sessions Window NWSAA Services Manager Application Window Output Window Override Existing Connection Window Pie Settings Window Pie Statistics Window Printer LU Sessions Window Server Management Options Window Server Management Options Window v1.2 Server Status Window Server Status Window v1.2 SNA Sessions Window Trace Window User Information Window

#### **NetWare HostPrint Services**

A service that can be installed on NetWare for SAA servers that allows applications running on the SAA Host to send print jobs to NetWare servers. It does so by providing Printer LU sessions on the NetWare for SAA server which emulate IBM 3287 printers, taking print job data from applications running on the host and forwarding that data to print queues and servers on the LAN.

#### **Host Application**

An application running on the host computer. NetWare HostPrint services enables host applications (for example: DSPRINT, VPS, RSCS) to send print data to NetWare servers. In order to print on the LAN printers, the host application binds to a HostPrint Printer LU session and uses the NetWare print job configuration that was assigned to that session In the NetWare CSCON utility. The host application's output to a NetWare server is governed by the settings of that print job.

#### **Printer LU Session**

A session on the NetWare for SAA server that is reserved for HostPrint services. Each printer LU session emulates an IBM 3287 printer. Printer LU sessions are initially defined in the NetWare CSCON utility.

#### **Print Job**

A set of print instructions. In this case, a print job is a preconfigured set of instructions for printing output from a Host application on a LAN printer. The print job name, print server, and print queue are initially configured in the NetWare PRINTCON utility, the print job's formatting settings are defined in the SYSCON utility.

# **Cancel Printing icon**

Cancels spooling of print data from the host. When you click this icon, HostPrint stops spooling print data from the host and sends a message to the host application that the Cancel Printing icon has been clicked.

HostPrint resumes print spooling when the host application sends a signal to start printing again, either on a new body of print data or the same print data as previously, depending on the host application.

Depending on the print job set up, print data already spooled to Host Print may still be sent to the target NetWare server for printing.

# **Reset Print Sessions icon**

Resets the current printer LU session.

Clicking this icon turns off the code in the Printer Status field and sends a power-on reset message to the host application. HostPrint resumes the session when the host application reestablishes the session. After the session is reestablished, printing continues if the host application allows it.

# PA1 icon

Sends a Program Attention (PA) signal to host applications that support PA signals.

# PA2 icon

Sends a Program Attention (PA) signal to host applications that support PA signals.

# **More Information icon**

Displays the Configure Printer LU Session window for the selected printer LU session. In the Configure Printer LU window, you can temporarily reconfigure settings for the selected printer LU session.

# Start icon

Turns an operation (such as a trace or a printer LU session state) ON.

# Stop icon

Turns an operation (such as a trace or printer LU session state) OFF.

## HostPrint

The NWSAA Services Manager interface to NetWare <u>HostPrint</u> lets you manage and temporarily reconfigure <u>printer LU sessions</u> and associated <u>print jobs</u> set up for NetWare HostPrint through the CSCON, SYSCON, and PRINTCON utilities.

Within the HostPrint interface module of NWSAA Services Manager, you can select a HostPrint printer LU session, temporarily reassign the print job assigned to that session or temporarily reconfigure the print job format settings. You can also reset and cancel printing on the LU session.

The changes you make to the Printer LU session settings remain in effect until the Printer LU Session state is turned OFF or until the HostPrint NLM is unloaded. When the HosPrint NLM is reloaded, the original settings are restored.

#### **NetWare for SAA Server Prerequisites:**

- NetWare for SAA v1.3 or higher installed.
- NetWare HostPrint v2.0 or later installed and loaded.
- LU sessions configured and assigned within HostPrint.

#### **Workstation Prerequisites:**

- Windows v3.1 or later installed.
- NWSAA System Manager version 2.0 or later installed.

#### Components

The NWSAA Services Manager interface to HostPrint consists of two windows:

- The <u>Printer LU Sessions Window</u> lists the Printer LU Sessions available on the target NetWare for SAA server and summarizes their attached print jobs and session state. You invoke it from the Service Status window of NWSAA Services Manager.
- The <u>Configure Printer LU Window</u> displays detailed information on individual Printer LU Sessions and allows you to carry out limited online management and configuration of those sessions. You invoke it from the Printer LU Sessions window.

