Avaya Fault & Performance Manager User Guide

09/19/2007 **DRAFT** **Rel 5.0**

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Using Avaya FPM

Overview

Introduction to Avaya Fault and Performance Manager

Avaya Fault and Performance Manager (FPM) lets you monitor and manage all of your voice systems from a single point.

- FPM alerts you when voice system faults and performance problems occur.
- FPM helps you isolate and identify fault and performance problems.
- FPM provides tools to help you fix fault and performance problems.

FPM collects configuration, fault, and performance data from your systems according to a schedule that you specify. FPM keeps a database of system exceptions and performance measurements, and it allows you to run reports on that data. You can present the data as text, tables, and graphs.

In addition to monitoring your voice systems, FPM also provides alarm management (not performance monitoring) for several adjuncts related to your voice systems including INTUITY Audix, DEFINITY Audix, Call Management System (CMS), Conversant, and INTUITY Interchange.

FPM supports up to 300 systems (with three servers) in a distributed environment.

Features

Fault and Performance Manager provides the following features:

- **Alarm Reception and Forwarding** — Detects alarms from your voice system (or other Avaya system) and relays them to the Avaya Technical Service Center.
- **Configuration Display** — Enables you to browse the configuration and administered properties of managed nodes.
- **Notes Page for each Voice System** — Enables you to create your own knowledge database.
- **Cut Through** — Provides access to your voice systems to perform routine maintenance and administrative tasks.
- **System Status Reporting** — Creates reports about the status of your voice systems. Includes information such as connection state, connect times, attempts, requests, errors, and alarms forwarded. You can define a wide variety of tabular and graphical reports covering performance, configuration, and exception data from any combination of systems. You can restrict reports to components of interest; for example, a specific hardware location or a list of trunk groups.
- **Report Scheduling** — Enables you to schedule when each report runs. Reports can be printed or saved to a file.
- **Data Collection** — Enables you to specify the types of data to collect from each system, the schedule for collecting the data, and how long to store the data.
- **Exception Logging** — Enables you to specify conditions for exception logging. This includes performance thresholds and fault or error conditions.
- **Exception Alerting** — Enables you to specify an alert level for each exception. The level and location of the alert are displayed in the Configuration and Status window as long as the condition persists.

Related Topics

- Data Flow
- Screen Organization

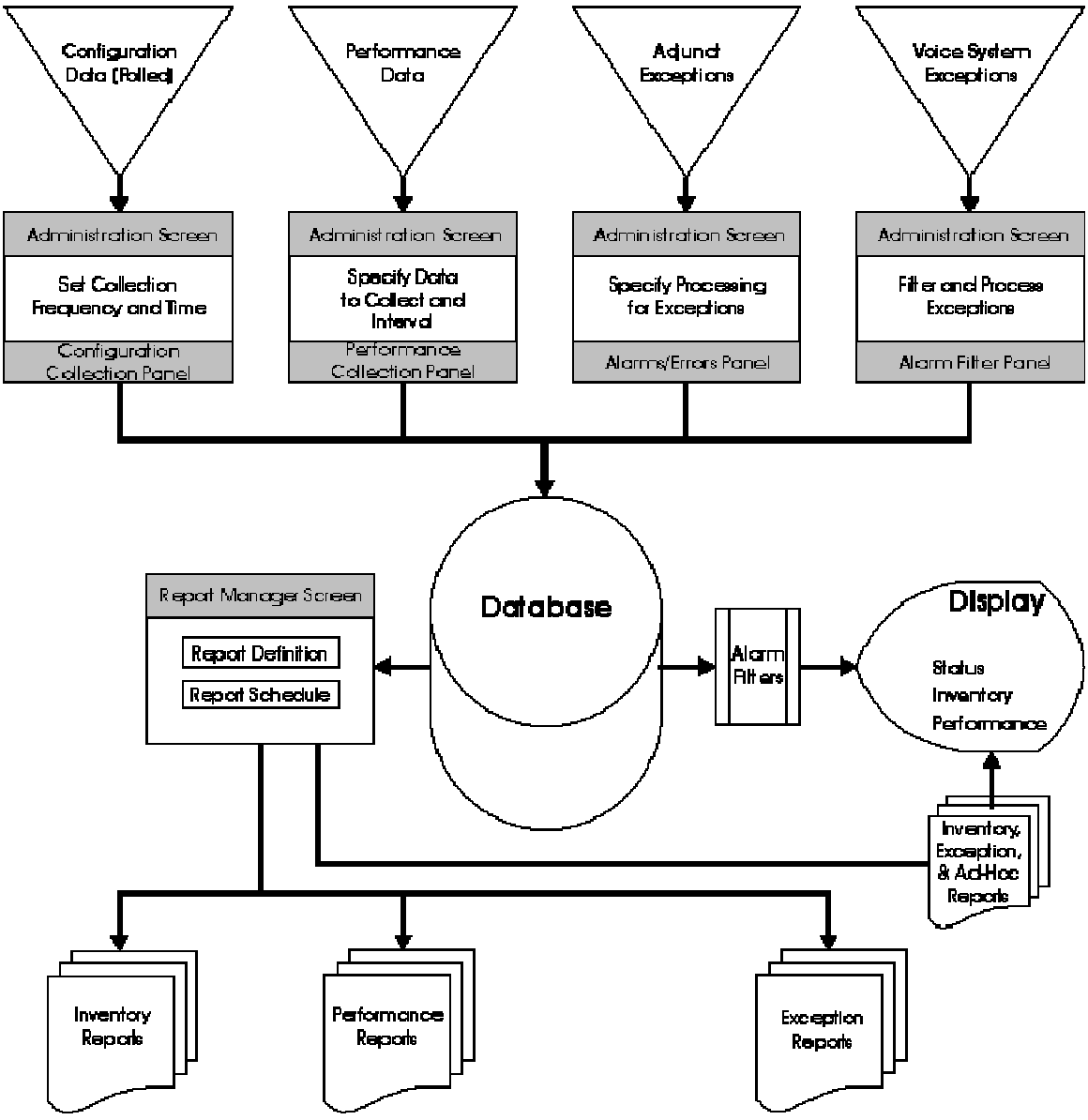
Data Flow

Data Flow

FPM has four data sources that provide the basis for all monitoring and reporting:

- Configuration data is collected at intervals that you specify.
- Performance data is collected according to specified data type and collection interval. Data can be collected for hourly values, daily peak, or weekly peak.
- Adjunct Exceptions are collected in real-time. You specify which data to collect, and how to process that data.
- Voice System Exceptions are collected in real-time. You define a set of filters that specifies which data to collect, and how to process that data.

Only the specified data is stored in the database.



The *Configuration and Status* screen and the *System Detail* screen display status and performance based on the configuration, performance, and exception data in the database. Accurate status depends upon the necessary exceptions having been processed and saved. Accurate performance data depends upon the necessary performance data having been collected and saved.

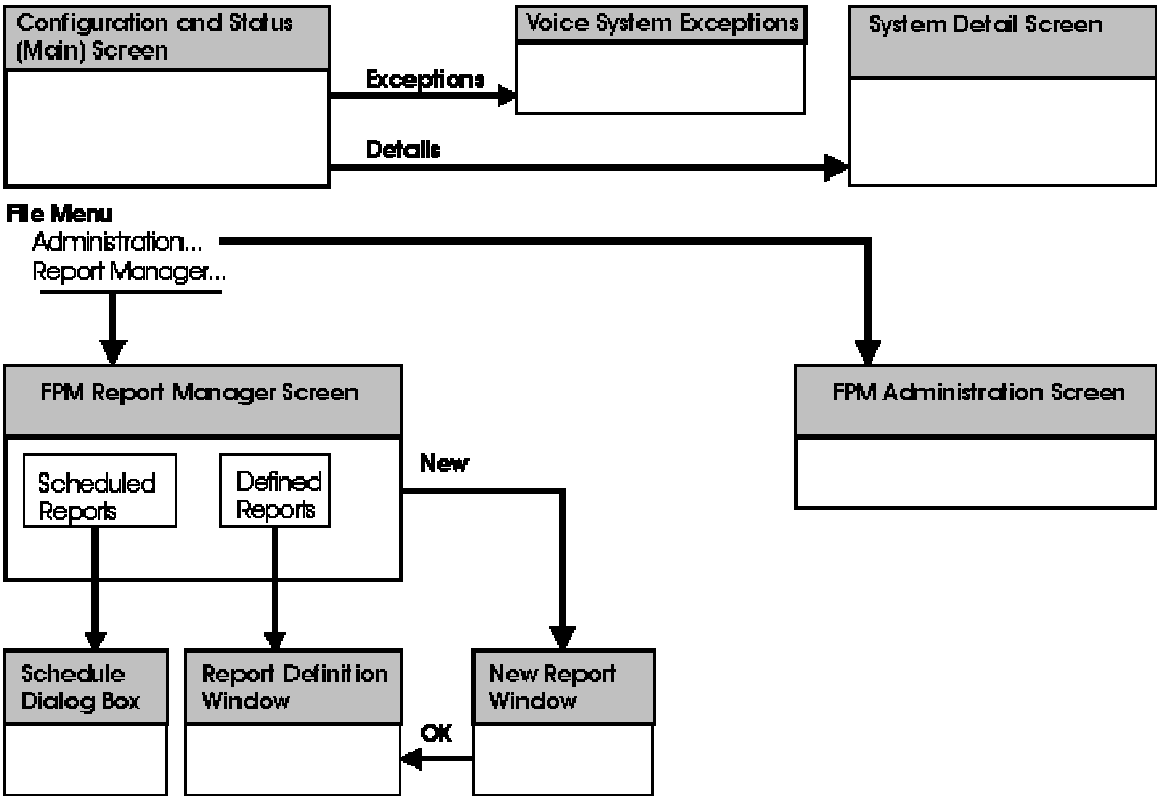
The Report Manager defines and schedules reports using inventory, performance, and exception data from the database. Accurate reporting depends upon the necessary performance and exception data having been processed and saved.

Related Topics

- Default and Custom System Parameters (Configuration Collection Panel, Performance Collection Panel)
- Configuration Collection Panel
- Performance Collection Panel
- Alarms/Errors Panel
- Alarm Filter Panel
- Report Manager Screen
- Report Definition Screen
- Scheduled Reports
- Report Types (Inventory, Performance, Exception)

Screen Organization

FPM initially displays the *Configuration and Status* screen.



The *Configuration and Status* screen divides your voice systems into convenient system groups. The highest alert level (critical, major, minor, warning) found in any member of a system group displays at the group level.

- Within each system group, individual systems are listed. The highest alert level found in any component of a system displays at the system level. Selecting a system displays a summary report for that system. The summary report includes counts of critical, major, minor, and warnings within the system. The summary report also provides basic performance and status information for that system.
- The **Detail** button on the system summary report provides access to configuration information for that system. Clicking **Detail** opens the *System Detail* screen. The kinds of configuration details available depends on the type of the selected system, but detail is generally available all the way down to the lowest level (usually individual ports).
- The **Exceptions** button on the system summary report (or on any system detail screen) provides a list of exceptions for the system. Clicking **Exceptions** opens the *Voice System Exceptions* screen. Two lists of exceptions are controlled by a drop-down list: exceptions in the selected system (or component), and exceptions involving FPM communication with the selected system (or component).

From the File menu of the *Configuration and Status* screen you can select **File > Administration...** to open the *FPM Administration* screen or **File > Report Manager...** to open the *FPM Report Manager* screen.

- The *FPM Administration* screen has two functions:
    - The *FPM Administration* screen defines how the system fault and performance data is collected and stored by FPM.

      You can define a system-wide template of default parameter values. Each system can use the default template or can override the template with values specific to that system. Parameters include the data to collect, the collection schedule, and the filtering to apply to exceptions to create alarms.
    - The *FPM Administration* screen defines the system views available through FPM.

      You can define the group names and membership for multiple views of your network based on system groups, IP or DCS trunk groups, or clusters.
- The *FPM Report Manager* screen provides:
    - Report Definitions

      You can select report types, systems, and other parameters for each report. You can schedule when reports are run on a regular basis. You can create ad-hoc reports and run them immediately when investigating a problem. You can also define reports, but not run them until needed to get specific information while trouble shooting.
    - Scheduled Reports

      You can select any regularly scheduled report that has been saved to a file and display it or print it.
    - Trunk Group Lists

      You can define trunk group lists for reports that are based on network performance rather than system performance.

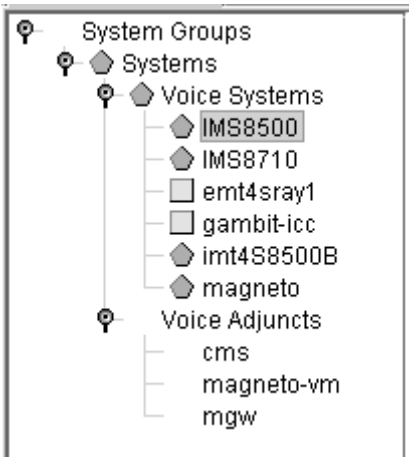
Related Topics

- Main Configuration and Status Screen
- System Detail Screen
- Administration Screen
- Report Manager Screen

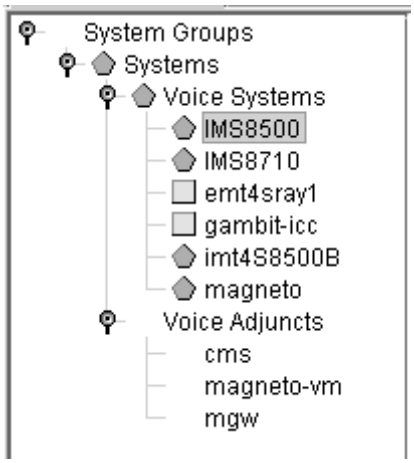
Configuration and Status

Main Configuration and Status Screen

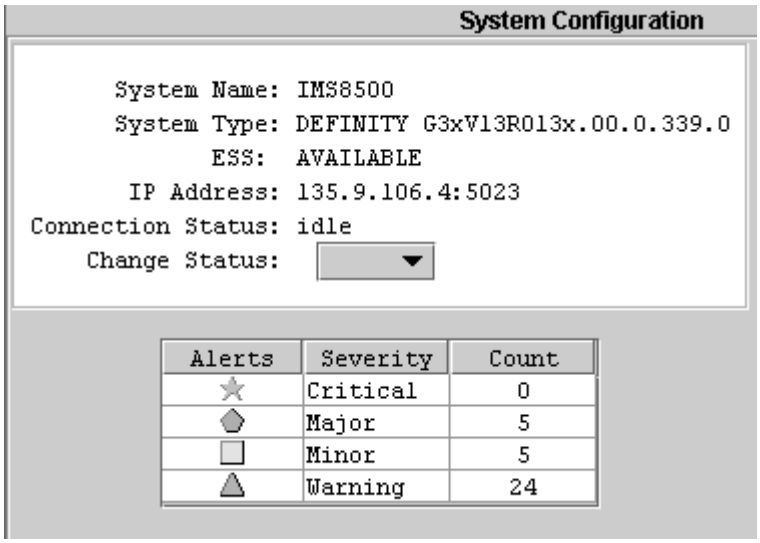
FPM initially displays the *Configuration and Status* screen. This screen divides your voice systems into convenient system groups. The highest alert severity level (critical, major, minor, warning) found in any member of a system group displays at the group level.



The tabs select different types of system grouping. Within each group, individual systems are listed. The highest alert level found in any component of a system displays at the system level. The display for system groups is shown. The displays for DCS Trunk Connectivity groups, IP Trunk Connectivity groups, and Clusters are similar.



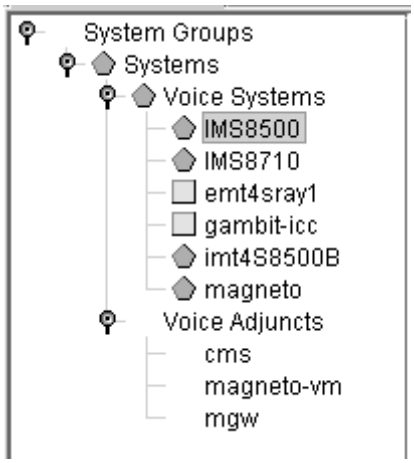
The tabs select different types of system grouping. Within each group, individual systems are listed. The highest alert level found in any component of a system displays at the system level. The display for system groups is shown. The displays for DCS Trunk Connectivity groups, IP Trunk Connectivity groups, and Clusters are similar.



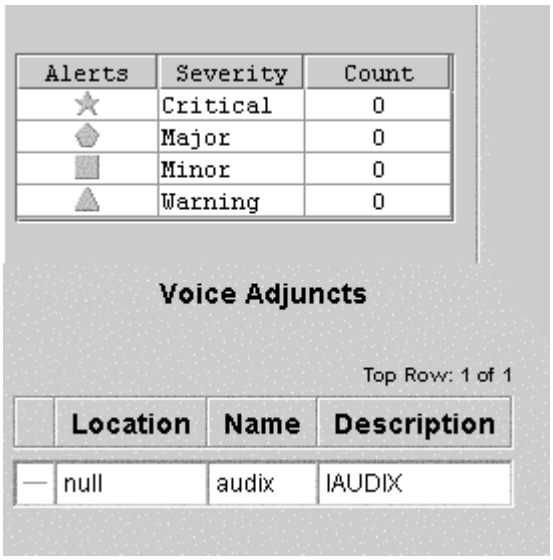
Selecting a voice system displays a summary report for that system. The summary report includes counts of critical, major, minor, and warnings within the system. The summary report also provides basic performance and status information for that system.

The change status drop-down selects whether the connection status is maintained **UP**, set **OFF**, or **Dynamic**(ally) connected and disconnected as needed.

Additional information panels are not shown.



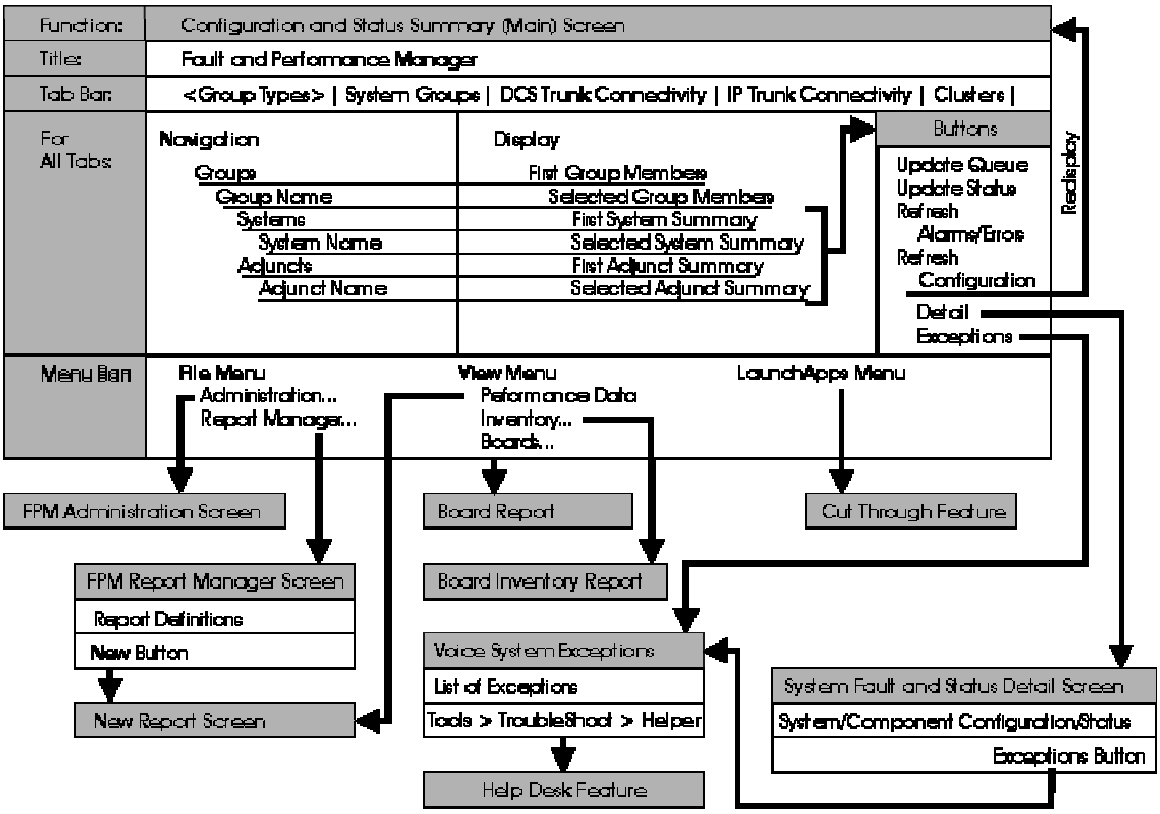
The tabs select different types of system grouping. Within each group, individual systems are listed. The highest alert level found in any component of a system displays at the system level. The display for system groups is shown. The displays for DCS Trunk Connectivity groups, IP Trunk Connectivity groups, and Clusters are similar.



Selecting a voice adjunct displays a summary report for that adjunct. The summary report includes counts of critical, major, minor, and warnings within the system. The summary report also provides basic performance and status information for that system.

The *Configuration and Status* screen provides access to all other system functions. The tabs determine what type of groups display in the *Navigation* panel. The *Display* panel shows group members or a summary for a selected system.

Navigation to other screens is shown and described below.



- **File > Administration...** opens the *FPM Administration* screen.
- **File > Report Manager...** opens the *FPM Report Manager* screen.
- **View > Capacity...** generates and opens the *Capacity Report*.
- **View > Performance Data...** opens the *New Report* dialog box.
- **View > Inventory...** generates and opens the *Board Inventory Report*.
- **View > Boards...** generates and opens the *Board Report*.
- **File > LaunchApps > <application name>** launches the selected cut-through application.
- The **Detail** button on the system summary report provides access to configuration information for that system. Clicking **Detail** opens the *System Detail* screen. The kinds of configuration details available depends on the type of the selected system, but detail is generally available all the way down to the lowest level (usually individual ports).
- The **Exceptions** button on the system summary report (or on any system detail screen) provides a list of exceptions for the system. Clicking **Exceptions** opens the *Voice System Exceptions* screen. Two lists of exceptions are controlled by a drop-down list: exceptions in the selected system (or component), and exceptions involving FPM communication with the selected system (or component).
- Selecting a specific exception and then selecting **Tools > TroubleShoot > Helper** from the *Voice System Exceptions* screen displays the Communication Manager help page related to the selected exception type.
- A quick cut through to the selected system is available by selecting **Tools > TroubleShoot > SAT Connection...** from the *Voice System Exceptions* screen.

Group Type Tabs

A tab bar appears near the top of the Configuration and Status screen. Selecting a tab determines how the systems are grouped. You may select whatever tab provides the most convenient view.

- System Groups

  The Systems Groups Tab provides user defined groups of systems for convenience in viewing network status and performance.

- DCS Trunk Connectivity

  The DCS Trunk Connectivity Tab provides systems grouped by DCS trunk connectivity for convenience in viewing network status and performance.

- IP Trunk Connectivity

  The IP Trunk Connectivity Tab provides systems grouped by IP trunk connectivity for convenience in viewing network status and performance.

- Clusters

  The Clusters Tab provides access to ESS or LSP information.

Related Topics

- Administration Screen.
- Report Manager Screen.
- Cut-Through Applications.
- System Detail screen.
- *Voice System Exceptions* screen.
- Board Inventory Report
- Board Report
- New Report Dialog Box

Group Type Tabs

System Groups Tab

The Systems Groups Tab provides user defined groups of systems for convenience in viewing network status and performance.

When viewing by system groups, the object tree uses the following hierarchy:

System Group (graphic or tabular display)
- System
  - Sever Status
  - System Status
    - Cabinets
      - Carriers
      - Boards (or ATM Boards)
      - Ports (general, data module, or trunk)
  - MGStacks
    - Stack
  - MediaGateway
    - Media Module
    - Ports (if applicable)
  - Port Networks
    - Port Network Connectivity (if applicable)
    - DCS Links
    - Stations with Exceptions
  - Data Modules
  - Trunk Groups
  - Routing Patterns
  - External Devices
  - Bulletin Board

Related Topics

- DCS Trunk Connectivity Tab
- IP Trunk Connectivity Tab
- Clusters Tab

DCS Trunk Connectivity Tab

The DCS Trunk Connectivity Tab provides systems grouped by DCS trunk connectivity for convenience in viewing network status and performance.

When viewing by DCS trunk connectivity, the object tree uses the following hierarchy:

System Group (graphic or tabular display)

- System
  - System Status
    - Sever Status
    - Cabinets
      - Carriers
        - Boards (or ATM Boards)
        - Ports (general, data module, or trunk)
    - MGStacks
      - Stack
    - MediaGateway
      - Media Module
      - Ports (if applicable)
    - Port Networks
      - Port Network Connectivity (if applicable)
      - DCS Links
      - Stations with Exceptions
    - Data Modules
    - Trunk Groups
    - Routing Patterns
    - External Devices
    - Bulletin Board

Related Topics

- System Groups Tab
- IP Trunk Connectivity Tab
- Clusters Tab

IP Trunk Connectivity Tab

The IP Trunk Connectivity Tab provides systems grouped by IP trunk connectivity for convenience in viewing network status and performance.

When viewing by IP trunk connectivity, the object tree uses the following hierarchy:

System Group (graphic or tabular display)
- System
  - System Status
    - Sever Status
    - Cabinets
      - Carriers
        - Boards (or ATM Boards)
        - Ports (general, data module, or trunk)
    - MGStacks
      - Stack
    - MediaGateway
      - Media Module
      - Ports (if applicable)
    - Port Networks
      - Port Network Connectivity (if applicable)
      - DCS Links
      - Stations with Exceptions
    - Data Modules
    - Trunk Groups
    - Routing Patterns
    - External Devices
    - Bulletin Board

Related Topics

- System Groups Tab
- DCS Trunk Connectivity Tab
- Clusters Tab

Clusters Tab

The Clusters Tab provides access to ESS or LSP information.

When viewing by cluster information, the object tree uses the following hierarchy: (click a link below to learn about that screen)

For Clusters, the tree uses the following hierarchy:

Cluster Groups (graphic or tabular display)

ESS Clusters

ESS Configuration

LSP Clusters

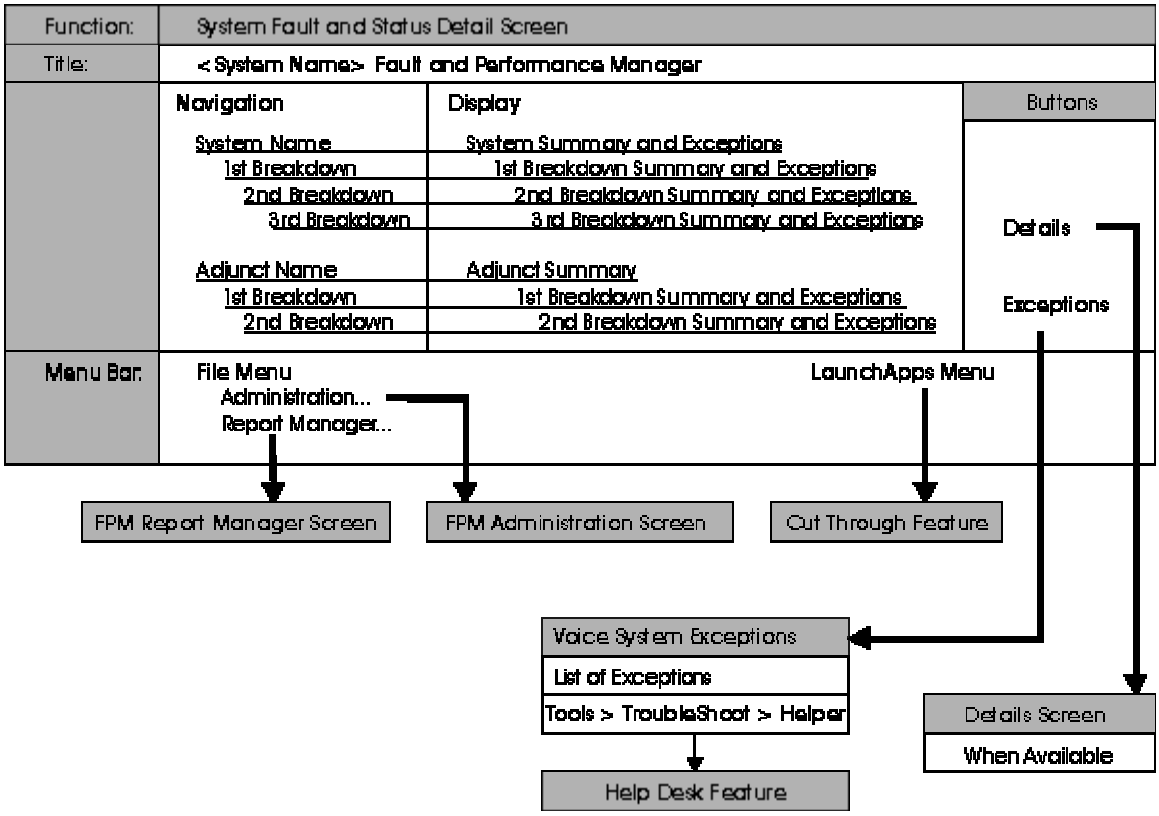
LSP Configuration

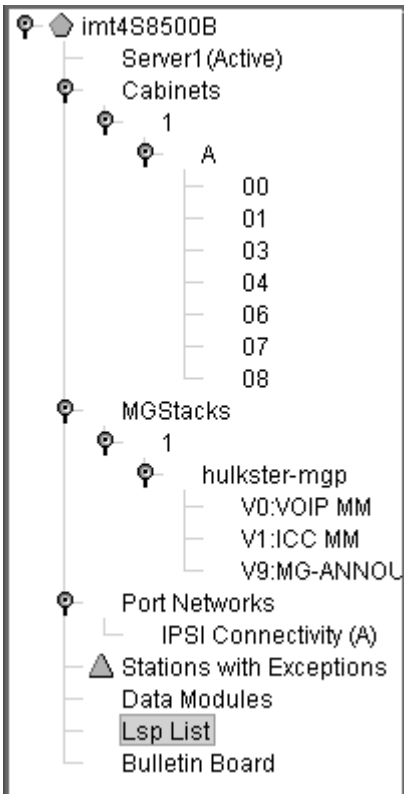
Related Topics

- System Groups Tab
- IP Trunk Connectivity Tab
- DCS Trunk Connectivity Tab

System Detail Screen

The *System Detail* screen displays information about components of a system or adjunct. The **Detail** button on the system summary report of the main *Configuration and Status* screen opens the *System Detail* screen. The Navigation panel shows the breakdown of available information.





The kinds of configuration details available depend on the type of the selected system, but detail is generally available all the way down to the lowest level (usually individual ports).

Navigation to other screens is described below.

- The **Detail** button appears on some system detail screens. Clicking **Detail** provides additional information when available.
- The **Exceptions** button appears on some system detail screens. It provides a list of exceptions for the system component currently displayed. Clicking **Exceptions** opens the *Voice System Exceptions* screen. Two lists of exceptions are controlled by a drop-down list: exceptions in the selected system (or component), and exceptions involving FPM communication with the selected system (or component).
- Selecting a specific exception and then selecting **Tools > TroubleShoot > Helper** from the *Voice System Exceptions* screen displays the Communication Manager help page related to the selected exception type.
- A quick cut through to the selected system is available by selecting **Tools > TroubleShoot > SAT Connection...** from the *Voice System Exceptions* screen.
- **File > Administration...** opens the *FPM Administration* screen.
- **File > Report Manager...** opens the *FPM Report Manager* screen.
- **File > LaunchApps > <application name>** launches the selected cut-through application.

Related Topics

- *Voice System Exceptions* screen
- Administration Screen
- Report Manager Screen
- Cut-Through Application

Configuration and Status Display

Fault and Performance Manager's main window displays status and configuration information about your Avaya network.

FPM can also forward status information to a general purpose Network Management System (NMS). Usually, however, general purpose NMS's cannot display detailed configuration information.

The table below shows objects in your network that you can view.

To view	Do this
ATM boards	• Open the System Group • Select the Voice System • Click **Details** • Select the Cabinet • Select the Carrier • Click a board
boards (including IP SERVER INTFC boards)	• Open the System Group • Select the Voice System • Click **Details** • Select the Cabinet • Select the Carrier • Click a board
Bulletin boards	• Open the System Group • Select the Voice System • Click **Details** • Click Bulletin Board
cabinets	• Open the System Group • Select the Voice System • Click **Details** • Click a cabinet
DCS connectivity	• Open the System Group • Select the Voice System • Click **Details** • Click DCS Links
DCS links	• Open the System Group • Select the Voice System • Click **Details** • Click DCS Links

To view	Do this
data modules	• Open the System Group • Select the Voice System • Click **Details** • Click Data Modules
external devices	• Open the System Group • Select the Voice System • Click **Details** • Click External Devices
media gateway stacks	• Open the System Group • Select the Voice System • Click **Details** • Click MGStacks
media gateway	• Open the System Group • Select the Voice System • Click **Details** • Select MGStacks • Click the media gateway
media servers	• Open the System Group • Select the Voice System • Click **Details** • Click the media server
ports	• Open the System Group • Select the Voice System • Click **Details** • Select the Carrier • Select the Cabinet • Click the port
port networks	• Open the System Group • Select the Voice System • Click **Details** • Click Port Networks
system groups	• Click the System Group
trunk groups	• Open the System Group • Select the Voice System • Click **Details** • Click Trunk Groups

To view	Do this
voice system	• Open the System Group • Click the Voice System

Related Topics

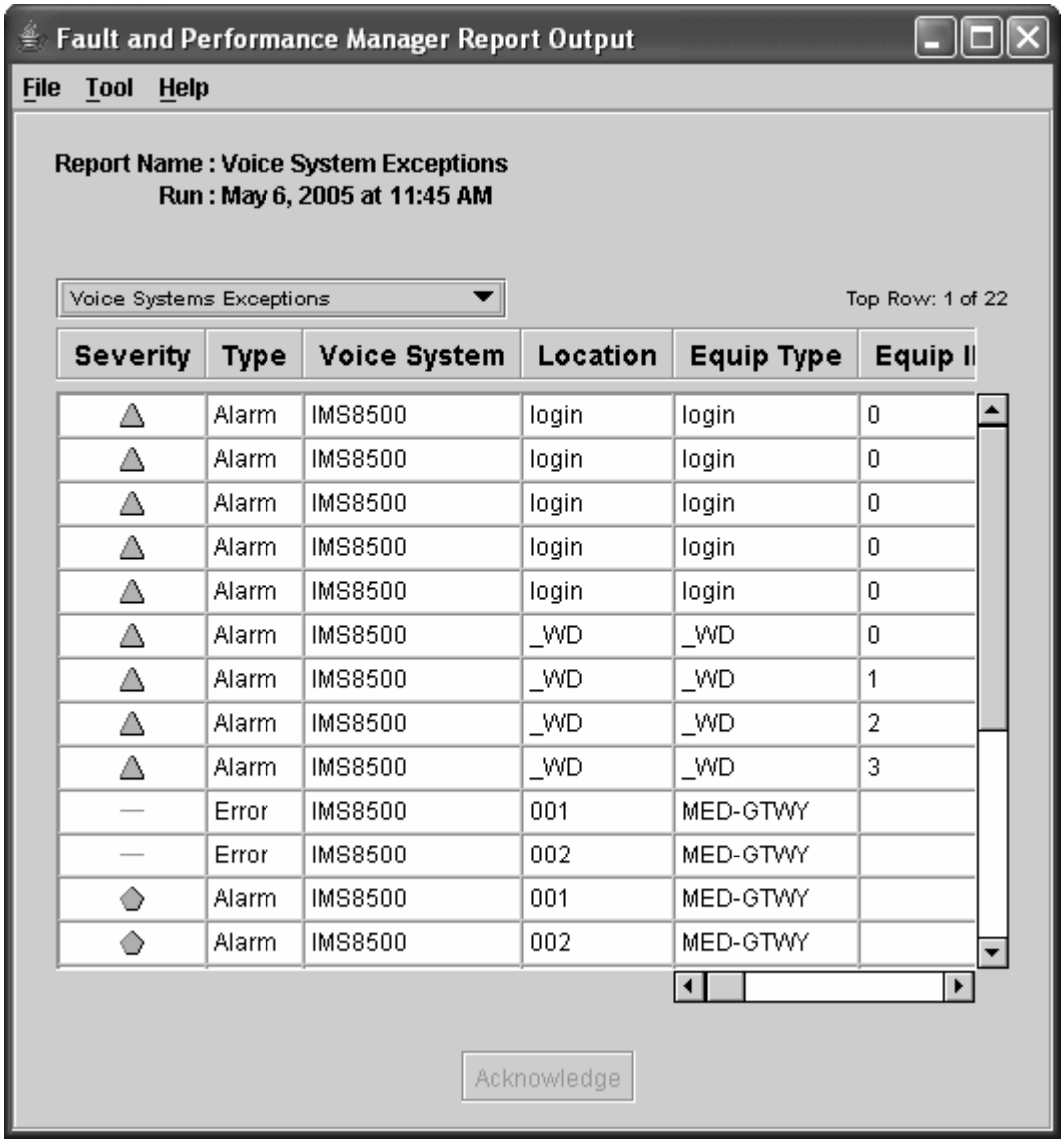
- Main Configuration and Status Screen
- System Detail Screen

Troubleshooting

Voice System Exceptions Screen (Online)

Voice system exceptions display when you click **Exceptions** on any screen on which it appears. The exceptions shown will be limited to current exceptions appropriate for the selected item on the screen containing the **Exceptions** button.

You can also run or schedule Voice System Exception reports from the Report Manager screen. When run from Report Manager screen, you can specify the contents and time period to be covered. NOTE: the data displayed is different when this report is run from the Report Manager. Please see Exceptions: Voice System.



Fields

There are two types of exceptions shown, depending on the setting of the drop-down list:

- **Voice System Exceptions** (primary data) occur on the voice system itself. The following fields display:

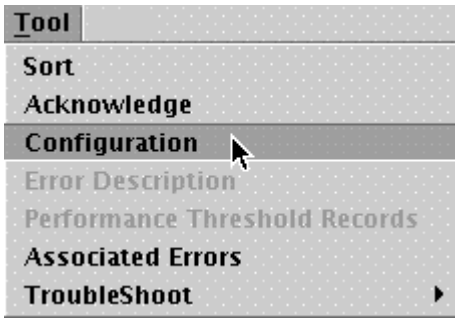
Column	Contains
Severity	Alert Severity (key)
Type	Type (key)
Voice System	Voice System (key)
Location	Hardware Location (key)
Equip Type	Equipment Type
Equip ID	Equipment ID
Voice System Start	Voice System Start Date and Time (key)
Voice system End	Voice system End Date and Time (key)
Description	The Description field may contain trap data fields as well as a brief description of the problem.
AlmNum	Alarm number
Alert	Alert
Exc DB ID	Exception Database ID

- **Fault/Performance Manager Exceptions** occur when there are communication events or difficulties between FPM and a voice system. The following fields display:

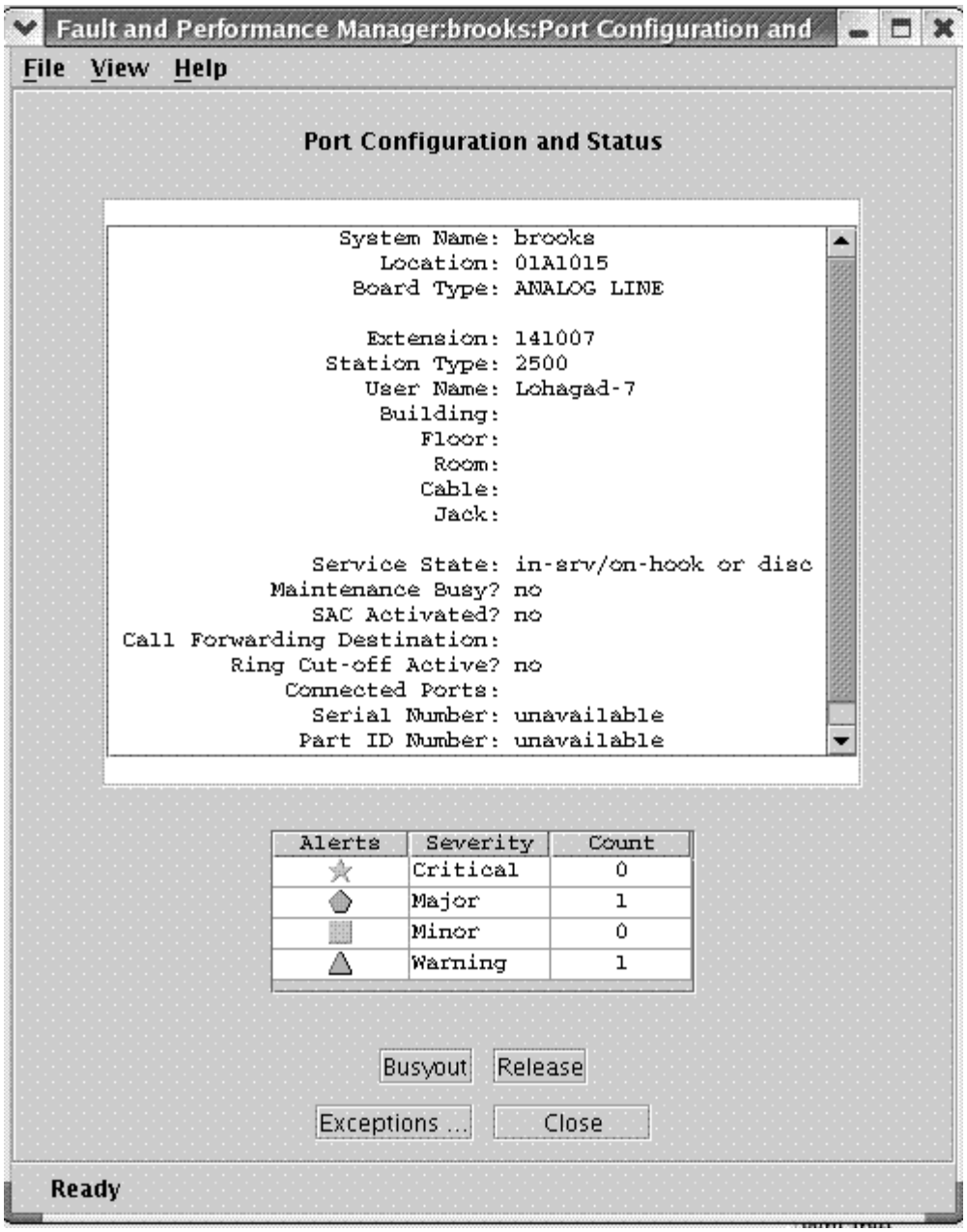
Column	Contains
Severity	Alert Severity (key)
Type	Type (key)
Voice System	Voice System (key)
NMS Start	NMS Start Date and Time (key)
NMS End	NMS End Date and Time (key)
Alert	Alert
Description	Description
Exc DB ID	Exception Database ID

Configuration

You can view the configuration associated with an exception by clicking on the exception to highlight it and then selecting **Tool > Configuration**.

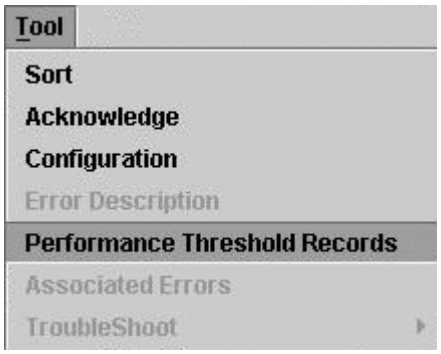


This opens a window showing the configuration associated with the highlighted exception.

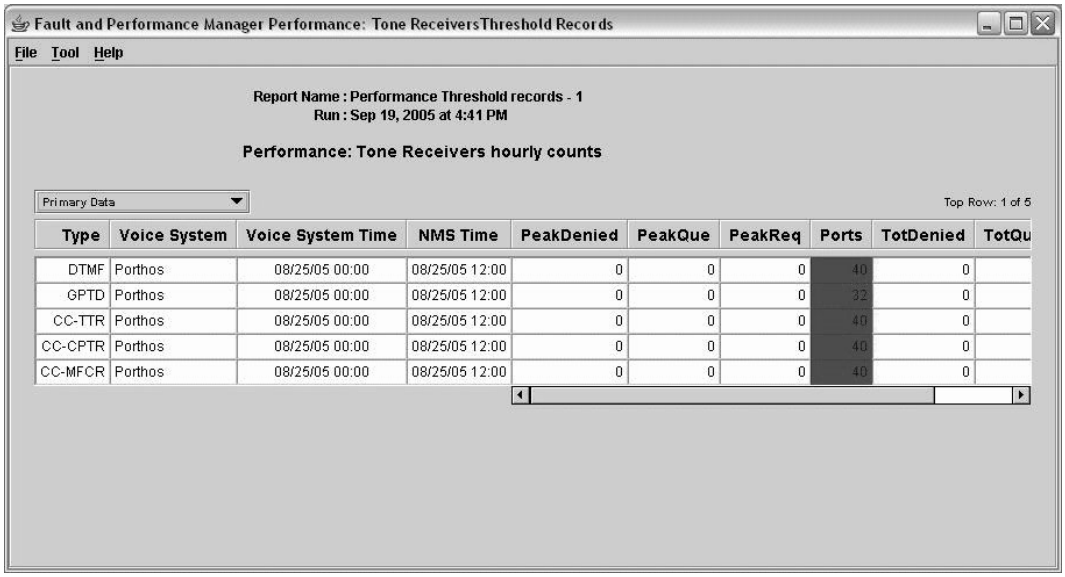


Performance Threshold Records

You can view the performance threshold records associated with an exception by clicking on the exception to highlight it and then selecting **Tool > Performance Threshold Records.**

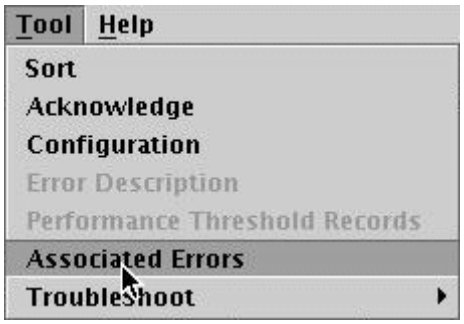


This opens a window showing the specific performance threshold records associated with the highlighted exception.

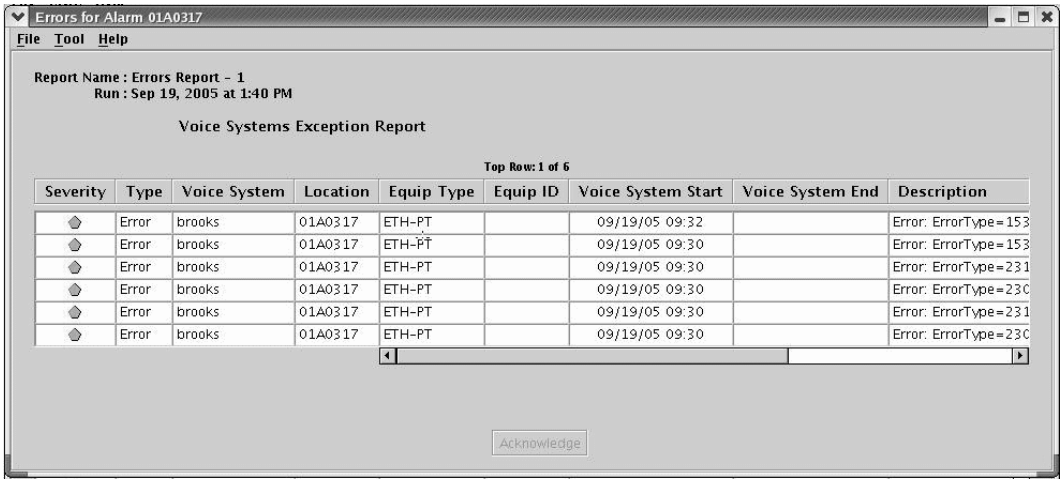


Associated Errors

You can view the errors associated with an exception by clicking on the exception to highlight it and then selecting **Tool > Associated Errors**.