#### **Related topics:**

<u>Listing Printer LU Sessions</u> <u>Managing Printer LU Sessions</u>

# **Listing Printer LU Sessions**

You can list the Printer LU sessions configured on the server running NetWare HostPrint.

- 1. Use NWSAA Services Manager to log in to the server running HostPrint.
- 2. In the Service Status window highlight the service with the HOSTPRT service type.

| Services       |           |                   |
|----------------|-----------|-------------------|
| Name           | Туре      | Loaded On         |
| SNA-9370       | NWSAA     | 06/03/93 at 14:17 |
| HOSTPRT        | HOSTPRINT | 06/03/93 at 14:24 |
| ES9000         | NWSAA     | 06/03/93 at 14:53 |
| NWSAA Profile: | HOSTPRT   |                   |

If no such service is listed in the Services list box, load the service from the NLM Loader dialog box.

3. In the Profile Configuration list box, highlight Printer LU Session and click on the Sessions Icon.

#### Profile Configuration

| Printer LU Session |  |
|--------------------|--|
|                    |  |
|                    |  |

The Printer LU Sessions window appears listing the LU printer sessions and associated print job settings.

- If more than one screen of Printer LU Session items has been configured, click the First, Last, Previous, or Next icons at the top of the screen to display the additional screens.
- To display detailed information on, or temporarily reconfigure one of the listed printer LU sessions, select that session and click the More Information icon at the top of the screen.

#### **Related topics:**

Printer LU Sessions Window

### Starting HostPrint Management

If the NetWare HostPrint software is installed on a server running NetWare for SAA, you can manage it through the NetWare for SAA Services Manager.

- 1. Use the NWSAA Services Manager to log in to the server running HostPrint .
- 2. In the Service Status window highlight the service with the HOSTPRT service type.

| Name           | Туре      | Loaded On         |
|----------------|-----------|-------------------|
| SNA-9370       | NWSAA     | 06/03/93 at 14:17 |
| HOSTPRT        | HOSTPRINT | 06/03/93 at 14:24 |
| ES9000         | NWSAA     | 06/03/93 at 14:53 |
| NWSAA Profile: | HOSTPRT   |                   |

If no such service is listed in the Services list box, load the service from the NLM Loader dialog box.

3. In the Profile Configurations list box, highlight Printer LU Session and click the Sessions icon at the top of the screen.

#### Profile Configuration

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| Printer LU Session |  |
|--------------------|--|
|                    |  |
|                    |  |

The Printer LU Sessions window appears listing the LU printer sessions and associated print job that were configured in the CSCON utility.

#### **Related topics:**

Printer LU Sessions Window Listing Printer LU Sessions Managing Printer LU Sessions

## **Managing Printer LU Sessions**

The Configure Printer LU Session window allows you to manage HostPrint <u>Printer LU</u> <u>Sessions</u>. You can cancel print data, reset print sessions and temporarily change the Print Job and Print Job formatting settings for a Printer LU session.

Your setting changes remain in effect until the Printer Session State is turned OFF or until the <u>HostPrint</u> NLM is unloaded.

- 1. Use NWSAA Services Manager to log in to the server running HostPrint.
- 2. In the Service Status screen highlight the service with the HOSTPRT service type.

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If no such service is listed in the Services list box, load the service from the NLM Loader dialog box.

3. In the Profile Configurations list box, highlight Printer LU Session and click on the Sessions Icon.

#### **Profile Configuration**

| Printer LU Session |  |
|--------------------|--|
|                    |  |
|                    |  |

The Printer LU Sessions window appears displaying the LU printer sessions and print jobs.

- 4. If the Printer LU session that you want to reconfigure is not displayed in the current screen, click on the First, Last, Previous, or Next icons to view the additional screens.
- 5. When you find the LU session that you want to configure, double click on that session. The Configure Printer LU window for that session appears.
- 6. Carry out the necessary operations or changes.

#### **Related Topics:**

<u>Configure Printer LU Sessions Window</u> <u>Formatting a Print Job</u> <u>Changing a Print Job</u> <u>Cancelling Print Data</u> <u>Resetting a Printer LU Session</u> <u>Sending a PA1 or PA2 Signal</u>

## Formatting a Print Job

You can temporarily change the format of a configured print job in the Configure Printer LU window.