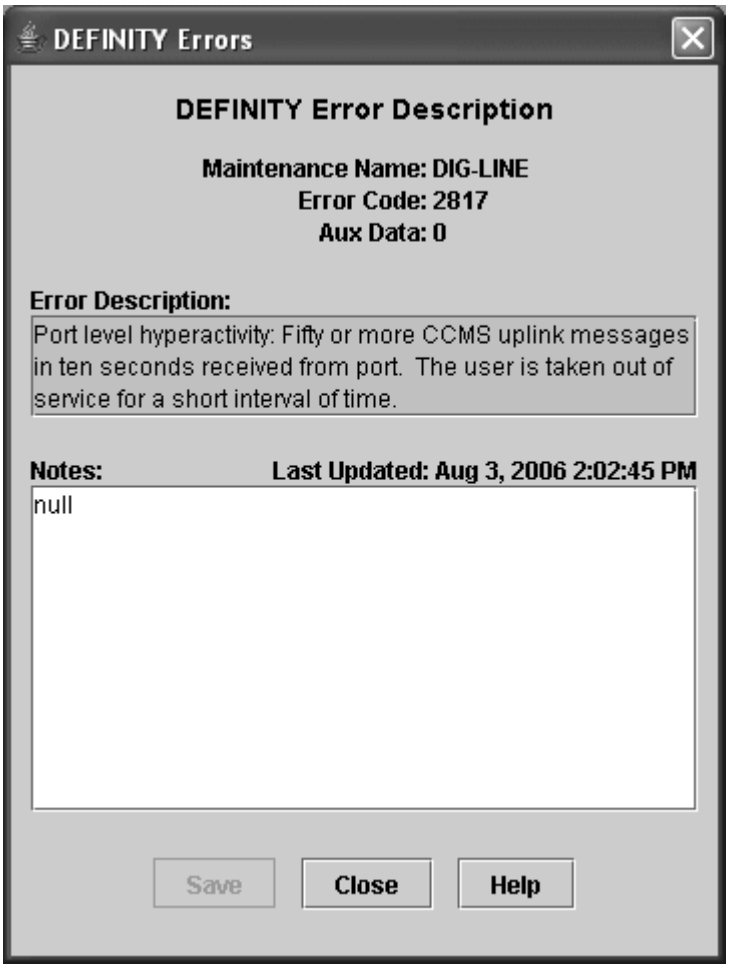


This opens the *Errors for Alarm #* screen showing the specific errors associated with the highlighted exception.



DEFINITY Error Description

From the *Errors for Alarm #* display, double click on any entry for a description of the error.



You can enter notes in the **Notes** box. To save your notes, click **Save**.

Notes are tied to a specific **Maintenance Name, Error Code,** and **Aux Data.** For Example:

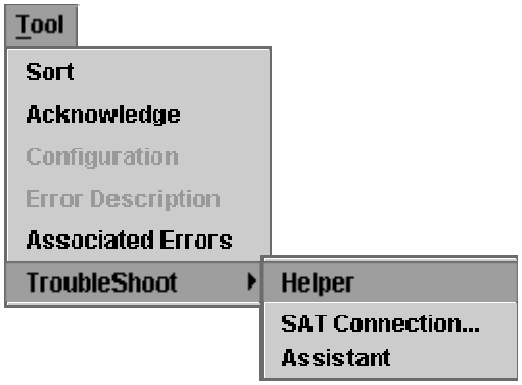
Maintenance Object: DIG-LINE
Error Code: 2817
Aux Data: 0

You can enter customer notes, and when a Digital Line 2817 error code, with aux data 0 occurs on some other station or switch, and you double-click on the error entry, it will show what you entered and saved from before.

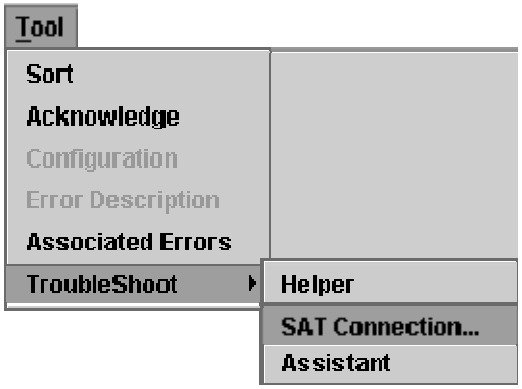
To close the dialog box, click **Close**.

Help Desk Feature

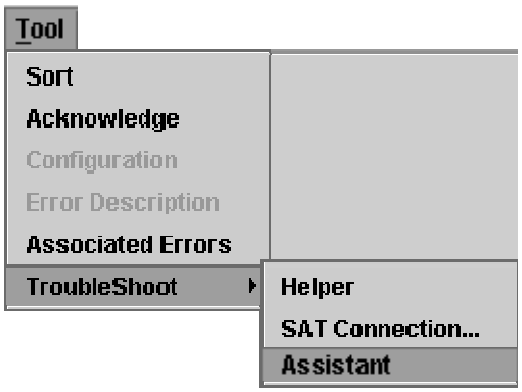
You can view additional information about an exception by clicking on the exception to highlight it and then selecting **Tool > TroubleShoot > Helper**. This opens the Communication Manager manual page describing the selected exception. The manual page may suggest additional tests or corrective actions that can be accomplished using the SAT.



You can get directly to the SAT by selecting **Tool > TroubleShoot > SAT Connection...**. This opens the *Login* dialog box for the selected system. You must have a user account and password on the selected system to use the SAT connection.



For some hardware types, you can use the automated assistant to automatically run additional test and/or corrective actions by simulating the SAT. You activate the Assistant by selecting **Tool > TroubleShoot > Assistant.**



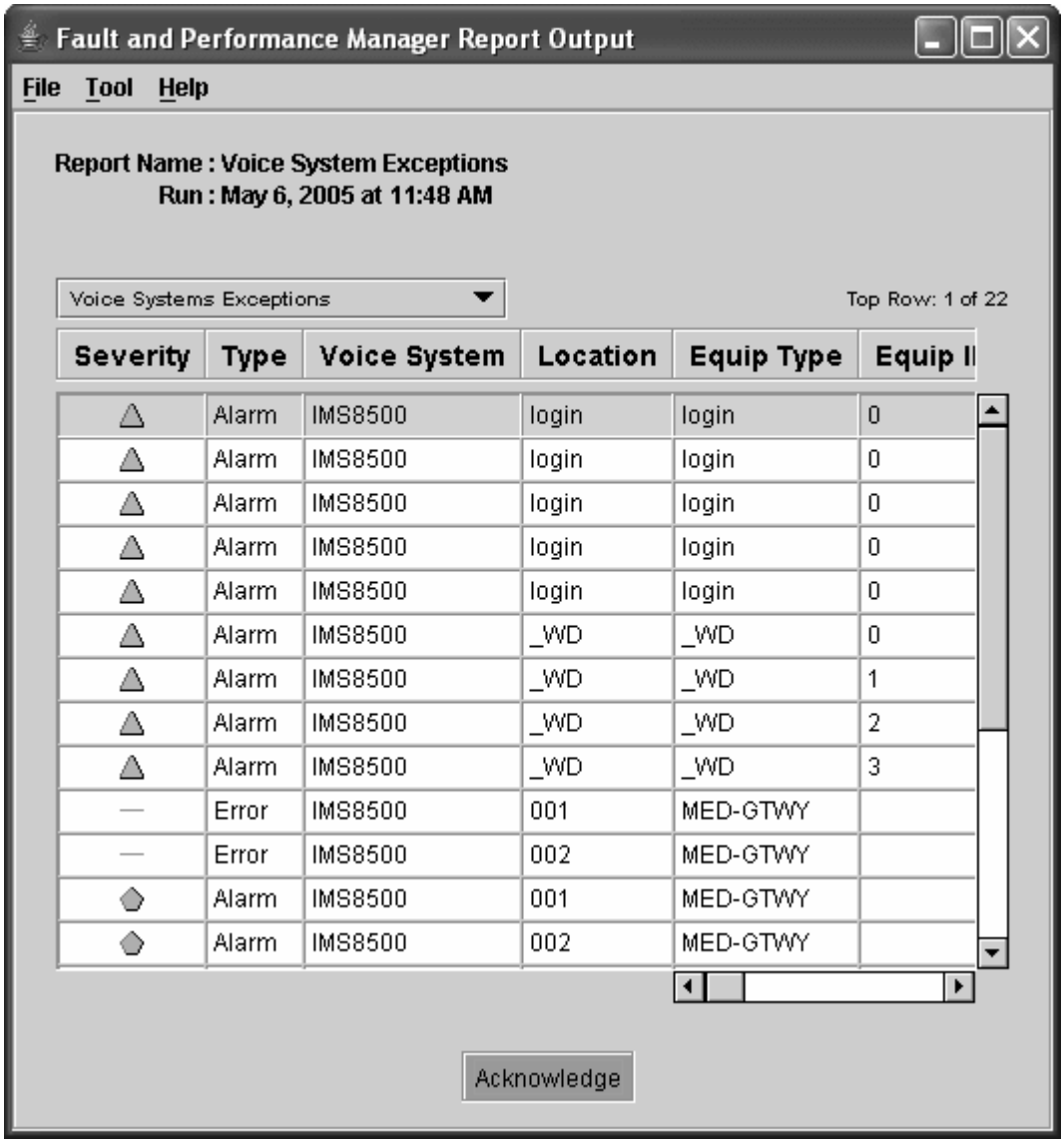
For additional information, please see Help Desk Feature.

Related Topics

- Cut-Through Applications
- Exceptions: Voice System
- Help Desk Feature

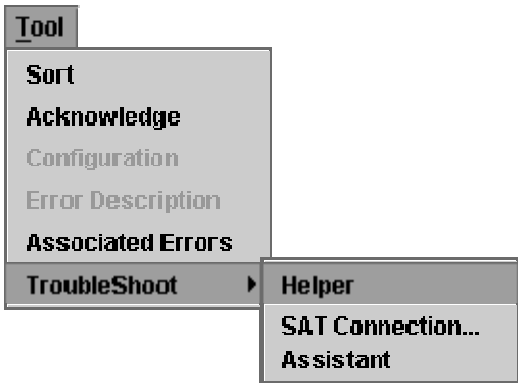
Help Desk Feature

When you have highlighted an exception by clicking on its row, you can invoke the Help Desk Feature.



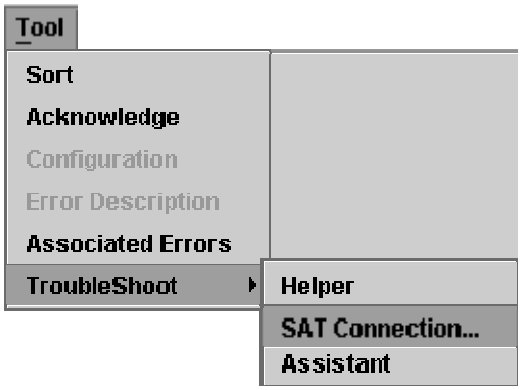
Help Desk Helper

You can view additional information about an exception by clicking on the exception to highlight it and then selecting **Tool > TroubleShoot > Helper**. This opens the Communication Manager manual page describing the selected exception. The manual page may suggest additional tests or corrective actions that can be accomplished using the SAT.



Help Desk SAT Connection

You can get directly to the SAT by selecting **Tool > TroubleShoot > SAT Connection...**. This opens the *Login* dialog box for the selected system. You must have a user account and password on the selected system to use the SAT connection.

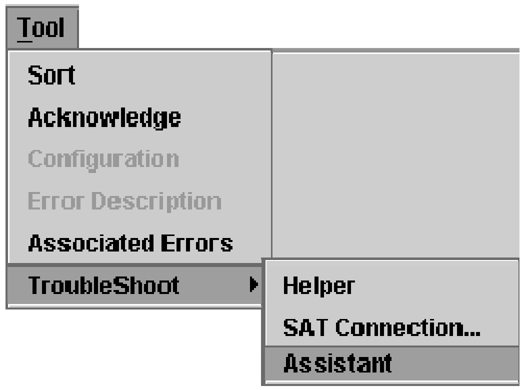


Help Desk Assistant

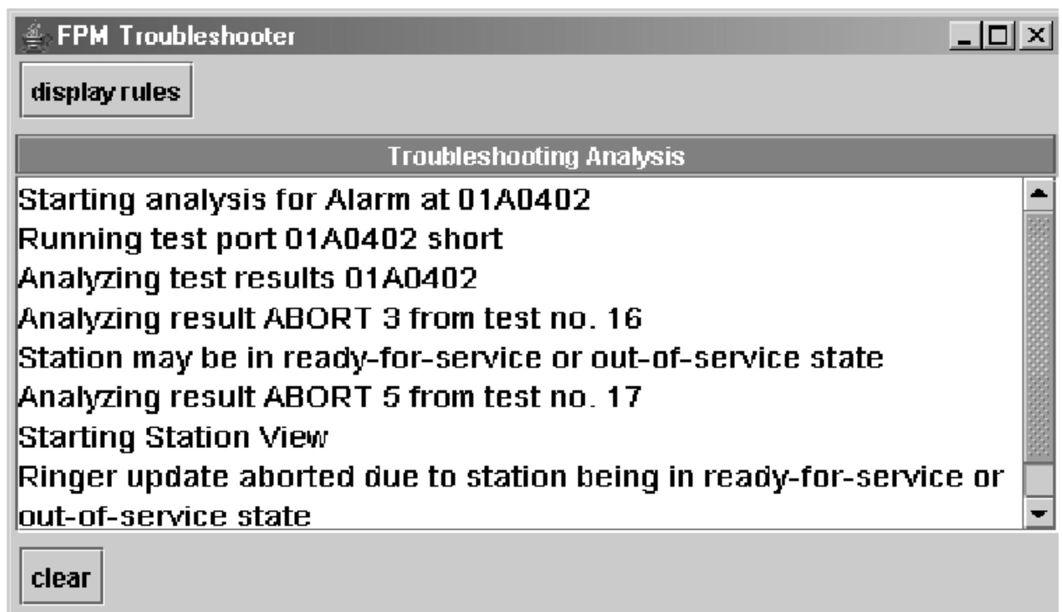
For some hardware types, you can use the Help Desk Assistant to automatically run additional test and/or take corrective actions by simulating the SAT. You activate the Assistant by selecting **Tool > TroubleShoot > Assistant.**

Note:

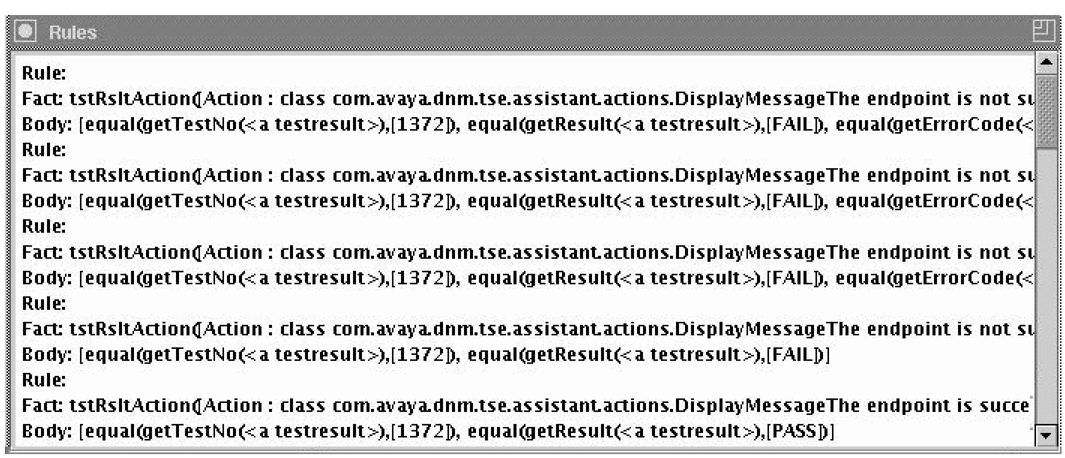
If the hardware type you wish assistance troubleshooting is not currently supported by the assistant, you will get a message box indicating that the module for that hardware type is not available.



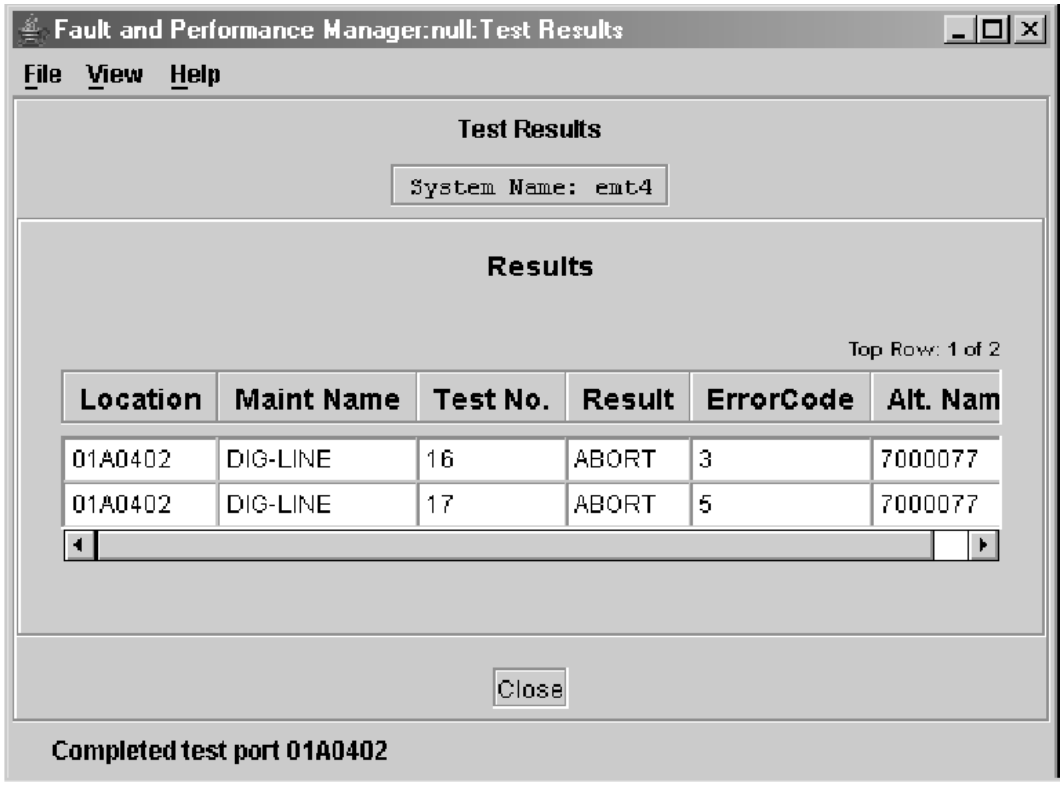
The Assistant displays its actions as they are taken.



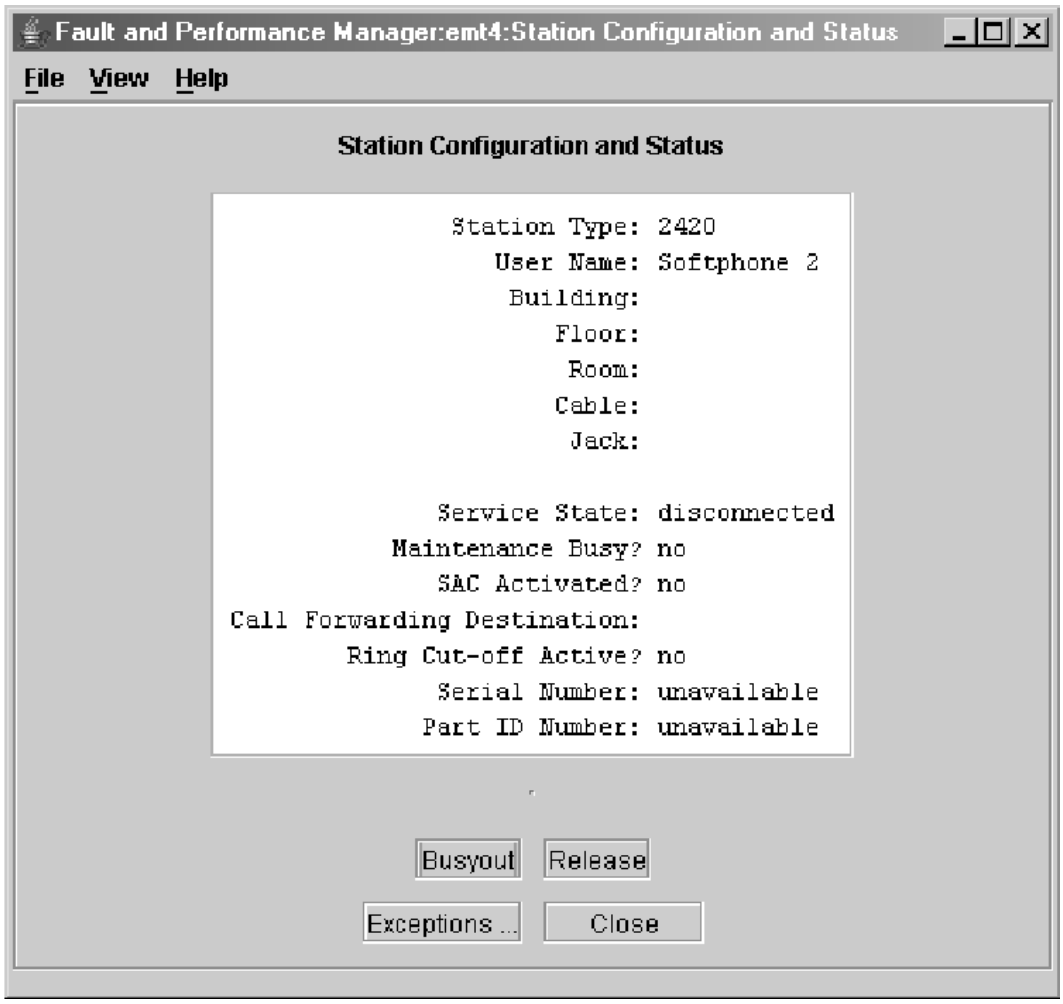
Click **display rules** to see the specific rules for automated troubleshooting.



The results of each test are reported as the test completes.



When the Assistant finishes, it reports its conclusions about the problem as a configuration and status display for the selected device.



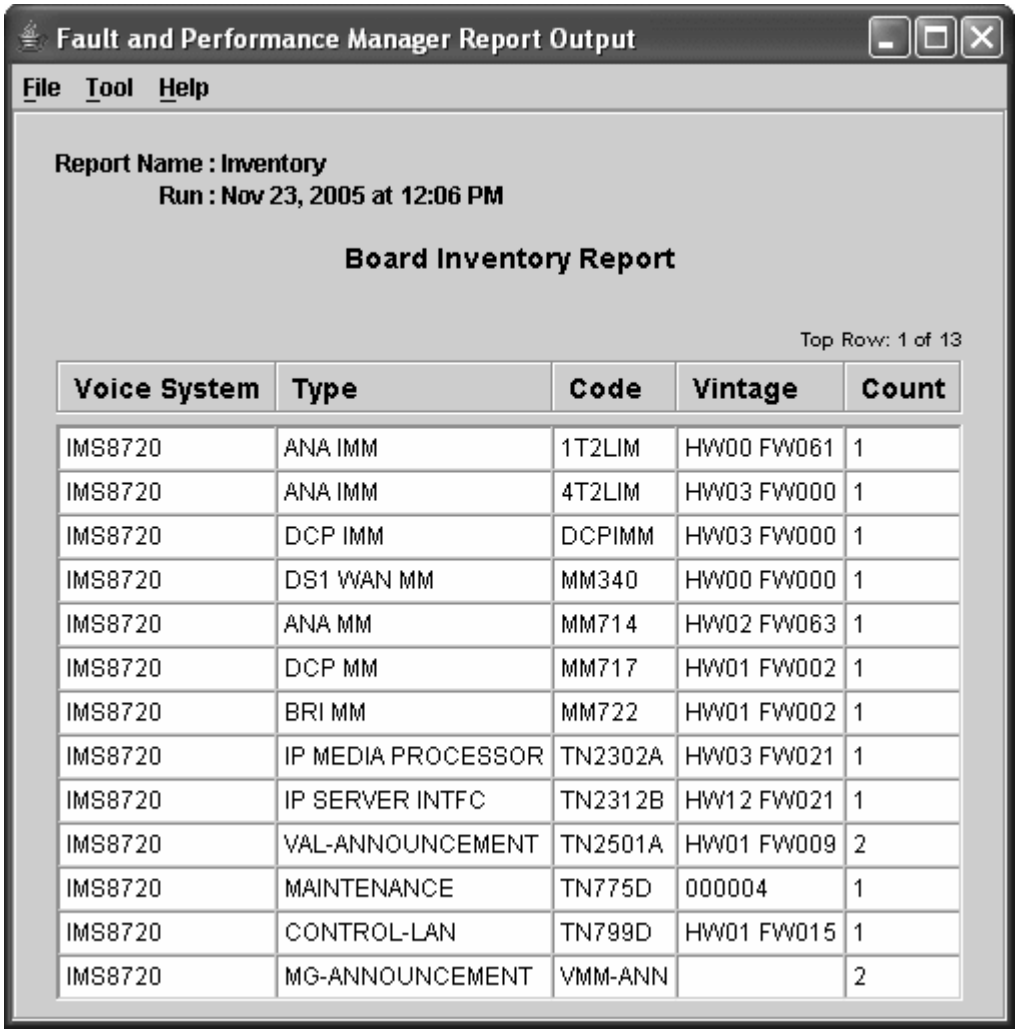
You may then take additional action as you feel necessary.

Related Topics

- Cut-Through Applications

Board Inventory Report (Online)

The Online Board Inventory Report shows all boards (circuit packs) by type, code, and vintage. It is generated from the Configuration and Status screen or the System Detail screen by selecting **View > Inventory**. The inventory include all boards appropriate for the currently selected location.



Voice System	Type	Code	Vintage	Count
IMS8720	ANA IMM	1T2LIM	HW00 FW061	1
IMS8720	ANA IMM	4T2LIM	HW03 FW000	1
IMS8720	DCP IMM	DCPIMM	HW03 FW000	1
IMS8720	DS1 WAN MM	MM340	HW00 FW000	1
IMS8720	ANA MM	MM714	HW02 FW063	1
IMS8720	DCP MM	MM717	HW01 FW002	1
IMS8720	BRI MM	MM722	HW01 FW002	1
IMS8720	IP MEDIA PROCESSOR	TN2302A	HW03 FW021	1
IMS8720	IP SERVER INTFC	TN2312B	HW12 FW021	1
IMS8720	VAL-ANNOUNCEMENT	TN2501A	HW01 FW009	2
IMS8720	MAINTENANCE	TN775D	000004	1
IMS8720	CONTROL-LAN	TN799D	HW01 FW015	1
IMS8720	MG-ANNOUNCEMENT	VMM-ANN		2

Fields

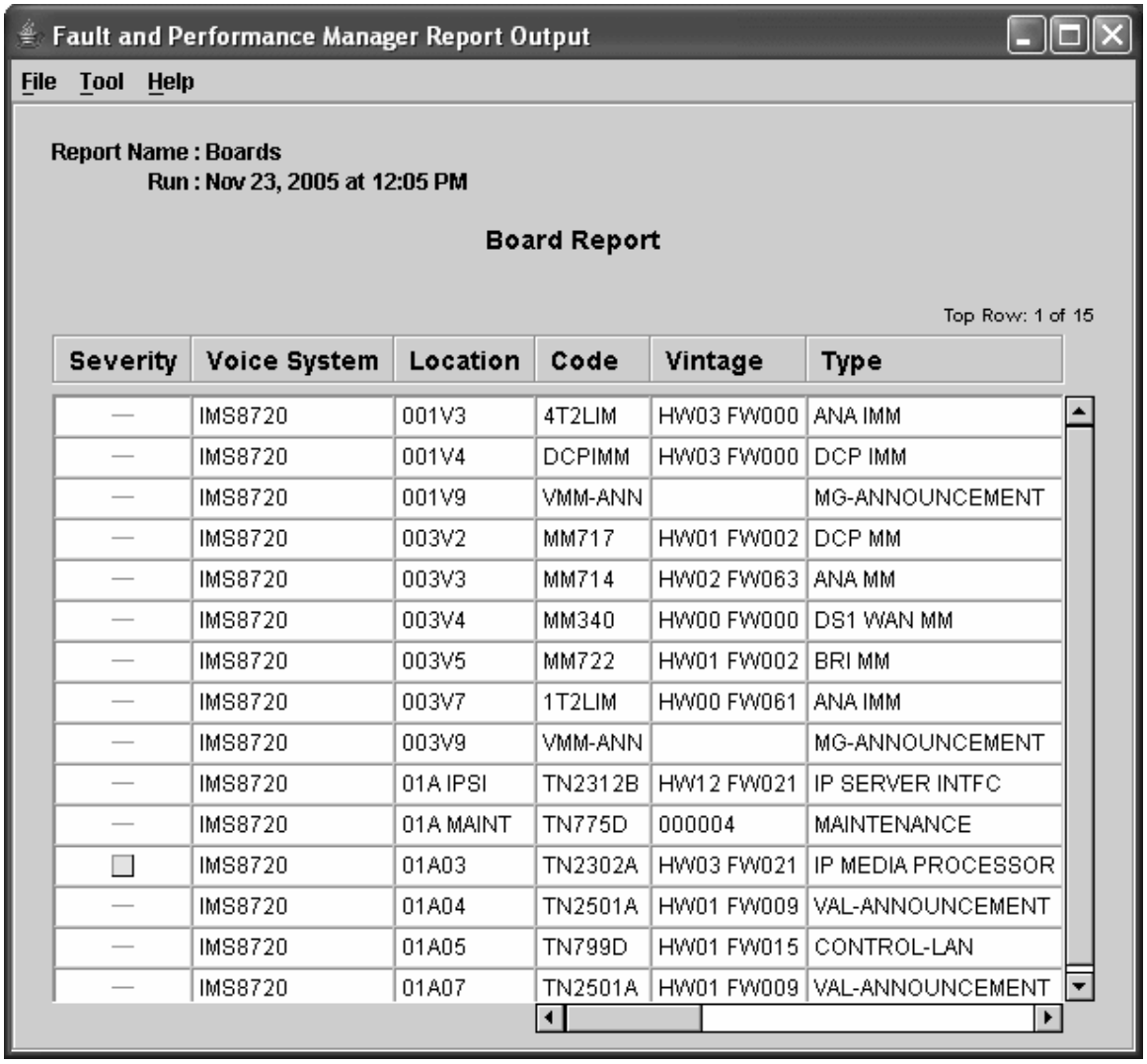
Column	Contains
Voice System	Voice System name
Type	Board type
Code	Hardware and Firmware vintage codes
Vintage	Board vintage code
Count	Count of boards of same type, code, and vintage.

Related Topics

- Configuration Board Inventory Report

Board Report (Online)

The Online Board Report shows a list of installed boards (circuit packs). It is generated from the Configuration and Status screen or the System Detail screen by selecting **View > Boards...**. It includes all boards appropriate for the currently selected location.



Severity	Voice System	Location	Code	Vintage	Type
—	IMS8720	001V3	4T2LIM	HW03 FW000	ANA IMM
—	IMS8720	001V4	DCPIMM	HW03 FW000	DCP IMM
—	IMS8720	001V9	VMM-ANN		MG-ANNOUNCEMENT
—	IMS8720	003V2	MM717	HW01 FW002	DCP MM
—	IMS8720	003V3	MM714	HW02 FW063	ANA MM
—	IMS8720	003V4	MM340	HW00 FW000	DS1 WAN MM
—	IMS8720	003V5	MM722	HW01 FW002	BRI MM
—	IMS8720	003V7	1T2LIM	HW00 FW061	ANA IMM
—	IMS8720	003V9	VMM-ANN		MG-ANNOUNCEMENT
—	IMS8720	01A IPSI	TN2312B	HW12 FW021	IP SERVER INTFC
—	IMS8720	01A MAINT	TN775D	000004	MAINTENANCE
☐	IMS8720	01A03	TN2302A	HW03 FW021	IP MEDIA PROCESSOR
—	IMS8720	01A04	TN2501A	HW01 FW009	VAL-ANNOUNCEMENT
—	IMS8720	01A05	TN799D	HW01 FW015	CONTROL-LAN
—	IMS8720	01A07	TN2501A	HW01 FW009	VAL-ANNOUNCEMENT

Fields

Column	Contains
Severity	Alert severity Icon
Voice System	Voice System name
Location	Board Location
Code	Board Code and Suffix
Vintage	Hardware and Firmware versions

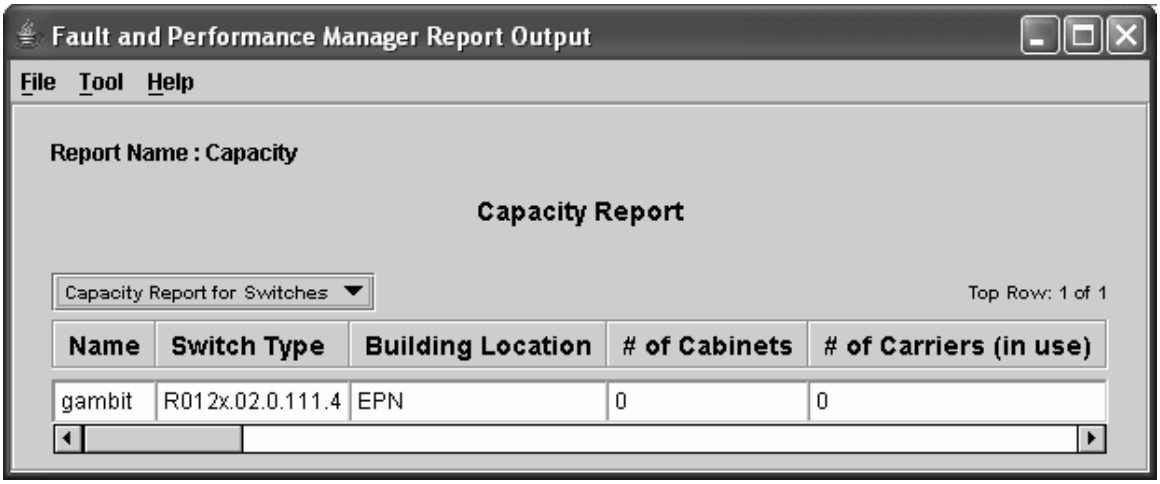
Column	Contains
Type	Board Type
AssignPorts	Count of assigned ports
UnassignPorts	Count of unassigned ports
TTIPorts	Count of TTI ports
PSAPorts	Count of PSA ports
TotPorts	Total number of ports
PN/SN	Port Network or Switch node number
SigType	Signalling Type
Name	Board Name
CSU ID	CSU module ID

Related Topics

- Configuration Board Report

Capacity Report (Online)

The Capacity Report provides used and available capacity information for a switch. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.



Fields

Column	Contains
Name	Voice System name
Switch Type	Voice System type
Building Location	Voice System Location
# if Cabinets	Number of cabinets
# of Carriers (in use)	Number of carriers in use
# of Unused Carriers	Number of spare carriers
Total Slot	Total slots available
Used Slot	Number of slots used
Spare Slot	Number of slots available
Total Digital Ports	Total digital ports
Used Digital Ports	Number of digital ports used
Spare Digital Ports	Number of digital ports available
Total Analog Ports	Total analog ports

Column	Contains
Used Analog Ports	Number of analog ports used
Spare Analog Ports	Number of analog ports available
Total License Ports	Total licensed ports
Used Licensed Ports	Number of licensed ports used
Spare Licensed Ports	Number of licensed ports available
Total X Mobility	
Used X Mobility	
Spare X Mobility	
Total IP Stations	Total IP stations
Used IP Stations	Number of IP stations used
Spare IP Stations	Number of IP stations available
Total DS1s	Total DS1 trunks
Total Trunk Ports	Total trunk ports
Total Station	Total stations
ACD License	ACD license included

Related Topics

- Configuration Capacity Report

Performance Report (Online)

Selecting **View > Performance Data...** from the *Configuration and Status* screen or the *System Detail* screen takes you directly to the New Report dialog box where you can define the performance report you want and run it immediately.

Related Topics

- New Report dialog box

Cut-Through Applications

You can directly access network management systems through the LaunchApps menu on the *Configuration and Status* screen.

The available applications depend on your network components.

- **ASA** — Avaya Site Administration
- **MgDeviceMgr** — Avaya Media Gateway Device Manager
- **MSA** — Multi-Site Administration
- **SMON** — Switch Monitoring
- **VAM** — Voice Announcement Manager
- **VMM** — Voice over IP Monitoring Manager

Related Topics

- Help Desk Feature
- Voice System Exceptions

Administration

Administration Screen

From the File menu of the *Configuration and Status* screen you can select **File > Administration...** to open the *FPM Administration* screen.

Note:

*A submenu displays when you select **File > Administration...** and there is more than one administration server available. The submenu lists the primary administration server IP address at the top followed by any other available administration servers. After you select one of the servers, the FPM Administration screen opens.*

FPM Administration Screen	
Title: "Fault and Performance Manager"	
Navigation	**Display**
Administration Root	List of Default Parameter Groups
Default Parameters	List of Default Parameters Groups
Parameter Groups	Default Parameter Group Panel
FPM Admin Parm Groups	Selected FPM Admin Parm Group Panel
Voice System Parameters	List of Voice System Names
Voice System Names	List of Parameter Groups
Parameter Groups	Voice System Parameter Group Panel
Voice Adjuncts Parameters	List of Voice Adjunct Names
Voice Adjuncts Names	List of Parameter Groups
Parameter Groups	Voice Adjunct Parameter Group Panel

The *FPM Administration* screen has two functions:

- The *FPM Administration* screen defines how the system fault and performance data is collected and stored by FPM.

  You can define a system-wide template of default parameter values. Each system can use the default template or can override the template with values specific to that system. Parameters include the data to collect, the collection schedule, and the filtering to apply to exceptions to create alarms. The following parameter groups can be defined:

  - Configuration Collection
  - Trunk Exceptions
  - Alarms/Errors
  - Performance Collection
  - Processor Occupancy
  - Trunk Group Exceptions
  - Adjunct Alarms/Errors

- The *FPM Administration* screen defines the system views available through FPM.

  You can define the group names and membership for multiple views of your network based on system groups, IP or DCS trunk groups, or clusters. The following parameter groups can be defined:

  - System Exceptions
  - System Groups
  - DCS Groups
  - IP Trunk Groups

Collecting Data

Filtering Alarms (Alarm Filter Panel)

The Alarm Filter Panel gives you detailed control of alarm collection and processing. You specify a set of parameters to filter out a selected set of alarms. Additional parameters define how often alarm collection occurs, and what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for alarm filtering.

- **Default Alarm/Error Panel**

  The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

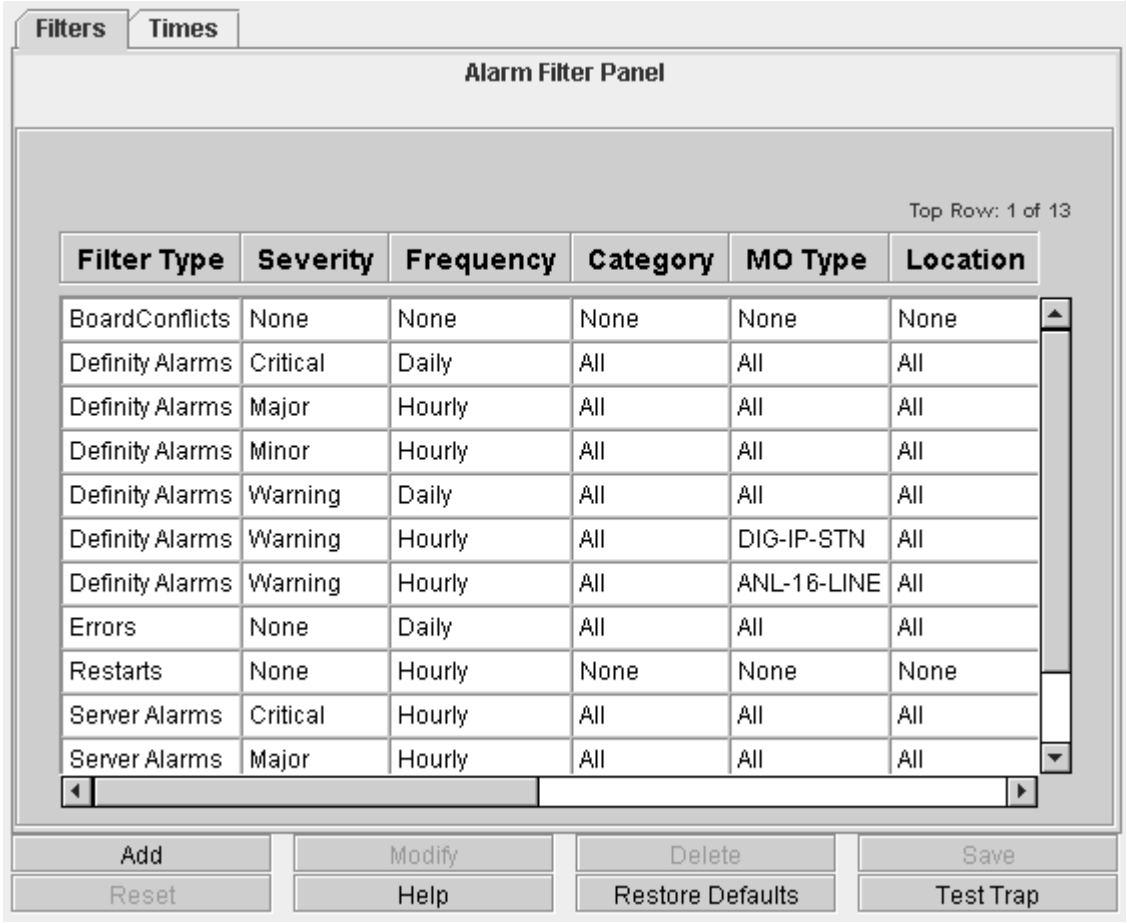
- **Custom Alarm/Error Panel**

  The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

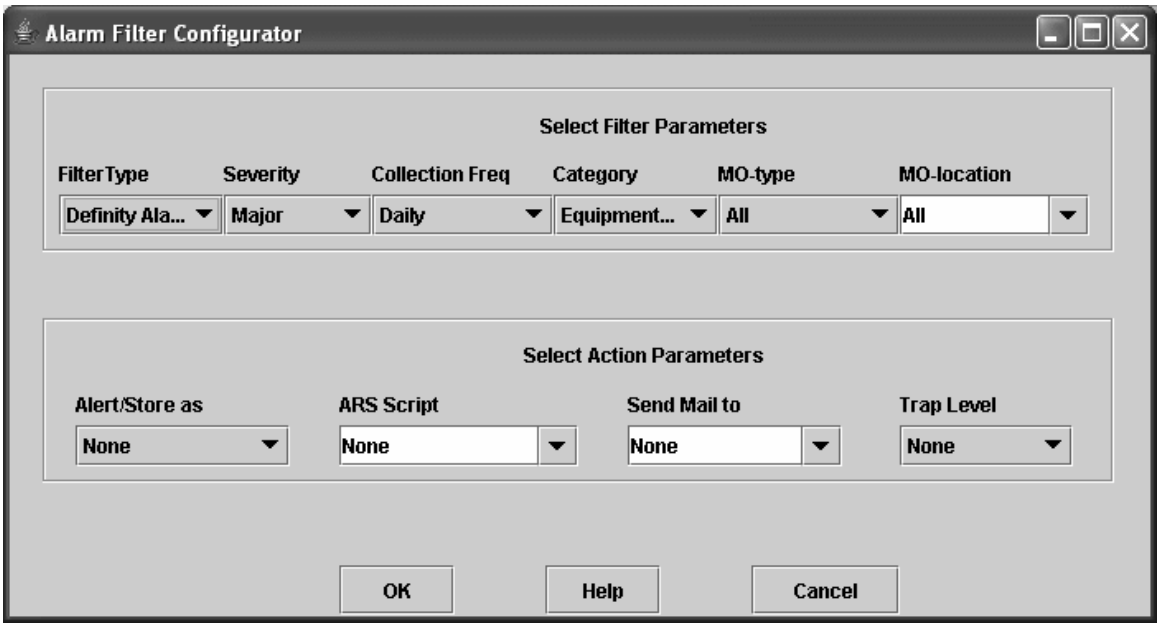
  For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Viewing Alarm Filters

Defined alarm filters are displayed as a scrolling list:



Selecting an alarm filter (or clicking **Add**) opens the selected filter (or a new filter) in the Alarm Filter Configurator.



Filter Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the upper section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Filter Type**: Select the type of alarm to be filtered:
  - **Definity Alarms:** Alarms collected from the Communication Managers and maintenance objects in the Communication Managers.

    Note:

    Definity Alarms *now includes the previous filter type:* ***Traps****. Selection of* ***Definity Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Traps*** *is no longer available.*
  - **Restart Alarms:** Restarts of the Communication Managers.

    Note:

    Restart Alarms *now includes the previous filter type:* ***Restarts****. Selection of* ***Restart Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Restarts*** *is no longer available.*
  - **Server Alarms:** Alarms collected from the Linux servers that hosts the Communication Managers.

    Note:

    Server Alarms *now includes the previous filter type:* ***Platform****. Selection of* ***Server Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Platform*** *is no longer available.*
  - **Errors:** Errors collected from the Communication Managers.

  - **Board Conflicts:** Board conflicts detected in the Communication Managers (detected as conflicts between what is administered and what is actually plugged in).

- **Severity:** Select the severity of alarm to be filtered:
  - Major
  - Minor
  - **Warning** (custom filters only)
  - Critical
  - **Resolved** (custom filters only)
  - All
  - **None** (this field does not apply to this filter)

Notes:

- To receive traps for Warning and Resolved alarms, the Communication Manager must be release 3.0 or above, and **Use Custom Values** must be selected.
- The filters for warning and resolved alarms are sent to the Communication Manager g3Agent using SNMP. The agent must be properly setup and the **SNMP write community strings** must be provided when requested.
- There are a huge number of warning alarms. It is counterproductive to turn on all warning alarms on all maintenance objects. The intent of warning severity is to allow notification of events of particular interest on a limited number of crucial Maintenance Objects.

- **Collection Frequency**: select the frequency of alarm filtering:
  - **None** (this field does not apply to this filter)
  - Daily
  - Hourly

Note:

*This field is only used for **Filter Type** values **Definity Alarms, Server Alarms,** and **Errors** — those types that are collected on a schedule from the Communication Manager. This field does not apply to **Board Conflicts** or **Restart Alarms.***

- **Category**: Categories are groups of Maintenance Object types. (For example, when the **Filter Type** is *Definity Alarms*, the default *Equipment-Type* category expands to the MO group *{MediaGateways, Cabinets, Boards, Ports, Extensions, and Trunks}.* When a **Category** is chosen, the **MO-Type** contains the corresponding expanded list of Maintenance Objects.

  This field is only used for **Filter Type** values *Definity Alarms, Server Alarms, Platform, Errors* and *Traps.* This field does not apply to *Board Conflicts,* and *Restarts.*

- **MO-Type**: The Maintenance Object type can be selected from an appropriate list of Maintenance Objects within each **Category**. If a specific Maintenance Object is chosen, the filter applies only to Maintenance Objects of that type. If the value *All* is chosen, the filter applies to all Maintenance Objects in the **Category.**
- **MO-Location**: The default *All* applies the filter to all locations for the chosen **MO-Type.** If a location is specified, the filter applies only to that location.


Note:

*When the **MO-Type** is specified as **Error**, the **MO-Location** field contains the **Error Code**.*

Action Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the lower section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The alarm/trap information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The alarm/trap information is stored in the database and displayed with the selected severity.
  - **None:** The alarm/trap information is neither stored nor displayed.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*

Specifying Default Filters

The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

Specifying Custom Filters

The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Adding, Modifying, and Deleting Alarm Filters

When the alarm filter panel is displayed, you can add, change, and delete filters using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Alarm Filter Configurator* with a blank form for a new filter.
- **Modify:** Select an existing filter by clicking on its row. Then click **Modify** to open the *Alarm Filter Configurator* with the selected filter parameters filled in for editing.
- **Delete:** Select one or more existing filters by clicking on their rows. Then click **Delete** to delete the selected filters. Multiple filters can be selected by clicking the first filter and then holding down the <shift> key and clicking the last filter.

- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.
- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

Generating Test Traps

The **Test Trap** button at the bottom of the *Alarm Filter Panel* generates a test trap.

- At the default level the **Test Trap** button is always enabled. FPM determines which voice systems have CM4.0 (load 730.0 and above) and sets those systems to generate a trap.
- At the voice system level clicking the **Test Trap** button generates a trap for that voice system. The **Test Trap** button is enabled only if the voice system has CM4.0 (load 730.0 and above).

If an appropriate alarm filter (**Type = Trap, Severity = Warning** or **All**) exists, the resulting traps display in the *Voice System Exception Report*. The Description indicates that this is a customer alarm test.

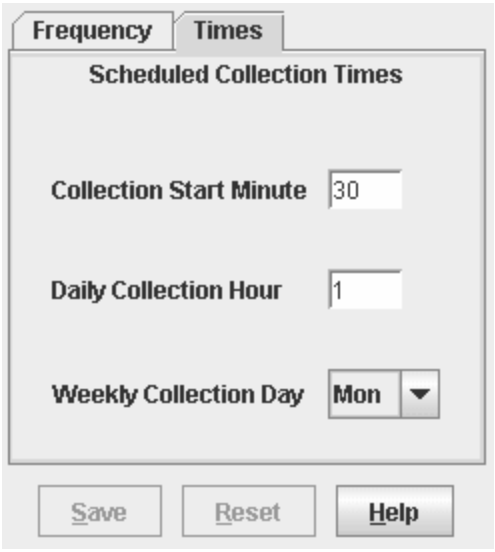
Default and Custom System Parameters

The following parameters can be defined. Each voice system and adjunct may use the default values or may define specific values that apply only to that voice system or adjunct.

Default Parameters

- Voice System Parameters:
  - Configuration Collection

Specifies how often to collect configuration data.



Specifies when to collect configuration data.

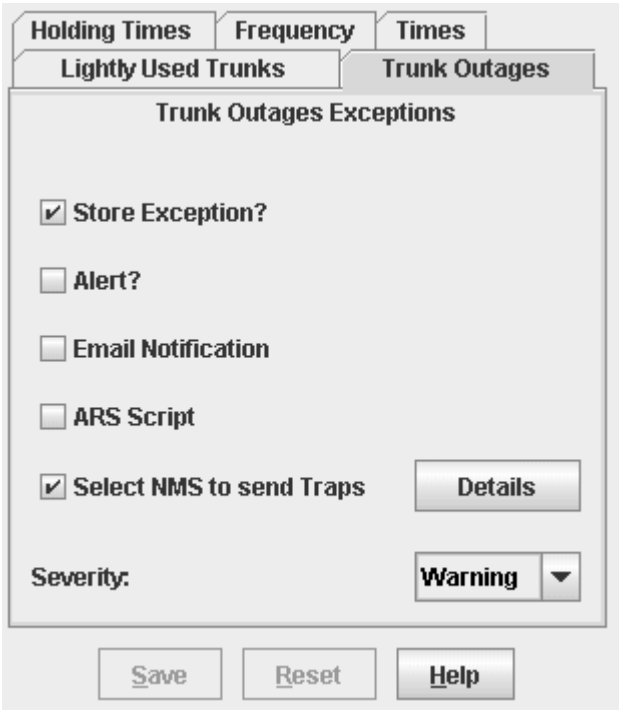
- Trunk Exceptions

Specifies what to do for ACA referrals for long and short holding times.

Specifies how often to collect trunk exception data.

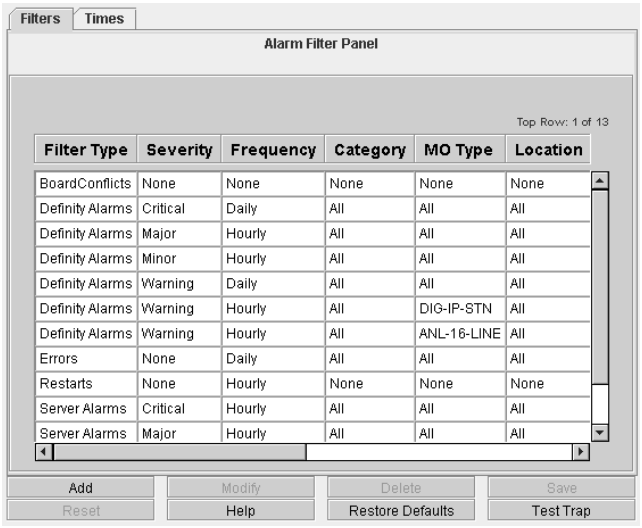
Specifies when to collect trunk exception data.

Specifies what to do with lightly used trunk exceptions.



Specifies what to do with trunk outage exceptions.

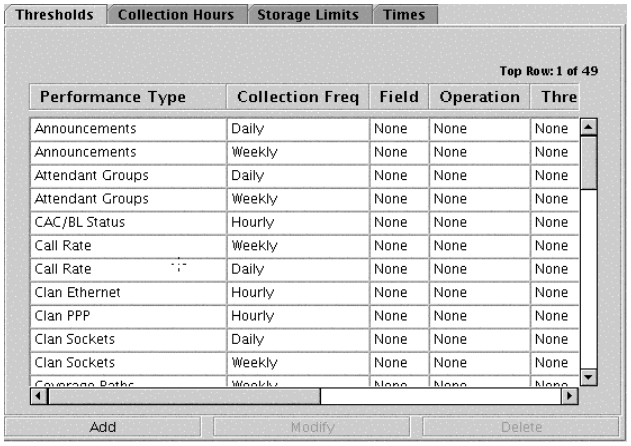
- Alarms/Errors



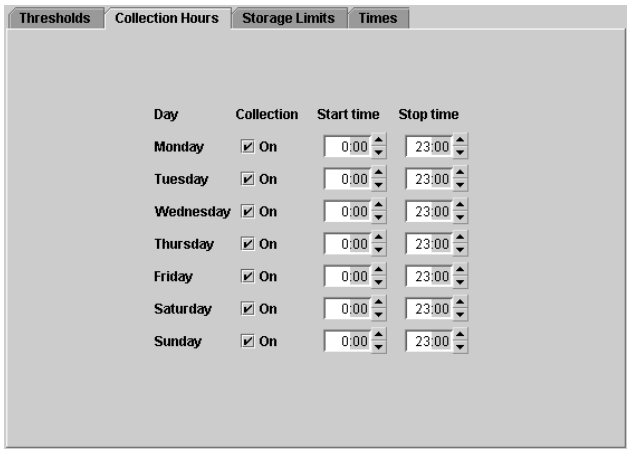
Specifies what to do with each alarm.

Specifies when to collect alarm information.

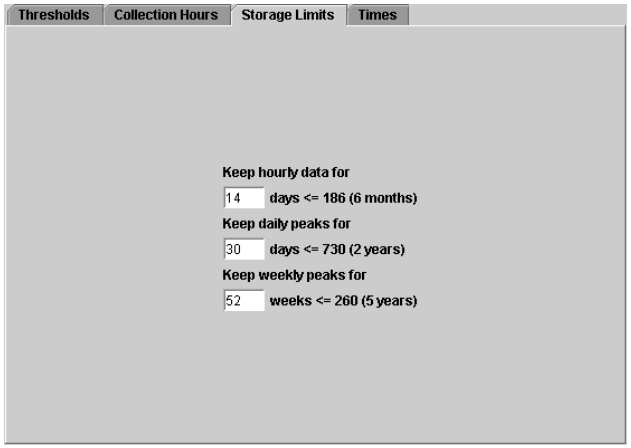
- Performance Collection



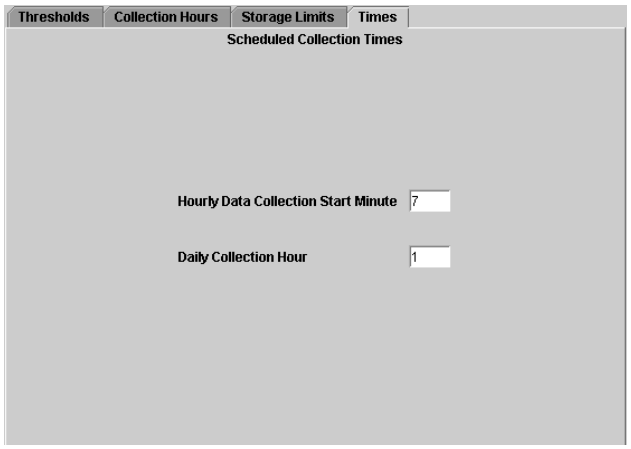
Specifies which data fields to perform threshold checks upon.



Specifies when to collect performance data.

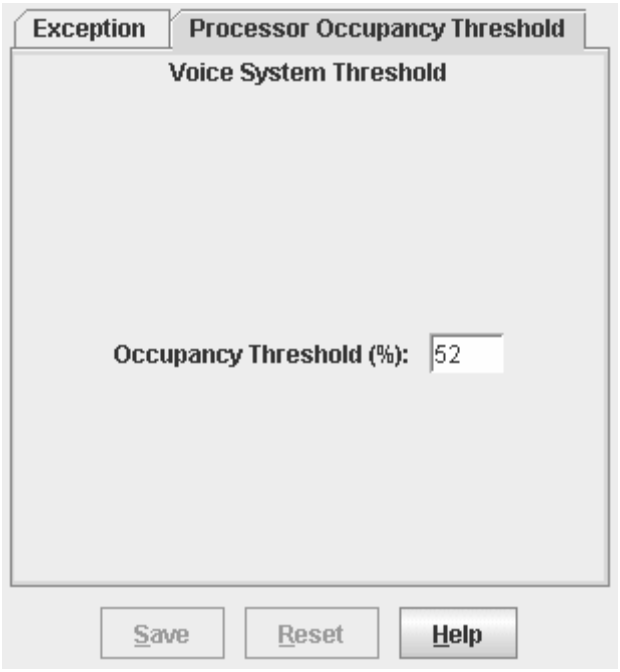


Specifies how long to keep performance data.



Specifies when to collect performance data.

- Processor Occupancy

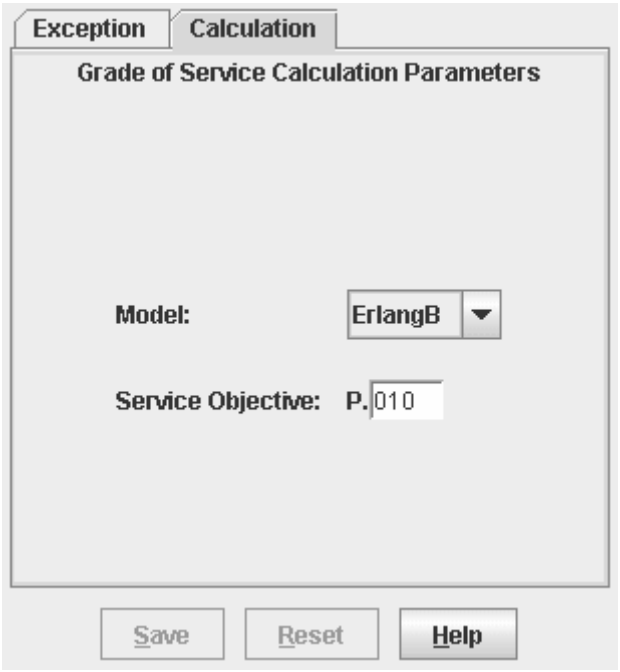


Specifies the threshold (%) for a processor occupancy exception.

Specifies what to do for a processor occupancy exception.

- Trunk Group Exceptions

Specifies what to do with trunk group exception data.



Specifies how to calculate grade of service.

- Adjunct Parameters
  - Adjunct Alarms/Errors

Specifies what to do with warning alarms from adjuncts.

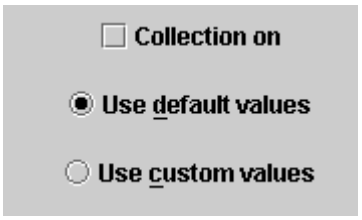
Specifies what to do with Inads alarms from adjuncts.

Specifies what to do with major alarms from adjuncts.

Specifies what to do with Minor alarms from adjuncts.

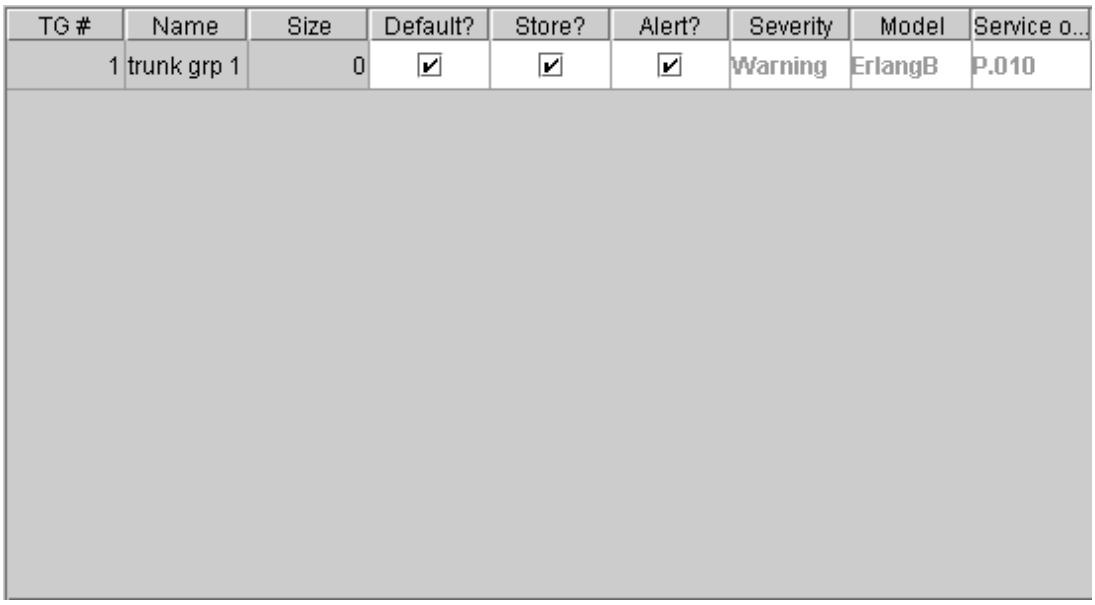
Custom Parameters

- Voice System Parameters:



Each custom parameter panel has the same format as the corresponding default parameter panel. When you select a parameter panel for a specific system, you can turn collection on or off. If collection is on, you can specify default values or custom values. When you specify custom values, the custom values will apply for the selected parameter panel only.

Trunk Group Exceptions has a different format. It represents multiple trunk groups in a list. Default or Custom can be selected for each trunk group independently.



TG #	Name	Size	Default?	Store?	Alert?	Severity	Model	Service o...
1	trunk grp 1	0	☑	☑	☑	Warning	ErlangB	P.010

- Adjunct Parameters

Each custom parameter panel has the same format as the corresponding default parameter panel. When you select a parameter panel for a specific adjunct, you can specify default values or custom values. When you specify custom values, the custom values will apply for the selected parameter panel only.

Performance Data

FPM collects the following performance data about your voice system. For most of this data, you can control whether FPM collects hourly counts, daily peaks, and/or weekly peaks. You can also control the length of time FPM retains each type of data in its database. (From other tabs related to the use of the data.)

Description	Hourly	Daily Peak	Weekly Peak	Other
Trunk Groups	Yes	Yes	Yes	
Wideband Trunk Groups	Yes	Yes	Yes	
ISDN Cal-by-Call Trunk Groups	Yes	—	—	
Processor Occupancy	Yes	Yes	Yes	
Port Networks	Yes	Yes	Yes	
Inter-Port Network Connections	Yes	Yes	Yes	
Security Violations	—	—	—	Daily Counts
Attendant Groups	Yes	Yes	Yes	
Routing Patterns	Yes	Yes	Yes	
Hunt Groups	Yes	Yes	Yes	
Coverage Paths	Yes	Yes	Yes	
Principal Data	Yes	Yes	Yes	
Switch Node Links	Yes	Yes	Yes	
Tone Receivers	Yes	Yes	Yes	
IP Codecs	Yes	Yes	Yes	
IP DSP Resources	Yes	Yes	Yes	
IP Signalling Groups	Yes	Yes	Yes	
Announcements	Yes	Yes	Yes	

Description	Hourly	Daily Peak	Weekly Peak	Other
Clan Sockets	Yes	Yes	Yes	
Clan Ethernets	Yes			
Clan PPP Links	Yes			
Calibrate Voice	Yes	Yes	Yes	
Calibrate Data	Yes	Yes	Yes	
Calibrate Service Link	Yes	Yes	Yes	
Calibrate Multimedia	Yes	Yes	Yes	
Calibrate Total	Yes	Yes	Yes	
Multimedia Interface	Yes			
Expansion Services Module				Weekly Counts
Voice Conditioners	Yes	Yes	Yes	
Denial Events	Yes	Yes	Yes	
CAC/BL Status	Yes			

Exception Data

FPM can collect the following exception data about your voice system. For most of this data, you can control the length of time FPM retains each type of data in its database, the severity it assigns to each type of exception, and whether it should alert you when an exception of that type occurs. You can set the thresholds for processor occupancy exceptions and trunk group grade-of-service violations.

- Alarms and Errors
- Board Conflicts
- CAC/BL Denial Events
- Lightly-Used Trunks
- Long Trunk Holding Times
- Processor Occupancy Threshold Violations
- Restarts
- Short Trunk Holding Times
- Trunk Group Grade-of-Service Violations
- Trunk Outages

Related Topics:

- Default Performance Collection, Data Types Tab

Threshold Alarm Panel

The Threshold Alarm Panel gives you detailed control of threshold alarm collection and processing. You specify a set of parameters to define threshold variables and values. Additional parameters define what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for threshold alarms.

- **Default Threshold Panel**

  The default Threshold panel appears under ***Administration Root > Default Parameters > Performance Collection.***

  The default Threshold panel applies to all systems except those where custom thresholds have been defined.

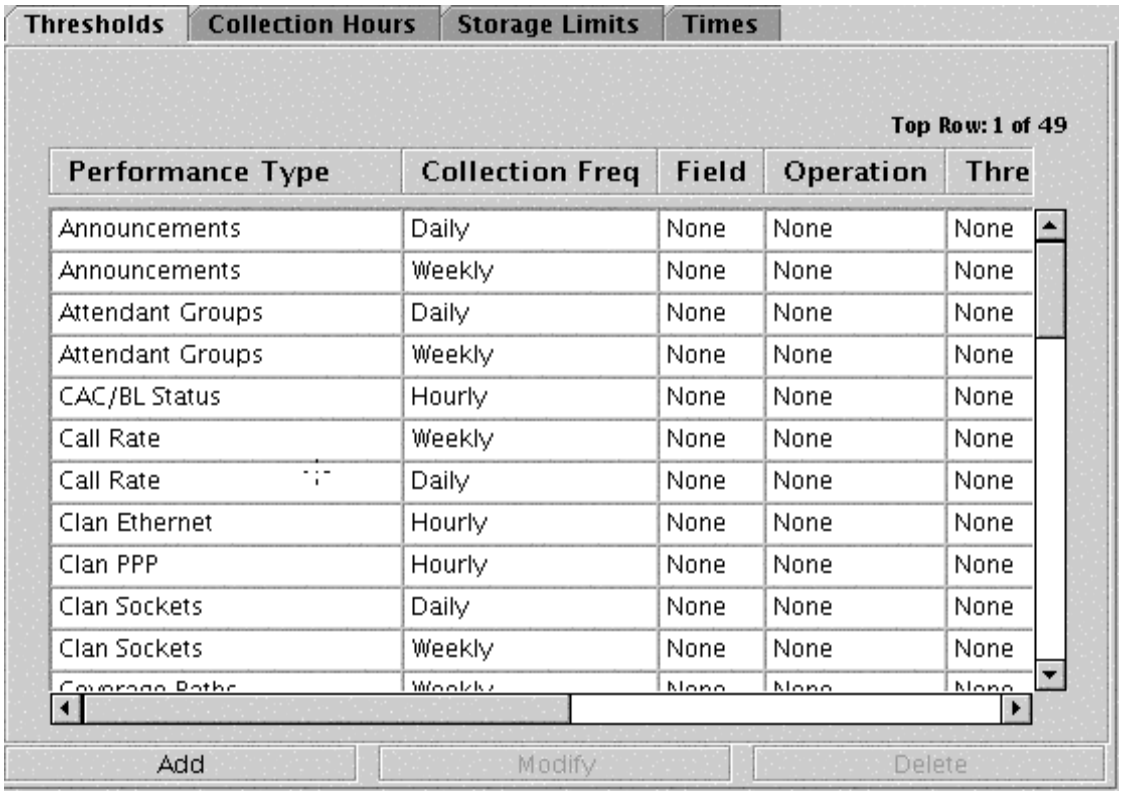
- **Custom Threshold Panel**

  The custom Threshold panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

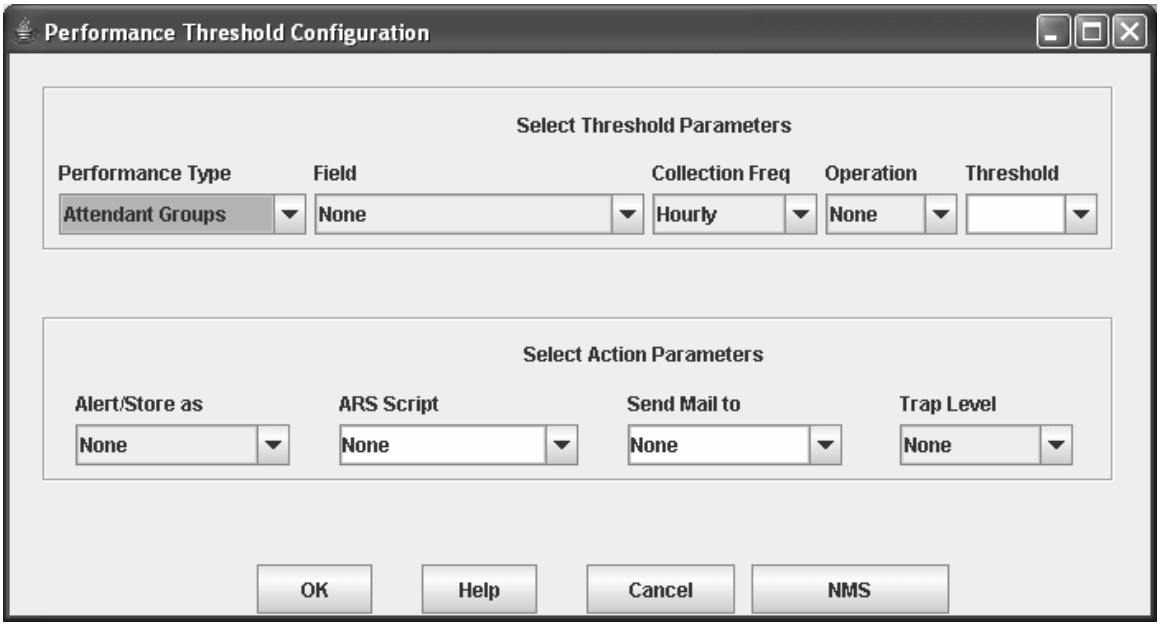
  For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Viewing Threshold Settings

Defined threshold settings are displayed as a scrolling list:



Selecting a threshold setting and clicking **Modify** (or clicking **Add**) opens the selected threshold (or a new threshold) in the Performance Threshold Configurator.



Threshold Parameters: These parameters are shown in each row of the Thresholds panel, and in the upper section of the Performance Threshold Configurator used to define or edit threshold settings.

- **Performance Type**: Select the type of threshold to be set:

Attendant Groups
Hunt Groups
Coverage Paths
Principal Data
Inter-Port Network Latency
Port Networks
Processor Occupancy
Routing Patterns
Security Violations
Switch Node Links
Tone Receivers
Trunk Groups
Trunk Groups, ISDN-PRI

Attendant Groups
Trunk Groups, Wideband
IP Codecs
IP DSP Resources
IP Signalling Groups
Announcements
CLAN Sockets
CLAN Ethernet
CLAN PPP
Call Rate
Multimedia Interface
Expansion Services Module
Voice Conditioners
Denial Events
CAC/BL Status

- **Field:** Select the data field to be tested for a threshold value:

  The fields available depend on the **Performance Threshold** selected. For each **Performance Threshold** type, all available data fields are listed.
- **Collection Frequency**: Select the frequency of threshold testing:
  - **None** (this field does not apply)
  - Hourly
  - Daily
  - Weekly
- **Operation:** Select the method of threshold testing:
  - **None** (this field does not apply)
  - **>** (data value is greater than threshold value)
  - **>=** (data value is greater than or equal to threshold value)
  - **=** (data value is equal to threshold value)
  - **<** (data value is less than threshold value)

  - **<=** (data value is less than or equal to threshold value)
- **Threshold:** Enter a numeric value to be used for comparison to the data value.

Action Parameters: These parameters are shown in each row of the Thresholds panel, and in the lower section of the Performance Threshold Configurator used to define or edit threshold settings. **NOTE:** Routing to Network Management Systems outside of Fault and Performance Manager is on a concealed list of check boxes activated by the **NMS** button.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The threshold information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The threshold information is stored in the database and displayed with the selected severity.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: Select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*
- **NMS:** Select routing to any or all Network Management Systems in the list of check boxes revealed by clicking the **NMS** button.

Specifying Default Thresholds

The default Thresholds panel appears under ***Administration Root > Default Parameters > Performance Collection.***

The default thresholds apply to all systems except those where custom thresholds have been defined.

Specifying Custom Thresholds

The custom Thresholds panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Adding, Modifying, and Deleting Thresholds

When the Thresholds panel is displayed, you can add, change, and delete thresholds using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Performance Threshold Configurator* with a blank form for a new threshold.
- **Modify:** Select an existing threshold by clicking on its row. Then click **Modify** to open the *Performance Threshold Configurator* with the selected threshold parameters filled in for editing.
- **Delete:** Select one or more existing thresholds by clicking on their rows. Then click **Delete** to delete the selected thresholds. Multiple thresholds can be selected by clicking the first threshold and then holding down the <shift> key and clicking the last threshold.
- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.

- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

FPM Parameters

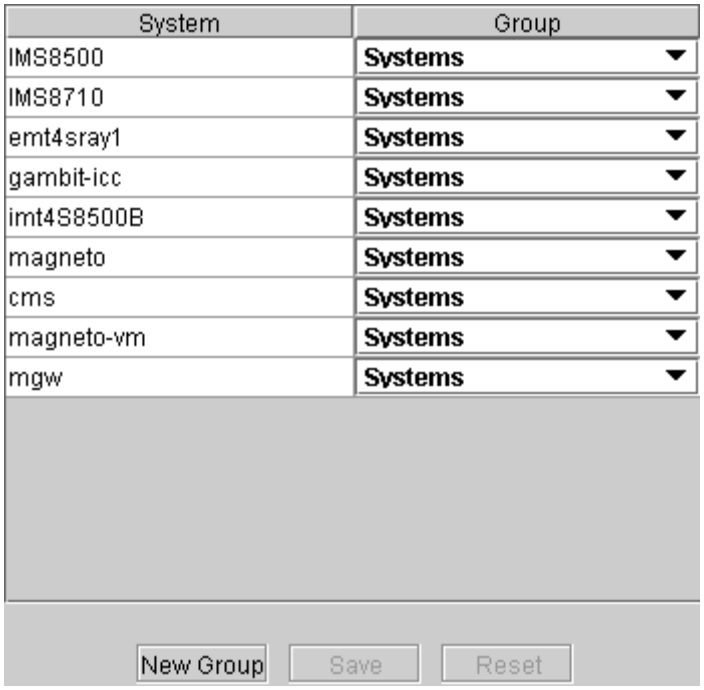
The FPM parameters apply to how systems are grouped and where data is stored. The following parameters can be defined:

- System Exceptions

Specifies what to do with data collection failure exceptions.

Specifies what to do with scheduled report failure exceptions.

- System Groups



Assigns voice systems to named system groups. The drop-down list shows all defined groups.

Voice systems are grouped as specified on the *Configuration and Status* screen when the **System Groups** tab is selected.

Use the **New Group** button to add a new group.

Each group name defined is included in the drop-down list for system groups.

- DCS Groups

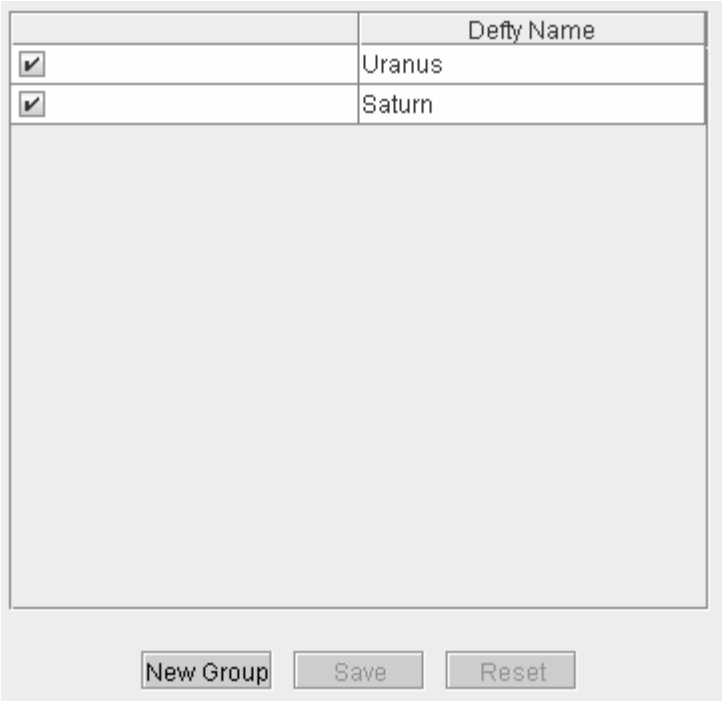
Assigns voice systems to the DCS group selected in the tree in the left panel. Check each system to be included in the group.

Voice systems are grouped as specified on the *Configuration and Status* screen when the **DCS Trunk Connectivity** tab is selected.

Use the **New Group** button to add a new group.

Each group name defined is included in the drop-down list for DCS trunk connectivity groups.

- IP Trunk Groups



Assigns voice systems to the IP Trunk group selected in the tree in the left panel. Check each system to be included in the group.

Voice systems are grouped as specified on the *Configuration and Status* screen when the **IP Trunk Connectivity** tab is selected.

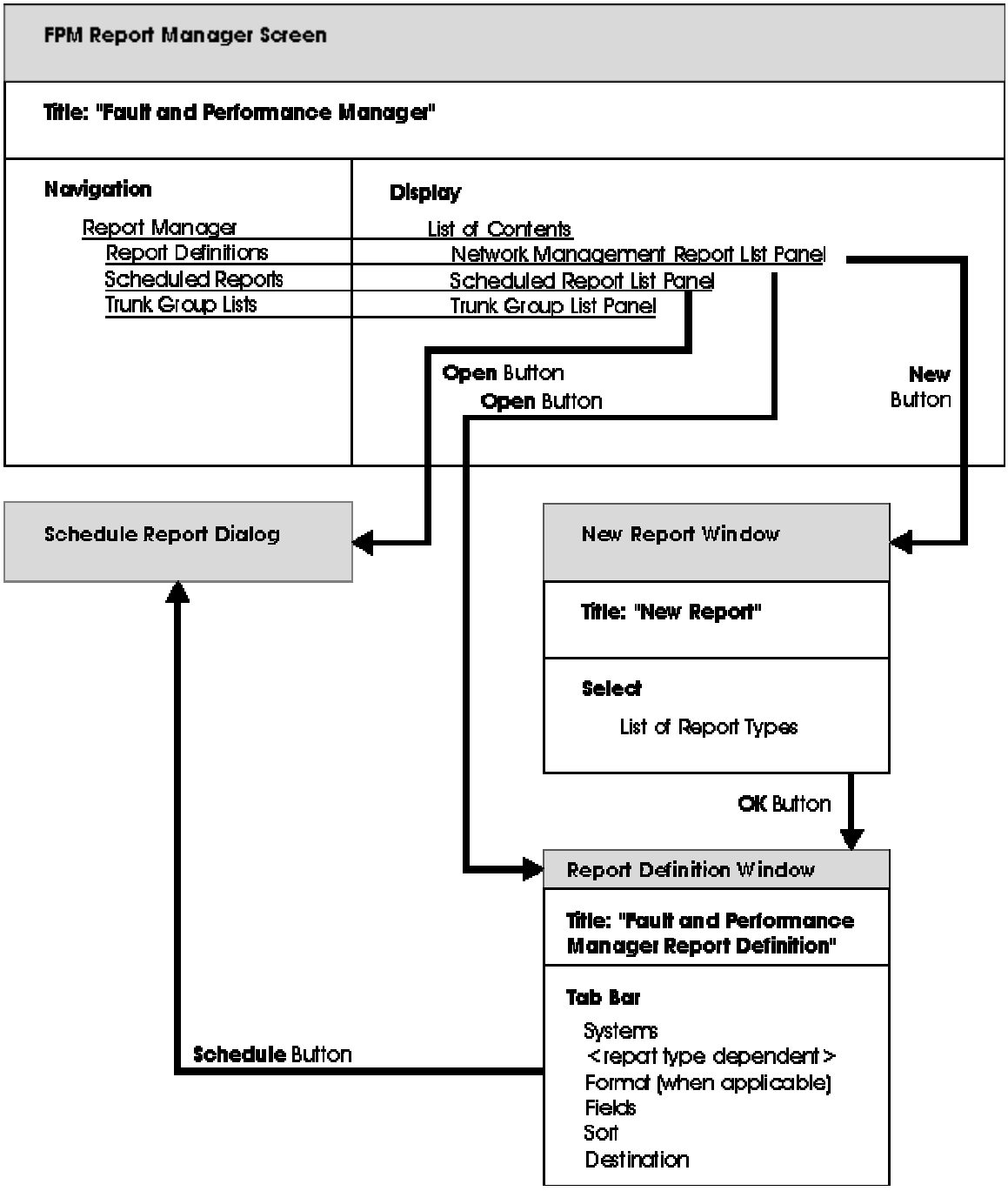
Use the **New Group** button to add a new group.

Each group name defined is included in the drop-down list for IP trunk groups.

Report Manager

Report Manager Screen

From the File menu of the *Configuration and Status* screen you can select **File > Report Manager...** to open the *FPM Report Manager* screen.



The *FPM Report Manager* screen provides:

- Report Definitions

  The Report Definitions panel lists all currently defined reports.

  For new reports, you can select report type, systems, and other parameters. You can schedule when reports are run on a regular basis. You can create ad-hoc reports and run them immediately when investigating a problem.

  For the types of reports you can define, see Report Types in the following topic.

- Scheduled Reports

  You can select any regularly scheduled report that has been saved to a file and display it or print it.

- Trunk Group Lists

  You can define trunk group lists for reports that are based on network performance rather than system performance.

Related Topics

- New Report Dialog Box
- Report Types
- Defined Reports
- Scheduled Reports
- Trunk Group Lists

Reports Types

Note:

Selection of a report type does not determine whether or not you have collected and saved the necessary information for the report. See Filtering Alarms, Default and Custom System Parameters, and Performance Data for data collection information.

FPM produces many types of reports. The report types are listed below:

Notes:

- If the value in the Time Scale column is "N/A", the report is not tied to any time scale. There are two different types of Time tabs, one for the exception reports and one for performance reports. On some of the performance reports, there are limited options on the Time tab.
- The available tabs are listed under Component Selection.
- If the value in the Secondary Data column is anything other than "N/A", the Report Output dialog box has a drop-down list where you can choose to display primary data, or one or more types of secondary data.

- Configuration Reports

  Configuration reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Board Inventory (table format only)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory may include all boards or only selected systems or locations.	N/A	Systems tab Location tab	N/A
Board Report (table format only)	Board Report shows a list of installed boards (circuit packs). The report may include all boards, or it may be filtered by system, type, code, or location.	N/A	Location tab Board Type tab	N/A
Capacity Report (table format only)	Capacity Report provides used and available capacity information for a switch. The report displays information for the selected switches.	N/A	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Board Inventory (online)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Board Report (online)	Board Report shows a list of installed boards (circuit packs). The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Capacity Report (online)	Capacity Report provides used and available capacity information for a switch. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A

- Exception Reports

  Some exception reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Exceptions: Adjunct Systems (table format only)	Adjunct Exceptions shows adjunct-related exceptions, for example, alarms or traps. Exceptions may be filtered by system or by time.	Time tab (Excptns)	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Exceptions: Fault/Performance Manager (table format only)	Network Manager exceptions shows exceptions related to this application, for example, failure to collect data or run a scheduled report. Exceptions may be filtered by type or time.	Time tab (Excptns)	N/A	N/A
Exceptions: Voice System (table format only)	Voice System Exceptions shows voice system-related exceptions, for example, alarms or TG GOS violations. Exceptions may be filtered by system, type, location, or time.	Time tab (Excptns)	Systems tab Types tab Location tab	N/A
Exceptions: Voice System (online)	Voice System Exceptions shows voice system-related exceptions. The exceptions are filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Exceptions: Transaction Logs	Transaction Logs shows all transactions in FPM such as logins and busyouts and releases on media modules and ports.	Time tab (Excptns)	Systems tab	N/A

- Performance Reports

  Performance reports run only from the Report Manager. However, you can go directly to the New Report dialog box from **View > Performance Data** on the main *Configuration and Status* screen.

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Announcements	Announcements performance shows maximum in-region and out-region play requests queued, requested, and dropped. Records may be filtered by system time.	Time tab	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Attendant Groups	Attendant Group performance shows call counts and usage for the group and for individual attendants. Records may be filtered by system and time.	Time tab	Systems tab	Attendants
Performance: CAC/BL Status	Call Admission Control / Bandwidth Limitation performance shows source and destination region, connection type and status, bandwidth limit value and units, transmission and reception bandwidth and number of connections, and number of denials.	Time tab	Systems tab	N/A
Performance: Call Rate	Call Rate performance shows busiest hour and interval. May be filtered by system and time.	Time tab	Systems tab Call Rate Types tab	N/A
Performance: CLAN Ethernet	CLAN Ethernet performance shows CLAN ethernet crc counts, and delta by board. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: CLAN PPP	CLAN PPP performance shows CLAN PPP crc counts and delta by board. May be filtered by system and time.	Time tab	Systems tab Board Type tab	N/A
Performance: CLAN Sockets	CLAN Sockets performance shows CLAN socket usage, and denial counts and percentages by boards and regions. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Coverage Paths	Coverage Paths performance shows configuration, usage, and call counts. Records may be filtered by system, coverage path, and time.	Time tab	Systems tab Coverage Paths tab	N/A

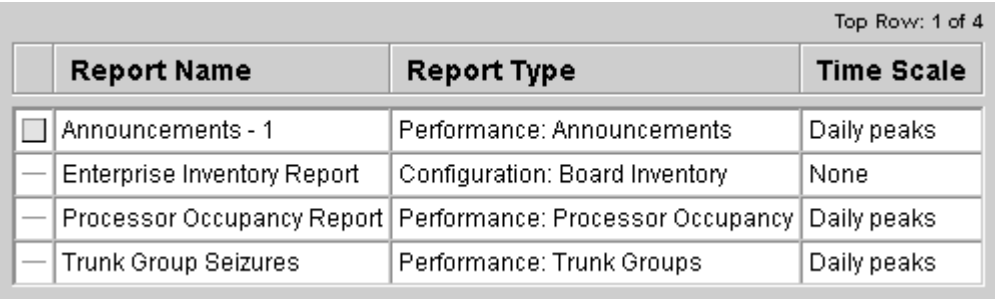
Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Denial Events	Denial Events performance shows event type, description, event data, first occurrence, last occurrence, and event count. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Expansion Services Module	Expansion Service Module performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Hunt Groups	Hunt Group performance shows configuration, usage, and call counts. May be filtered by system, hunt group, and time.	Time tab	Systems tab Hunt Groups tab	N/A
Performance: Inter-Port Network Latency	Inter-Port Network Latency shows PN connection requests and ATM setup requests with average delay in milliseconds. Records may be filtered by system, PN pairs, and time.	Time tab	Systems tab PN Connections tab	N/A
Performance: IP Codecs	IP Codecs performance shows G.711/G.732/G.729 codec usage, in CCS or Erlangs for IP codecs. Records may be filtered by system, IP codec type, and time.	Time tab	Systems tab	N/A
Performance: IP DSP Resources	IP DSP Resources performance shows configuration, usage, and peg counts for IP DSP resources. Records may be filtered by system and time.	Time tab	Systems tab	N/A
Performance: IP Signaling Groups	IP Signaling Groups performance shows packet latencies, and packets sent and lost for IP Signaling Groups. Records may be filtered by system and time.	Time tab	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Multimedia Interface	Multimedia Interface performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Port Networks	Port Networks performance shows usage and peg counts. Records may be filtered by system, PN pair, and time.	Time tab	Systems tab Port Networks tab	N/A
Performance: Principal Data	Principal Data performance shows configuration, usage, and call counts. Records may be filtered by system, principal data, and time.	Time tab	Systems tab Principal Data tab	N/A
Performance: Processor Occupancy	Processor Occupancy shows occupancy and call counts. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Routing Patterns	Routing Patterns performance shows call counts for routing patterns and trunk groups within routing patterns. Records may be filtered by system, routing pattern, and time.	Time tab	Systems tab Routing Patterns tab	Trunk groups
Performance: Security Violations	Security Violations includes valid and invalid attempts by port type and by system. Records may be filtered by system and time.	Time tab	Systems tab	Port types
Performance: Switch Node Links	Switch Node Link performance shows usage and peg counts. Records may be filtered by system, SN link, and time.	Time tab	Systems tab Switch Node Links tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Tone Receivers	Tone receiver performance shows peg counts for each tone receiver type and port network. Records may be filtered by system, tone receiver type, and time.	Time tab	Systems tab Tone Receivers tab	Port networks
Performance: Trunk Groups	Trunk Group performance shows usage, peg count, and grade-of-service.	Time tab	Systems tab Trunk Groups tab	Primary Data or Average Data
Performance: Trunk Groups ISDN-PRI CBC	ISDN-PRI performance shows configuration, usage, and counts for ISDN TG	Time tab	Systems tab Trunk Groups tab	ISDN services or features, and usage allocation plans
Performance: Trunk Groups, Wideband	Wideband Trunk performance shows configuration, usage, and peg counts for wideband TGs. Records may be filtered by system, TG or TG list, and time.	Time tab	Systems tab Trunk Groups tab	N/A
Performance: Voice Conditioner	Voice Conditioner performance shows available counts/usage, H320/voice/total usage/allocation/denials, out-of-service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A

Defined Reports

The Defined Reports panel lists all reports that have been defined.



Top Row: 1 of 4

	Report Name	Report Type	Time Scale
☐	Announcements - 1	Performance: Announcements	Daily peaks
—	Enterprise Inventory Report	Configuration: Board Inventory	None
—	Processor Occupancy Report	Performance: Processor Occupancy	Daily peaks
—	Trunk Group Seizures	Performance: Trunk Groups	Daily peaks

The first column (unlabeled) is an alert indicator if there is a report run failure

You can define reports independently of scheduling them to run. This allows you to create (or reuse) special reports for trouble shooting. As long as you have collected the necessary data for a trouble shooting report, you can select it from the list of defined reports and run it immediately, or schedule it for any time.

You can define and run ad-hoc reports at any time by clicking **New**.

Buttons:

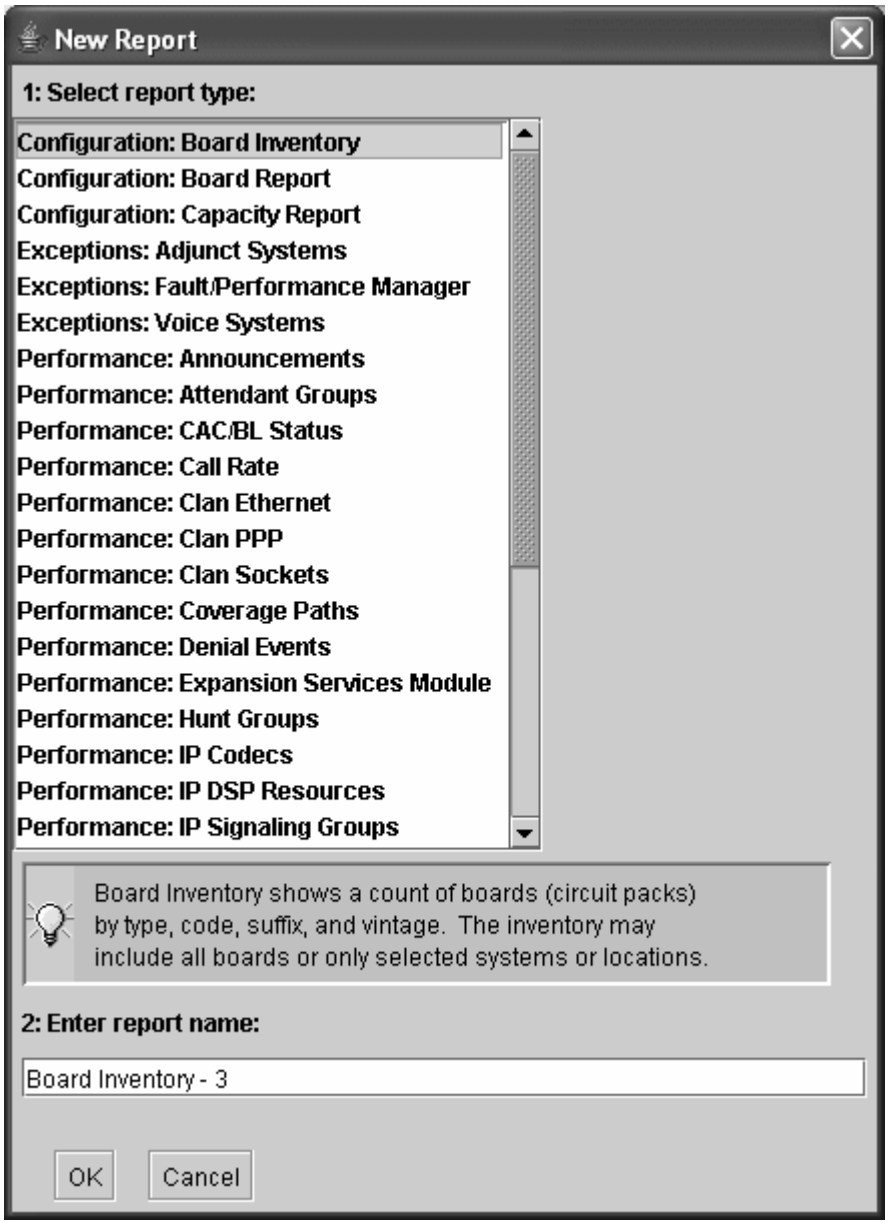
- **New** — Opens the *New Report* dialog box to define a new report.
- **Open** — Highlight a row by clicking on it. Then click **Open**. The existing report definition displays in the *Report Definition* screen.
- **Exceptions** — Shows report failure exceptions related to the selected report(s).
- **Delete** — Highlight a row by clicking on it. Then click **Delete**. The existing report is deleted.

Related Topics

- Report Definition Screen
- Exceptions
- Scheduling Reports

New Report Dialog Box

Selecting **View > Performance Data...** from the *Configuration and Status* screen or the *System Detail* screen opens the New Report Dialog Box. You may also open the New Report Dialog Box by clicking **New** on the Report Definition screen. The New Report Dialog Box is used to select a report type and assign a report name.



To define a new report, follow these steps:

1. Select the report type from the available list.

   FPM displays a description of the selected report type in the information box below the report type list box.

2. Enter a unique name for the new report in the **Enter Report Name** text box.
3. Click **OK** to create the new report.

FPM displays the Report Definition Dialog Box. This dialog box contains different tabs depending on the type of report you are creating.

Related Topics

- Report Definition Dialog Box
- Report Definition screen
- How To Create a New Report
- How To Run or Schedule a Report
- How To View a Report
- How To Print a Report

Report Definition Dialog Box

The *Report Definition* screen has a variable number of tabs depending on the **Report Type** selected. There are six types of tabs. All reports have Systems, Fields, Sort, and Destination tabs. Other tabs are present when appropriate to the individual report.