The changes you make last until the next time the Printer Session State is turned OFF or until <u>HostPrint</u> is unloaded.

1. Display the Configure Printer LU window for the <u>Printer LU Session</u> whose print job you want to reformat. (See "Managing Printer LU Sessions" for more information.)

NOTE: If the printer LU session's current print job is different from the one you want to format, click the Stop icon to set the Printer Session State field to OFF, click on the Print Job Name field, click on the print job you want to reformat, and click the OK icon. After the Configure Printer LU window for that session closes, reopen it.

- 2. If the Printer Session State is OFF, click the Start icon to set the Printer Session State field to ON.
- 3. Set the Chars Per Line (MPP), Lines Per Inch (LPI), and Lines Per Page (MPL) print settings.
- 4. Click the OK icon at the top of the screen to confirm your changes.

#### **Related Topics:**

Configure Printer LU Session Window Managing Printer LU Sessions Chars Per Line field Lines Per Inch field Lines Per Page field

# **Changing a Print Job**

You can temporarily change the Print Job\Server\Print Queue assigned to the current <u>Printer LU session</u>.

- 1. Display the Configure Printer LU window for the Printer LU Session whose assigned print job you want to change. (See "Managing Printer LU Sessions" for more information.)
- 2. If the Printer Session State field is set ON, click Stop icon to turn the session OFF.

The Print Job Name field becomes ungreyed.

- 3. Click on the scroll arrow in the Print Job Name field to display a list of print jobs, the server where they are being run and their print queue name. Click on the print job you want.
- 4. Click the OK icon to confirm the new print job.

#### **Related topics:**

<u>Configure Printer LU Window</u> <u>Managing Printer LU Sessions</u> <u>Print Job Name field</u>

# **Canceling Print Data**

You can cancel print data for a Printer LU session.

- 1. Display the Configure Printer LU window for the <u>Printer LU Session</u> whose print data you want to cancel. (See "Managing Printer LU Sessions" for more information.)
- 2. If the Printer Session State field is set OFF, click the Start icon to turn the session ON.
- 3. Click the Cancel Printing icon at the top of the screen.

#### **Related Topics:**

Configure Printer LU Window Managing Printer LU Sessions Cancel Printing icon

## **Resetting a Printer LU Session**

You can reset a Printer LU session .

- 1. Display the Configure Printer LU window for the Printer LU Session that you want to reset. (See "Managing Printer LU Sessions" for more information.)
- 2. If the Printer Session State field is set OFF, click the Start icon to turn the session ON.
- 3. Click the Reset Print Session icon at the top of the screen.

Clicking the Reset Print Session icon turns off any message in the Printer Status field and sends a power-on reset message to the host if communication has been established. The session then indexes one line and printing continues if the <u>host</u> <u>application</u> allows it.

#### **Related Topics:**

<u>Configure Printer LU Window</u> <u>Managing Printer LU Sessions</u> <u>Reset Print Session icon</u>

# Sending a PA1 or PA2 Signal

You can send a program attention, PA1 or PA2, signal to the <u>host application</u> if your host application supports such signals.

- 1. Display the Configure Printer LU window for the <u>Printer LU Session</u> from where you want to send the PA1 or PA2 signal. (See "Managing Printer LU Sessions" for more information.)
- 2. If the Printer Session State field is set OFF, click the Start icon to turn the session ON.
- 3. Click the PA1 or PA2 icon at the top of the screen.

Clicking the PA1 or PA2 sends a PA1 or PA2 signal to the host application.

#### **Related Topics:**

Configure Printer LU Window Managing Printer LU Sessions PA1 icon PA2 icon

# **Printer LU Sessions Window**

The Printer LU Sessions screen:

- displays settings for the <u>printer LU sessions</u> and associated <u>print jobs</u> that the HostPrint administrator configured in the CSCON utility.
- allows users to select a printer LU session to reconfigure.

| 😑 Pr                          | inter Sessions(HOSTPRT,Printer LU Se  | ssion 1,SVE-VANCOU | JVER) 🔽 🔺     |
|-------------------------------|---|--------------------|---------------|
|                               |   |                    |               |
| LU Name                       | Print Job/Server/Print Queue  | Host Application   | Session State |
| HOSTPRT2<br>HOSTPRT2<br>HILYA | SSM_HPJob / BAY-ENGPRINT / SOUTH_HP<br>SSM_HPJob / BAY-ENGPRINT / SOUTH_HP<br>ILYA'S_Job / GEMINI / EPSON | VPS<br>VPS<br>VPS  | Off           |
| Done collecting               | printer session information.  |                    |               |

### **LU Name**

The LU name assigned to this HostPrint session. Any HostPrint session used by NetWare HostPrint must have a dedicated LU name defined through the CSCON utility (regardless of whether it is an individual LU or belongs in an LU pool group). For more information on LU names see the *NetWare HostPrint Administration Guide*.