- **Systems** Tab — allows you to select the systems included in the report.
- **Component selection tabs**, if any, appear here. See list below:
    - **Board Type** Tab — allows you to select the boards included in the report.
    - **Hunt Groups** Tab — allows you to select the hunt groups included in the report.
    - **IP Codecs** Tab — allows you to specify which IP codec types are included in the report.
    - **Location** Tab (Board Report) — allows you to specify the board information at all locations or at one location included in the report.
    - **Location** Tab (Exceptions Report) — allows you to specify the exceptions at all locations or at one location included in the report.
    - **PN Connections** Tab — allows you to select the port network connections included in the report.
    - **Port Networks** Tab — allows you to select the port networks included in the report.
    - **Routing Patterns** Tab — allows you to select the routing patterns included in the report.
    - **Switch Node Links** Tab — allows you to select the switch node links included in the report.
    - **Time** Tab (general) — allows you to set time options for the report. (**Hourly counts**, **Daily peaks**, or **Weekly peaks; previous period**, or **fixed interval**.)
    - **Time** Tab (Exceptions Report) — allows you to specify exception time options in your report. (**Show current exceptions,** or **Show exception history**.)
    - **Tone Receivers** Tab — allows you to select the type of tone receivers included in the report.
    - **Trunk Groups** Tab — allows you to select trunk groups included in the report.
    - **Types** tab (Voice System Exceptions Report) — allows you to select the types of exceptions included in the report.
- **Format** Tab — allows you to select "table" or "chart," and specify chart properties. This tab does not appear for "table form only" reports.
    - **Chart Properties** Dialog Box — Allows you to specify type of chart, 3D properties of the chart, and the fields to plot along the X and Y axes.
- **Fields** Tab — allows you to select the data fields included in the report and specify the order of the fields.
- **Sort** Tab — allows you to specify up to three levels of sorting based on the included fields.
- **Destination** Tab — allows you to direct the report output to the screen, a printer, or a file.
    - Print Properties Dialog Box — allows you to find networked printers and specify print properties.

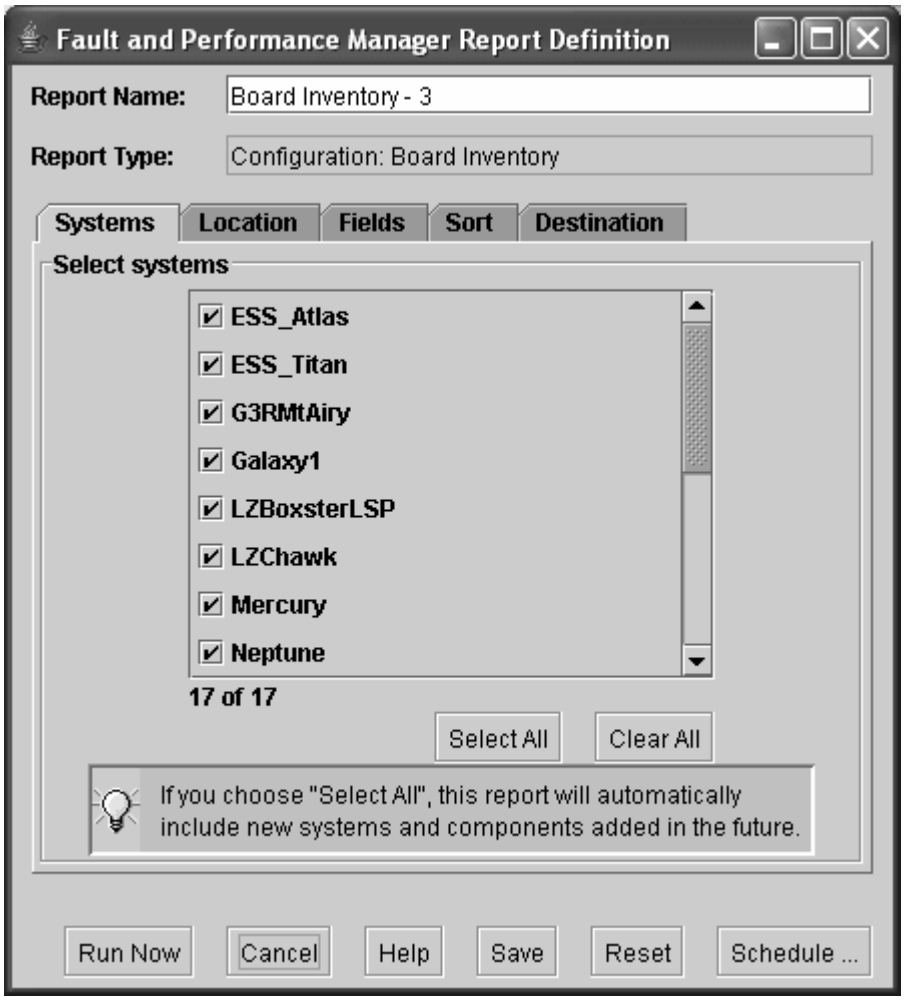
Report Definition Tabs

Systems Tab

This tab allows you to select the systems to include in your report.

Note:

You can only select systems for which you have administrative privileges.



To select systems, follow these steps:

1. From the **Systems** tab, select one or more systems to include in the report.
   - Use the **Select All** button to select all systems.
   - Use the **Clear All** button to clear any selections.
2. After selecting the systems, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Component Selection Tabs

Board Type Tab

This tab allows you to specify the boards to include in your report.

To make board selections, follow these steps:

1. On the **Select Board Types** box, complete the following fields:
    - Include only boards with unassigned ports: Check or clear as desired.
    - **All boards**: Select to include all boards in your report.

      Note:

      If you want a more selective report, select either Types including or Codes including below.

      *If you do not select **All boards**, then you must enter up to six sub-strings to match against board types or board codes plus suffixes. The report includes boards that match any one of the sub-strings you enter.*

    - **Types including**: Enter up to six sub-strings of board types to include in your report.

For example if you enter type "line", the report includes boards of types ANALOG LINE, BRI LINE, DATA LINE, DIGITAL LINE, and PDATA LINE.

Note:

Types are always uppercase, but the matching ignores case.

- **Codes including**: Enter up to six sub-strings of board codes to include in your report.

  For example, if you enter code "TN76", the report includes TN760, TN765, and TN765C.

Note:

Codes are always uppercase, but the matching ignores case.

2. After selecting the board types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

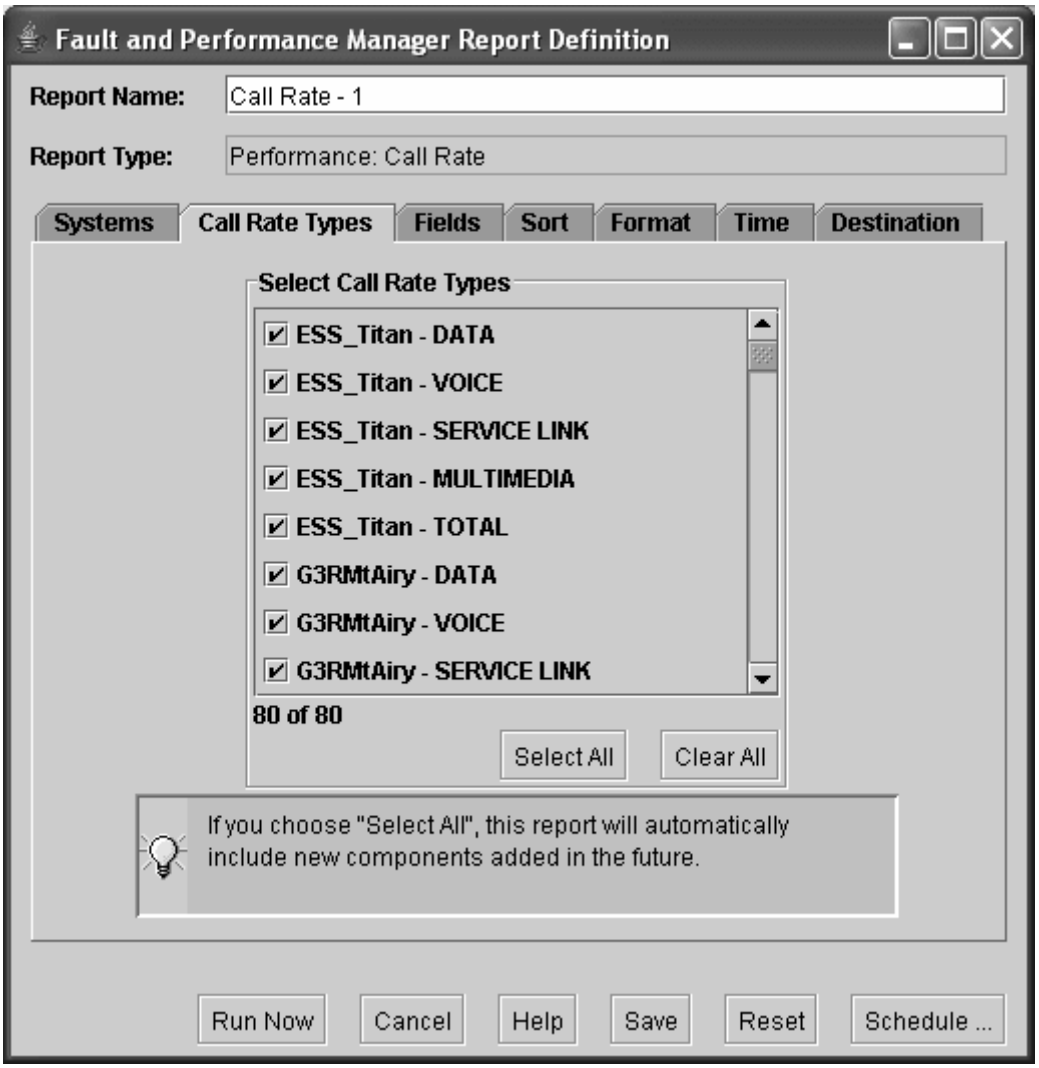
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Call Rate Tab

This tab allows you to specify the call rate types to include in your report.



To make call rate selections, follow these steps:

1. Select the call rate types to include.
2. Use the **Select All** button to select all call rate groups.
3. Use the **Clear All** button to clear any selections.
4. After selecting the call rate types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

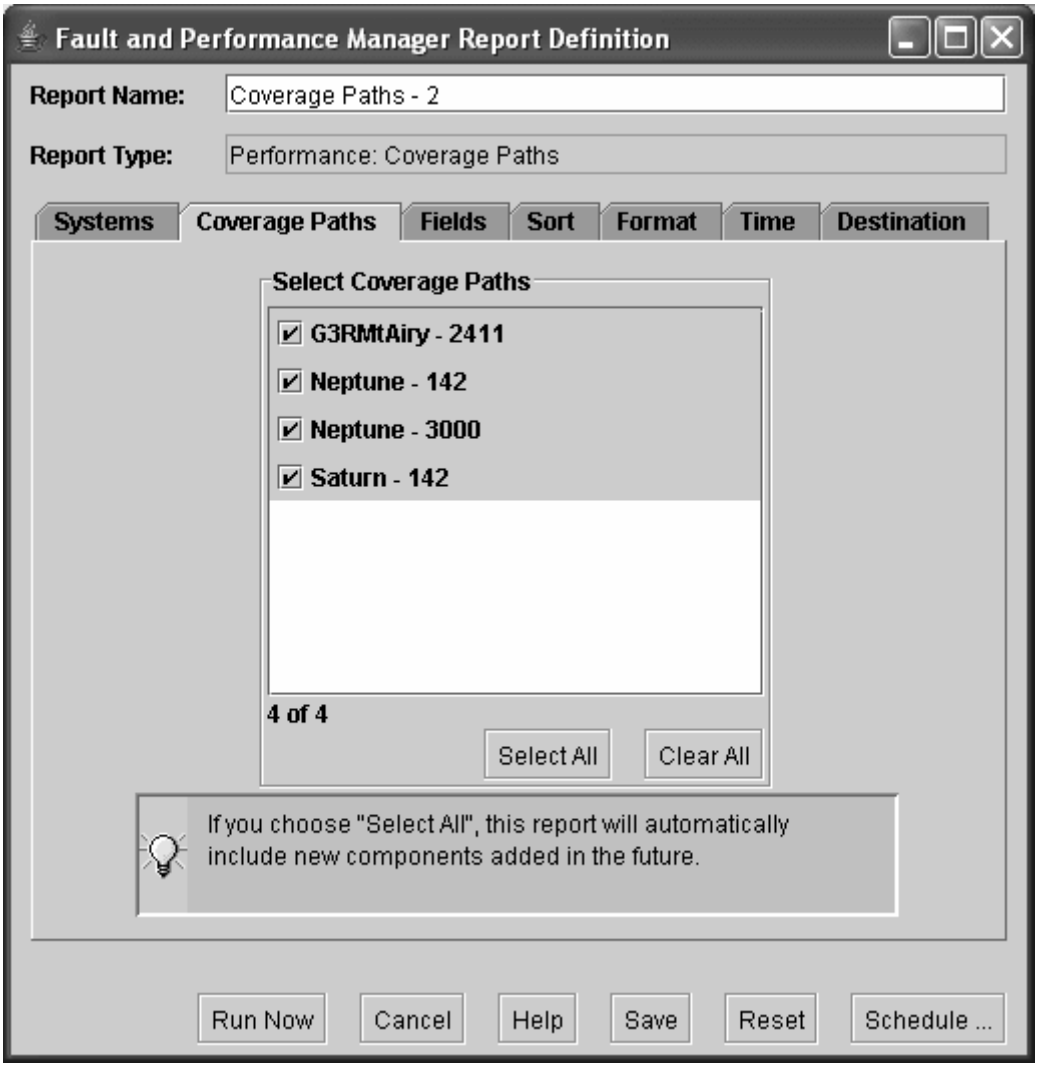
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Call Rate Tab

This tab allows you to select the coverage paths to include in your report.



To select the coverage paths, follow these steps:

1. Select the coverage paths to include in the report.

   Use the **Select All** button to select all systems.

   Use the **Clear All** button to clear any selections.

2. After selecting the connections, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

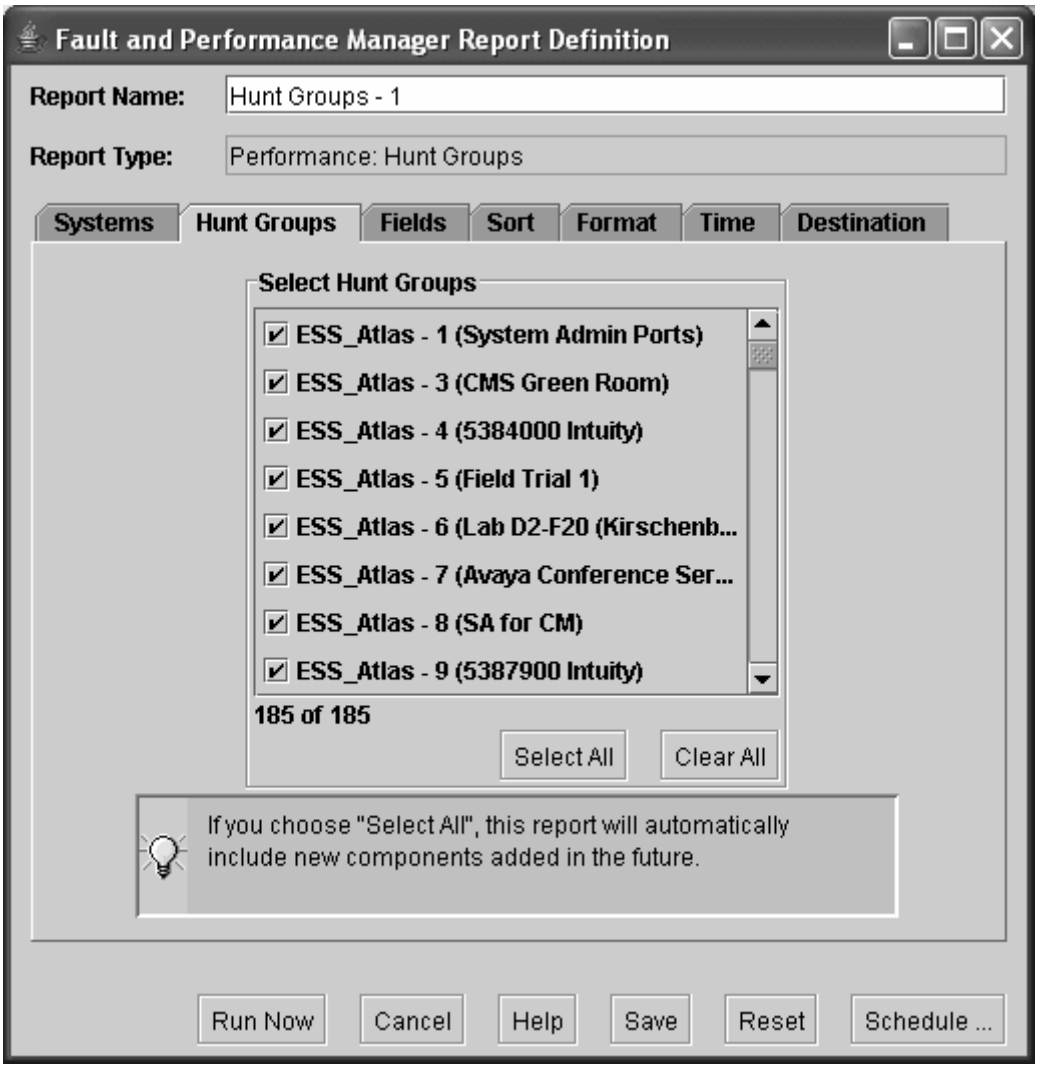
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Hunt Groups Tab

This tab allows you to select the hunt groups to include in your report.



To select hunt groups, follow these steps:

1. Select the Hunt Groups to include in the report.

   Fault and Performance Manager displays a list of hunt groups for the systems selected on the Systems tab. The list includes the system name, the hunt group number, and the hunt group name, if known. Note that it is possible that Fault and Performance Manager may receive performance data for a new hunt group before Fault and Performance Manager receives configuration data. In this case, the hunt group name is not shown until configuration data is collected. (See Configuration Collection for more information.)

   - Use the **Select All** button to select all hunt groups.
   - Use the **Clear All** button to clear any selections.

2. After selecting the hunt groups, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

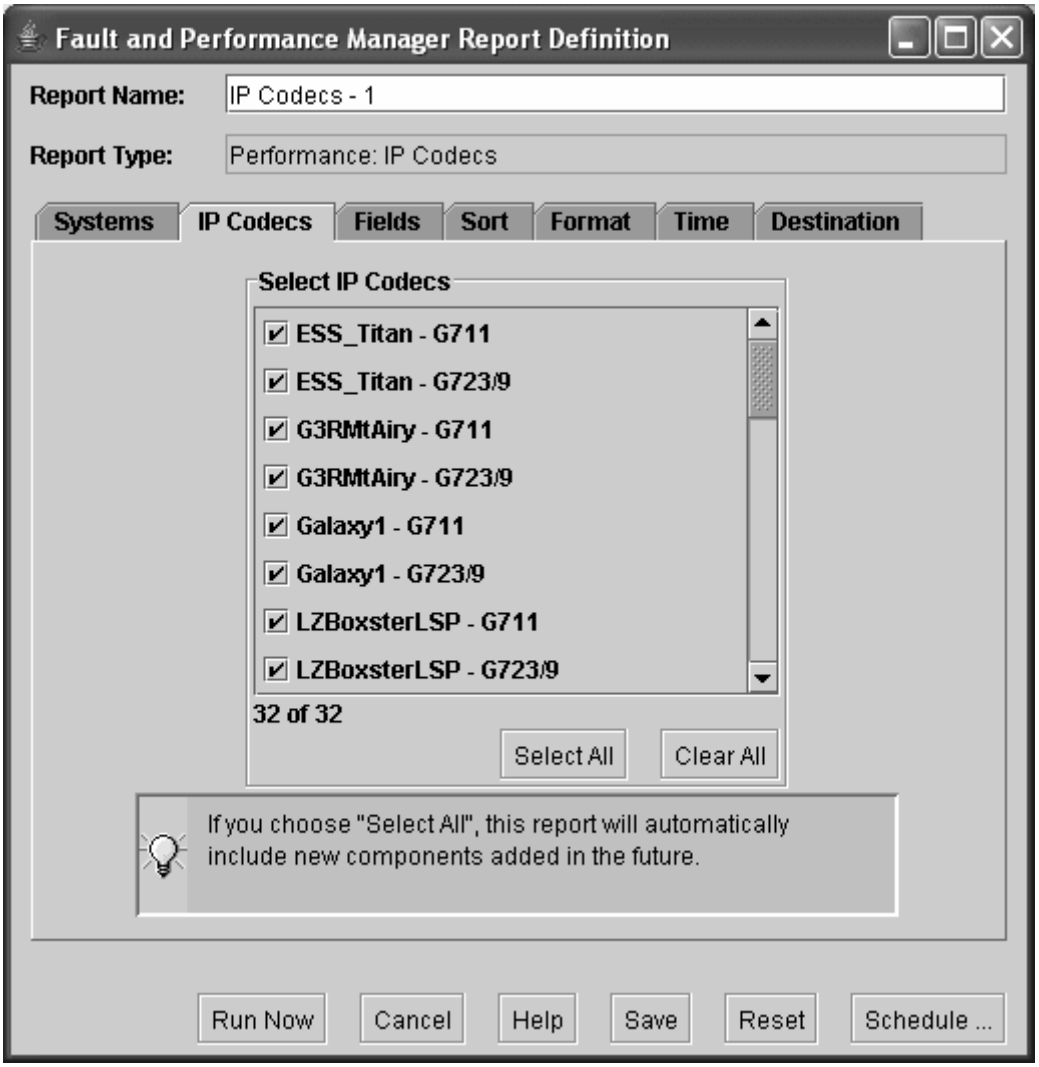
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

IP Codecs tab

This tab allows you to specify which IP codec types to include in your report.



If you select all systems on the Systems tab, then the IP Codecs tab does not allow you to make selections.

To select IP Codecs, follow these steps:

1. Select the IP Codecs to include in the report.

   Fault and Performance Manager displays a list of IP codecs for the systems selected on the Systems tab. The list includes the system name and the codec name.

   - Use the **Select All** button to select all hunt groups.
   - Use the **Clear All** button to clear any selections.

2. After selecting the IP Codecs, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

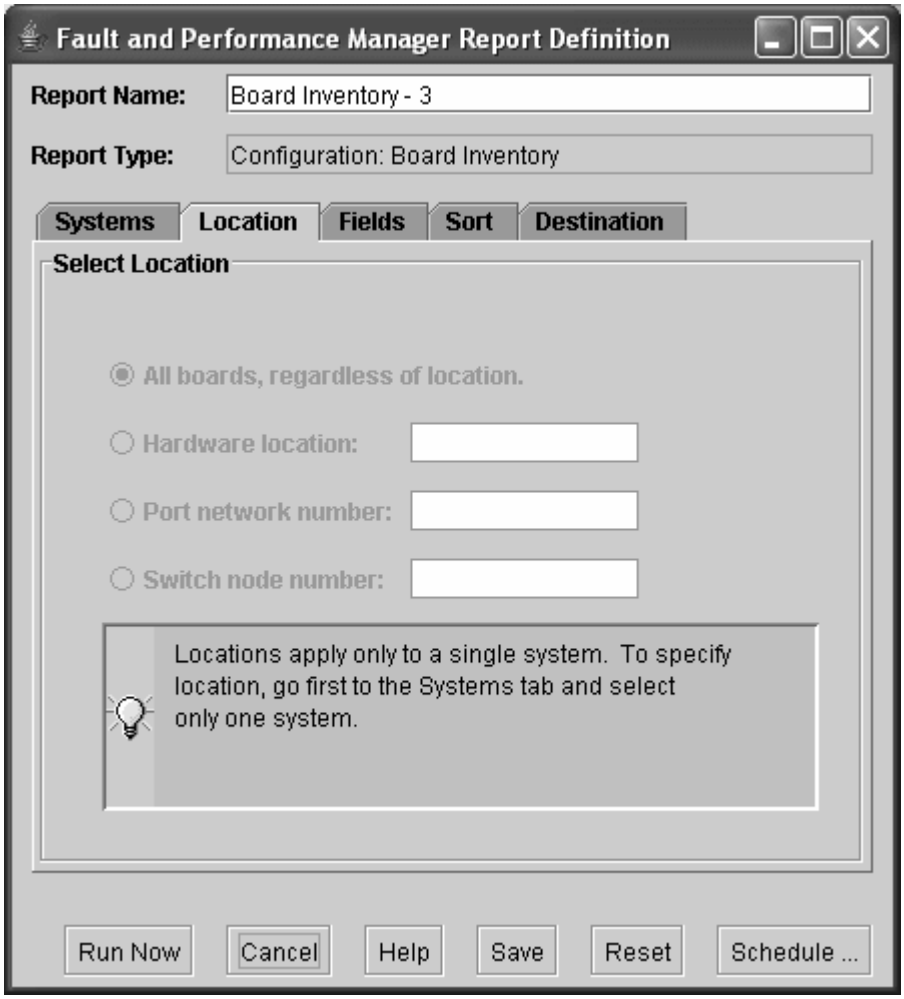
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Location Tab for Board Report

This tab allows you to specify the board information at all or one location to be included in your report.



To select exception locations, follow these steps:

1. In the **Select Location** box, specify either all boards or specific hardware, port networks, or switch nodes at one location.
    - All boards, regardless of location: Select to include all boards.
    - **Hardware location:** Enter a valid hardware location. (The system does not validate this entry. Make sure the spelling is correct.) The report includes all exceptions for hardware locations beginning with the specified location string. For example, if you enter a carrier location such as 02B, the report includes exceptions for that carrier location and exceptions at all boards and ports contained in that carrier.
    - **Port network number:** Enter a valid port network number. (The system does not validate this entry. Make sure the number is correct.)
    - **Switch node number:** Enter a valid switch node number. (The system does not validate this entry. Make sure the number is correct.)

2. After selecting the location, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

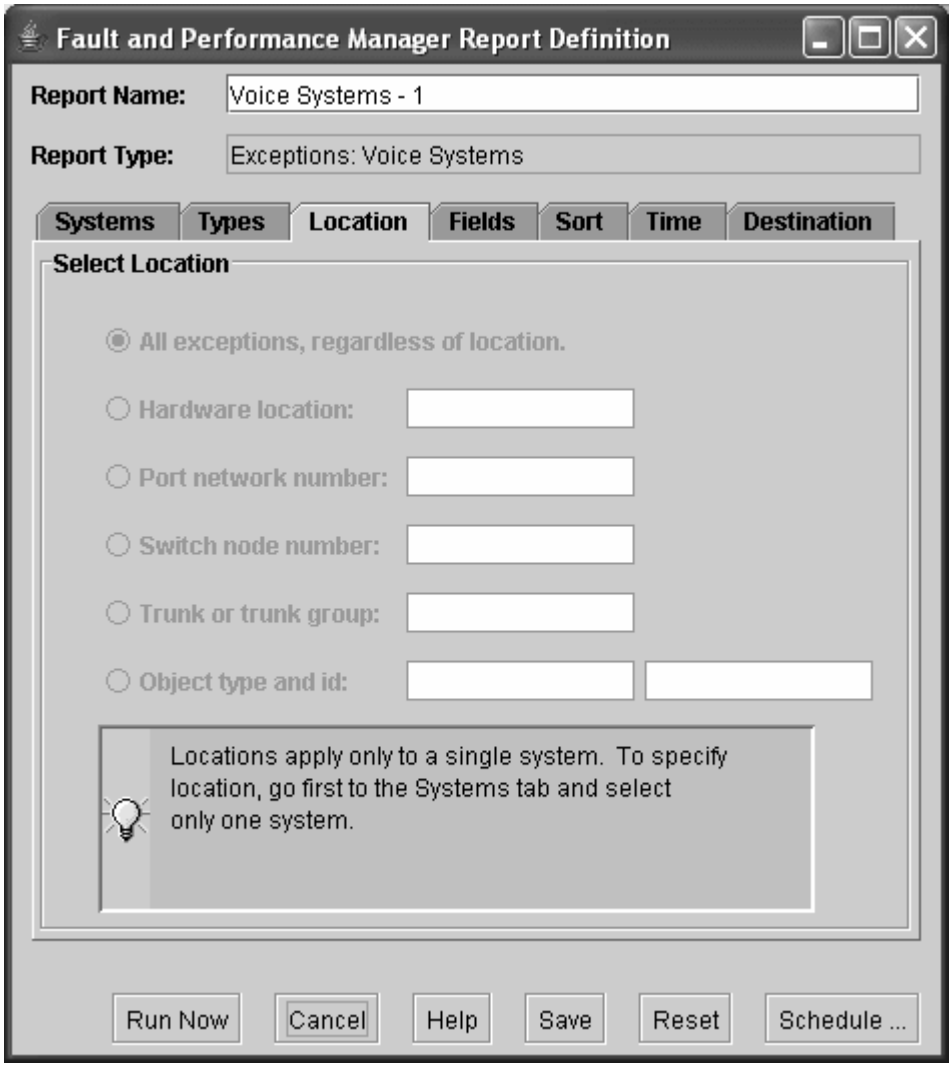
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Location Tab for Voice System Exceptions Report

This tab allows you to specify the exceptions at all or one location to be included in your report.



To select exception locations, follow these steps:

1. In the **Select Location** box, specify either all exceptions or exceptions at one location.
   - All exceptions, regardless of location: Select to include all exceptions.
   - Hardware location:

     Enter a valid hardware location. (The system does not validate this entry. Make sure the spelling is correct.) The report includes all exceptions for hardware locations beginning with the specified location string. For example, if you enter a carrier location such as 02B, the report includes exceptions for that carrier location and exceptions at all boards and ports contained in that carrier.
   - Port network number:

     Enter a valid port network number. (The system does not validate this entry. Make sure the number is correct.)

- Switch node number:

  Enter a valid switch node number. (The system does not validate this entry. Make sure the number is correct.)

- Trunk or Trunk Group:

  Enter a valid trunk group number or a trunk group and member in the format nnnn/mmmm. The report will include alarms, errors, trunk group GOS violations, restarts, board conflicts, processor occupancy exceptions, and the four trunk exception types, or a subset of these types as specified on the Types tab. (The system does not validate this entry. Make sure the entry is correct.) The report includes all exceptions that could cause an alert on the specified trunk or trunk group.

- Object type and ID:

  For object type, enter a voice system maintenance name and for object ID, enter a voice system ALT name. Up to 12 characters can be entered, including alphanumeric, a dash (-), and forward slash (/). Lower case characters are converted to upper case. (The system does not validate this entry. Make sure the entry is correct.) The report includes all exceptions whose object type and ID exactly match the entry in this field.

Tips

- To find all exceptions on a trunk group when you know the trunk group number:

  Select the **Trunk or trunk group** option button and enter the trunk group number, for example "1009". In this case, trunk group GOS violations on the specified trunk group, as well as alarms, errors, outages, light usage, and holding time exceptions for members of the trunk group, are included in your report.

- To find all exceptions on a single trunk when you know the trunk group and member

  Select the **Trunk or trunk group** option button and enter the trunk group and member, for example "1009/235". In this case, alarms, errors, outages, light usage, and holding time exceptions for the specified trunk are included in your report. Trunk group GOS violations are not included, since they are trunk group alerts rather than trunk alerts.

  or

  If you know the trunk type and the corresponding maintenance name, for example "CO-TRK" or "AUX-TRK", select the **Object type and ID** option button, and enter the maintenance name for the object type and the trunk ID for the object ID. In this case, only alarms and errors are included in your report, since the other exceptions are detected by the application, which assigns an object type of "TRUNK".

- To find exceptions on all trunks of a specific type when you know the maintenance name corresponding to the specified type:

  Select the **Object type and ID** option button and enter the maintenance name for the object type. Leave the object ID blank. In this case, all alarms and errors on trunks of the specified type are included in your report. Application-detected exceptions like trunk outages are not included in your report, since they have object type "TRUNK".

- To find exceptions on a single extension when you know the line type and its corresponding maintenance name:

Select the **Object type and ID** option button and enter the maintenance name for the object type, for example"ANL-16-L" or "DIG-LINE", and the digits of the extension for the object ID. In this case, alarms and errors on the port serving that extension are included in your report.

2. After selecting the location, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

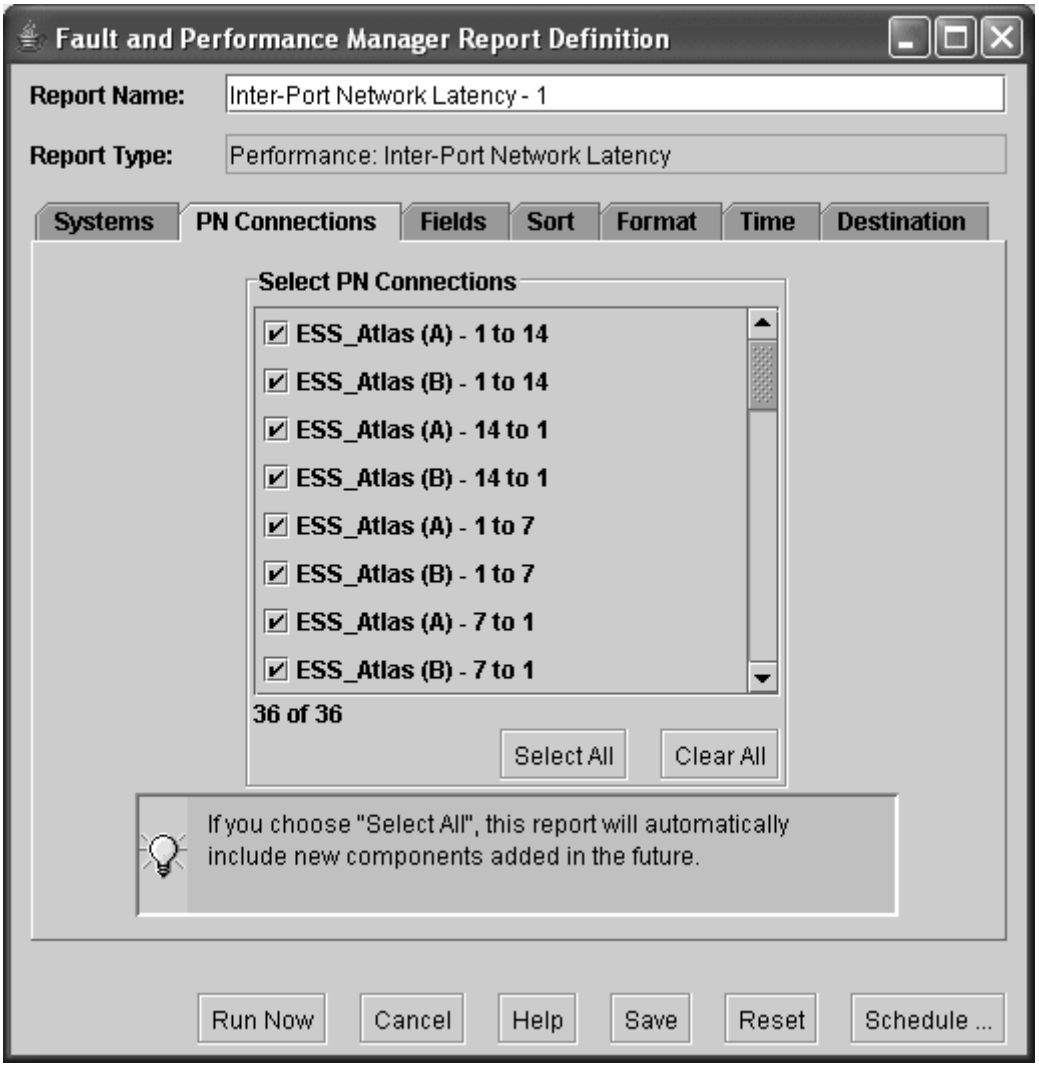
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

PN Connections Tab

This tab allows you to select the port network connections to include in your report.



To select the port network connections, follow these steps:

1. Select the port network connections to include in the report.

   The list shows only connections for which Fault and Performance Manager has collected performance data. This will not be all connections, since the voice system limits performance data collection to at most 20 connections at a time.

   - Use the **Select All** button to select all systems.
   - Use the **Clear All** button to clear any selections.

2. After selecting the connections, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

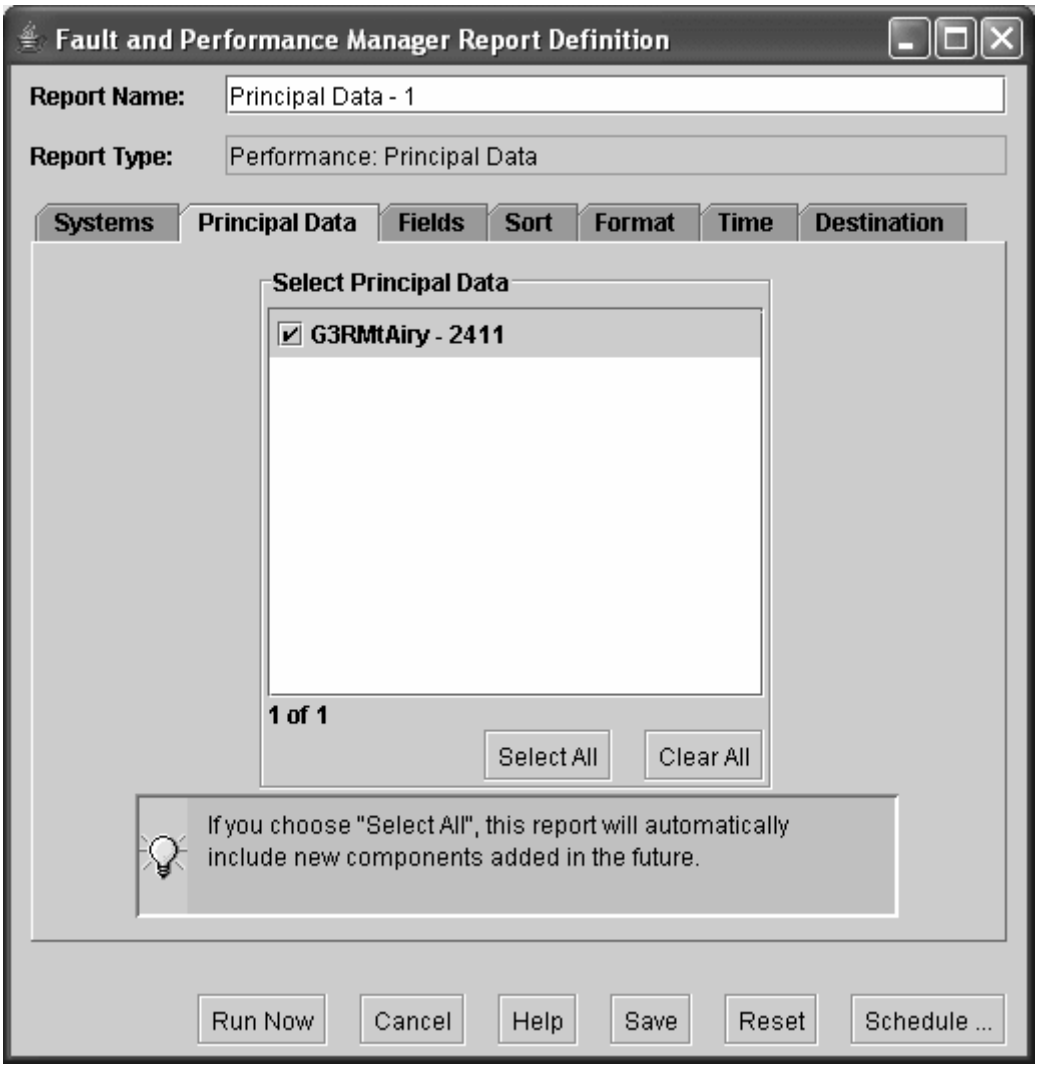
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Principal Data Tab

This tab allows you to select the principal data to include in your report.



To select the principal data, follow these steps:

1. Select the principal data to include in the report.

   The list shows only principal data for which Fault and Performance Manager has collected performance data.

   - Use the **Select All** button to select all principal data.
   - Use the **Clear All** button to clear any selections.

2. After selecting the principal data, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

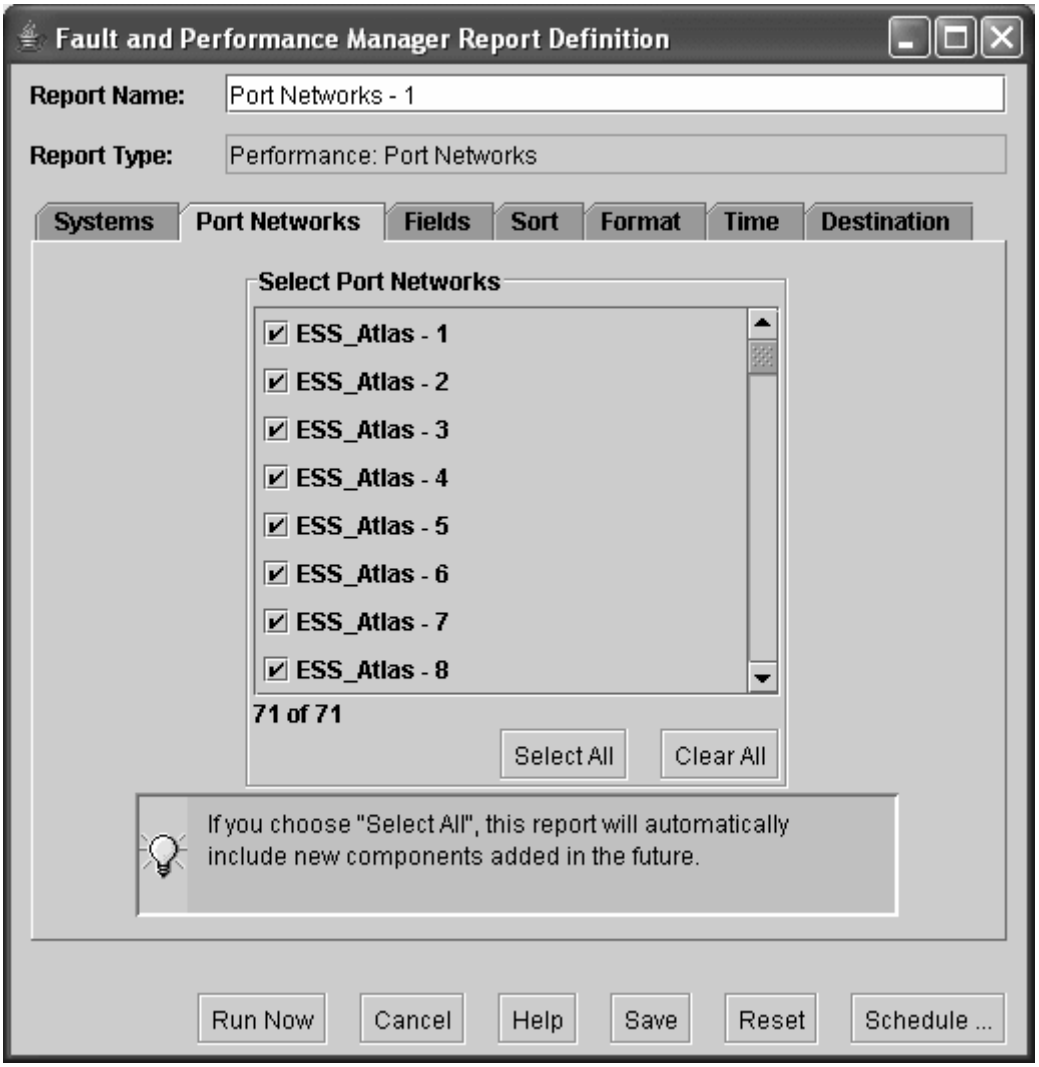
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Port Networks Tab

This tab allows you to select the port networks to include in your report.



To select the port networks, follow these steps:

1. Select the port networks to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the port networks, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

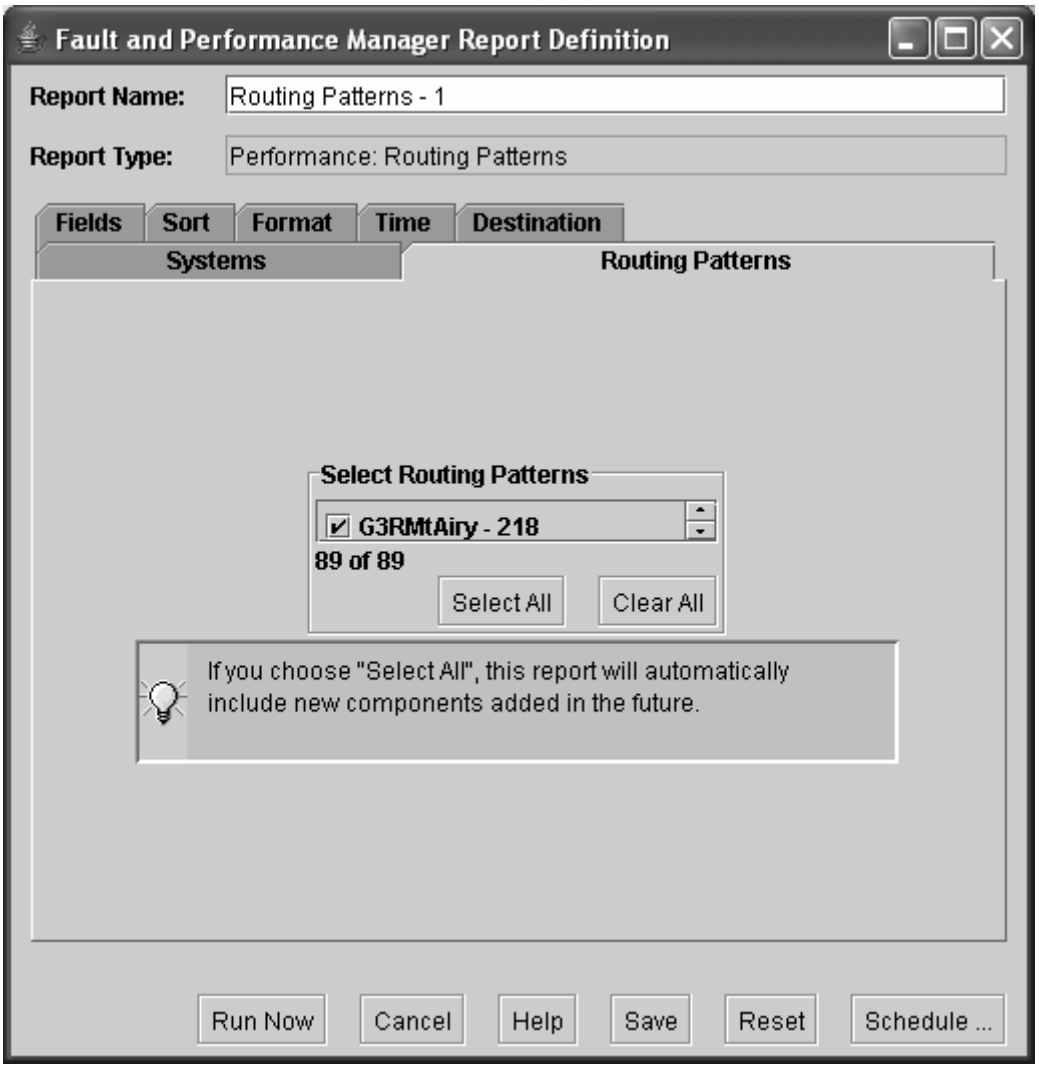
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Routing Patterns Tab

This tab allows you to select the routing patterns to include in your report.



To select routing patterns, follow these steps:

1. Select the routing patterns to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the routing patterns, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

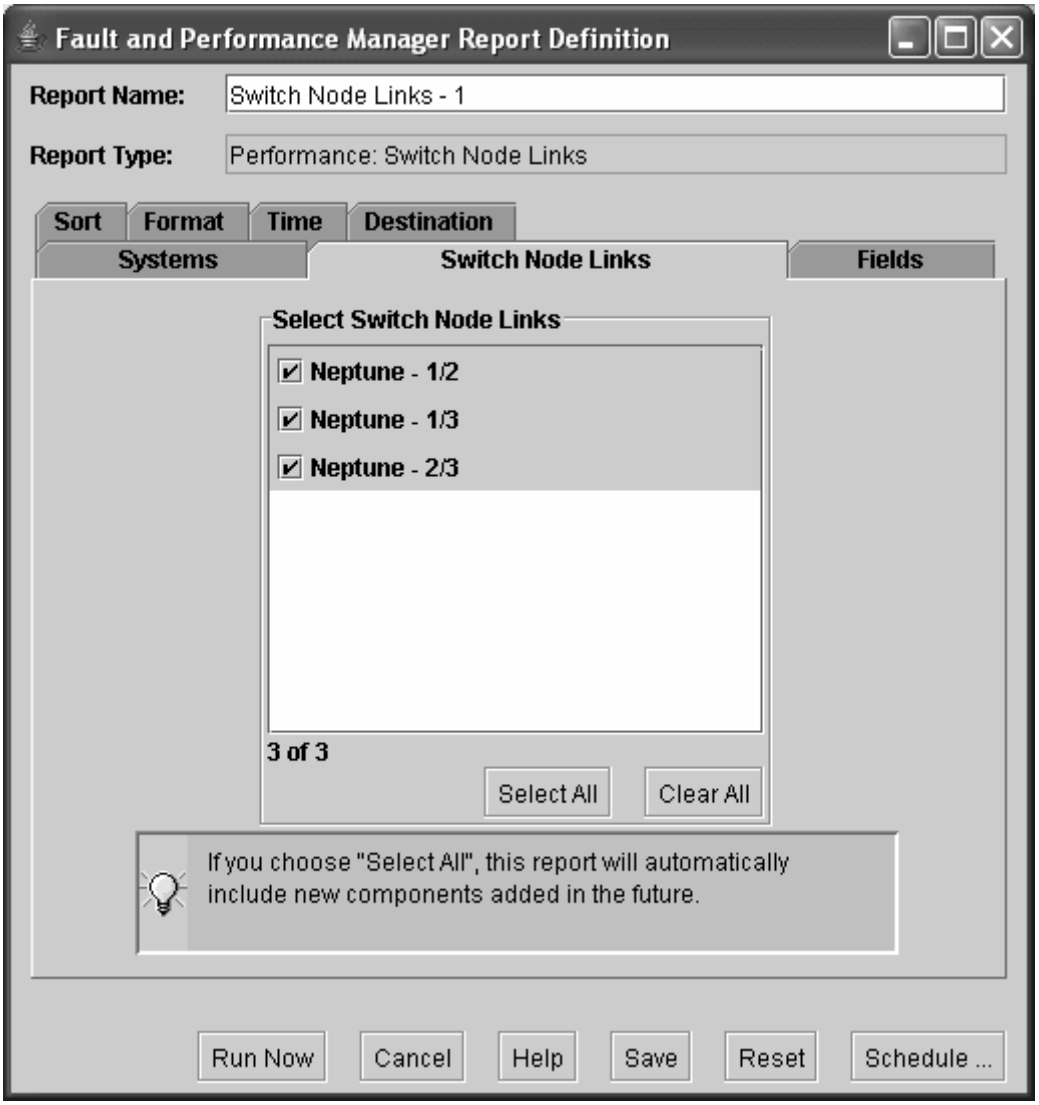
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Switch Node Links Tab

This tab allows you to select the switch node links to include in your report.



To select switch node links, follow these steps:

1. Select the switch node links to include in the report.
    - Use the **Select All** button to select all switch node links.
    - Use the **Clear All** button to clear any selections.
2. After selecting the switch node links, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

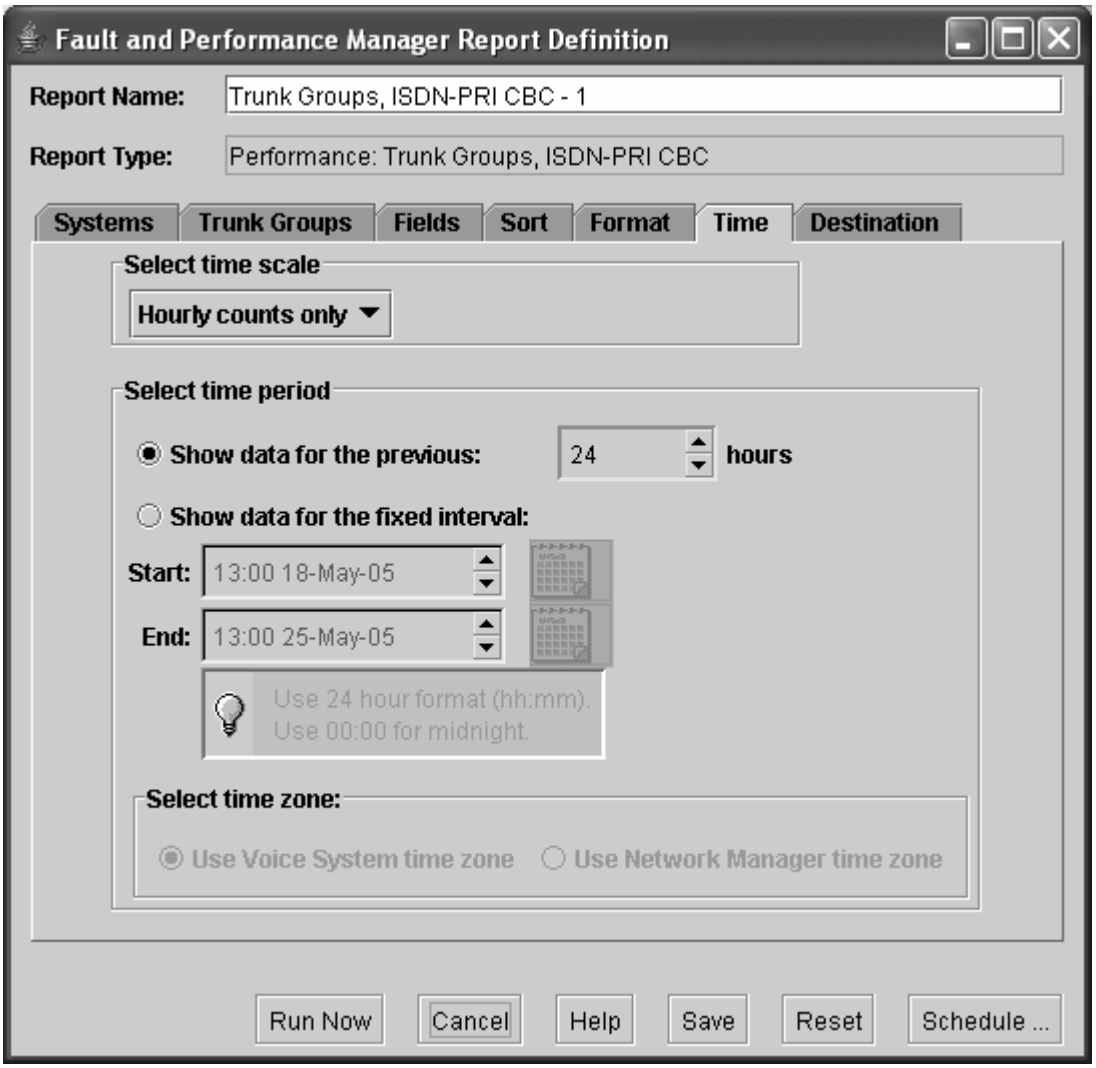
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Time Tab

This tab allows you to set time options for your report.



To set time options, follow these steps:

1. Select the time scale from the drop-down list box: **Hourly counts**, **Daily peaks** (default), or **Weekly peaks**.

Tips

- If you select Daily or Weekly peaks, all time windows start and end at midnight and the hour field is inactive.
- If you select Weekly peaks, all time windows start and end at a week boundary, Monday 00:00. You can specify a different day; in this case when the report is run, the time window expands to the week boundary before and after the time window defined.

1. Choose the time period by selecting one of the following options:

   - Show data for the previous

     Enter the duration in the corresponding text box. The duration unit is hours, days, or weeks depending on the time scale selected. The default is 7 days.

   - Show data for the fixed interval

     Enter the start and end times and days. The end time must be later than the start time. The time is in 24-hr. format. Select the time zone: **DEFINITY time zone** or **Use Network Manager time zone**. DEFINITY time zone refers to the time at each monitored voice system. Use Network Manager time zone refers to the time on the network management station running the application.

      **Note:**

     Reports defined with Daily or Weekly peaks and Show data for the fixed interval should also use the voice system time zone. This ensures that if a voice system is in a different time zone, all peaks are reported within the time window.

3. After selecting the time information, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

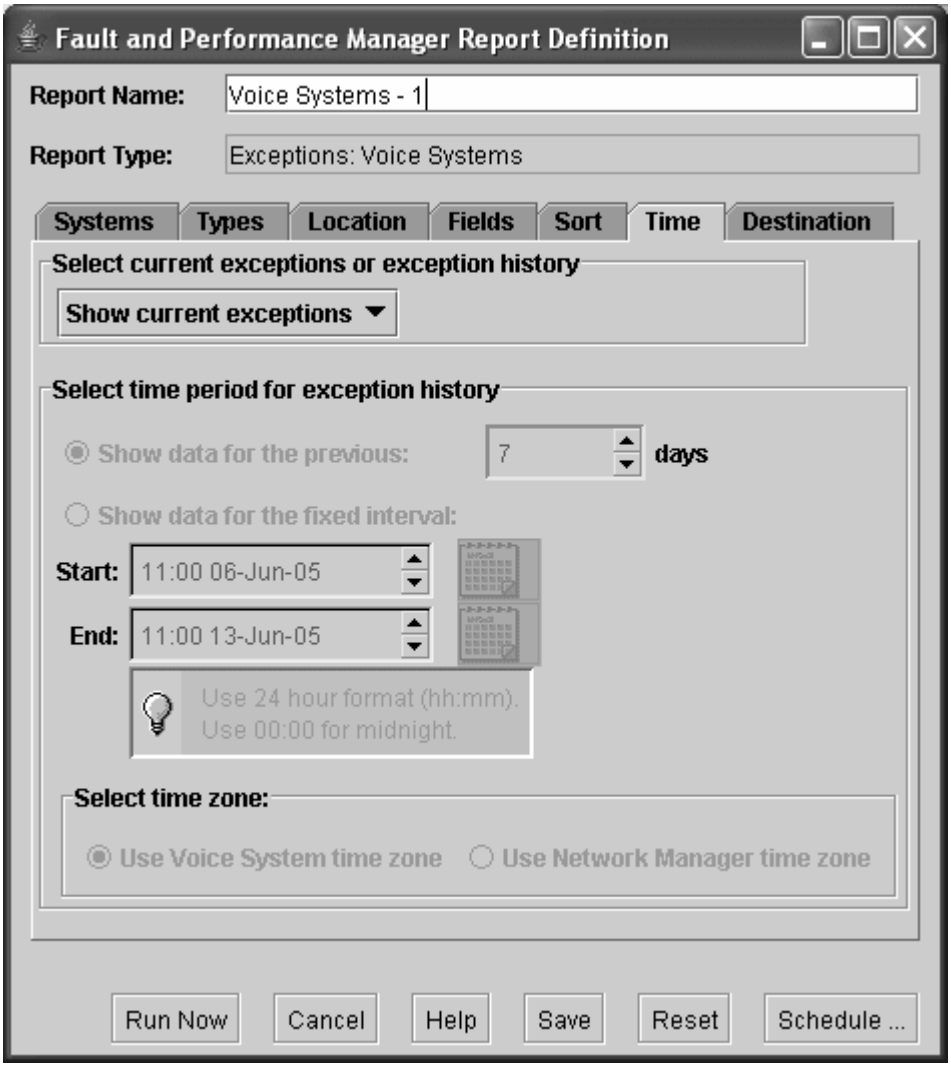
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Time Tab for Exception Report

This tab allows you to select exception time options in your report.



To set exception time options, follow these steps:

1. In the **Select current exceptions or exception history** drop-down list box, select **Show current exceptions** or **Show exception history**.

   Note:

   *When **Show current exceptions** is selected, all the other controls in this tab are inactive.*

2. Choose the time period by selecting one of the following options:

   - Show data for the previous

     Enter the duration in the corresponding text box. The duration unit is days. The default is 7 days.

- Show data for the fixed interval

  Enter the start and end times and days. The end time must be later than the start time. The time is in 24-hr. format.

- Select Time zone

  Only applies to a DEFINITY Exception Report. *Does not apply to a Fault/Performance Manager Exception Report.* If you select a fixed window for a DEFINITY Exception report, select the time zone. **DEFINITY time zone** refers to the time at each monitored voice system**. Network Manager time zone** refers to the time on the network management station running the application.

3. After selecting the time information, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

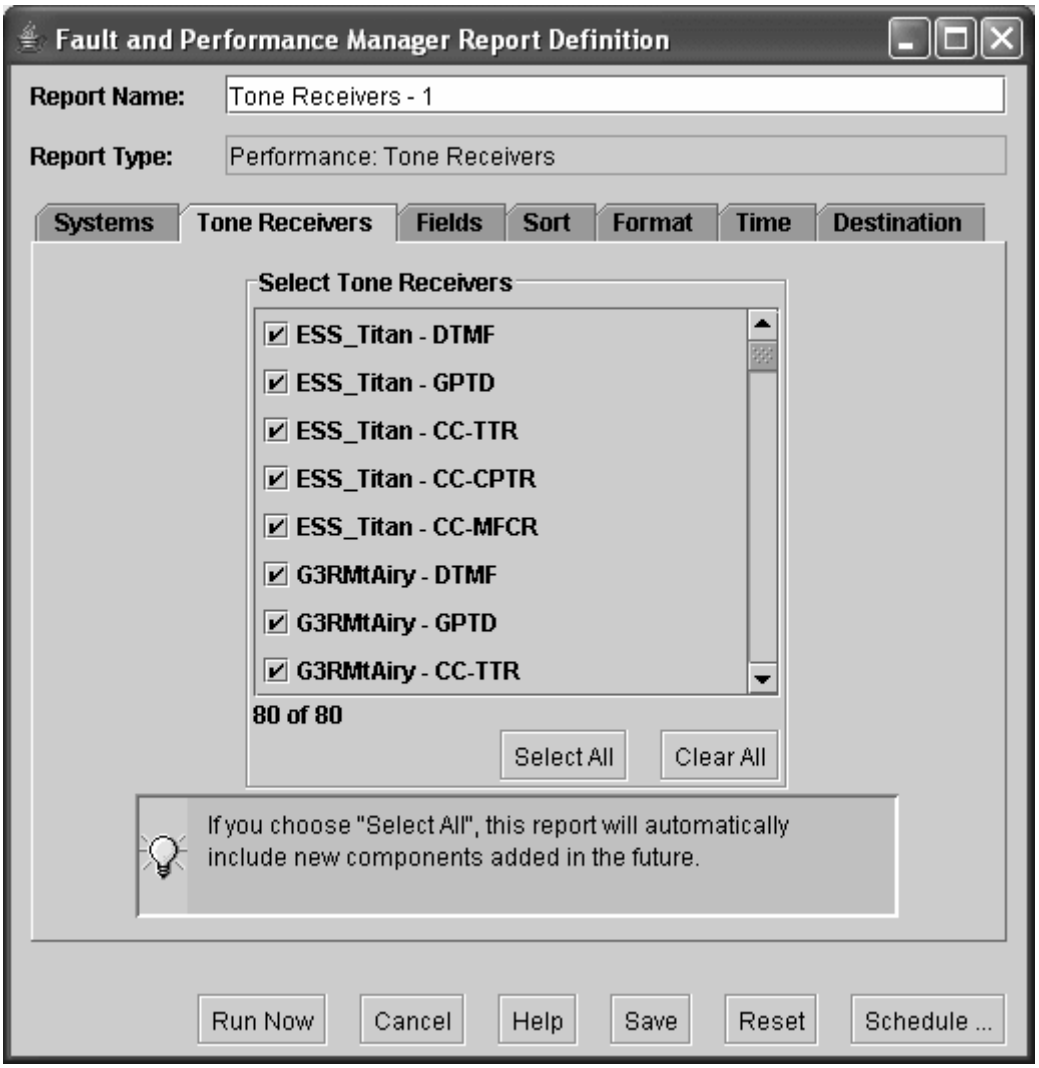
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Tone Receivers Tab

This tab allows you to select the type of tone receivers to include in your report.



To select tone receiver types, follow these steps:

1. Select the tone receiver types to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the tone receiver types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

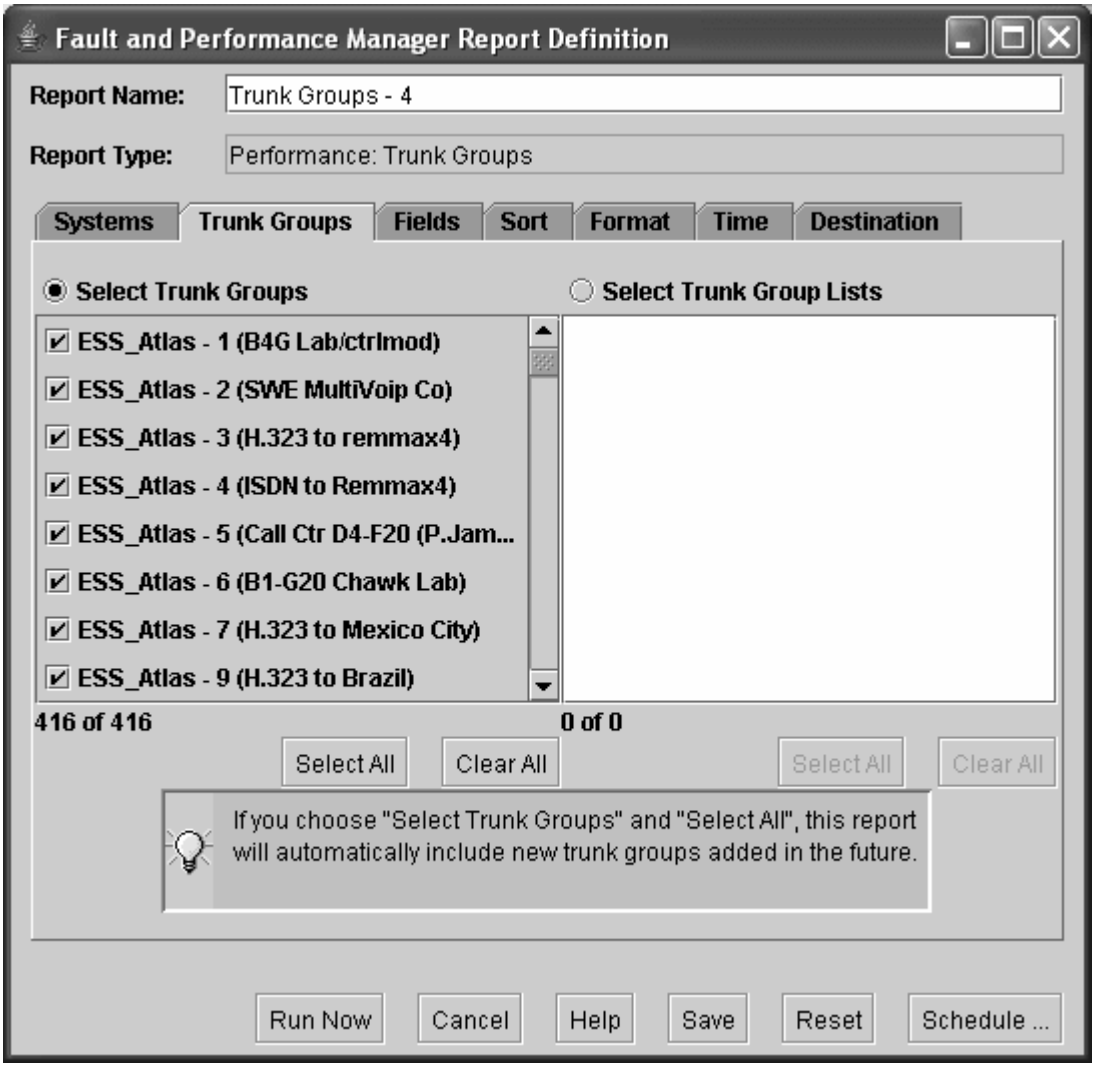
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Trunk Groups Tab

This tab allows you to select trunk groups in your report.



To select trunk groups, follow these steps:

1. Select one of the following options:
    - **Trunk Groups** to choose one or more trunk groups.

      The displayed list includes the trunk groups for systems selected on the Systems tab. The list includes the system name, the trunk group number, and the trunk group name, if known. It is possible that Fault and Performance Manager may receive performance data for a new trunk group before it receives configuration data. In this case, the trunk group name is not shown until configuration data is collected. (See Configuration Collection for more information.)
    - **Trunk Group Lists** to choose one or more trunk group lists.

      The displayed list includes the trunk group lists for systems selected on the Systems tab. The list includes the system name and the trunk group list name. (See Trunk Group Lists to view and edit the contents of a trunk group list.)

- Use the **Select All** button to select all trunk groups.
- Use the **Clear All** button to clear any selections.

Note:

If more trunk group lists are subsequently added, they will not be automatically included. You must edit the Report Definition to include the new lists.

2. After selecting the trunk groups, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

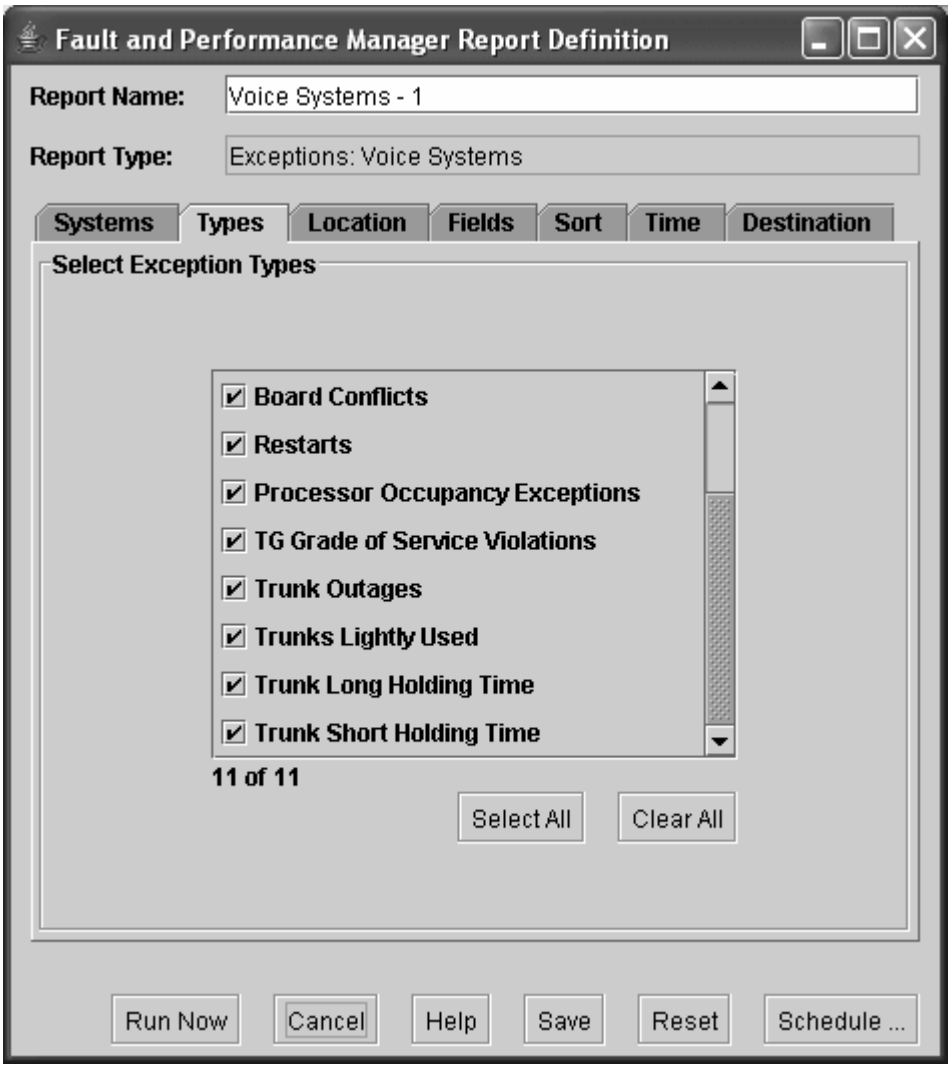
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Types Tab

This tab allows you to select the types of exceptions to include in your report.



To select the types of exceptions, follow these steps:

1. Select the types of exceptions that you want to include in your report by selecting each one in the **Select Exception Types** list box. (At least one type must be selected.)
    - Use the **Select All** button to select all exception types.
    - Use the **Clear All** button to clear any selections.
2. After selecting the exception types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Format Tab

This tab allows you to select the output format for your report.

Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

To set output format options, follow these steps:

1. Choose the output format for the report by selecting either the **Table** option button (default) or the **Chart** option button.
2. If you select the **Chart** option button, click the **Chart options** button to specify the Chart Properties and click Close when you are done.

   For help completing the fields, click **Help** on that screen.

3. After selecting the report format, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

    - Run Now

      Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

    - Schedule

      Opens the Schedule Report dialog box.

    - Reset

      Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

    - Cancel

      Cancels the report definition and closes the dialog box without saving any changes.

    - Help

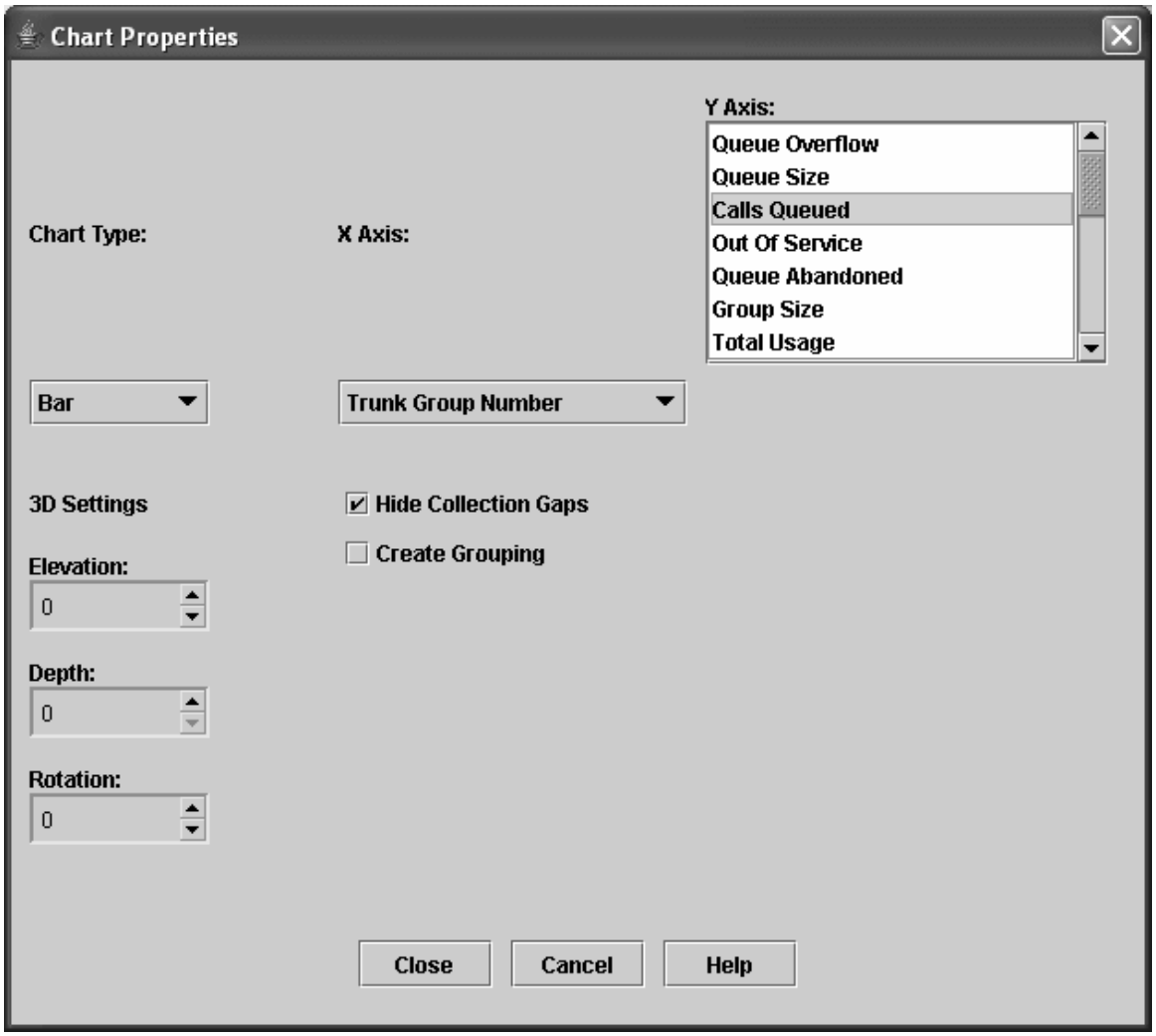
      Displays a help screen for the selected tab.

Related Topics

- Chart Properties Dialog Box

Chart Properties Dialog Box

This dialog box allows you to set charting options for your report. It is accessed by clicking **Chart** on the Format tab of the Report Definition dialog box.



Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

To set chart options, complete the following steps:

1. Set the chart format by filling in the following fields:

Field	Description
Chart Type	Select the type of chart: Bar, Stacked Bar, Line, or Pie

Field	Description
3D Settings	Set the appearance of the chart in three dimensions: **Elevation** - sets the position of the observer above the horizontal axis from -45? to +45?. A negative elevation positions the observer below the horizontal axis. (Default is 0 for a two-dimensional graph only.) **Depth** - sets the depth of the graph as a percent of the width from 0 - 500%. (Default is 0 for a two-dimensional graph only. In this case, both Elevation and Rotation are ignored.) **Rotation** - sets the position of the observer to the right or left of the vertical axis from -45? to +45?. (Positive rotation positions the observer to the right of the vertical axis; negative rotation positions the observer to the left of the vertical axis.) **Notes**: If both Elevation and Rotation are zero (0), the graph is two-dimensional and the Depth is ignored. If the Depth is a non-zero value, and either Elevation or Rotation is a non-zero value, then the graph is three-dimensional, but the effect is somewhat flat. **Tip**: To achieve the best 3D effect, each of the above settings should be a non-zero value.
X Axis	Set the X-axis to one of the Key fields previously defined for the report. The default is the voice system date and time.
Hide Collection Gaps	Check to delete gaps in the data. For example, if data collection is scheduled only during business hours (9:00 a.m. to 5:00 p.m.), setting this option ensures that gaps during off-hours and weekends are deleted.
Create Grouping	Check to group measurements according to the values of one grouping field.
Group By	If Create Grouping is checked, select one field from the key fields selected on the **Fields** tab. The default is the voice system name.
Y Axis	If Create Grouping is checked, select one Y-axis measurement from the non-key numeric fields selected on the **Fields** tab. The default is the first non-key numeric field. If Create Grouping is not checked, select up to 10 Y-axis measurements from the non-key numeric fields selected on the **Fields** tab. **Tip:** The fields available on the X- and Y-axes are the fields selected on the **Fields** tab. If you set chart properties here and then go back and change the selections on the **Fields** tab, this may change the chart in unpredictable ways.

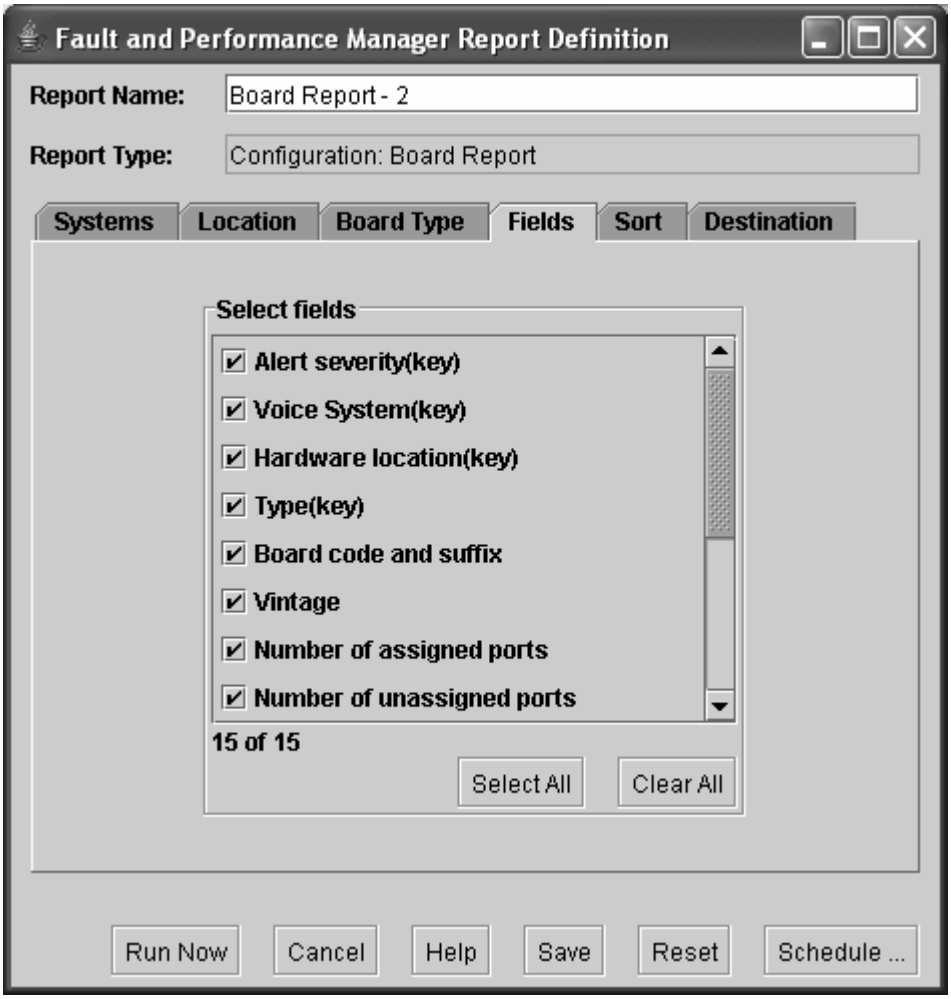
2. Click **Close** to close the Chart Properties dialog box.

Related Topics

- How to print a report

Fields Tab

This tab allows you to select the data fields to include in your report.



The list of fields depends on the report type. All fields available in the data records used for the report are listed.

To select the data fields, follow these steps:

1. Select the data fields to include in the report (by default all data fields are selected.)

   The order of the fields in the report is the same as the order the fields in this list. The fields selected here determine the fields that are available for sorting and charting on the Sort tab and Format tab respectively. The word "key" in parentheses identifies Key fields. These are the fields that uniquely identify a record, for example, date and time, system name, and sometimes component identifier (trunk group number). Each report should include at least one key field. Some report types have "secondary" data fields. For example, a Routing Pattern report has an hourly record for each routing pattern, which is called the "primary" record. The data fields in this record are the primary data fields. In addition, each primary record has a number of "secondary" records, one for each trunk group in the routing pattern. The "secondary" data fields appear in the selection list after the primary data fields, and are indicated by a different background color. If you include both primary and secondary data fields in a report, the report output shows several tables and charts.

- Use the **Select All** button to select all fields.
- Use the **Clear All** button to clear any selections.

2. To select the units in which traffic usage measurements are presented, select one of the following options:

Note:

These buttons are only available for Performance reports.

- Show traffic in CCS
- Show traffic in Erlangs

3. After selecting the fields, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Sort Tab

This tab allows you to select the sort options in your report.

To set sorting options, follow these steps:

1. From the **Sort** tab, select how to sort the data rows in the report:
    - **Sort first by**: select the first sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button
    - **Then by**: select the second sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button
    - **Then by**: select the third sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button

Note:

*The fields you can sort on are the fields selected on the **Fields** tab. If you set sort fields here and then go back and change the selections on the **Fields** tab, this may change the sort in unpredictable ways.*

Tips

- Sort dates in descending order to get the most recent first.
- Sort severity in descending order to get the most critical first.
- Most other fields are usually sorted in ascending order.
- You can also sort rows after you run the report.

2. Enter the maximum number of records to be included in the report in the **Specify maximum records in a report** field.

   The default is 1000.

3. After selecting the sort options, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Destination Tab

This tab allows you to select the report output destination and print the reports.

To set the report output destination, follow these steps:

1. Select one or more of the following report destinations:
   - **Screen** to send the report to the screen display.
   - **Print** to send the report to the specified print destination.

     Click the **Setup** button to specify a print command or a printer for the report or to specify height and width of the text on the page.
   - **File** to send the report to the specified file destination.

     Click the **Save As** button to specify the directory, file name, and file format (ASCII or HTML (default)).

Note:

The ASCII file format is intended primarily as input to other applications; for example, expert systems or spreadsheet programs.

Select one of the following options:

- **Replace** to overwrite the file with the latest data, or
- **Automatically append time stamp to file** to create a new report each time the report is run

- **E-Mail** to send the report to a specified email address. Enter one or more email addresses.

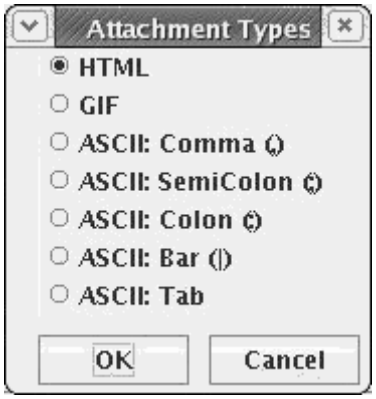
Note:

Spaces are invalid in the email address field. If you use internal type addresses (such as first initial and last name), specify the first initial, a dot, and the last name rather than using spaces. Separate multiple entries with commas but no spaces.

Note:

*Even when only email output is desired, **File** must be checked and a valid directory on the Linux server is required in the associated text box. Click **Save As** to save the report under a specific name. If you do not check **File** and supply a valid Linux server directory, the resulting file will have an incorrect extension.*

If you select E-Mail, you can also select Attachment Type in the Attachment Type dialog box:



Selecting HTML (default) generates the report as a web browser readable table. Selecting any of the ASCII formats gives delimited fields suitable for importing into a spread sheet. For reports that are formatted as charts, an additional choice (GIF) is available to present the chart as a picture.

2. After selecting the output destinations, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   **Note:**

  *File must be checked and a local PC directory is required in the associated text box. Click **Save As** to save the report under a specific name.*

- Schedule

  Opens the Schedule Report dialog box.

   **Note:**

  *File must be checked and a valid directory on the Linux server is required in the associated text box. Click **Save As** to save the report under a specific name.*

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

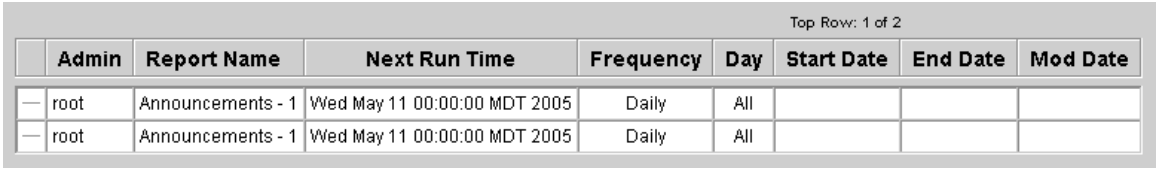
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Scheduled Reports

The Scheduled Reports panel lists all reports that have been scheduled for later execution.



Top Row: 1 of 2

	Admin	Report Name	Next Run Time	Frequency	Day	Start Date	End Date	Mod Date
—	root	Announcements - 1	Wed May 11 00:00:00 MDT 2005	Daily	All			
—	root	Announcements - 1	Wed May 11 00:00:00 MDT 2005	Daily	All			

Buttons:

- **Exceptions** — Shows report failure exceptions related to the selected report(s).
- **Reschedule** — Highlight a row by clicking on it. Then click **Reschedule**. The existing report is opened in the *Schedule Report* dialog box.
- **Delete** — Highlight a row by clicking on it. Then click **Delete**. The existing report is deleted.
- **Help:** Displays a help screen for this panel.

Related Topics

- Schedule Report Dialog Box
- Exceptions

Schedule Report Dialog Box

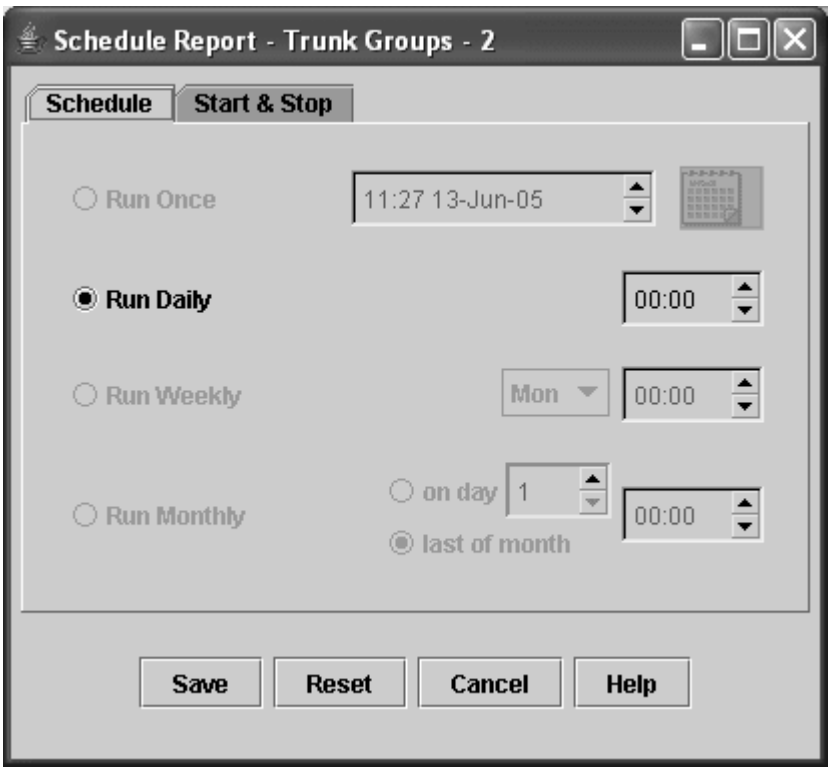
Note:

You can complete administration functions such as scheduling a report only from the server application GUI. Administration functions are not available from the Web client.

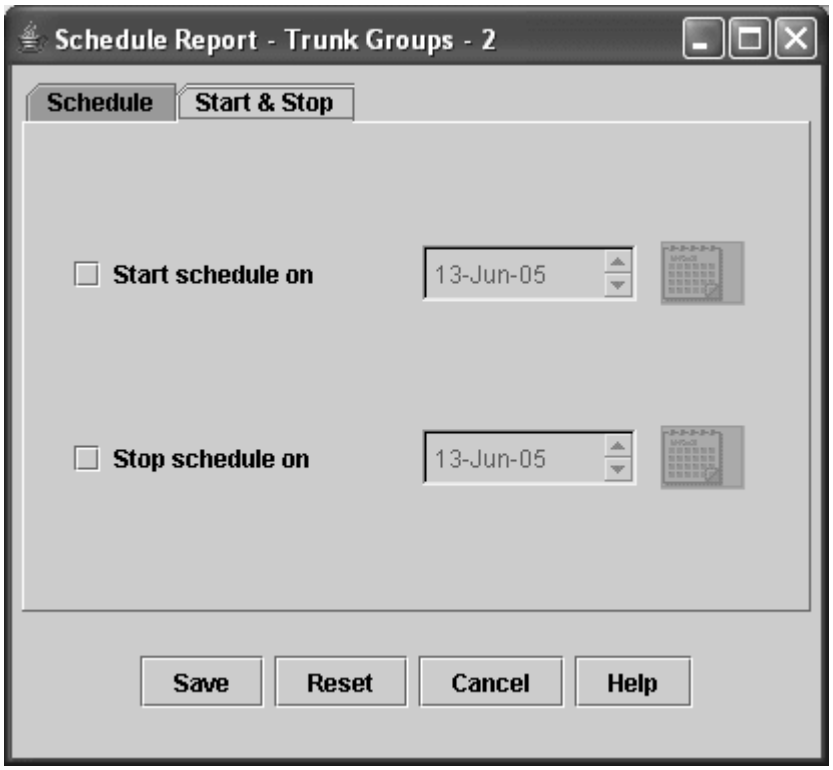
Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

This dialog lets you specify when you want a report to run.



1. Select an option button and complete the corresponding fields to define the schedule:
   - **Run once at**: Enter the date in dd/mm/yy format, and enter the time start time in military format (24 hr.)
   - **Run daily**: Enter the start time in military format (24 hr.)
   - **Run weekly**: Select a day of the week, and enter the start time in military format (24 hr.)
   - **Run monthly**: Select a day of the month, or select the last day of the month.
2. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.
3. Select the **Start and Stop** tab.



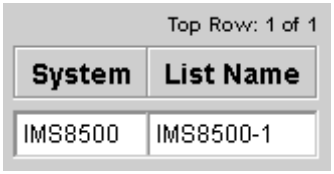
4. Select the **Start Schedule on** check box and enter a start date in dd/mm/yy format.
5. Select the **Stop Schedule on** check box and enter a stop date in dd/mm/yy format.
6. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.

Related Topics

- How to run or schedule a report

Trunk Group Lists

Trunk group lists are a convenient way of specifying multiple trunk groups without having to list each member each time.



Buttons:

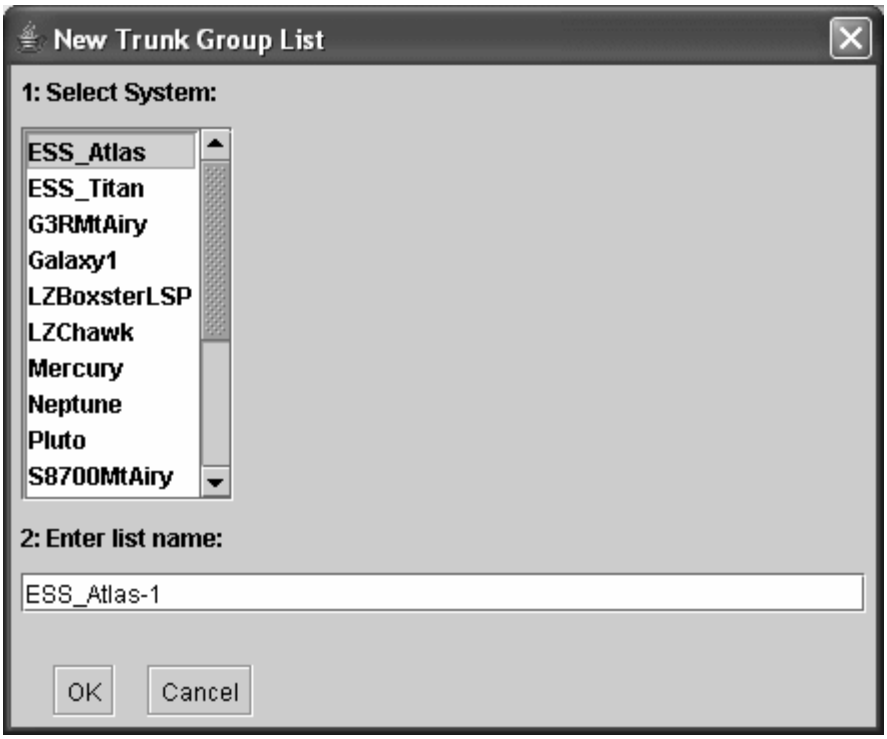
- **New** — Opens the New Trunk Group List dialog box to define a new trunk group list.
- **Open** — Highlight a row by clicking on it. Then click **Open**. The members of the trunk group list display on the Trunk Group List Definition dialog box.
- **Delete** — Highlight a row by clicking on it. Then click **Delete**. The existing trunk group list is deleted.

Related Topics

- New Trunk Group List
- Trunk Group List Definition

New Trunk Group List Dialog Box

Clicking **New** on the Trunk Group Lists display of the *Report Manager* screen opens the *New Trunk Group List* dialog box.



A trunk group list applies to one system.

1. Select the system.
2. Enter a name for the list.
3. Click **OK**.

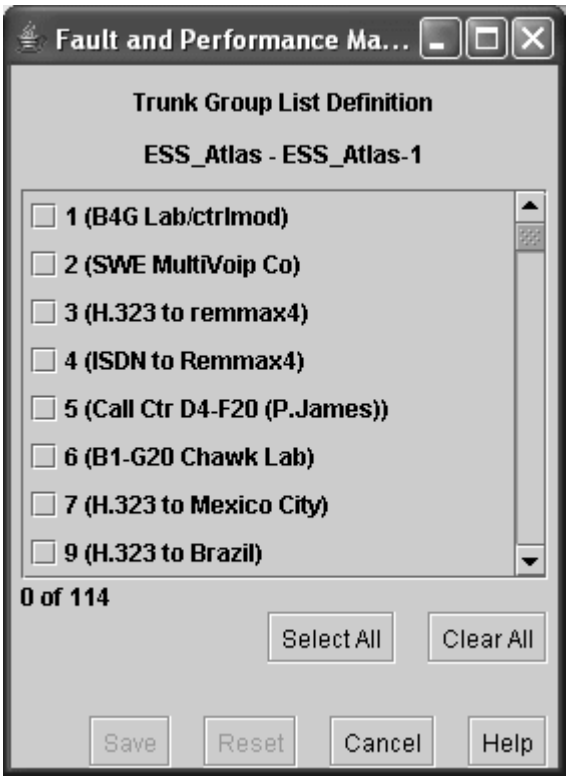
   The Trunk Group List Definition dialog box opens.