### **Print Job/Server/Print Queue**

This combination of Print job, server, and print queue names was defined in PRINTCON then assigned to a printer LU session in the CSCON utility.

<u>Print Job</u> - is the name of a print job assigned to this LU session in the CSCON utility. For more information on the Print Job name the the *NetWare HostPrint* Administration Guide.

<u>Server</u> - is the name of the NetWare server that contains the print queue in which this print job will run. This server was assigned to the print job in the PRINTCON utility.

<u>Print Queue</u> - is the name of the print queue in which the above print job is placed. This print queue was assigned to the print job in the PRINTCON utility.

# **Host Application**

The name of the application running on the host that has acquired the current printer LU session.

# **Session State**

The current state of this printer LU session. Possible states are ON or OFF.

# **Configure Printer LU Window**

The Configure Printer LU Window allows you to carry out online management and modification of the current Printer LU Session .

| Configure Printer LU(HOSTPRT1,SVE-VANCOUVER) |                                   |  |
|--|-----------------------------------|--|
| 💋 🗇 PA1                                      | PA2 34 34                         |  |
| Print Job Number :                           | Print Job Status :                |  |
|  | Print Job / Server / Print Queue  |  |
| Print Job Name :                             | SSM_HPJob / BAY-ENGPRINT / SOUTH_ |  |
| Host Application Name :                      | VPS                               |  |
| Printer Session State :                      | On                                |  |
| Printer Status :                             |                                   |  |
| Chars Per Line (MPP) :                       | 132                               |  |
| Lines Per Inch (LPI) :                       | 6 <b>±</b>                        |  |
| Lines Per Page (MPL) :                       | 1                                 |  |
|  |                                   |  |
|  |                                   |  |
|  |                                   |  |
| <u> </u>                                     |                                   |  |

## **Print Job Number**

The number that NetWare has assigned to the current print job. If the server running HostPrint is the same as the NetWare server running the print job, then Print Job Number is the same number that appears on that server's PCONSOLE display.

If the print job is being run on a different server, then the Print Job Number displayed in this field and on the other server's PCONSOLE will differ.

This value displays only when the print job displayed in the Print Job Name field is active.

# **Print Job Status**

Displays whether or not HostPrint is still processing print data from the host. The displayed values can be:

ADDING - indicates HostPrint is busy spooling print data to the server displayed in the Print Job Name field.

READY - indicates HostPrint is ready to receive and process more print data from the host application.

These values display only when the print job displayed in the Print Job Name field is active.

# **Print Job Name**

Lets you temporarily reassign and modify the Print job/Server/Print Queue combination assigned to this printer LU Session. This field is active if the Printer Session State is OFF.

- 1. If the Printer Session State is ON, click on the Stop icon to turn the session off.
- 2. Click on the scroll arrow in the Print Job Name field to display a list of print jobs, the server where they are being run and their print queue name. Highlight the print job you want.
- 3. Click the OK icon to confirm the change.

The new print job setting will remain in effect until the HostPrint NLM is unloaded.

# **Host Application Name**

The name of the host application that is assigned to the current LU session.

# **Printer Session State**

Displays whether the printer session state is ON or OFF.

- To change the Printer Session State from OFF to ON, click the Start icon at the top of the screen.
- To change the Printer Session State from ON to OFF, click the Stop icon at the top of the screen.

When the Printer Session State is ON, you are able to temporarily change the Lines Per Inch (LPI), Chars Per Line (MPP), and Lines Per Page (MPL) settings for the current Print Job. These settings remain in effect until you change them, turn the Printer Session State OFF, or unload the HostPrint NLM. You can also click the icons at the top of the screen to cancel the Printer LU Session, reset the Printer LU Session, or send a PA1 or PA2 signal to the the host application.