Related Topics

- Trunk Group List Definition dialog box
- Trunk Group Lists

Trunk Group List Definition dialog box

The *Trunk Group List Definition* dialog box displays when you click **Open** on the Trunk Group List display, or when you click **OK** on the New Trunk Group List dialog box.



All trunk groups on the system associated with this trunk group list are displayed.

1. Check any or all of the trunk groups.
2. Click **Save**.

Related Topics

- New Trunk Group Lists dialog box
- Trunk Group Lists

Task Help

How To View Your Network

You can view your network in one of two ways:

- Using a general purpose Network Management System (NMS) (if you have one).
- Using Fault and Performance Manager's Network Monitor.

Viewing your network using an NMS

To view your network using your NMS, refer to the documentation that came with your NMS.

Viewing your network using Fault and Performance Manager

To view your network using Fault and Performance Manager's Network Monitor, complete the following steps:

1. Display the Network Monitor.

   This window displays by default when you open Fault and Performance Manager. Depending on the object selected in the left pane, the right pane displays appropriate information.

   Note:

   The Network Monitor window has four tabs just below the menu bar. The highest level item in the left pane will have a name similar to the selected tab.

Tab	Highest Level Item
System Groups	System Groups
DCS Trunk Connectivity	DCS Groups
IP Trunk Connectivity	IPT Groups
Clusters	Cluster Groups

   If you see the Administration window or Report Manager window (no tabs, and the highest level item in the left pane is Administration Root or Report Manager), close or minimize them to see the Network Monitor.

2. Select one of the tabs.
   - **System Groups:** Displays voice systems in user-defined groups.
   - **DCS Trunk Connectivity:** Displays voice systems in groups based on DCS trunk connectivity.
   - **IP Trunk Connectivity:** Displays voice systems in groups based on IP trunk connectivity.
   - **Clusters:** Displays information about ESS and LSP clusters.
3. In the left pane, click the object you want to view.

The group or cluster will open to show individual systems in the left or icons for the individual systems in the right pane.

4. In the left pane, click the system name, or in the right pane double-click the system icon.

   The System Detail screen opens, showing configuration and status information displays for the selected system. The left pane allows you to drill down for greater levels of detail.

For additional information, please see:

- System Groups Tab
- DCS Trunk Connectivity Tab
- IP Trunk Connectivity Tab
- Clusters Tab

How To Set Data Collection Parameters

Note:

You can complete administration functions such as setting data collection parameters only from the server application GUI. Administration functions are not available from the Web client.

To specify data collection options for any of the data that FPM can collect, complete the following steps:

1. Open the *FPM Administration* screen by selecting **File>Administration.**
2. In the Navigation panel, select the object you want to collect data on.

   For example, select **Default Parameters** and then select **System Exceptions**.
3. If you selected **Voice System Parameters**, select the system you want to set up data collection for.

   FPM expands the selected system and displays a list of data types for that system.
4. Select the type of data you want to collect.

   FPM displays the appropriate administration tabs in the right pane.
5. Select the appropriate tab.
6. Complete the fields on that tab.

   For help understanding the fields, click the **Help** button on that screen.
7. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.

Related Topics

- Data that you can collect

How To Create a New Trunk Group List

Creating a trunk group list within FPM does not affect your voice systems. It merely allows you to group trunks within FPM for your convenience. You might use this feature, for example, to group trunks by "usage area" and then run reports on the group, rather than the individual trunks.

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Trunk Group Lists.**
3. In the right pane, click the **New** button.

   FPM displays the New Trunk Group List dialog box.
4. Select the appropriate voice system from the list.
5. Enter a unique name for the new Trunk Group List.
6. Click **OK** to create the new trunk group list.

   FPM displays the Trunk Group List Definition dialog box.
7. Select the trunk groups you want to add to the list.
   - Use the **Select All** button to select all trunk groups.
   - Use the **Clear All** button to clear all trunk groups.
8. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.
9. Click **Close** to close the Trunk Group List Definition dialog box.

Related Topics

- How to add trunk groups to the trunk group list

How To Add Trunk Groups to the Trunk Group List

If you arrived at this help topic by clicking the Help button on the Trunk Group List Definition screen, go to Step 4. Otherwise, start below.

Adding trunk groups to the FPM trunk group list does not affect your voice system. It simply makes groups of trunks within FPM. You might use this feature, for example, to group trunks by "usage area" and then run reports on the group, rather than the individual trunks.

1. Open the Report Manager by selecting **File>Report Manager**.
2. In the left pane, click **Trunk Group Lists**.
3. From the right pane, select a trunk group list and click the **Open** button.

   FPM displays the Trunk Group List Definition dialog box. The trunk groups that are currently in the list are selected.
4. Select the trunk groups that you want to add to the list. (At least one trunk group must be selected.)
   - Use the **Select All** button to select all trunk groups.
   - Use the **Clear All** button to clear all trunk groups.
5. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.
6. Click **Close** to close the Trunk Group List Definition dialog box.

Related Topics

- How to create a new trunk group list

How To Create a System Group

FPM allows you to create system groups so that you can organize your systems logically according to the needs of your work. For example, you might group systems by location, by type, or by some other characteristic. The systems that you group together will appear in the Fault and Performance Manager main window under the System Group name that you specify in the following procedure.

To create a system group, complete the following steps:

1. Open the Administration window by choosing **File>Administration.**
2. In the Navigation Pane, select **System Groups.**

   FPM displays a list of system groups.
3. In the right pane, click the **New Group** button.

   FPM displays the New Group dialog box.
4. Enter a unique system group name in the **Enter Group Name** field and click **OK**.
5. In the right pane, use the drop-down list to change the system group for a particular system.
6. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.

Related Topics

- How to move a system to a new group

How To Move a System to a New Group

Moving a system to a new group is similar to moving a file to a new folder or directory in your computer's file management system, except that the change affects only FPM windows.

To move a system to a new system group, complete the following steps:

1. Open the Administration window by choosing **File>Administration.**
2. In the left pane, select **System Groups.**

   FPM displays a list of systems and the groups they belong to.
3. In the right pane, locate the system that you want to move.
4. From the drop-down box to the right of the system, choose a new group for the system to belong to.

If you do not see the appropriate group in the list, it is because it does not exist. In that case, you can create a system group.

Related Topics

- How to create a system group

How To Change Alarm Levels

FPM places colored symbols by the nodes in the tree on the FPM main window if there are exceptions in the branches beneath. By default, these symbols mean:

 Critical Alarm

 Major Alarm

 Minor Alarm

 Warning

The highest level of alarm that has occurred anywhere in a branch will be represented at the parent node so that you can see the alarm even if the branch is closed.

You can change what FPM reports as a critical, major, or minor alarm. To do so, complete the following steps:

1. From the main window, choose **File>Administration.**

   FPM displays the Administration window.

2. In the Administration window, click **Voice System Parameters** in the left pane.

   FPM displays the voice systems that it knows about.

3. Select the voice system for which you want to set alarm icons.
4. Select **Alarms/Errors.**
5. Select the **"Use custom values"** radio button.
6. Select the tab corresponding to the exception for which you want to redefine icons.

Filtering Alarms (Alarm Filter Panel)

The Alarm Filter Panel gives you detailed control of alarm collection and processing. You specify a set of parameters to filter out a selected set of alarms. Additional parameters define how often alarm collection occurs, and what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for alarm filtering.

- **Default Alarm/Error Panel**

  The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

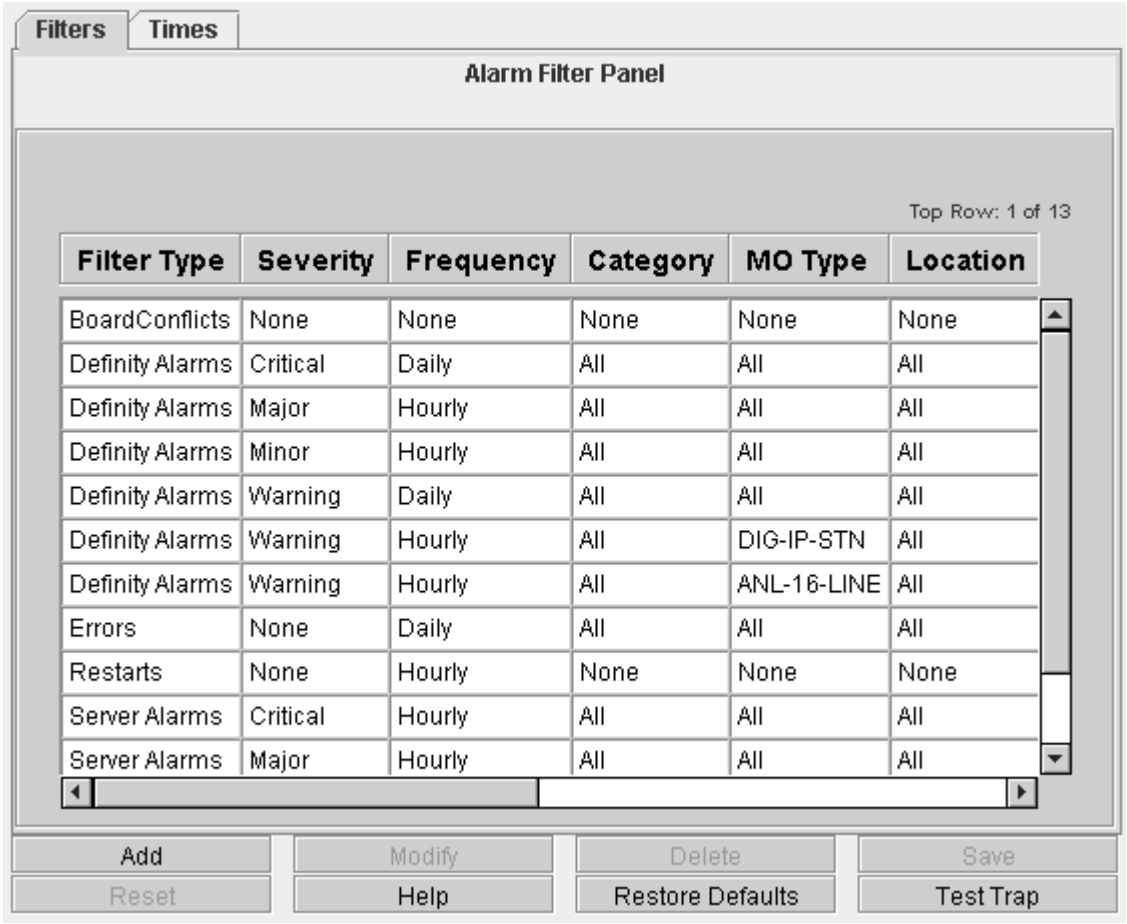
- **Custom Alarm/Error Panel**

  The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

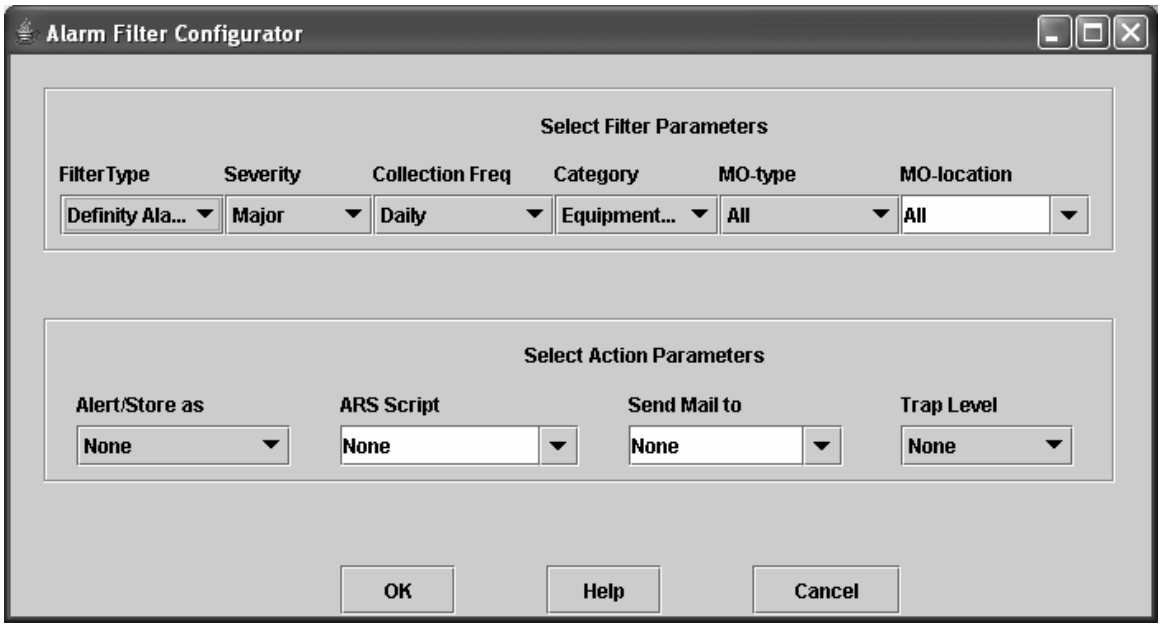
  For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Viewing Alarm Filters

Defined alarm filters are displayed as a scrolling list:



Selecting an alarm filter (or clicking **Add**) opens the selected filter (or a new filter) in the Alarm Filter Configurator.



Filter Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the upper section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Filter Type**: Select the type of alarm to be filtered:
  - **Definity Alarms:** Alarms collected from the Communication Managers and maintenance objects in the Communication Managers.

    Note:

    Definity Alarms *now includes the previous filter type:* ***Traps****. Selection of* ***Definity Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Traps*** *is no longer available.*
  - **Restart Alarms:** Restarts of the Communication Managers.

    Note:

    Restart Alarms *now includes the previous filter type:* ***Restarts****. Selection of* ***Restart Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Restarts*** *is no longer available.*
  - **Server Alarms:** Alarms collected from the Linux servers that hosts the Communication Managers.

    Note:

    Server Alarms *now includes the previous filter type:* ***Platform****. Selection of* ***Server Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Platform*** *is no longer available.*

- **Errors:** Errors collected from the Communication Managers.
- **Board Conflicts:** Board conflicts detected in the Communication Managers (detected as conflicts between what is administered and what is actually plugged in).

- **Severity:** Select the severity of alarm to be filtered:
  - Major
  - Minor
  - **Warning** (custom filters only)
  - Critical
  - **Resolved** (custom filters only)
  - All
  - **None** (this field does not apply to this filter)

Notes:

- To receive traps for Warning and Resolved alarms, the Communication Manager must be release 3.0 or above, and **Use Custom Values** must be selected.
- The filters for warning and resolved alarms are sent to the Communication Manager g3Agent using SNMP. The agent must be properly setup and the **SNMP write community strings** must be provided when requested.
- There are a huge number of warning alarms. It is counterproductive to turn on all warning alarms on all maintenance objects. The intent of warning severity is to allow notification of events of particular interest on a limited number of crucial Maintenance Objects.

- **Collection Frequency**: select the frequency of alarm filtering:
  - **None** (this field does not apply to this filter)
  - Daily
  - Hourly

Note:

*This field is only used for **Filter Type** values **Definity Alarms, Server Alarms,** and **Errors** — those types that are collected on a schedule from the Communication Manager. This field does not apply to **Board Conflicts** or **Restart Alarms.***

- **Category**: Categories are groups of Maintenance Object types. (For example, when the **Filter Type** is *Definity Alarms*, the default *Equipment-Type* category expands to the MO group *{MediaGateways, Cabinets, Boards, Ports, Extensions, and Trunks}.* When a **Category** is chosen, the **MO-Type** contains the corresponding expanded list of Maintenance Objects.

  This field is only used for **Filter Type** values *Definity Alarms, Server Alarms, Platform, Errors* and *Traps.* This field does not apply to *Board Conflicts,* and *Restarts.*

- **MO-Type**: The Maintenance Object type can be selected from an appropriate list of Maintenance Objects within each **Category**. If a specific Maintenance Object is chosen, the filter applies only to Maintenance Objects of that type. If the value *All* is chosen, the filter applies to all Maintenance Objects in the **Category.**
- **MO-Location**: The default *All* applies the filter to all locations for the chosen **MO-Type.** If a location is specified, the filter applies only to that location.

Note:

*When the **MO-Type** is specified as **Error**, the **MO-Location** field contains the **Error Code**.*

Action Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the lower section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The alarm/trap information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The alarm/trap information is stored in the database and displayed with the selected severity.
  - **None:** The alarm/trap information is neither stored nor displayed.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*

Specifying Default Filters

The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

Specifying Custom Filters

The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Adding, Modifying, and Deleting Alarm Filters

When the alarm filter panel is displayed, you can add, change, and delete filters using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Alarm Filter Configurator* with a blank form for a new filter.
- **Modify:** Select an existing filter by clicking on its row. Then click **Modify** to open the *Alarm Filter Configurator* with the selected filter parameters filled in for editing.

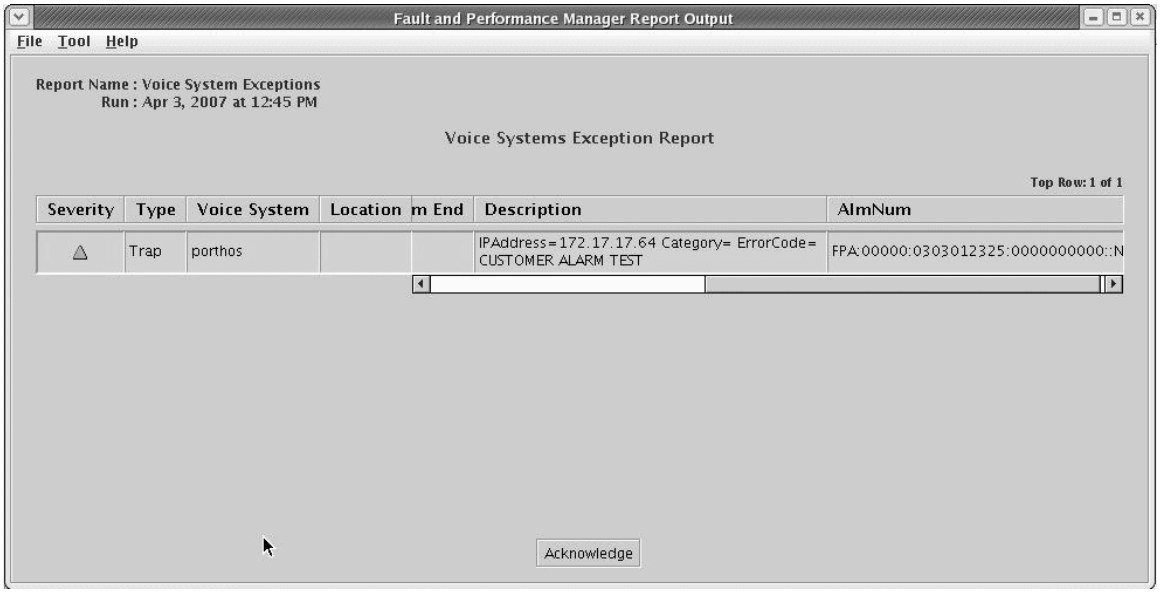
- **Delete:** Select one or more existing filters by clicking on their rows. Then click **Delete** to delete the selected filters. Multiple filters can be selected by clicking the first filter and then holding down the <shift> key and clicking the last filter.
- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.
- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

Generating Test Traps

The **Test Trap** button at the bottom of the *Alarm Filter Panel* generates a test trap.

- At the default level the **Test Trap** button is always enabled. FPM determines which voice systems have CM4.0 (load 730.0 and above) and sets those systems to generate a trap.
- At the voice system level clicking the **Test Trap** button generates a trap for that voice system. The **Test Trap** button is enabled only if the voice system has CM4.0 (load 730.0 and above).

If an appropriate alarm filter (**Type = Trap, Severity = Warning** or **All**) exists, the resulting traps display in the *Voice System Exception Report*. The Description indicates that this is a customer alarm test.



Threshold Alarm Panel

The Threshold Alarm Panel gives you detailed control of threshold alarm collection and processing. You specify a set of parameters to define threshold variables and values. Additional parameters define what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for threshold alarms.

- **Default Threshold Panel**

  The default Threshold panel appears under ***Administration Root > Default Parameters > Performance Collection.***

  The default Threshold panel applies to all systems except those where custom thresholds have been defined.

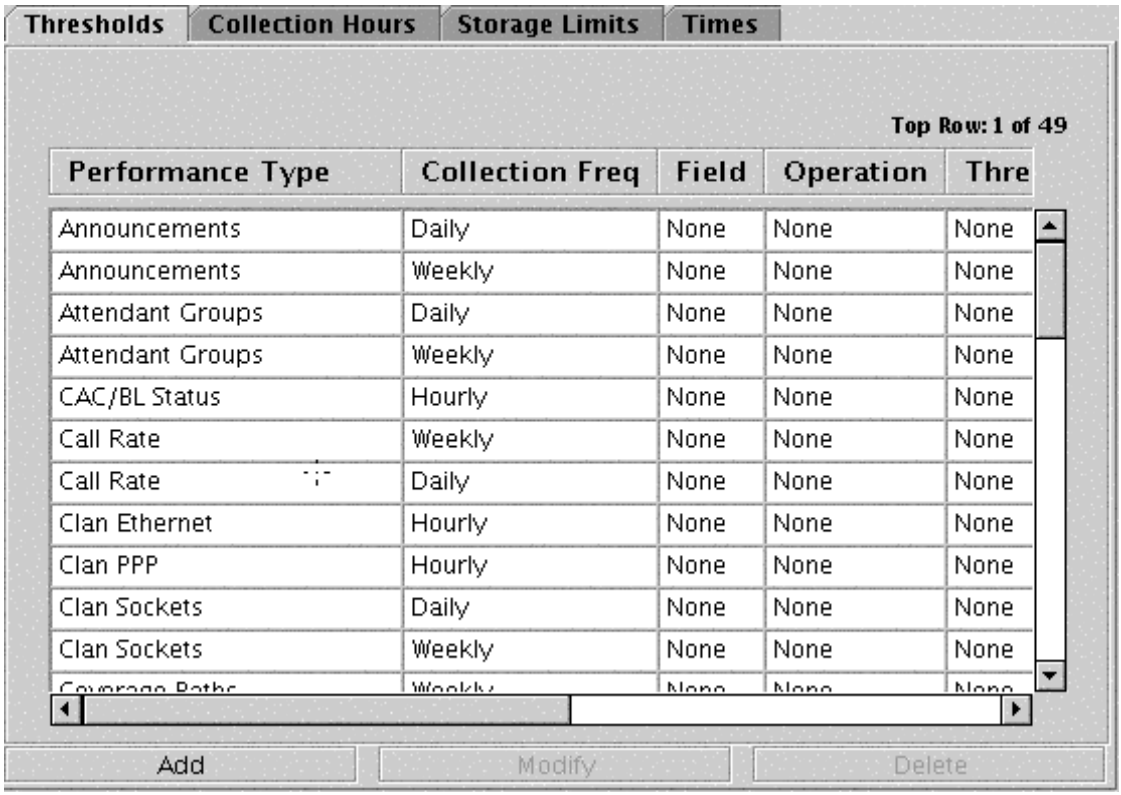
- **Custom Threshold Panel**

  The custom Threshold panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

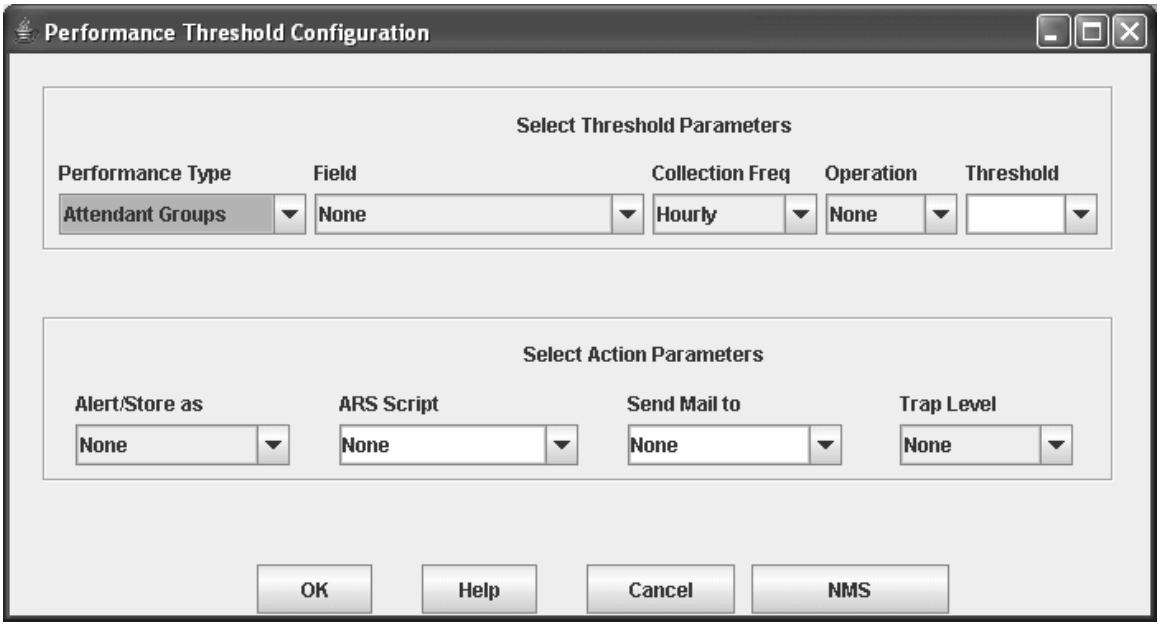
  For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Viewing Threshold Settings

Defined threshold settings are displayed as a scrolling list:



Selecting a threshold setting and clicking **Modify** (or clicking **Add**) opens the selected threshold (or a new threshold) in the Performance Threshold Configurator.



Threshold Parameters: These parameters are shown in each row of the Thresholds panel, and in the upper section of the Performance Threshold Configurator used to define or edit threshold settings.

- **Performance Type**: Select the type of threshold to be set:

Attendant Groups
Hunt Groups
Coverage Paths
Principal Data
Inter-Port Network Latency
Port Networks
Processor Occupancy
Routing Patterns
Security Violations
Switch Node Links
Tone Receivers
Trunk Groups
Trunk Groups, ISDN-PRI

Attendant Groups
Trunk Groups, Wideband
IP Codecs
IP DSP Resources
IP Signalling Groups
Announcements
CLAN Sockets
CLAN Ethernet
CLAN PPP
Call Rate
Multimedia Interface
Expansion Services Module
Voice Conditioners
Denial Events
CAC/BL Status

- **Field:** Select the data field to be tested for a threshold value:

  The fields available depend on the **Performance Threshold** selected. For each **Performance Threshold** type, all available data fields are listed.
- **Collection Frequency**: Select the frequency of threshold testing:
  - **None** (this field does not apply)
  - Hourly
  - Daily
  - Weekly
- **Operation:** Select the method of threshold testing:
  - **None** (this field does not apply)
  - **>** (data value is greater than threshold value)
  - **>=** (data value is greater than or equal to threshold value)
  - **=** (data value is equal to threshold value)
  - **<** (data value is less than threshold value)

- **<=** (data value is less than or equal to threshold value)

- **Threshold:** Enter a numeric value to be used for comparison to the data value.

Action Parameters: These parameters are shown in each row of the Thresholds panel, and in the lower section of the Performance Threshold Configurator used to define or edit threshold settings. **NOTE:** Routing to Network Management Systems outside of Fault and Performance Manager is on a concealed list of check boxes activated by the **NMS** button.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The threshold information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The threshold information is stored in the database and displayed with the selected severity.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: Select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*
- **NMS:** Select routing to any or all Network Management Systems in the list of check boxes revealed by clicking the **NMS** button.

Specifying Default Thresholds

The default Thresholds panel appears under ***Administration Root > Default Parameters > Performance Collection.***

The default thresholds apply to all systems except those where custom thresholds have been defined.

Specifying Custom Thresholds

The custom Thresholds panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Adding, Modifying, and Deleting Thresholds

When the Thresholds panel is displayed, you can add, change, and delete thresholds using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Performance Threshold Configurator* with a blank form for a new threshold.
- **Modify:** Select an existing threshold by clicking on its row. Then click **Modify** to open the *Performance Threshold Configurator* with the selected threshold parameters filled in for editing.
- **Delete:** Select one or more existing thresholds by clicking on their rows. Then click **Delete** to delete the selected thresholds. Multiple thresholds can be selected by clicking the first threshold and then holding down the <shift> key and clicking the last threshold.
- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.

- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

How To Use the Help Desk Feature

The Help Desk feature provides:

- **Helper:** Automatic access to the Communication Manager Maintenance Manual to assist in troubleshooting. The page displayed is keyed to the specific exception selected in the Voice System Exceptions display or in the Exceptions: Voice System report.
- **SAT Connection:** Access to the SAT for the voice system on which the selected exception occurred.
- **Assistant:** Automatic troubleshooting by a rule-based expert system.

The Help Desk feature can be activated from the System Configuration panel or from an Exceptions: Voice System report.

Access from System Configuration Panel

Whenever a voice system is selected in the tree pane of the Configuration and Status monitor window, a System Configuration panel displays summary information for that voice system. Clicking Exceptions opens a Voice System Exceptions display for the selected voice system. Click any row to highlight it and then use the **Tools** menu to access the desired Help Desk feature.

Access from a Voice System Exceptions Report

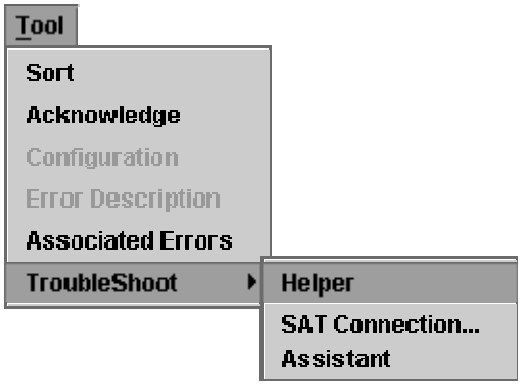
The user may define a report of type “Exceptions: Voice System” for one or more voice systems. Whenever a report of this type is displayed, click any row to highlight it and then use the **Tools** menu to access the desired Help Desk feature.

Note:

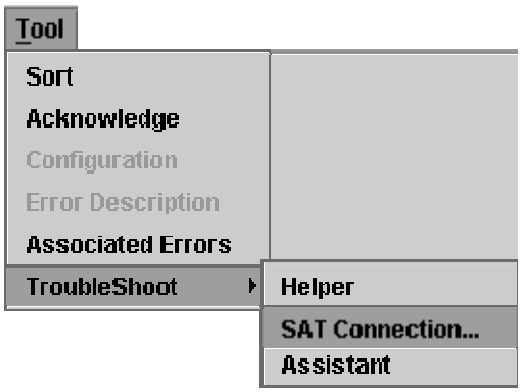
The name of this report is user specified and may not specifically indicate that voice system exceptions are reported. The type of the report, “Exceptions: Voice System” controls both the format of the report and the availability of the Help Desk feature.

Using the Help Desk Feature

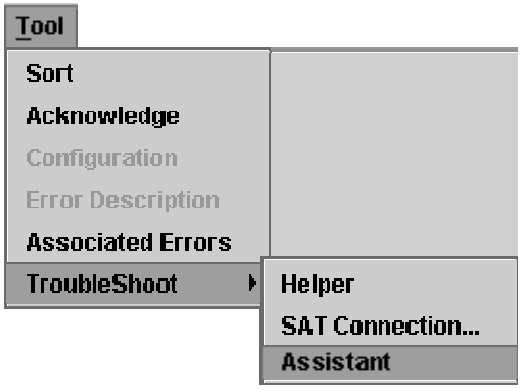
You can view additional information about an exception by clicking on the exception to highlight it and then selecting **Tool > TroubleShoot > Helper**. This opens the Communication Manager manual page describing the selected exception. The manual page may suggest additional tests or corrective actions that can be accomplished using the SAT.



You can get directly to the SAT by selecting **Tool > TroubleShoot > SAT Connection...**. This opens the *Login* dialog box for the selected system. You must have a user account and password on the selected system to use the SAT connection.



For some hardware types, you can use the automated assistant to automatically run additional test and/or corrective actions by simulating the SAT. You activate the Assistant by selecting **Tool > TroubleShoot > Assistant.**



For additional information, please see Help Desk Feature.

Reports

Reports Types

Note:

Selection of a report type does not determine whether or not you have collected and saved the necessary information for the report. See Filtering Alarms, Default and Custom System Parameters, and Performance Data for data collection information.

FPM produces many types of reports. The report types are listed below:

Notes:

- If the value in the Time Scale column is "N/A", the report is not tied to any time scale. There are two different types of Time tabs, one for the exception reports and one for performance reports. On some of the performance reports, there are limited options on the Time tab.
- The available tabs are listed under Component Selection.
- If the value in the Secondary Data column is anything other than "N/A", the Report Output dialog box has a drop-down list where you can choose to display primary data, or one or more types of secondary data.

- Configuration Reports

  Configuration reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Board Inventory (table format only)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory may include all boards or only selected systems or locations.	N/A	Systems tab Location tab	N/A
Board Report (table format only)	Board Report shows a list of installed boards (circuit packs). The report may include all boards, or it may be filtered by system, type, code, or location.	N/A	Location tab Board Type tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Capacity Report (table format only)	Capacity Report provides used and available capacity information for a switch. The report displays information for the selected switches.	N/A	Systems tab	N/A
Board Inventory (online)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Board Report (online)	Board Report shows a list of installed boards (circuit packs). The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Capacity Report (online)	Capacity Report provides used and available capacity information for a switch. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A

- Exception Reports

  Some exception reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Exceptions: Adjunct Systems (table format only)	Adjunct Exceptions shows adjunct-related exceptions, for example, alarms or traps. Exceptions may be filtered by system or by time.	Time tab (Excptns)	Systems tab	N/A
Exceptions: Fault/Performance Manager (table format only)	Network Manager exceptions shows exceptions related to this application, for example, failure to collect data or run a scheduled report. Exceptions may be filtered by type or time.	Time tab (Excptns)	N/A	N/A
Exceptions: Voice System (table format only)	Voice System Exceptions shows voice system-related exceptions, for example, alarms or TG GOS violations. Exceptions may be filtered by system, type, location, or time.	Time tab (Excptns)	Systems tab Types tab Location tab	N/A
Exceptions: Voice System (online)	Voice System Exceptions shows voice system-related exceptions. The exceptions are filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Exceptions: Transaction Logs	Transaction Logs shows all transactions in FPM such as logins and busyouts and releases on media modules and ports.	Time tab (Excptns)	Systems tab	N/A

- Performance Reports

  Performance reports run only from the Report Manager. However, you can go directly to the New Report dialog box from **View > Performance Data** on the main *Configuration and Status* screen.

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Announcements	Announcements performance shows maximum in-region and out-region play requests queued, requested, and dropped. Records may be filtered by system time.	Time tab	Systems tab	N/A
Performance: Attendant Groups	Attendant Group performance shows call counts and usage for the group and for individual attendants. Records may be filtered by system and time.	Time tab	Systems tab	Attendants
Performance: CAC/BL Status	Call Admission Control / Bandwidth Limitation performance shows source and destination region, connection type and status, bandwidth limit value and units, transmission and reception bandwidth and number of connections, and number of denials.	Time tab	Systems tab	N/A
Performance: Call Rate	Call Rate performance shows busiest hour and interval. May be filtered by system and time.	Time tab	Systems tab Call Rate Types tab	N/A
Performance: CLAN Ethernet	CLAN Ethernet performance shows CLAN ethernet crc counts, and delta by board. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: CLAN PPP	CLAN PPP performance shows CLAN PPP crc counts and delta by board. May be filtered by system and time.	Time tab	Systems tab Board Type tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: CLAN Sockets	CLAN Sockets performance shows CLAN socket usage, and denial counts and percentages by boards and regions. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Coverage Paths	Coverage Paths performance shows configuration, usage, and call counts. Records may be filtered by system, coverage path, and time.	Time tab	Systems tab Coverage Paths tab	N/A
Performance: Denial Events	Denial Events performance shows event type, description, event data, first occurrence, last occurrence, and event count. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Expansion Services Module	Expansion Service Module performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Hunt Groups	Hunt Group performance shows configuration, usage, and call counts. May be filtered by system, hunt group, and time.	Time tab	Systems tab Hunt Groups tab	N/A
Performance: Inter-Port Network Latency	Inter-Port Network Latency shows PN connection requests and ATM setup requests with average delay in milliseconds. Records may be filtered by system, PN pairs, and time.	Time tab	Systems tab PN Connections tab	N/A
Performance: IP Codecs	IP Codecs performance shows G.711/G.732/G.729 codec usage, in CCS or Erlangs for IP codecs. Records may be filtered by system, IP codec type, and time.	Time tab	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: IP DSP Resources	IP DSP Resources performance shows configuration, usage, and peg counts for IP DSP resources. Records may be filtered by system and time.	Time tab	Systems tab	N/A
Performance: IP Signaling Groups	IP Signaling Groups performance shows packet latencies, and packets sent and lost for IP Signaling Groups. Records may be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Multimedia Interface	Multimedia Interface performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Port Networks	Port Networks performance shows usage and peg counts. Records may be filtered by system, PN pair, and time.	Time tab	Systems tab Port Networks tab	N/A
Performance: Principal Data	Principal Data performance shows configuration, usage, and call counts. Records may be filtered by system, principal data, and time.	Time tab	Systems tab Principal Data tab	N/A
Performance: Processor Occupancy	Processor Occupancy shows occupancy and call counts. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Routing Patterns	Routing Patterns performance shows call counts for routing patterns and trunk groups within routing patterns. Records may be filtered by system, routing pattern, and time.	Time tab	Systems tab Routing Patterns tab	Trunk groups

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Security Violations	Security Violations includes valid and invalid attempts by port type and by system. Records may be filtered by system and time.	Time tab	Systems tab	Port types
Performance: Switch Node Links	Switch Node Link performance shows usage and peg counts. Records may be filtered by system, SN link, and time.	Time tab	Systems tab Switch Node Links tab	N/A
Performance: Tone Receivers	Tone receiver performance shows peg counts for each tone receiver type and port network. Records may be filtered by system, tone receiver type, and time.	Time tab	Systems tab Tone Receivers tab	Port networks
Performance: Trunk Groups	Trunk Group performance shows usage, peg count, and grade-of-service.	Time tab	Systems tab Trunk Groups tab	Primary Data or Average Data
Performance: Trunk Groups ISDN-PRI CBC	ISDN-PRI performance shows configuration, usage, and counts for ISDN TG	Time tab	Systems tab Trunk Groups tab	ISDN services or features, and usage allocation plans
Performance: Trunk Groups, Wideband	Wideband Trunk performance shows configuration, usage, and peg counts for wideband TGs. Records may be filtered by system, TG or TG list, and time.	Time tab	Systems tab Trunk Groups tab	N/A
Performance: Voice Conditioner	Voice Conditioner performance shows available counts/usage, H320/voice/total usage/allocation/denials, out-of-service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A

Running Reports

How to view a list of existing reports

There are two types of "existing reports" in FPM:

- Reports that have been defined but may or may not have been ***run.***
- Reports that have been run, generating ***output.***

To view a list of defined reports

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Report Definitions.**

   The list of defined reports appears in the right pane.

To view a list of output (or view the report output)

Note:

Usually, all report output is stored in the same directory. If you know the directory name, you can skip steps 1 through 4.

To view the list of report files, follow these steps.

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Report Definitions.**
3. In the right pane, select the report you are interested in and click **Open**.

   The Report Definition dialog box opens.
4. Click the **Destination** tab.

   The folder containing report output is listed in the text box under the **File** checkbox.
5. Using Windows Explorer, navigate to the folder where you (or others) may have stored output. This folder may not be on your machine, and may not be accessible.
6. Double click the report you want to view to open it in Internet Explorer. The report output has the name requested when the report was defined, possibly followed by a date. The file is in HTM format. If the report has both principal and secondary data, both are printed in separate sections. To print a copy of the HTML report, use Internet Explorer's print function.

Related Topics

- How To View Report Settings
- How To View a Report

How To View or Change Report Settings

To view the settings of an existing report, complete the following steps:

1. Open the Report Manager by selecting **File>Report Manager.**
2. In the left pane, click **Report Definitions.**
3. In the right pane, click the report with the settings you want to view or change.
4. Click **Open**.

   FPM displays the report in the Report Definition Dialog Box.
5. To view the report settings, click the tabs.
6. To change the report settings, enter new values in the appropriate fields.

   For help completing any of the tabs, click **Help** on that screen.
7. Do one of the following:
   - To overwrite the settings of the old report, click **Save.**
   - To create a new report definition with your new settings and leave the old settings intact, change the name of the report and then click **Save.**
8. When you are finished viewing or changing the report settings, do one of the following:
   - Click **Run Now** to run the report immediately.
   - Click **Schedule** and complete the Schedule Report Dialog Box to schedule the report to run later.

     For help completing the Schedule Report Dialog Box, click **Help** on that screen.
   - Click the "X" in the upper right corner to close the Report Definition dialog box.

Related Topics

- How To Create a New Report
- How To View a Report
- How To Print a Report

How To Create a New Report

To create a new report:

- Define the report
- Run or Schedule the report
- View or print the report

What do you want to do?

- View a list of existing reports
- Define a new report
- View or change the settings of an existing report
- Run or schedule a report
- View a report
- Print a report

How To Define a New Report

When you "define" a new report, you specify the information that FPM needs in order to run and store the report. Once you define the report and save the definition, you need to run or schedule the report, and then view it or print it.

To define a new report, complete the following steps:

1. Open the Report Manager by choosing **File>Report Manager**.
2. In the left pane, click **Report Definitions**.
3. In the right pane, click the **New** button.

   FPM displays the New Report Dialog Box
4. Select the report type from the available list.

   FPM displays a description of the selected report type in the information box below the report type list box.
5. Enter a unique name for the new report in the **Enter Report Name** text box.
6. Click **OK** to create the new report.

   FPM displays the Report Definition Dialog Box. This dialog box contains different tabs depending on the type of report you are creating.
7. In the screen that appears, click the tabs and complete the fields to define the report.

   For help completing any of the tabs, click **Help** on that screen.
8. Click **Save** to save the report to run at a later date or set up for scheduling.

Related Topics

- How To Create a New Report
- How To Run or Schedule a Report
- How To View a Report
- How To Print a Report

How To Run or Schedule a Report

Note:

You can complete administration functions such as printing a report only from the server application GUI. Administration functions are not available from the Web client.

Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

Note:

*Scheduling a report does not necessarily print the report. When the report runs, whether or not FPM prints the report is determined by the settings you specify in the Report Definitions Dialog Box on the **Destinations** tab.*

Scheduling a report gives FPM the information it needs to run the report on the day and at the time you specify. You can schedule a report to run immediately or later.

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Report Definitions.**
3. In the right pane, select the report you want to schedule.

   If the report you want is not on the list, you may not have created it yet. Create it and then return to this topic when you want to schedule it.
4. Click the **Open** button.

   FPM displays the Report Definition Dialog Box.
5. Click the **Destination** tab and verify that the report output is directed to a printer or a file.
6. To run the report immediately, click the **Run Now** button.
7. To schedule the report to run later, do the following:
   - Give the report definition a unique name and click the **Save** button.
   - Click the **Schedule** button.

     FPM displays the Schedule Report Dialog Box.
   - Complete the Schedule Report dialog box.

     For help completing the fields, click the **Help** button on that screen.

Related Topics

- How To Create a New Report
- How To View a Report
- How To Print a Report

How To View a Report

Note:

Usually, all report output is stored in the same directory. If you know the directory name, you can skip steps 1 through 4.

First, view the list of report files:

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Report Definitions.**
3. In the right pane, select the report you are interested in and click **Open**.

   The Report Definition Dialog Box opens.
4. Click the **Destination** tab.

   The folder containing report output is listed in the text box under the **File** checkbox.
5. Using Windows Explorer, navigate to the folder where you (or others) may have stored output. This folder may not be on your machine, and may not be accessible.
6. Double click the report you want to view to open it in Internet Explorer. The report output has the name requested when the report was defined, possibly followed by a date. The file is in HTM format. If the report has both principal and secondary data, both are printed in separate sections. You can print the HTML version of the report using the Internet Explorer print function.

Related Topics

- How To Create a New Report
- How To Schedule a Report
- How To Print a Report

How To Print a Report

Note:

You can complete administration functions such as printing a report only from the server application GUI. Administration functions are not available from the Web client.

Before you can print a report, you have to create it (unless it already exists) and run it. In addition, your printer must be on, properly configured, and capable of printing Postscript files.

After you create and run the report, you can print it by completing the following steps:

1. Open the Report Manager by choosing **File>Report Manager.**
2. In the left pane, click **Report Definitions.**
3. In the right pane, select the report you are interested in and click **Open**.

   The Report Definition Dialog Box opens.
4. Click the **Destination** tab.
5. Check **Print** and enter a destination (printer).
6. Click **Run Now** to generate and print the report.

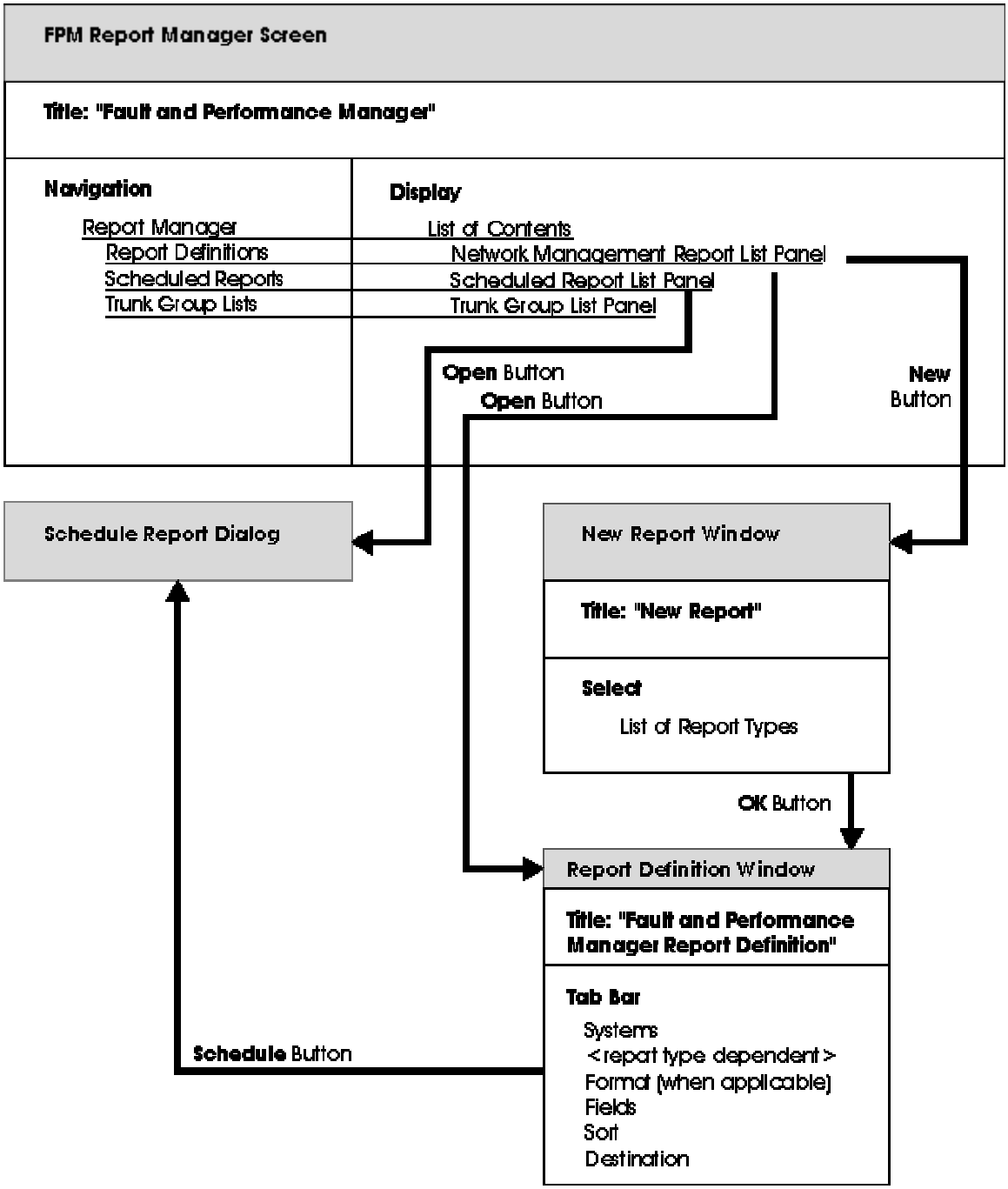
Related Topics

- How To Create a New Report
- How To Run or Schedule a Report
- How To View a Report

Report Descriptions

Report Manager Screen

From the File menu of the *Configuration and Status* screen you can select **File > Report Manager...** to open the *FPM Report Manager* screen.