When the Printer Session State is OFF, you can change the print job/server/print queue combination associated with the current Printer LU session.
# **Printer Status**

Displays printer status messages, that may apply to the current Printer LU session and print job. Possible printer status messages include:

Note the code number displayed,

and contact your LAN administrator.

| Message:   | Explanation:  |
|--|---|
| Invalid operation.   | You attempted an operation that is not supported on your printer.   |
| PA1 signal sent to the host application.                       | You clicked the PA1 icon.   |
| PA2 signal sent to the host application.                       | You clicked the PA2 icon.   |
| Press PA1 or PA2 (requested by host application).              | Click the icon specified by your host administrator's instructions. |
| Printing cancelled.  | You clicked the Cancel icon.  |
| The target server, print queue, or printer is not operational. | Contact your LAN administrator.                                     |
|  |   |

Unexpected status indicator code <NN>.

## **Lines Per Inch (LPI)**

Allows you to temporarily change the print job lines per inch (LPI) setting. This field appears if the Printer Session State is ON. Permissable values are: 3, 4, 6, 8. After you change this setting, click the OK icon to confirm it. Any change you make to this field stays in effect until the Printer Session State is turned OFF or until HostPrint is unloaded.

# **Chars Per Line (MPP)**

Allows you to temporarily change the Characters Per Line (MPP) setting. This field appears if the Printer Session State is ON. Enter a number between 1 and 255. After you change this setting, click the OK icon to confirm it. Any change you make to this field stays in effect until the Printer Session State is turned OFF or until HostPrint is unloaded.

# Lines Per Page (MPL)

Allows you to temporarily change the Lines Per Page (MPL) setting. This field appears if the Printer Session State is ON. Enter a value between 1 and 255. After you change this setting, click the OK icon to confirm it. Any change you make to this field stays in effect until the Printer Session State is turned OFF or until HostPrint is unloaded.

### HostPrint has lost contact with remote file server

#### **Explanation:**

HostPrint has lost a connection to a file server on which it has a print job configured, probably because that file server is down.

### **Default Severity:**

Minor

### Action:

- 1. Double click this message in the Event Monitor to display more Information. Note the server name listed.
- 2. If you have access to the listed server, restart it.
- 3. If you do not have access to the listed server, contact the LAN administrator who does. HostPrint will attempt reconnection automatically every 60 seconds.

### **HostPrint Session Connect was successful**

#### **Explanation:**

A Printer LU session was successfully reset in the CSTATUS utility by a Hard Reset command. The open datagram route to the Communication Executive was successful.

## **Default Severity:**

Informational

#### Action:

None.

## **HostPrint Session Connect failed.**

#### **Explanation:**

A HostPrint printer LU session did not initialize because a LAN workstation is already using the LU session that HostPrint is configured for.

or

A printer LU session did not successfully reset after the Hard Reset command was used in the CSSTATUS utility.

#### **Default Severity:**

Minor

### Action:

- 1. Double click this messsage in the Event Monitor for detailed information. Note the LU Name listed in the Detailed Information window.
- 2. Reload HostPrint. Make sure no workstation is using the listed LU session.
- 3. If this message persists, double click it for detailed information. Note the listed failure code and contact your authorized Novell reseller.

#### HostPrint reconnect to remote file server failed.

#### **Explanation:**

HostPrint has lost contact with a file server and has tried and failed to reconnect to that file server. (HostPrint attempts to reconnect every 30 seconds.) This message displays the first time the reconnection attempt fails due to a specific error code. Subsequent failed reconnection attempts due to the same condition will not display this message.

#### **Default Severity:**

Major

#### Action:

- 1. Double click this message in the Event Monitor to display detailed information. Note the listed server name and failure code.
- 2. If you have access to the listed server, restart it.
- 3. If you do not have access to the listed server, contact the LAN administrator who does. HostPrint will attempt reconnection automatically every 30 seconds.
- 4. If this message persists, double click it for detailed information. Note the listed failure code and contact your authorized Novell reseller.

### HostPrint reconnect to remote file server was successful

#### **Explanation:**

After losing contact with a file server, HostPrint has successfully reconnected to that file server. After losing a server connection, HostPrint attempts to reconnect every 30 seconds. When it succeeds, it displays this message.

## Severity:

Informational

#### Action:

None.