The *FPM Report Manager* screen provides:

- Report Definitions

The Report Definitions panel lists all currently defined reports.

For new reports, you can select report type, systems, and other parameters. You can schedule when reports are run on a regular basis. You can create ad-hoc reports and run them immediately when investigating a problem.

For the types of reports you can define, see Report Types in the following topic.

- Scheduled Reports

  You can select any regularly scheduled report that has been saved to a file and display it or print it.

- Trunk Group Lists

  You can define trunk group lists for reports that are based on network performance rather than system performance.

Related Topics

- New Report Dialog Box
- Report Types
- Defined Reports
- Scheduled Reports
- Trunk Group Lists

Report Definition Dialog Box

The *Report Definition* screen has a variable number of tabs depending on the **Report Type** selected. There are six types of tabs. All reports have Systems, Fields, Sort, and Destination tabs. Other tabs are present when appropriate to the individual report.

- **Systems** Tab — allows you to select the systems included in the report.
- **Component selection tabs**, if any, appear here. See list below:
    - **Board Type** Tab — allows you to select the boards included in the report.
    - **Hunt Groups** Tab — allows you to select the hunt groups included in the report.
    - **IP Codecs** Tab — allows you to specify which IP codec types are included in the report.
    - **Location** Tab (Board Report) — allows you to specify the board information at all locations or at one location included in the report.
    - **Location** Tab (Exceptions Report) — allows you to specify the exceptions at all locations or at one location included in the report.
    - **PN Connections** Tab — allows you to select the port network connections included in the report.
    - **Port Networks** Tab — allows you to select the port networks included in the report.
    - **Routing Patterns** Tab — allows you to select the routing patterns included in the report.
    - **Switch Node Links** Tab — allows you to select the switch node links included in the report.
    - **Time** Tab (general) — allows you to set time options for the report. (**Hourly counts**, **Daily peaks**, or **Weekly peaks; previous period**, or **fixed interval**.)
    - **Time** Tab (Exceptions Report) — allows you to specify exception time options in your report. (**Show current exceptions,** or **Show exception history**.)
    - **Tone Receivers** Tab — allows you to select the type of tone receivers included in the report.
    - **Trunk Groups** Tab — allows you to select trunk groups included in the report.
    - **Types** tab (Voice System Exceptions Report) — allows you to select the types of exceptions included in the report.
- **Format** Tab — allows you to select "table" or "chart," and specify chart properties. This tab does not appear for "table form only" reports.
    - **Chart Properties** Dialog Box — Allows you to specify type of chart, 3D properties of the chart, and the fields to plot along the X and Y axes.
- **Fields** Tab — allows you to select the data fields included in the report and specify the order of the fields.
- **Sort** Tab — allows you to specify up to three levels of sorting based on the included fields.
- **Destination** Tab — allows you to direct the report output to the screen, a printer, or a file.
    - Print Properties Dialog Box — allows you to find networked printers and specify print properties.

Report Output Window

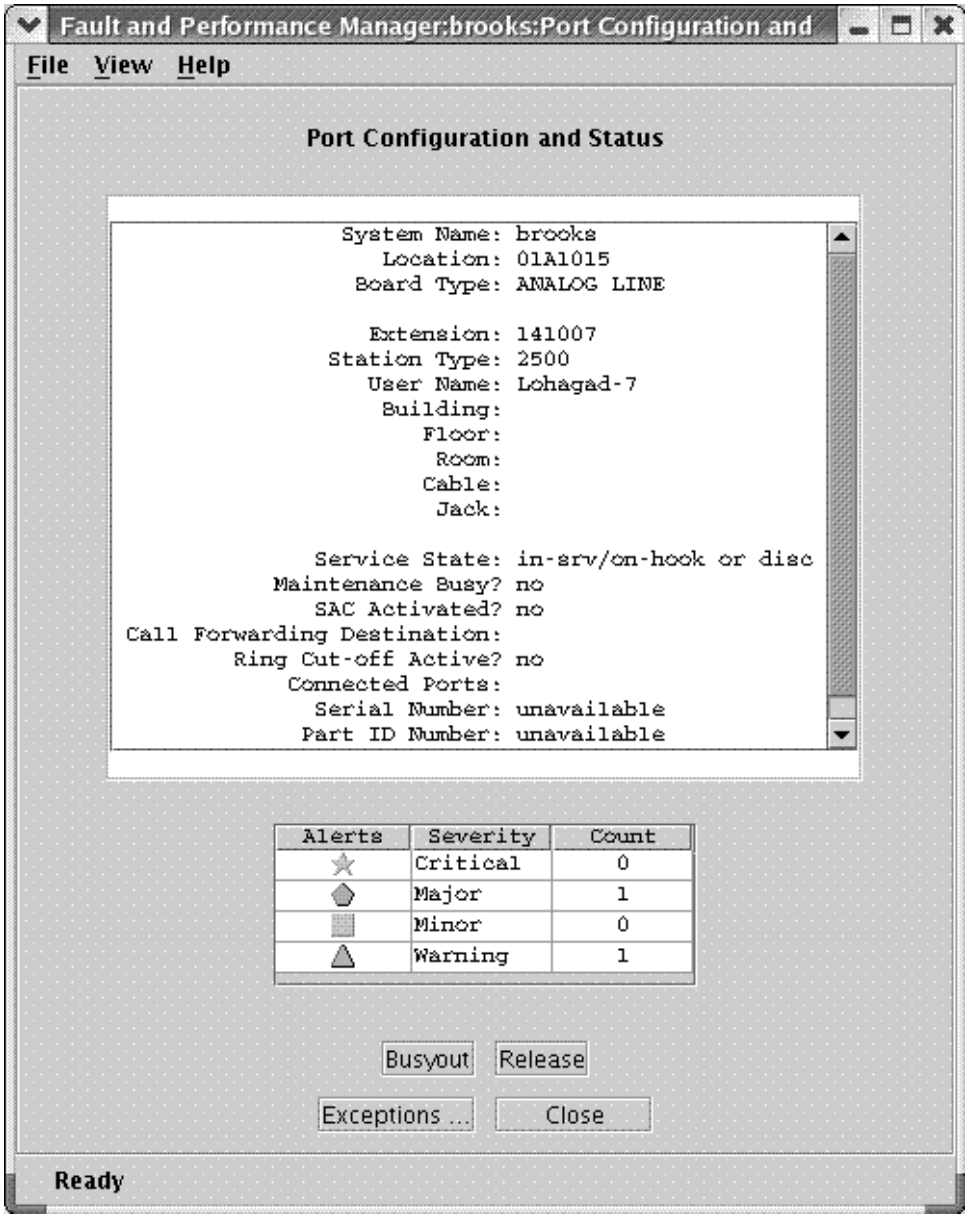
This window provides the following information:

- Report name
- Run date and time
- Time interval covered by the report (Start date and time and End date and time)
- Primary data/Secondary data combo selection box (if the report type contains secondary data types)

Menu Options

The Report Output Window includes the following menu options:

- **File:**
  - **Open>Chart:** Shows the selected report output in chart format (if supported by the report type).
  - **Open>Table:** Shows the selected report output in table format.
  - **Save As:** Opens a dialog box that lets you save the report as an HTML file.
  - **View as HTML:** Opens the report output in Internet Explorer.
  - **Close:** Closes the Report Output window.
- **Tools:**
  - **Sort:** Opens a dialog box that lets you choose sorting options.
  - **Acknowledge:** Enabled only for an exception report. Acknowledges all exceptions on the list. (The exceptions are removed from the list as they have presumably been processed.)
  - **Configuration:** Opens a configuration screen for the hardware highlighted in the Report Output Window. (Typical shown below.)



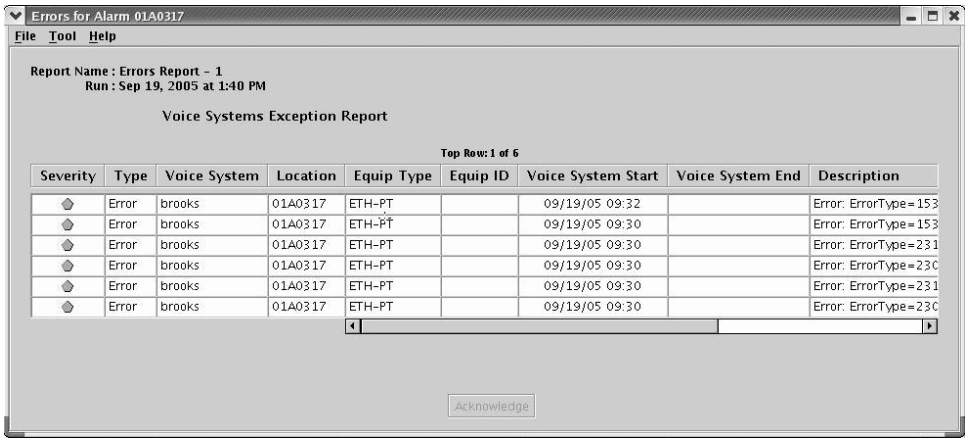
- **Error Description:** Provides an error description for the highlighted error on the Error Report. See **Associated Errors** (next).

  This window provides the following information about selected voice system errors:

  - The Maintenance Name.
  - The Error Code.
  - The Alt Name/Aux Data.
  - The Error Description corresponding to the maintenance name/error code/Alt Name if supplied by the voice system. If there is no supplied description, then "Not Available" appears in the Error Description box.)
  - A Notes text box in which any previous notes are displayed with the date and time of the last update, and in which you can enter notes pertaining to the error in question.

- Command buttons:
  - **Save:** Saves any modifications.
  - **Close:** Closes the window.
  - **Help:** Displays a help window.

- **Associated Errors:** Enabled only for an exception report. Opens the Error Report for the highlighted alarm. This shows all errors associated with the highlighted alarm.

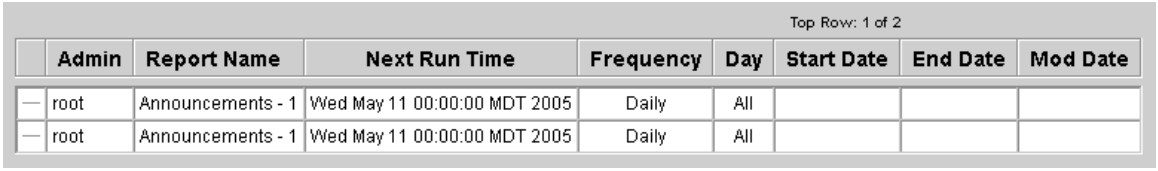


- **TroubleShoot > Helper:** Enabled only for an exception report. Opens the Communication Manager manual page describing the selected exception. The manual page may suggest additional tests or corrective actions that can be accomplished using the SAT.
- **TroubleShoot > SAT Connection:** Enabled only for an exception report. Opens the *Login* dialog box for the selected system. You must have a user account and password on the selected system to use the SAT connection.

- **Help**
  - **Help Topics:** Displays the Help Table of Contents
  - **Current Pane:** Accesses help on the panel in the display pane
  - **About:** Displays information about Fault and Performance Manager

Scheduled Reports

The Scheduled Reports panel lists all reports that have been scheduled for later execution.



Top Row: 1 of 2

	Admin	Report Name	Next Run Time	Frequency	Day	Start Date	End Date	Mod Date
—	root	Announcements - 1	Wed May 11 00:00:00 MDT 2005	Daily	All			
—	root	Announcements - 1	Wed May 11 00:00:00 MDT 2005	Daily	All			

Buttons:

- **Exceptions** — Shows report failure exceptions related to the selected report(s).
- **Reschedule** — Highlight a row by clicking on it. Then click **Reschedule**. The existing report is opened in the *Schedule Report* dialog box.
- **Delete** — Highlight a row by clicking on it. Then click **Delete**. The existing report is deleted.
- **Help:** Displays a help screen for this panel.

Related Topics

- Schedule Report Dialog Box
- Exceptions

Schedule Report Dialog Box

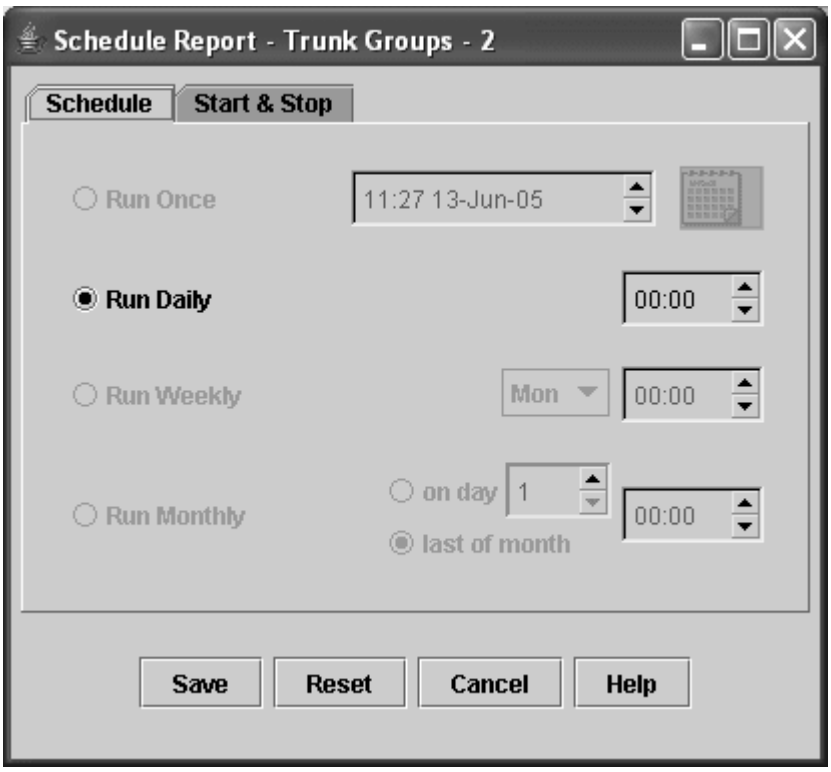
Note:

You can complete administration functions such as scheduling a report only from the server application GUI. Administration functions are not available from the Web client.

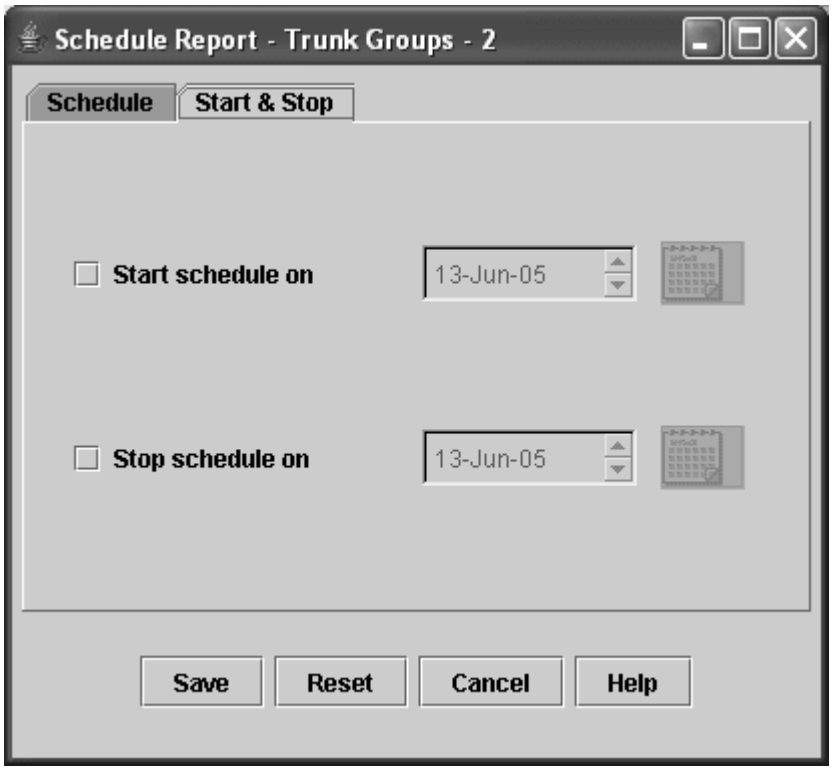
Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

This dialog lets you specify when you want a report to run.



1. Select an option button and complete the corresponding fields to define the schedule:
   - **Run once at**: Enter the date in dd/mm/yy format, and enter the time start time in military format (24 hr.)
   - **Run daily**: Enter the start time in military format (24 hr.)
   - **Run weekly**: Select a day of the week, and enter the start time in military format (24 hr.)
   - **Run monthly**: Select a day of the month, or select the last day of the month.
2. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.
3. Select the **Start and Stop** tab.



4. Select the **Start Schedule on** check box and enter a start date in dd/mm/yy format.
5. Select the **Stop Schedule on** check box and enter a stop date in dd/mm/yy format.
6. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.

Related Topics

- How to run or schedule a report

Configuration Reports

Board Inventory Report

The Configuration Board Inventory Report shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory may include all boards or only selected systems or locations.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Type	Board type
Code	Board code and suffix
Vintage	Board vintage code
Count	Board count

Tabs

- Systems tab
- Location tab
- Fields tab
- Sort tab
- Destination tab

Related Topics

- Board Inventory Report (Online)

Board Report

The Configuration Board Report shows a list of installed boards (circuit packs). The report may include all boards, or it may be filtered by system, type, code, or location.

Fields

Column	Contains
Severity	Alert severity Icon
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Location	The cabinet, carrier, and slot for the specified board.
Type	Board Type
Code	Board code and suffix
Vintage	Board manufacture date
AssignPorts	Count of assigned ports
UnassignPorts	Count of unassigned ports
TTIPorts	Count of TTI ports
PSAPorts	Count of PSA ports
TotPorts	Total number of ports
PN/SN	Port network or Switch node number
SigType	Signaling type
Name	Board name
CSU ID	CSU module ID

Tabs

- Systems tab
- Location tab
- Board Type tab
- Fields tab
- Sort tab
- Destination tab

Related Topics

- Board Report (Online)

Capacity Report

The Capacity Report provides used and available capacity information for a switch. The report displays information for the selected switches.

Fields

Column	Contains
Name	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Switch Type	Voice System type
Building Location	Voice System Location
# if Cabinets	Number of cabinets
# of Carriers (in use)	Number of carriers in use
# of Unused Carriers	Number of spare carriers
Total Slot	Total slots available
Used Slot	Number of slots used
Spare Slot	Number of slots available
Total Digital Ports	Total digital ports
Used Digital Ports	Number of digital ports used
Spare Digital Ports	Number of digital ports available
Total Analog Ports	Total analog ports
Used Analog Ports	Number of analog ports used
Spare Analog Ports	Number of analog ports available
Total License Ports	Total licensed ports
Used Licensed Ports	Number of licensed ports used
Spare Licensed Ports	Number of licensed ports available
Total X Mobility	
Used X Mobility	

Column	Contains
Spare X Mobility	
Total IP Stations	Total IP stations
Used IP Stations	Number of IP stations used
Spare IP Stations	Number of IP stations available
Total DS1s	Total DS1 trunks
Total Trunk Ports	Total trunk ports
Total Station	Total stations
ACD License	ACD license included

Tabs

- Systems tab
- Fields tab
- Sort tab
- Destination tab

Related Topics

- Capacity Report (Online)

Exception Reports

Table of Exception Types and Reports

Exception Type	Exception Report	Location or Component Selection
Data collection failures Scheduled report failures	Network Manager Exceptions	None
Alarms Errors	Voice System Exceptions	Voice System plus one of the following: -Hardware location (cabinet, carrier, slot, port) -Port network number -Switch node number -Trunk group or group and member -One or both of the following: --Equipment type, usually a voice system Maintenance Name --Equipment identifier, usually a voice system Alt Name, for example an extension. May also be trunk group number or trunk group and member.
Board conflicts Restarts	Voice System Exceptions	Voice System
Processor occupancy exceptions	Voice System Exceptions	Voice System
TG GOS violations	Voice System Exceptions	Voice System plus trunk group
Trunk outages Trunks - Lightly-used Trunk holding times	Voice System Exceptions	Voice System plus trunk group or trunk group and member
N/A	Transaction Logs Exceptions	Voice System

Exceptions: Adjunct Systems

The Adjunct Systems Exceptions Report shows adjunct-related exceptions, for example, alarms or traps. Exceptions may be filtered by system or by time.

Fields

- CMS Exceptions

Column	Contains
Severity	Alert Severity (key)
Type	Type (key)
ADJUNCT	ADJUNCT
Product ID	Product ID
Alarm No.	Alarm No.
Name	Name
Product Type	Product Type
Version	Version
ID Value	ID Value
Alarms No.	Alarms No.
ADJUNCT Start	ADJUNCT Start Date and Time (key)
ADJUNCT End	ADJUNCT End Date and Time (key)
Alert	Alert
Exc DB ID	Exception Database Identifier.

- Messaging Adjunct Exceptions

Column	Contains
Severity	Alert Severity (key)
Type	Type (key)
ADJUNCT	ADJUNCT
Product ID	Product ID

Column	Contains
Alarm No.	Alarm No.
Location	Location
Resource	Resource
Fault Code	Fault Code
Module ID	Module ID
Event No.	Event No.
Count No.	Count No.
ADJUNCT Start	ADJUNCT Start Date and Time (key)
ADJUNCT End	ADJUNCT End Date and Time (key)
Alert	Alert
Exc DB ID	Exception Database Identifier.

- VMM Exceptions

Column	Contains
Severity	Alert Severity (key)
Type	Type (key)
ADJUNCT	ADJUNCT name
Product ID	Product ID
Alarm No.	Alarm No.
Participant Address	Participant IP address
Participant Phone	Participant phone number
Participant GateKeeper	Participant Gate Keeper name
Participant Peer Address	Participant Peer Address
QoS RTT	Packet delay

Column	Contains
QoS Jitter	Average jitter
QoS Packets	Packets Sent
QoS Lost Packets	Lost Packets
System Alarm Count	System Alarm Count
System Alarm Threshold	System Alarm Threshold value
Trap Location	Trap Location
RTPCInactivityTimeout	RTPC Inactivity Timeout value
Alert	Alert
Exc DB ID	Exception Database Identifier.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Time tab
- Destination tab

Exceptions: Fault/Performance Manager

Network Manager exceptions shows exceptions related to this application, for example, failure to collect data or run a scheduled report. Exceptions may be filtered by type or time.

Fields

Column	Contains
Severity	Alert Severity (key)
Type	Exception Type (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
NMS Start	Most recent date and time when the Network Management System (NMS) software started.
NMS End	Most recent date and time when the Network Management System (NMS) software ended.
Alert	Alert identifier.
Description	Alert description.
Exc DB ID	Exception Database Identifier.

Tabs

- Fields tab
- Sort tab
- Time tab
- Destination tab

Exceptions: Voice Systems

The Voice Systems Exception Report shows current or historical exceptions for the selected systems. Exceptions may be filtered by type or time.

Types

Type of Exceptions
Alarms
Server Alarm
Errors
Board Conflicts
Restarts
Processor Occupancy Exceptions
TG Grade of Service Violations
Trunk Outages
Trunks Lightly Used
Trunk Long Holding Time
Trunk Short Holding Time
Management Security Service Traps
Performance Alarm

Fields

Column	Contains
Severity	Alert Severity (key)
Type	Type of exception (key). See table above for values.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Location	The cabinet, carrier, and slot for the specified board.
Equip Type	Equipment Type
Equip ID	Equipment ID

Column	Contains
Voice System Start	Most recent date and time when the voice system software started (key).
Voice system End	Most recent date and time when the voice system software ended.
Description	The Description field may contain trap data fields as well as a brief description of the problem.
AlmNum	Alarm number
Alert	
Exc DB ID	Exception Database Identifier.

Tabs

- Systems tab
- Types tab
- Location tab
- Fields tab
- Sort tab
- Time tab
- Destination tab

Exceptions: Transaction Logs

The Transaction Logs Exception Report shows current or historical transactions for the selected systems. Transactions may be filtered by time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
NMS Start	Most recent date and time when the voice system software started (key).
NMS End	Most recent date and time when the Network Management System (NMS) software ended.
Description	The Description field contains details of each transaction including the userid, system, transaction type and results as applicable.

Tabs

- Systems tab
- Time tab
- Fields tab
- Sort tab
- Destination tab

Performance Reports

Performance: Announcements

The Announcements Performance Report shows maximum in-region and out-region play requests queued, requested, and dropped. Records may be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Board Location	The cabinet, carrier, and slot for the specified board.
Calls Queued	Calls Queued. The number of announcements that were held in queue while waiting for a port during the period.
Extension	Assigned extension.
Max Calls	Maximum Calls. The peak number callers simultaneously connected to a port by announcement during the period.
Max Callers on Board / Period	The peak number callers simultaneously connected to a circuit pack (sum of the ports) at the same time.
Max Ports	Maximum Ports. The peak number of ports used simultaneously for playing the same announcement during the period (1-16 for TN750; 1-31 for TN2501AP).
MPort Plays	Multi-port Plays. A count of how many times the announcement played through more than one port simultaneously during the period.
Name (First 24 Chars)	The first 24 characters of the 27-character announcement name as administered on the announcement form.
PSP	Peak speed-to-play from the time the request to play the announcement went into the queue until the time it starts playing. Abandoned calls that are waiting for announcement port are not included in the calculation.
Announcement Number	The system assigned number of the announcement.
Play Ports	The number of ports available on the circuit pack.

Column	Contains
Play Requests	The number of requests to play this announcement. • If there is a queue, equals the number of times played plus abandons • If there is no queue, equals the number of times played plus “busys” (no ports are available)
All Ports Busy / Period	A count of how many times the all-ports-busy condition occurred within the reporting period.
Queue Drops	Calls that dropped while in queue. A count of the individual calls that had to queue but dropped while waiting during the period - this includes calls abandoned by the caller and VOA aborts but excludes calls that were waiting but answered by an agent.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Time tab
- Destination tab

Performance: Attendant Groups report

The Attendant Groups Performance Report shows call counts and usage for the group and for individual attendants. Records may be filtered by system and time.

Fields

- Primary level data:

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
AvgHold	Average Hold Time
CallsHeld	The number of calls answered by the attendant group and subsequently placed on hold by the attendant group.
TalkTime	The total time, during the measurement interval, attendant(s) are active or talking on a loop (measured in CCS). Talk time is not started until the call is answered by the attendant. The duration of time between the call terminating at the attendant console and when the call is answered is not accumulated as either Avail Time or Talk Time. Calls split by the attendant do not accumulate talk time from the point when the attendant presses the start button until the call is placed. Calls routed to an attendant via a hunt group are treated as calls to the attendant extension and therefore do not accumulate talk time. NOTE: An attendant can have up to six calls on hold at any one time. However, each attendant can only be active on one loop at a time. **Suggested action:** If talk time is acceptable, but one or more of the other measurements are unacceptable, then all parameters should be studied in order to identify what should be changed (the number of consoles, number of attendant positions staffed, attendants schedule, faulty trunks, and so on).

Column	Contains
TimeAvail	Time Available. The time during which the “pos avail” lamp is lit on all attendant consoles, and the attendants are not talking on calls but are available to handle new calls. Measured in Centum (hundred) Call Seconds (CCS). NOTE: An attendant can have calls on hold and still be available. For example, if two attendants are available for 15 minutes each during the measurement hour, the total available time would be 30 minutes or 18 CCS (0.5 hour X 36 CCS per hour). Consoles may be administered either with their own unique extension number or without any extension number. For the “with extension number” case, traffic measurements for outgoing calls and incoming calls to the extension are allotted to the console’s extension number and not to the attendant group. For the “without” case, all traffic measurements are allotted to the attendant group. The time the console is on outgoing calls is not included in the attendant group’s Time Avail measurement. Attendants are not available and do not accumulate time available when: • The position is in Night Service • The position was busied-out • The headset is unplugged • The attendant is servicing a call Suggested actions: • If the Time Avail plus Time Talk fields total to a number less than 36 CCS X the number of attendants, then some of the attendant positions are not staffed for the measurement hour. If this is a problem, then it is appropriate to staff additional positions during the busy hour(s). • If the Time Avail plus Time Talk fields equal 36 CCS X the number of attendants, then any time available is idle time or time not spent on calls. A large number for the Time Avail field indicates a low occupancy. If this is a problem, then it is appropriate to reduce the number of attendant positions that are staffed. Staffed time is usually very close to the sum of the Time Avail and Time Talk fields.
CallsAns	The number of calls answered by all active attendants during the measurement hour. With Total Usage and Calls Answered, you can determine the Average Work Time (AWT), which is the time it takes an attendant to handle a call. Calls placed to individual attendant extensions or that route to an attendant via a hunt group do not increment the CallsAns counter.

Column	Contains
HeldTime	The total amount of time (measured in seconds) the attendants have calls on hold.
CallsQue	The total number of calls placed in the attendant queue (delayed) because no attendants are available. Calls remain in the queue until one of the following occurs: • An attendant becomes available and the call is connected. • The caller, while waiting in the queue, abandons the call hangs up) before an attendant is available. • The call covers to another point in a coverage path.
CallsHeldAban	Calls Held-Abandoned. The number of calls that abandon while the caller is in hold mode. Held calls which time out and re-alert are included in the held-abandoned call count. **Suggested action:** If this number is determined to be excessive, you should investigate and attempt to identify the reasons.
CallsAban	The number of calls that ring an attendant group and drop (the caller hangs up) before an attendant answers. Where applicable, this total includes calls abandoned from the attendant queue before answered. A call abandoned after placed on hold is not included in this measurement, because it is already added to the calls answered measurement. **Suggested action:** Observe times during which the calls abandoned number may be higher than desirable, and then schedule additional attendants in the group as needed during the indicated times.

Column	Contains
TimeAban	Also referred to as time to abandoned. The average amount of time calls spend in queue and/or ringing at the console before the callers hang up (measured in seconds). NOTE: Time to abandoned does not include calls that overflow the attendant group queue. Time To Abandoned = Total Number of Calls Abandoned / Total Delay For All Abandoned Calls (in seconds) Suggested action: If the TimeAban value is smaller than the SpeedAns (sec) value, you need more agents. As a contrast, if the TimeAban value is larger than the SpeedAns (sec) value, the attendant group should process the calls faster. The attendant group should be engineered so TimeAban approximately equals the calculated average delay. Total Delay = (Time To Abandoned) × (# of Abandoned Calls) + (Speed of Answer) × (# of Calls Answered) Avg Delay = Calls Answered + (CallsAban / Total Delay) NOTE: If the average time to abandon is equal to or exceeds 9999 seconds, the value 9999 displays in the field.
SpeedOfAns	The average elapsed time from when a call terminates at the attendant group to when the call is answered by an attendant (measured in seconds). The average time calls wait to ring an attendant (Queue Usage / Calls Answered). The Queue Usage is the total time calls spend in the attendant queue. NOTE: Calls terminate either directly to an attendant console and subsequently begin ringing or in the attendant queue when there are no attendant positions available. Speed of Answer = Total Number of Calls Answered / Total Delay For All Answered Calls (in seconds) If the average time to abandon is equal to or exceeds 9999 seconds, the value 9999 displays in the field. **Suggested action:** If this number appears to be too high and all attendants are working at acceptable efficiency levels, consider additional training that may help the attendants complete calls more quickly. Alternatively, observe the hours during which speed of service becomes unacceptable and consider adding consoles and staffing additional attendants during those hours.

Column	Contains
Size	The number of attendant positions (consoles) administered for the groups.

- Secondary level data:

Column	Contains
AttID	Attendant ID. A number between 1 and the maximum number of attendants to identify which attendant's data is being displayed. This number is chosen by the user upon administering this attendant.
AvgHold	Average Hold Time
TalkTime	The time the attendant is active on calls (in CCS), measured from the time the attendant activates an attendant loop until the loop is released. If more than one loop is active on an attendant console at one time, the usage is counted only once (for example, one attendant is not counted as being busy more than once at a single time).
TimeAvail	Time Available. The total time the subject attendant is available to receive calls during the polling interval (measured in CCS).
CallsAns	Calls Answered. The total number of calls answered by this attendant (measured in CCS). Calls placed to an individual attendant extension or that route to an attendant via a hunt group do not increment the Calls Ans field.
HeldTime	The time the attendant had calls on hold (measured in seconds).

Tabs

- Systems tab
- Fields tab
- Sort tab
- Time tab
- Destination tab

Performance: Call Admission Control/Bandwidth Limitation report

The Call Admission Control/Bandwidth Limitation Performance Report shows source and destination region, connection type and status, bandwidth limit value and units, transmission and reception bandwidth and number of connections, and number of denials.

Fields

- Destination Region

Column	Contains
Source Region	Source Region number (1-250) (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Destination Region	Destination Region number (1-250) (key)
Connection Type	Connection Type (Direct | Indirect)
Connection Status	Connection Status (Pass | fail)
BW Limit Value	Bandwidth Limit Value (count of bandwidth limit units). The number of calls, Kbits, or Mbits to establish the limit. For Dynamic CAC Gateway, this number is assigned by Communication Manager.
BW Limit Units	Bandwidth Limit Units. Since the bandwidth limit is by direct connection, the single bandwidth limitation applies to the combined audio and video traffic. • Calls, Kbits, Mbits Limit Value indicates maximum bandwidth in the specified units. • Dynamic The maximum bandwidth will be determined dynamically based on network load algorithms in media gateways that have this capability. • No Limit
BW Used Transmission	transmission.
BW Used Reception	Bandwidth used for Reception

Column	Contains
Transmission Connect Count	Transmission Connect Count
Reception Connect Count	Reception Connect Count
Denial Count	Denial Count

- Primary Data

Column	Contains
Source Region	Source Region (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Call Rate report

The Call Rate Performance Report shows busiest hour and interval. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Type	Type
Busiest Hour Compl	The number of calls completed, or answered (including incoming, outgoing, and intercom) during the busiest hour.
Busiest Hour (Hour)	Identifies the busiest (peak) hour. This is the hour with the largest number of completed calls.
Busiest Hour Int (Min)	Busiest Hour Int (Min)
Busiest Hour Int (Sec)	Busiest Hour Int (Sec)
Busiest Hour Int Calls Compl	Busiest Hour Int Calls Compl
Busiest Interval (Hour) Calls Comp	Busiest Interval (Hour) Calls Compl
Busiest Interval (Hour)	Busiest Interval (Hour)
Busiest Interval (Min)	Busiest Interval (Min)
Busiest Interval (Sec)	Busiest Interval (Sec)
Busiest Interval (Int) Compl	Busiest Interval (Int) Compl

Tabs

- Systems tab
- Call Rate Types tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: CLAN PPP report

The CLAN PPP Performance Report shows CLAN PPP crc counts and delta by board. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
	Board
CHAP Failures Delta	The difference between the current and the previous sample for the number of failed attempts for ppp authentication.
CHAP Failures Total	The total value of the counter on the board NOTE: The counter value can be up to 11 digits long because of the 32-bit counter on the board. After the occurrence of an “N/A,” the delta equals the total. Busy-out or release of a board or a port, the reset board command, and reseating the board all clear the firmware counters.
CRC Check Delta	The difference between the current and the previous sample for Cyclic Redundancy Check errors.
CRC Check Total	The total value of the counter on the board NOTE: The counter value can be up to 11 digits long because of the 32-bit counter on the board. After the occurrence of an “N/A,” the delta equals the total. Busy-out or release of a board or a port, the reset board command, and reseating the board all clear the firmware counters.
Date	The date that the data was collected.
Invalid Frame Delta	The difference between the current and the previous sample for invalid frames. Invalid frames are frames that are misaligned.

Column	Contains
Invalid Frame Total	The total value of the counter on the board NOTE: The counter value can be up to 11 digits long because of the 32-bit counter on the board. After the occurrence of an “N/A,” the delta equals the total. Busy-out or release of a board or a port, the reset board command, and reseating the board all clear the firmware counters.
Hour	The hour that the data was collected.
Time	The current 15-minute interval in which the action was performed.

Tabs

- Systems tab
- Board Type tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: CLAN Sockets report

The CLAN Sockets Performance Report shows CLAN socket usage, and denial counts and percentages by boards and regions. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Board	The cabinet, carrier, and slot for the specified board.
Denial Count	Total number of times a C-LAN socket on the board was needed for a call or link, but was not available.
Hour	The hour the measurement was taken. Switches in multiple time zones are treated as in the current MMI reports. We do not assume that the customer has made any correlation between LAN regions and time zones.
Denial %	(Denial Count)/(Denial Count + Count)
Time ASB %	The percentage of time during the measured interval that all C-LAN sockets on the board were unavailable for use.
Count	Total number of times a C-LAN socket on the board was needed for a call or link, and was available.
Region	The network region that the C-LAN for this measurement is in.
Usage (ERL)	The total time, in Erlangs, that is available from sockets on this C-LAN board. Calculated by: (Total Socket Seconds of usage)/3600

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: CLAN Ethernet report

The CLAN Ethernet Performance Report shows CLAN ethernet crc counts, and delta by board. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Board	The cabinet, carrier, and slot for the specified board.
Collision Count Delta	The difference between the current and the previous sample
Collision Count Total	The error count for collisions on the Ethernet.
CRC Check Delta	The difference between the current and the previous sample
CRC Check Total	The error count for CRC errors.
Date	The date that the data was collected.
Hour	The hour that the data was collected.
Time	The current 15-minute interval in which the action was performed.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Coverage Paths

The Coverage Paths Performance Report shows configuration, usage, and call counts. Records may be filtered by system, coverage path, and time.

Fields

Column	Contains
CpId#	Coverage Path ID (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
CallsOffrd	The total number of calls offered to the path.
CallsActive	The number of calls offered to this path due to the principal being active. **Suggested action:** If this number is large compared to the CallsOffrd field, you should investigate. A possible reason is the path is administered for “active” only.
CallsBusy	The number of calls offered to this path due to the principal being busy.
CallsDA	The number of calls offered to this path because the principal did not answer the call after the administered number of rings.
CallsAll	The number of calls offered to this path due to the use of Cover All.
CallsSendAll	The number of calls offered to this path due to the principal’s use of Send-All-Calls, or the calling party using Go To Coverage. Suggested action: If this number, or the CallsAll field, are unusually large, you should investigate why calls are still offered to this principal.
CallBack	The number of calls offered to this path where the calling party used LWC or ACB before a coverage point answered the call. These cases are separated out because they are usually considered abandons but counting them as such would be misleading. **Suggested action:** If this number appears high, verify why calls are not being answered.
Ans1	The total number of calls answered by the specified point.

Column	Contains
Abd1	The total number of calls abandoned by the caller while ringing at the specified point. **Suggested action:** If this number is high, you may want to re-engineer the coverage paths so less traffic is offered to this point.
Ans2	The total number of calls answered by the specified point.
Abd2	The total number of calls abandoned by the caller while ringing at the specified point. **Suggested action:** If this number is high, you may want to re-engineer the coverage paths so less traffic is offered to this point.
Ans3	The total number of calls answered by the specified point.
Abd3	The total number of calls abandoned by the caller while ringing at the specified point. **Suggested action:** If this number is high, you may want to re-engineer the coverage paths so less traffic is offered to this point.

Tabs

- Systems tab
- Coverage Paths tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Denial Events

The Denial Events Performance Report shows event type, description, event data, first occurrence, last occurrence, and event count. May be filtered by system and time.

Fields

- Primary Data

Column	Contains
Type	Type of event (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.

- Event Index

Column	Contains
Type	Type of event (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Event Index	A system assigned number that uniquely identifies the event (key).
Description	A brief description of the cause of the event.
Event Data 1	Hexadecimal data captured by the event handler to help identify the exact cause of the event.
Event Data 2	
First Month	The date and time of the first occurrence included in this event record.
First Day	
First Hour	
First Minute	

Column	Contains
Last Month	The date and time of the last occurrence included in this event record.
Last Day	
Last Hour	
Last Minute	
Event Count	The number of times this same event occurred over the period indicated in the first and last date and time fields.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Expansion Services Module report

The Expansion Service Module Performance Report shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Available Ports	Available Ports. Total network ESM-MMIs in the system.
Available Usage	Available Usage. Total time, in CCS units, that is available in the system for ESM-MMI ports.
Denials	Total number of times an MMI port was needed but could not be allocated because all ports were busy. Ideally, this number should be zero. If you see denials on a regular basis, you should consider adding MMIs to your system.
Hour	Measurement Hour. The hour for which these measurements apply, on the 24-hour clock.
Out of Service	Out of Service in CCS Units. The total time, in CCS units, that any ESM-MMI ports were out of service during any part of the measured interval.
APB %	The percentage of time during the measured interval that all ESM-MMI ports are unavailable to carry a new call.
Block %	The percentage of attempted allocations of ESM-MMI ports that are not successful. This value is calculated as % blockage = (Denials / Total Allocation + Denials) * 100
Total Allocation	Total Allocated. The total number of times that an MMI port was allocated to a call. Keep in mind that a 2-channel call occupies 2 ports, so this number does not necessarily reflect the number of calls that took place. Also, point-to-point calls do not use MMI resources, so these allocations are for conversion calls of multimedia conferences.
Total Usage	The total time, in CCS units, that ESM-MMI ports are in use on a call. Includes the time that the ports are out of service or maintenance busy. Usage is measured from the time the port is allocated until it is released.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Hunt Groups report

The Hunt Group Performance Report shows configuration, usage, and call counts. May be filtered by system, hunt group, and time.

Fields

Column	Contains
Grp#	Hunt group number
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Name	Shows the name administered for the hunt group.
Size	Shows the actual number of hunt group members.
Type	Group Type. Identifies the type of hunt group, which may be one of the following: • ddc - direct department calling • ucd - uniform call distribution • ead - expert agent distribution
AvgHold	Average hold time calculated from TotUsage and CallsAns.
CallsAban	The total number of calls which attempt to reach the hunt group but abandon the attempt before being answered. Calls may abandon either while in the hunt group queue or while ringing a hunt group extension. This total does not include calls answered by Call Pick Up, other hunt groups, or calls abandoned while listening to a forced first announcement. NOTE: ACD calls redirected to other splits within the system via the intraflow feature are not counted as abandoned calls. ACD calls redirected to another switch (interflow feature) are not counted as abandoned calls. **Suggested actions:** Observe times during which the Calls Abandoned number may be higher than desired. Subsequently, consider adding one or more agents to the hunt group and staffing these additional positions during the problem times. Also, see “Suggested action” in the ‘‘Total usage’’ description.
CallsAns	Calls Answered

Column	Contains
CallsQue	Total number of calls that arrive to find all members of the hunt group busy and are placed in the hunt group queue. Calls Queued includes all calls that go to coverage.
QueOvfl	The number of calls that arrive when all slots in the hunt group queue are occupied.
QueSize	Shows the maximum number of calls that can be in queue for the hunt group.
SpeedOfAns	The average time interval (in seconds) from when the call first enters the hunt group or hunt group queue until the call is answered by a hunt group member. This does not include the time taken by a forced first announcement.
TimeAvai	The total time (in CCS) the hunt group extensions are not in use but are available to receive hunt group calls during the measurement hour. Time Available is calculated only when an agent (extension) is ready to receive calls from the specified hunt group. For example, if the hunt group had four extensions and each was available for 15 minutes during the measurement hour, the total time available would be 60 minutes or 36 CCS. NOTE: ACD hunt groups administered to support Multiple Call Handing displays a series of 5 asterisks (*****) in the total usage field. This measurement is not collected for ACD hunt groups that support Multiple Call Handling.
TotUsage	The sum of all times (in CCS) that the members of a hunt group are busy on hunt group calls. Total Usage is the most important parameter for this report. The maximum possible usage = 36 CCS × Total # of Members **Suggested action:** If the Total Usage number approaches the total CCS, you may consider adding another extension to the hunt group but only staffing it during the peak hours. If the hunt group has several extensions and the Total Usage is low, this may be acceptable if the personnel perform other duties. NOTE: ACD hunt groups administered to support Multiple Call Handing displays a series of 5 asterisks (*****) in the Total Usage field. This measurement is not collected for ACD hunt groups that support Multiple Call Handling.

Tabs

- Systems tab
- Hunt Groups tab
- Fields tab

- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: IP Codecs Report

The IP Codecs Performance Report shows G.711/G.732/G.729 codec usage, in CCS or Erlangs for IP codecs. Records may be filtered by system, IP codec type, and time.

Fields

Column	Contains
IP Codec Type	IP Codec Type (G.711/G.732/G.729) (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
DSP Resources	Total number of IP codec resources, or voice channels, in the region.
In Region	The total number of times an IP media processor port in the region was allocated to a selected codecs call.
Out of Region	The total number of times an IP media processor port was needed in the region for a selected codec call, but was successfully allocated to a resource in another region. If the “Region” fields on the Inter Network Region Connection Management screen are blank, then this measurement will always be 0.
Region	The network region of the IP media processors being measured. The region number is assigned on the Ip-interfaces screen during switch administration.
Usage	Amount of time (in erlangs) that the selected codecs were in use during the measurement period. The time is measured from the time the voice channel is allocated until it is released, including the time that the voice channel is on a call. This measurement is calculated by adding the total time (in seconds) that the selected codecs resources on all IP media processors are in use, divided by 3600.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: IP DSP Resources Report

The IP DSP Resources Performance Report shows configuration, usage, and peg counts for IP DSP resources. Records may be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
DSP Resources	Total number of IP codec resources, or voice channels, in the region.
In Region	The total number of times an IP media processor port in the region was allocated to a call
Out of Region	The total number of times an IP media processor port was needed in the region for a call, but was successfully allocated to a resource in another region. If the “Region” fields on the Inter Network Region Connection Management screen are blank, then this measurement will always be 0.
Percent Blocked	The percent of attempted use of IP media processor ports in the region that were not successful (blocked). This percent includes calls that were denied after they were successfully allocated out of the region.
Percent Out of Service	The percent of CCS time that any IP media processor ports were out of service during the measurement period. This percent includes ports that were manually busied out or maintenance busy during the measured interval. This measurement is calculated by multiplying by 100 the following: Total time (in CCS) that any port was out of service divided by the number of available resources times 36
Region	The network region of the IP media processors being measured. The region number is assigned on the Ip-interfaces screen during switch administration.
Resources Denied	The total number of times an IP media processor port was needed in the region for a call, but all media ports in all regions were busy and the call did not go through.

Column	Contains
Usage	Digital Signaling Processor Usage in Erlangs. Amount of time (in erlangs) that all codecs were in use during the measurement period. The time is measured from the time the voice channel is allocated until it is released, including the time that the voice channel is on a call. This measurement is calculated by adding the total time (in seconds) that G.711 resources on all IP media processors are in use plus twice the total time (in seconds) that G.723 and G.729 resources are in use plus twice the time (in seconds) that fax relay resources are in use, divided by 3600.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: IP Signalling Report

The IP Signaling Groups Performance Report shows packet latencies, and packets sent and lost for IP Signaling Groups. Records may be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Region	The network region of the group.
Average Latency / Hour	The average latency (ms) for the whole hour.
Packets Sent / Hour	The number of packets sent during the whole hour.
Percent Packets Lost / Hour	The percent of lost packets for the whole hour (if100% the corresponding latency is shown as ****)
Average Latency / Interval	The average latency (ms) for the interval
Packets Sent / Interval	The number of packets sent during the interval.
Percent Packets Lost / Interval	The percent of lost packets for the interval
Signalling Group Number	The group number in rank order.
Worst Interval / Hour	The hour with the worst 3 minute interval within the hour.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Inter-Port Network Latency report

The Inter-Port Network Latency Performance Report shows PN connection requests and ATM setup requests with average delay in milliseconds. Records may be filtered by system, PN pairs, and time.

Fields

Column	Contains
Dest PN	Destination Port Network (key)
Orig PN	Originating PN (key)
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
PNC	PN Connectivity (A or B)
ATMReq	ATM Network Setup Requests
ATMSetup	Average ATM Setup Time
PNSetup	Average PN Setup Time
PNReq	PN Connection Requests

Tabs

- Systems tab
- PN Connections tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Multimedia Interface report

The Multimedia Interface Performance Report shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Available Ports	Available Ports
Available Usage	Available Usage
Denials	Denials
Hour	Hour
Out of Service	Out of Service
APB %	APB %
Block %	Block %
Total Allocation	Total Allocation
Total Usage	Total Usage

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Port Networks Report

The Port Networks Performance Report shows usage and peg counts. Records may be filtered by system, PN pair, and time.

Fields

Column	Contains
PN#	Identifies the port network being measured (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
IncTrkIncPeg	The count of TDM time-slot seizures caused by calls to a station on the port network from an incoming trunk on another port network.
IncTrkIncUsage	The TDM time-slot usage caused by calls to a station on the port network from an incoming trunk on another port network. Usage is displayed in CCS.
IncTrkIntraPeg	The count of TDM time-slot seizures caused by incoming trunk calls to a station on the same port network.
IncTrkIntraUsage	The TDM time-slot usage caused by incoming trunk calls to a station on the same port network. Usage is displayed in CCS.
IncTrkOutPeg	The count of TDM time-slot seizures caused by calls to a station on another port network from an incoming trunk on the measured port network.
IncTrkOutUsage	The TDM time-slot usage caused by calls to a station on another port network from an incoming trunk on the measured port network. Usage is displayed in CCS.
IntInterPeg	Intercom Inter-PN Peg
IntInterUsage	Intercom Inter-PN Usage
IntIntraPeg	Intercom Intra-PN Peg
IntIntraUsage	Intercom Intra-PN Usage
OutTrkIncPeg	The count of TDM time-slot seizures resulting from outgoing calls originated at stations on another port network but serviced by trunks on the port network measured.

Column	Contains
OutTrkIncUsage	The TDM time-slot usage resulting from outgoing calls originated at stations on another port network but serviced by trunks on the port network measured. Usage is displayed in CCS.
OutTrkIntraPeg	The count of TDM time-slot seizures caused by outgoing calls made by stations on the measured port network and serviced by outgoing trunks on the same port network.
OutTrkIntraUsage	The TDM time-slot usage caused by outgoing calls made by stations on the measured port network and serviced by outgoing trunks on the same port network. Usage is displayed in CCS.
OutTrkOutPeg	The count of TDM time-slot seizures resulting from outgoing calls originated at stations on the port network measured but serviced by trunks on another port network.
OutTrkOutUsage	The TDM time-slot usage resulting from outgoing calls originated at stations on the port network measured but serviced by trunks on another port network. Usage is displayed in CCS.
PNLBlock	The total count of circuit switched PN link blockages, that is, the total number of times a PN link time-slot is denied, during the measurement hour. This count includes calls originating or terminating on this PN. This field should be zero for all configurations that do not use T1 remoting and are smaller than 16 PNs since the center stage is non-blocking in these configurations. **Suggested action:** If blockages occur in the switching fabric, consider shifting resources. Use the Intercom, Outgoing, Incoming and Tandem reports to determine which resources to switch.
PNLOcc	The percent Port Network Link Occupancy is computed as follows: (PNL Usage/PNL Total Potential Usage) x 100
PNLPeak	The maximum number of PNL time slots allocated at any one time during the measurement.
PNLPeg	The total number of circuit switched time slot seizure attempts for the PN during the measurement hour.
PNLUsage	The total circuit switch usage (Measured in CCS) of the PN Link(s). PN Link Usage = Sum of the allocated PN link time-slots at the end of each 100 second interval in a measurement hour. PNL Total Potential Usage = 766 x 36 CCS = 27,576 CCS
PNOcc	Port Network Occupancy

Column	Contains
CtlUtil	The fraction of the total capacity of the processor on the measured EI board. This value is expressed in percent, where 0% is the processor occupancy corresponding to no control measure traffic, and 100% is the processor occupancy corresponding to the maximum message traffic that can be handled and meet delay criteria. The data used to calculate this field is obtained as a traffic counter from the EI board. When the processor is idle, it usually reads about 14%.
TanTrkIncPeg	The count of TDM time-slot seizures resulting from tandem trunk calls originating on another port network but terminating on the port network measured.
TanTrkIncUsage	The TDM usage resulting from tandem trunk calls originating on another port network but terminating on the port network measured. The usage is represented in CCS.
TanTrkIntraPeg	The count of TDM time-slot seizures caused by tandem trunk calls originating and terminating on the port network being measured.
TanTrkIntraUsage	The TDM usage caused by tandem trunk calls originating and terminating on the port network being measured. The usage is represented in CCS.
TanTrkOutPeg	The count of TDM time-slot seizures resulting from tandem trunk calls originating on the port network measured but terminating on another port network.
TanTrkOutUsage	The TDM usage resulting from tandem trunk calls originating on the port network measured but terminating on another port network. The usage is represented in CCS.
TDMBlock	The total count of TDM blockages, that is, the total number of times a TDM time-slot request is denied for the PN being measured, during the measurement hour.
TDMOcc	The percent TDM Occupancy is computed as follows: (TDM Usage/TDM Total Potential Usage) x 100 **Suggested action:** Generally, the load should be distributed evenly across port networks. If the percent occupancy is out of line with the occupancy on other port networks, consideration should be given to shifting resources. Use the Intercom, Outgoing, Incoming, and Tandem reports to help determine which resources to shift.
TDMPeak	The maximum number of TDM time-slots allocated at any one time during the measurement hour.

Column	Contains
TDMPeg	The total count of circuit switch TDM time-slot seizure attempts for the PN during the measurement hour (requests for maintenance processes are not included).
TDMUsage	The total TDM time-slot usage, in CCS, for the PN being measured: TDM Usage = Sum of the allocated TDM Time Slots at the end of each 100 second interval in a measurement hour. TDM Total Potential Usage = 483 x 36 CCS = 17,388 CSS

Tabs

- Systems tab
- Port Networks tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Principal Data

The Principal Data Performance Report shows configuration, usage, and call counts. Records may be filtered by system, principal data, and time.

Fields

Column	Contains
PdId#	Principal Data ID (key). The principal extension or PCOL group/TAC being reported.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
CallsOffrd	Calls Offered. The total number of calls offered to the principal.
CallsActive	The number of calls sent to coverage by this principal due to the principal being active.
CallsBusy	The number of calls sent to coverage by this principal due to the principal being busy.
CallsDA	The number of calls sent to coverage by this principal because the principal didn't answer the call after the administered number of rings.
CallsAll	The number of calls sent to coverage by this principal due to the principal's use of Cover All.
CallsSendAll	The number of calls sent to coverage by this principal due to the principal's use of Send All Calls, or because the calling party used the Go To Cover feature.
CallBack	The number of calls offered to this principal where the calling party used LWC or ACB before the principal answered the call and before it went to coverage. These cases are separated out because they look like abandons and counting them as such would be misleading.

Column	Contains
Aband	The total number of abandoned calls, where the calling party hung up before the call was answered or sent to coverage. **Suggested Action:** If this number is high at the principal, you may need to redirect traffic. The number of calls answered by principal = Calls Offered − Calls Abandoned − Calls Redirected
Redir	The total number of calls not answered by the principal and subsequently sent to coverage. **Suggested action:** If this number is large compared to CallsOffrd, investigate the reasons.
CoveragePath	The coverage paths used by this principal.

Tabs

- Systems tab
- Principal Data tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Processor Occupancy Report

The Processor Occupancy Performance Report shows occupancy and call counts. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
%CP_Occ	Call Processing Occupancy. The percentage of occupancy used by call processing-level processes. The processing of CDR, DCS, ISDN, and other adjunct interfaces is also included in this level. Note that some occupancy due to BX.25 and ISDN-PRI call traffic is counted as static occupancy instead of CP Occ. **Note:** It is not desirable for any system to function at 100 percent processor occupancy. Rather, the CP Occ and Stat Occ fields should total no more than a maximum of 75 percent. By maintaining this 75 percent maximum limit, other system functions can be performed and bursts of caller activity can also be accommodated. Suggested actions: If the 75 percent maximum limit is exceeded, take one or more of the following steps to lower call processing occupancy: • If the users do not get a dial tone immediately, they should be encouraged to wait 10 to 15 seconds before going on-hook and off-hook again. • If the system is part of a private network and is receiving a large amount of traffic from another system in the private network, investigate the possibility of reconfiguring the network. • Check the administration translation and verify all digital sets, administered with display modules, actually have display modules. For those sets without display modules, change the administration translations to indicate the digital sets do not have a display module. • Check the hardware error log for high levels of maintenance activity.

Column	Contains
%IdleOcc	Idle Occupancy. The amount of time the processor is unused. There are several factors that drive down this number, including the following: • A large offered load increases CP occupancy • A switch with many stations and trunks requires a high level of background maintenance, increases SM occupancy • Frequent demand testing or administration increases SM occupancy These factors may reduce the idle occupancy to almost 0 percent during several 3-minute intervals. On a heavily-loaded configuration with frequent demand testing, the idle occupancy may drop to low levels for longer periods (perhaps 1–2 hours). These situations are normal and do not indicate a problem with the configuration. However, a lightly-loaded configuration with few stations translated and little demand maintenance or administration should not experience long periods of low idle occupancy (less than 15 percent). If this is the case, a problem is likely.
IncAtts	Incoming Attempts. The number of incoming trunk seizures from public network facilities.
IntAtts	Intercom Attempts. This field includes the sum of two types of calls. The first type is extension-to-extension calls on the same configuration. The second type is partially completed calls where a local extension goes off-hook and then hangs up before the call is answered. This includes both busy and no-answer calls.
OutAtts	Outgoing Attempts. The number of outgoing trunk seizures made over public network facilities.
%Aban	Percent Abandoned (percent)
PNetAtts	Private Network Attempts. The number of incoming and outgoing seizures made over private network facilities. Note that a tandem call is counted as two private network attempts, since it includes both incoming and outgoing trunk seizures. NOTE: The determination of whether a call is over public network or over private network facilities depends on the trunk type (for ISDN-PRI facilities it is also dependent on the service type).

Column	Contains
%StaticOcc	Static Occupancy. The percentage of occupancy used by high priority background processes in support of call processing, maintenance, and administration functions. Examples of this activity are high level sanity checks, system timing, polling of adjuncts, and operating system support. This also includes some call processing occupancy for BX.25 and ISDN-PRI traffic. **Note:** Static occupancy remains fairly consistent in an idle configuration. However, it increases as traffic is introduced into the system.
%SM_Occ	System Management Occupancy. The percentage of processor occupancy due to system management processes. This measurement is time coincident with the peak value of the combined call processing and static processor occupancy.
TanCalls	Tandem Calls. The number of trunk-to-trunk calls connected during the last hour.
TotAtts	Total Attempts. The number of call attempts made during the measurement interval. The following occurrences count as an attempt: • A user lifts the station handset and hangs up before dialing any digits (off-hooks) • A user lifts the station handset, dials the destination number, the far end rings but does not answer, and the user hangs up (no answer) • A user lifts the station handset, dials the destination number, the far end is busy • A user places a call answered by the dialed number • A user conferences a second party onto the call • An incoming trunk seizure • Maintenance requests an outgoing trunk be seized • Tandem calls (either pnet or public network) result in 2 attempts, but only one total call • AUDIX audits of message waiting lamps • AUDIX Leave Word Calling activations NOTE: Mathematically, the Total Atmpts field is the total of the Intcom, Inc, Out, and Pnet Atmpts fields.
TotCalls	Total Calls. The total number of calls connected during the listed hour. Calls are counted in the time interval they are answered and not in the time interval they are dropped. Therefore, a call that starts in one time interval and ends in another is counted only in the time interval where it originates.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Routing Patterns Report

The Routing Patterns Performance Report shows call counts for routing patterns and trunk groups within routing patterns. Records may be filtered by system, routing pattern, and time.

Fields

- Primary level data:

Column	Contains
Pat#	The identification (number) of the route pattern measured.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
CallsCarried	The total number of seizures (for all trunk groups) in the routing pattern.
CallsQue	The number of offered calls that found all trunk groups in the pattern busy and were placed in queue for the first trunk group (first-choice trunk group) in the pattern. These calls also increment the blocked calls counter.
QueOvfl	The number of calls that find the queue on the first trunk group full. Calls attempted while the queue is in overflow receive a reorder signal. These calls also increment the blocked calls counter.
QueSize	The size (length) of the queue for the first trunk group in the route pattern. This is commonly referred to as the route pattern queue size. A queue is an ordered sequence of calls waiting to be processed.
CallsBlock	The number of offered outgoing calls that found all trunk groups in the pattern busy. If the queue overflows, then the call is still blocked. Specifically, a blocked call is a call that: • Arrives when there are no available resources • Arrives and gets queued • Arrives when the queue is full • Arrives and cannot queue because the queue length is set to zero • Cannot queue because the Automatic Callback (ACB) button is busy • Cannot queue because there is no ACB button

Column	Contains
CallsOffer	The total number of calls offered to the route pattern. • Calls Offered (With Queue) = # of Calls Carried + # of QueueOverflowCalls + # of QueueAbandonCalls • Calls Offered (Without Queue) = # of Calls Carried + # of CallsBlocked
%Block	The percentage of offered calls not carried on the route pattern. It does not include unauthorized calls denied service on the route pattern (due to restrictions) or calls carried on the route pattern but do not successfully complete at the far end (that is, where there is no answer).

- Trunk Group Measurements:

Column	Contains
Pat#	The identification (number) of the route pattern measured.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
TG#	Trunk Group Number. The number, assigned via the Trunk Group screen, that identifies each trunk group associated with the displayed data (key). Trunk groups are listed in the same order as they are assigned on the Route Pattern screen. The first trunk group listed is the first selected (preference 1); the second listed is the second selected (preference 2), and so on. (key)
Dir	Identifies whether the assigned trunk groups are outgoing (out) or 2-way (two). Incoming trunks are not included in route patterns.
Name	The trunk group identification administered on the Trunk Group screen.
Size	The number of trunks in the group.

Column	Contains
Type	The type of trunk in the group. The following types of trunk groups can be accessed through the route pattern: • Access (access) • Advanced Private Line Termination (aplt) • Local Central Office (co) • Direct Inward/Outward Dialing (diod) • Foreign Exchange (fx) • Integrated Services Digital Network-Primary Rate Interface (isdn-pri) • Tandem (tandem) • Tie Trunk (tie) • Wide Area Telecommunications Service (wats)
Service	ISDN PRI service
TAC	Trunk Access Code administered for the trunk group.
WB	If a trunk group is administered to support wideband switching, a “W” appears.
TotCalls	The total number of calls carried by the route pattern by the trunk group.
%Carried	The percentage of the total calls carried over the route pattern by the trunk group. **Suggested action:** The first trunk group listed in the report is the first choice trunk group. This trunk group should always carry a significantly larger percentage of the calls than any of the other trunk groups. If not, you should add more members so the first choice trunk group has significantly more members than any other group in the pattern.

Tabs

- Systems tab
- Routing Patterns tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Security Violations Report

The Security Violations Performance Report includes valid and invalid attempts by port type and by system. Records may be filtered by system and time.

Fields

- Primary Data

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
BCViol	The total number of times a user entered a valid or invalid remote access barrier code, and the number of resulting security violations. Barrier codes are used with remote access trunks. An inexplicable, significant increase in valid barrier code use could indicate the barrier code has been compromised. A marked increase in this number of invalid codes may indicate someone is attempting to break into your system. If you have just administered a new barrier code, or a barrier code expired recently, it may indicate people are making honest mistakes. **Suggested action:** Delete or change the barrier code if you suspect it has been compromised.
InvAttAC	Invalid Attendant AC
InvRemAC	Invalid Remote AC
InvStnAC	Invalid Station AC
TotInvAC	Total Invalid AC
InvTrkAC	Invalid Trunk AC
InvBC	Invalid Barrier Codes
InvStnSSC	Invalid Station SSC
TotInvSSC	Total Invalid SSC
InvTrkSSC	Iinvalid Trunk SSC

Column	Contains
Since	The time at which the counts were last cleared and started accumulating again, or when the system is initialized.
AttACViol	Attendant AC Security Violations
RemACViol	Remote AC Security Violations
StnACViol	Station AC Security Violations
TotACViol	Total AC Security Violations
TrkACViol	Trunk AC Security Violations
TotSSCViol	Total SSC Security Violations
ValAttAC	Valid Attendant AC
ValRemAC	Valid Remote AC
ValStnAC	Valid Station AC
TotValAC	Total Valid AC
ValTrkAC	Valid Trunk AC
ValBC	Valid Barrier Codes
ValStnSSC	Valid Station SSC
TotValSSC	Total Valid SSC
ValTrkSSC	Valid Trunk SSC

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Switch Node Links Report

Switch Node Link performance shows usage and peg counts. Records may be filtered by system, SN link, and time.

Fields

Column	Contains
Link	Switch Node Pair. Identifiers for the two SNs connected by the SNL being measured (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
SNL Block	The total count of circuit switched SNL blockages, that is, the total number of times a call is blocked because no time-slots are available either in the most direct route or through any alternate route, during the measurement hour.
SNL Ovfl	The total number of times a call is routed over an alternate route. This counter is incremented when a call was not successfully routed over the most direct route and is routed over an alternate route. This allows you to distinguish true blockage of a call from the direct route blockage. **Suggested action:** Generally, the usage between switch nodes should be equally distributed. If the usage between switch nodes is high, you may want to move resources to another switch node or add a new switch node.
SNL Peg	The total count of circuit switched SNL time-slot seizure attempts during the measurement hour between the two measured SNs. This is the total peg count on all interconnecting fibers.
SNL Usage	The total circuit switch usage of the SNL connecting the two SNs. This is the total usage on interconnecting fibers. At the end of each 100-second interval, a snapshot is taken of the number of SNL time-slots used on each port network. Max SNL usage = 766 x 36 CCS = 27,576.
Slots	The number of switch node link time-slots available between switch nodes. At any given time interval, this translation value is fixed. The SNL time slot maximum is 766; for T1 remoting it is 94.

Tabs

- Systems tab
- Switch Node Links tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Tone Receivers Report

The Tone receiver Performance Report shows peg counts for each tone receiver type and port network. Records may be filtered by system, tone receiver type, and time.

Fields

- Measurements by Port Network

Column Header	Contains
Type	The type of tone receiver measured. NOTE: Each TN748 and TN420 circuit pack provides four DTMF ports (for touch-tone reception) and two GPTD ports (for call progress tone reception). The TN744 Call Classifier Circuit Pack provides eight ports for call progress tone reception (CC-CPTR), touch-tone reception (CC-TTR), or MFC (CC-MFCR) reception.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
PN#	The port network in which the circuit pack containing the type of tone receiver listed is physically located.
PeakAlloc	The peak number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers located in the listed port network in use simultaneously during the listed hour.
PeakOffPN	Peak Off-Port Network. For the identified hour and port network, this is the peak number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers simultaneously allocated on a different port network for requests originated on this port network. NOTE: A desirable goal is to minimize (within reason) the number displayed with this field. **Suggested actions:** Locate communities of interest within the same port network. Provide sufficient tone receivers for each port network. Perhaps you should move one TN748 and TN420 circuit pack (or, if you are working with a CC-TTR, CC-CPTR, and MFCR, move a TN744 circuit pack) to the PN with the Off-PN counts to minimize Off-PN allocations.
Requests	The number of requests for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers within the port network during the listed hour.

Column Header	Contains
TotAlloc	The total number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers located in the listed port network allocated for use during the listed hour.
TotOffPN	For the identified hour and port network, this is the total number of DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers allocated on a different port network for requests originated on this port network. NOTE: With ideal conditions, this field displays the number 0. However, with more practical conditions, the field displays a larger number. **Suggested actions:** Locate communities of interest within the same port network. Provide sufficient tone receivers for each port network.

- Primary Data

Column	Contains
Type	The tone receiver circuit packs physically connected at the time of the hour measurement.
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
PeakDenied	The system-wide peak number of requests denied because no receivers were available during the listed hour. Suggested action: At a minimum you should increase the number of tone receivers by the number displayed in the Peak Denied field. Furthermore, you may want to consider engineering the switch as “non-blocking” for tone receivers. This involves increasing the number of tone receivers (the Avail field) so all requests receive service immediately and no requests are queued. For example, keep the value displayed in the Avail field greater than that displayed in the PeakReq field.
PeakQue	The system-wide maximum number of call requests queued at any one time during the listed hour. NOTE: The system has a maximum queue size of 4 for DTMF requests and 80 for CC-TTR call vectoring requests.

Column	Contains
PeakReq	The system-wide peak number of simultaneous requests for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers that occurred at any one time for the listed hour. The peak (or maximum) number is calculated by incrementing a counter for each request and decreasing the counter when the request fails or a tone receiver is released. NOTE: If the Peak Req field indicates a number higher than listed in the Avail field, then certain requests were either queued or denied during the peak time interval. Denied requests fail and are given the reorder tone.
Ports	The number of the ports available for the type of tone receiver listed.
TotDenied	The system-wide total number of requests denied because no receivers were available during the listed hour. For DTMF-receiver or CCTR requests, this happens only after the queue is full. Those requests denied are given reorder tone.
TotQue	The system-wide total number of requests queued during the listed hour. A request is queued when there are no receivers immediately available. Only DTMF and CC-TTR requests are queued. NOTE: If a request for a receiver is made in one port network, and no receivers are available, then the request is offered to the next port network. If no receivers are available on any port network, then the request is queued. Queued call requests do not receive dial tone until a tone receiver becomes available.
TotReq	The system-wide total number of requests, by call processing, for DTMF, GPTD, CC-TTR, CC-CPTR, or MFCR receivers during the listed hour. The total number of requests is calculated by incrementing a counter for each request.

Tabs

- Systems tab
- Tone Receivers tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Trunk Groups Report

The Trunk Group Performance Report shows usage, peg count, and grade-of-service.

Fields

- Average Data

Column	Contains
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Size	The number of administered trunks in the trunk group.
Type	Group Type. The type of trunk in the trunk group. The system monitors/measures the following trunk types: • Access Tie Trunk (Access) • Advanced Private Line Termination (aplt) • Central Office (co) • Public Network Service Customer Provided Equipment (cpe) • Direct Inward Dialing (did) • Direct Inward/Outward Dialing (diod) • Digital Multiplexed Interface Bit Oriented Signaling (dmi-bos) • Foreign Exchange (fx) • Integrated Services Digital Network (isdn-pri) • Release Link Trunk (rlt) • Tandem (tan) • Tie Trunk (tie) • Wide Area Telecommunications Service (wats)
Days	Count of days
Model	Model
GOS	Grade of Service
Needed Size	Average of recommended trunks needed
Recommended Size	Average of recommended size
Av. Pk. Usage	Average peak usage

- Primary level data:

Column	Contains
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Size	The number of administered trunks in the trunk group.
Needed Size	Needed Size
Model	Traffic Model
AvgHold	Average Hold Time
QueOvfl	The total number of calls not queued because the queue is full. These calls receive a reorder signal. **Suggested actions:** Generally, this field indicates the number 0. If this field indicates a high number, then either the queue size may be too small, or add more trunks to reduce the number of calls queuing.
QueSize	A number (0 to 100) that identifies the number of slots assigned to the trunk group queue. This number represents how many calls may be held in queue by the trunk group. If 0 is displayed, then no queue is administered. Hence, the other queue measurements are also 0. Generally, the queue size should be larger than the trunk group size; however, not more than three times as large as the trunk group size.
TotUsage	Total usage (in CCS) for all trunks in the trunk group. Represents the total time the trunks are busy (with calls) during the one-hour measurement period. Total usage measures each time a trunk is seized for use by an incoming call (whether it is picked up or not) or an out going call (only after digits have been dialed).
AvgUsage	Average Trunk Usage

Column	Contains
CallsQue	The total number of calls that entered the trunk group queue after finding all trunks busy.
OOS	The number of trunks in the trunk group out of service (listed as maintenance busy) at the time data is collected. An individual trunk may be taken out of service by the switch whenever an excessive number of errors occur, or by maintenance personnel to run diagnostic tests. **Suggested action:** If the trunks are removed from service by the switch, then the appropriate maintenance personnel should be notified. The objective is to keep all members of a trunk group “in service.” Generally, you should not make adjustments to the trunk group because of “Out of Service” trunks, but should get those trunks returned to service.
QueAban	The number of calls removed from the queue in one of the following manners: • By the system because they have been in the queue for more than 30 minutes • By the user (for example, dialing the cancel code). Suggested action: Typically, this field indicates a small number. However, a large number generally indicates the queue size is too large and people are abandoning because they remained in queue for a long holding time and gave up.
GroupOvfl	The number of calls offered to a trunk group not carried or queued (if a queue is present). Calls rejected for authorization reasons are not included.
IncSeize	The number of incoming seizures carried on the trunk group.

Column	Contains
%ATB	The percentage of time all trunks in the trunk group were simultaneously in use during the measurement interval. NOTE: In use means the trunks are busy — either serving calls or because they are busied-out by maintenance. **Suggested actions:** 1. If the group direction is outgoing or two-way, then a high number in the %ATB field and nothing in the GroupOvfl or QueOvfl indicates everything is functioning normally. However, a more typical scenario is a high number in this field and a high number in the GroupOvfl field. This indicates a possible problem that necessitates further analysis. Unless it is the last trunk group in the pattern, overflow is to the next choice trunk group, and the number in the GroupOvfl field is of no great significance. Otherwise, the obvious choice is to add more trunks to the trunk group. 2. If the group direction is incoming, then a high number in this field is bad. It indicates some incoming calls are probably blocked. Generally, you want to add more trunks, thus lowering the %ATB and decreasing the number of calls blocked.

Column	Contains
%Block	The percentage of offered calls not carried on the trunk group. It does not include unauthorized calls denied service on the trunk group (due to restrictions) or calls carried on the trunk group but do not successfully complete at the far end (that is, where there is no answer). For trunk groups without a queue, the calls not carried are those calls that arrive when all trunks are busy. The number of Outgoing Seizures is calculated as follows: Outgoing Seizures = Total Seizures − Incoming Seizures Similarly, the equation for calculating Outgoing Calls Offered is as follows: Outgoing Calls Offered = Group Over flow + Outgoing Seizures %Block = GroupOvfl / Outgoing Calls Offered For trunk groups with a queue, the calls not carried are those calls that arrive when all trunks are busy and the queue is full (Queue Overflow) and calls removed from queue before being carried (Queue Abandoned). For this scenario, the Percentage Outgoing Blocking is calculated as follows: Outgoing Calls Offered = QueOvf + QueAbd + Outgoing Seizures % OutBlk = ((QueOvfl + QueAbd)/Outgoing Calls Offered) * 100 **Suggested actions:** 1. You can increase the length of the queue rather than adding more trunks. Subsequently, you should monitor the Que Abd field to insure it stays within reasonable limits. 2. If conditions are such that Step 1 is not appropriate, then you may find it necessary to add more trunks. NOTE: If you are using ARS you may see a high number in this field. This only indicates calls are overflowing to the next choice.
TotSeize	The number of incoming and outgoing seizures carried on the trunk group. This includes the number of times a trunk in the group is seized, including false starts, don’t answer, and busy.
AvgUsage	Average Usage
GOS	Grade of Service
Recommended Size	Recommended Size
Dir	Identifies whether the trunk group is incoming (inc), outgoing (out), or two-way (two).

Column	Contains
Name	Administered trunk group name.
Type	Group Type. The type of trunk in the trunk group. The system monitors/measures the following trunk types: • Access Tie Trunk (Access) • Advanced Private Line Termination (aplt) • Central Office (co) • Public Network Service Customer Provided Equipment (cpe) • Direct Inward Dialing (did) • Direct Inward/Outward Dialing (diod) • Digital Multiplexed Interface Bit Oriented Signaling (dmi-bos) • Foreign Exchange (fx) • Integrated Services Digital Network (isdn-pri) • Release Link Trunk (rlt) • Tandem (tan) • Tie Trunk (tie) • Wide Area Telecommunications Service (wats)
Service	ISDN PRI Service
TAC	Trunk Access Code administered for the trunk group.
WB	WideBand flag. If any trunks in the trunk group are used in a wideband (n X DS0) connection, a “W” appears in this column.

Tabs

- Systems tab
- Trunk Groups tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Trunk Groups- ISDN-PRI CBC Report

The Trunk Groups ISDN-PRI Call-by-Call (CBC) Performance Report shows configuration, usage, and counts for ISDN Trunk Groups

Fields

- Service/Feature Measurements:

Column	Contains Field
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Service	Feature. The names of up to 10 services/features and the special identifier “other” for which the associated measurements are reported.
TotUsage	The sum of time, in hundred-call-seconds (CCS), for all channels used by the specified service/feature during the measurement interval.
GroupOvfl	Overflow Trunk Group. The number of outgoing calls that requested the specified service/feature, on the ISDN-PRI CBC trunk group, but are not carried because the calls arrived to find no idle trunk members available. NOTE: There are three overflow fields, each with a different priority. They are: overflow trunk group (GroupOvfl) (priority 1), overflow maximum (MaxChanOvfl) (priority 2), and overflow services/features (SvcOvf) (priority 3). If more than one of the overflow conditions is met, only the field that represents the condition with the highest priority is incremented.
IncSieze	The total number of incoming calls that requested the specified service/feature through the ISDN-PRI CBC trunk group. For two-way and outgoing trunks, the number of Outgoing Seizures can be calculated as follows: Out Seize = Total Seize − In Seize

Column	Contains Field
MaxChanOvfl	Overflow maximum. The number of calls not carried because the calls originated at a time when the service/feature already used-up its allotted maximum number of channels. In this case, the trunk group may still have trunk members available for the other services/features. Suggested actions: 1. Investigate the possibility of raising the number administered in the MaxChannels field. This is only possible provided the free pool is not exceeded. To determine whether or not you have more trunks available for a S/F calculate the following: Max − Min (for the identified S/F) ≤ Free Pool For example, use the above equations with the data in the formula as follows: • Free Pool = Total # of in−service trunks − Σ Min for each S/F • Free Pool = 18 − (5 + 4) • Free Pool = 9 • 8 − 4 (f or SDN) ≤ 9 • 4 ≤ 9 Therefore, you can increase the Max 2. Consider adding more trunks to the trunk group and increase the maximum for the identified service/feature.
MaxChannels	The maximum number of channels in the ISDN-PRI CBC trunk group allocated to the specified service or feature at the time the measurements are collected.
MinChannels	The minimum number of channels in the ISDN-PRI CBC trunk group allocated to the specified service/feature at the time the measurements are collected.

Column	Contains Field
%ATB	Percentage All Trunks Busy. The percentage of time (0 to 100%) during the measurement interval that the specified service/feature could not get a channel because of at least one of the following reasons: • All trunks in the ISDN-PRI CBC trunk group are busy on a call or busied-out by maintenance. • This service/feature is above its minimum; and all available trunks are reserved for other features/services below their minimums. • The specified feature or service is at its maximum number of channels. **Suggested actions:** 1. A number in the GroupOvfl field indicates the physical maximum number of trunks is exhausted. Unless the trunk group is the last preference in the routing pattern, overflow is to the next trunk group. Otherwise, the obvious choice is to add more trunks to the trunk group. 2. If the SvcOvfl field indicates a problem (for example, a significant number), refer to Suggested actions in the SvcOvfl description. 3. If the MaxChanOvfl field indicates a problem (for example, a significant number), refer to Suggested actions in the MaxChanOvf description.
%TBM	Percentage of Trunks Below Minimum. The percentage of time during the polling interval that the number of channels in use by the specified service/feature is below the specified minimum. **Suggested action:** Lower the “MinChannels” since this may be the cause for the “SvcOvfl”. NOTE: If the % TBM field is high, then you are reserving more trunk members than will be used. Determine if another service/feature needs more trunks and, if so, lower the “MinChannels” for this service/feature.

Column	Contains Field
%Block	Percentage Outgoing Blocking. The ratio of outgoing calls not carried for a specified service/feature to the outgoing calls offered by the service/feature. For an ISDN-PRI CBC trunk group without a queue, the calls not carried are those calls that find all facilities busy for the specified service/feature. For an ISDN-PRI CBC trunk group with a queue, the calls not carried are queue abandons plus those calls that find all facilities for the specified service/feature busy and cannot be queued because the queue is full. **Suggested actions:** 1. Look at the % ATB column and identify any service/feature with a high value. Follow the Suggested actions in the % ATB description. 2. You can increase the length of the queue rather than adding more trunks. Subsequently, you should monitor the Queue Abandonments field to insure it stays within reasonable limits. 3. If conditions are such that Item 1 above is not appropriate, you may find it necessary to add more trunks.
SvcOvfl	Overflow Services/Features. The number of calls that requested the specified service/feature but denied because the calls arrived under the following conditions: • The specified service/feature is at or above its minimum channel allocation and below its maximum allocation. • There are idle channels available in the trunk group, but they are reserved to meet the minimum channel allocation for other services/features. **Suggested actions:** 1. Investigate the possibility of raising the “MinChannels” requirements for this service/feature. 2. Investigate the possibility of increasing the number of members for the trunk group. 3. Determine whether or not the “MinChannels” assignments for the other services/features are appropriate. For example, if the column “% TBM” displays a high number for one or more of the other service/features, then you can lower the minimums (for one or more of the other services/features). This makes more trunks available for this service/feature.
TanSieze	Tandem Seizures. The total number of trunk-to-trunk call seizures using this Service/Feature.
TotSieze	The total number of incoming and outgoing calls that requested the specified service/feature through the ISDN-PRI CBC trunk group.

- Usage Allocation Plans Used:

Column	Contains Field
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Plan	Allocation Plan Used. A list of the Usage Allocation Plan numbers followed by a list of the durations (in minutes) each plan was in effect during the measurement interval. The Number field can display up to a maximum of six plan numbers. A maximum of three different UAPs (identified by the numbers 1, 2, and 3) may be defined for each trunk group. All three plans are defined on Page 3 of the trunk group screen. Page 4 of the corresponding trunk group screen is where you administer plan assignments. Each CBC trunk group is administered with either “fixed” allocation or “scheduled” allocation. If fixed, it remains in effect continuously. If scheduled, the designated plans are activated on a per-day and time-of-day basis determined by the schedule.
Duration	the durations (in minutes) each plan (above field) was in effect during the measurement interval.

- Primary Data:

Column	Contains
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.

Column	Contains
QueOvfl	The total number of calls denied access to a trunk, found the queue full, and the caller received reorder tone. **Suggested actions:** Generally, this field displays the number 0. If this field indicates a high number, then the queue size may be too small, more trunks may be needed so fewer calls will queue, or the UAP may be too restrictive (for example, some of the “MinChannels” values may be too high, or some of the “MaxChannels” values may be too low). Also, see Suggested actions in the % TBM description.
QueSize	Size of the queue for the ISDN-PRI CBC trunk group. If zero is displayed, then no queue is administered. Hence, the other queue measurements is also zero. If the queue is administered, then it serves all of the network services/features administered for the trunk group. However, its functional operation is somewhat different than the queue used with conventional trunk groups. When a particular service/feature uses its allotted maximum number of channels, then any additional call attempts are queued, even though not all of the trunks are currently in use. If the queue is already full, any additional call attempts simply overflow with the caller receiving reorder tone. **Recommendations:** Since one service/feature generally does not experience peak traffic the same time as another service/feature, there is an averaging effect. Furthermore, the queue size for a CBC trunk group need not be much larger than for a non-CBC trunk group. The Queue Size should be larger than the trunk group size; but, typically, not more than three times as large as the trunk group size.
CallsQue	The total number of calls entered the CBC trunk group queue during the hour.
OOS	The number of trunks in the trunk group out of service at the time the measurements are collected. An individual trunk may be taken out of service either automatically by the switch whenever an excessive number of errors occur, or by maintenance personnel in order to run diagnostic tests. **Suggested action:** If the trunks were removed from service by the switch, then the appropriate maintenance personnel should be notified. The objective is to keep all members of a trunk group in service. Generally, you should not make adjustments to the CBC trunk group because of Out of Service trunks, but should get those trunks returned to service.

Column	Contains
QueAban	The number of calls removed from the queue by either the system or the user. The system automatically removes calls from the queue after 30 minutes. A user may abandon his/her call by canceling the Automatic Callback feature (set earlier to place their call in the queue). **Suggested action:** Recall that a trunk group and its associated queues are sized to accommodate peak-hour traffic loads. Typically, this field indicates a small number. However, a large number generally indicates the queue size is too large and people are abandoning because they remained in queue for a long time. Consider adding more trunks so fewer calls queue.
Dir	Group Direction. Identifies whether the trunk group is incoming (inc), outgoing (out), or two-way (two).
Name	Administered trunk group name.
Size	Group Size. The number of administered trunks in a specified trunk group. For additional details, refer to the Hardware Guide for Avaya™ Communication Manager.
Type	Group Type. The type of trunk associated with the accumulated data. The system monitors the following trunk types (see Administrator's Guide for Avaya™ Communication Manager): • Access (access) • Advanced Private Line Termination (aplt) • Central Office (co) or Public Network Service • Customer Provided Equipment (cpe) • Digital Multiplexed Interface Bit Oriented Signaling (dmi-bos) • Direct Inward Dialing (did) • Direct Inward/Outward Dialing (diod) • Foreign Exchange (fx) • Integrated Services Digital Network (isdn-pri) • Release Link Trunk (rlt) • Tandem (tandem) • Tie Trunk (tie) • Wide Area Telecommunications Service (wats)
Service	Service (?)
TAC	Trunk Access Code administered for the trunk group.
WB	WideBand flag. If any trunks in the trunk group are used in a wideband (n X DS0) connection, a "W" appears in this column.

Tabs

- Systems tab
- Trunk Groups tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Trunk Groups- Wideband Report

The Wideband Trunk Performance Report shows configuration, usage, and peg counts for wideband Trunk Groups. Records may be filtered by system, Trunk Group or Trunk Group list, and time.

Fields

Column	Contains
TG#	A number that identifies each trunk group associated with the displayed data. Group numbers are displayed in numerical order, beginning with the lowest administered number and continuing to the highest administered number (key).
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
TotUsage	Total usage (in CCS) for all trunks in the trunk group. Represents the total time the trunks are busy (with calls) during the one-hour measurement period. Total usage measures each time a trunk is seized for use by an incoming call (whether it is picked up or not) or an out going call (only after digits have been dialed).
OOS	The number of trunks in the trunk group out of service (listed as maintenance busy) at the time data is collected. An individual trunk may be taken out of service by the switch whenever an excessive number of errors occur, or by maintenance personnel to run diagnostic tests. **Suggested action:** If the trunks are removed from service by the switch, then the appropriate maintenance personnel should be notified. The objective is to keep all members of a trunk group “in service.” Generally, you should not make adjustments to the trunk group because of “Out of Service” trunks, but should get those trunks returned to service.
GroupOvfl	The number of calls offered to a trunk group not carried or queued (if a queue is present). Calls rejected for authorization reasons are not included.
IncSeize	The number of incoming seizures carried on the trunk group.

Column	Contains
%ATB	The percentage of time all trunks in the trunk group were simultaneously in use during the measurement interval. NOTE: In use means the trunks are busy — either serving calls or because they are busied-out by maintenance. **Suggested actions:** 1. If the group direction is outgoing or two-way, then a high number in the %ATB field and nothing in the GroupOvfl or QueOvfl indicates everything is functioning normally. However, a more typical scenario is a high number in this field and a high number in the GroupOvfl field. This indicates a possible problem that necessitates further analysis. Unless it is the last trunk group in the pattern, overflow is to the next choice trunk group, and the number in the GroupOvfl field is of no great significance. Otherwise, the obvious choice is to add more trunks to the trunk group. 2. If the group direction is incoming, then a high number in this field is bad. It indicates some incoming calls are probably blocked. Generally, you want to add more trunks, thus lowering the %ATB and decreasing the number of calls blocked.

Column	Contains
%Block	The percentage of offered calls not carried on the trunk group. It does not include unauthorized calls denied service on the trunk group (due to restrictions) or calls carried on the trunk group but do not successfully complete at the far end (that is, where there is no answer). For trunk groups without a queue, the calls not carried are those calls that arrive when all trunks are busy. The number of Outgoing Seizures is calculated as follows: Outgoing Seizures = Total Seizures − Incoming Seizures Similarly, the equation for calculating Outgoing Calls Offered is as follows: Outgoing Calls Offered = Group Over flow + Outgoing Seizures %Block = GroupOvfl / Outgoing Calls Offered For trunk groups with a queue, the calls not carried are those calls that arrive when all trunks are busy and the queue is full (Queue Overflow) and calls removed from queue before being carried (Queue Abandoned). For this scenario, the Percentage Outgoing Blocking is calculated as follows: Outgoing Calls Offered = QueOvf + QueAbd + Outgoing Seizures % OutBlk = ((QueOvfl + QueAbd)/Outgoing Calls Offered) * 100 **Suggested actions:** 1. You can increase the length of the queue rather than adding more trunks. Subsequently, you should monitor the Que Abd field to insure it stays within reasonable limits. 2. If conditions are such that Step 1 is not appropriate, then you may find it necessary to add more trunks. NOTE: If you are using ARS you may see a high number in this field. This only indicates calls are overflowing to the next choice.
TotSeize	The number of incoming and outgoing seizures carried on the trunk group. This includes the number of times a trunk in the group is seized, including false starts, don’t answer, and busy.
Dir	Identifies whether the trunk group is incoming (inc), outgoing (out), or two-way (two).
Name	Administered trunk group name.
Size	The number of administered trunks in the trunk group.

Column	Contains
Type	Group Type. The type of trunk in the trunk group. The system monitors/measures the following trunk types: • Access Tie Trunk (Access) • Advanced Private Line Termination (aplt) • Central Office (co) • Public Network Service Customer Provided Equipment (cpe) • Direct Inward Dialing (did) • Direct Inward/Outward Dialing (diod) • Digital Multiplexed Interface Bit Oriented Signaling (dmi-bos) • Foreign Exchange (fx) • Integrated Services Digital Network (isdn-pri) • Release Link Trunk (rlt) • Tandem (tan) • Tie Trunk (tie) • Wide Area Telecommunications Service (wats)
Service	Service Type. The administered Service Type for the trunk group. Valid entries are accunet, i800, inwats, lds, mega800, megacom, multiquest, operator, other, outwats-bnd, public-ntwrk, sdn, sub-operator, and wats-max-bnd.
TAC	Trunk Access Code administered for the trunk group.
WB	WideBand flag. If any trunks in the trunk group are used in a wideband (n X DS0) connection, a “W” appears in this column.

Tabs

- Systems tab
- Trunk Groups tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Performance: Voice Conditioner Report

The Voice Conditioner Performance Report shows available counts/usage, H320/voice/total usage/allocation/denials, out-of-service, and blockage. May be filtered by system and time.

Fields

Column	Contains
Voice System	A 20-character string administered by the customer that uniquely identifies the voice system (key).
Voice System Time	Most recent date and time when the voice system software started (key).
NMS Time	Most recent date and time when the Network Management System (NMS) software started.
Available Ports	Total number of VC ports in the system.
Available Usage	Total time, in CCS, that all VC ports are available in the system. Calculated as #MMI ports x 36.
H320 Allocation	Total time VC ports are allocated to H320 endpoints.
H320 Denials	Number of times a port was needed for an H320 call, but was not available.
H320 Usage	Total time that VC ports are allocated to H320 endpoints.
Hour	Measurement Hour. The hour for which these measurements apply, on the 24-hour clock.
Out of Service	The total time, in CCS units, that any MMI ports were out of service during any part of the measured interval.
APB %	The percentage of time during the measured interval that all MMI ports are unavailable to carry a new call.
Block %	The percentage of attempted allocations of MMI ports that are not successful. This value is calculated as % blockage = (Total Denials / Total Alloc + Total Denials) * 100
Total Allocation	Total number of times a VC port was allocated to a call. Each B-channel used on a multimedia call counts as one allocation.
Total Denials	Total number of times a VC port was needed for any call, but was not allocated because all VC ports were busy.

Column	Contains
Total Usage	Total time, in CCS units, that VC ports are available to carry a new call. This includes time that the ports are busy on a call, out of service or maintenance busy. Measured from the time that the port is allocated until it is released.
Voice Allocation	Total time VC ports are allocated to voice endpoints.
Voice Denials	Number of times a port was needed for a voice call, but was not available.
Voice Usage	Total time VC ports are allocated to voice endpoints.

Tabs

- Systems tab
- Fields tab
- Sort tab
- Format tab
- Time tab
- Destination tab

Screen Reference

Main Window

The main window offers three "views":

- Configuration and Status (default)
- FPM Administration
- Report Manager

Configuration and Status

The Configuration and Status view is the default view when you open FPM. It provides a concise, graphical view of the configuration and health of your voice systems, using tabs and a Windows-File-Explorer-like "tree" to represent your voice system network. The tabs provide alternate ways of organizing the information.

- **System Groups**: Displays voice systems in user-defined groups
- **DCS Trunk Connectivity:** Displays voice systems in groups based on DCS trunk connectivity.
- **IP Trunk Connectivity:** Displays voice systems in groups based on IP trunk connectivity.
- **Clusters:** Displays information about ESS and LSP clusters.

For System Groups, DCS Trunk Connectivity, and IP Trunk Connectivity, the nodes in the tree represent objects in the network, and you can click objects at different levels of the tree to see different levels of detail about your network.

- The first level of the tree shows the groups of voice systems that Fault and Performance Manager is monitoring,
- The second level shows the individual voice systems in those groups, and
- The third level shows the components of the voice systems: cabinets and stations, for example.

For Clusters, the nodes in the tree are specifically related to ESS and LSP support.

Cluster Groups

ESS Clusters

ESS Configuration

LSP Clusters

LSP Configuration

You can open and close the branches of the tree by clicking the key icons. When the key points to the right, the subtree branches are closed. When the key points down, the subtree branches are displayed.

Click a group, a system, or a component of a system to view information about it.

Fault and Performance Manager places colored symbols by the nodes in the tree if there are exceptions in the branches beneath. By default, these symbols mean:

 Critical Alarm

 Major Alarm

 Minor Alarm

 Warning

The highest level of alarm that has occurred anywhere in a branch will be represented at the parent node so that you can see the alarm even if the branch is closed.

FPM Administration

The FPM Administration window lets you control which data Fault and Performance Manager collects from each voice system, whether it collects the data daily or hourly, and what time each day or hour it collects the data. View a list of the data that you can collect

Report Manager

The Report Manager lets you create customized performance, exception, and configuration reports for your voice system. After you create a report, the Report Manager lets you run the report immediately, save it to run later, or schedule it to run periodically. It lets you see the report output on the screen, send it to a printer, or write it to a file in HTML or character-delimited format. The Report Manager also lets you define reports containing data from multiple voice systems, giving you a comprehensive view of your voice system network. View a list of reports that Fault and Performance Manager can generate

Menus

The main window (the Network Monitor) contains the following menu options:

- File
  - **Administration:** Opens the FPM Administration Window
  - **Report Manager:** Opens the Report Manager Window
  - **Exit:** Exits Fault and Performance Manager
- View
  - **Refresh:** Refreshes the contents of the window if the displayed information has changed
- Help
  - **Help Topics:** Displays the Table of Contents for the help system
  - **Current Panel:** Accesses help on the panel in the display pane
  - **About:** Displays information about Fault and Performance Manager.

Status Bar

The Status Bar at the bottom of the Main Window displays the status of user requests.

Related Topics

- How to view your network

Administration window

FPM Administration Window

Overview

This window lets you specify what data to collect and when.

Note:

You can complete administration functions such as setting data collection parameters only from the server application GUI. Administration functions are not available from the web client.

The Navigation Pane displays the following tree structure. In the FPM Administration window, click the object in the Navigation pane that you want to administer. Below, you can click a link to learn more about that window.

- **Administration Root**
  - Default Parameters
- **Configuration Collection**
  - Trunk Exceptions
  - Alarms/Errors
  - Performance Collection
  - Processor Occupancy Exceptions
  - Trunk Group Exceptions
  - System Exceptions
  - System Groups
  - DEFINITY Parameters
- **Configuration Collection**
  - Trunk Exceptions
  - Alarms/Errors
  - Performance Collection
  - Processor Occupancy Exceptions
  - Trunk Group Exceptions

Menu Options

- **File**
  - **Close:** Closes the FPM Administration window
- **View**
  - **Refresh:** Refreshes the contents of the window if the displayed information has changed
- **Help**
  - **Help Topics:** Displays the Table of Contents for the help system

- **Current Panel:** Accesses help on the panel in the display pane
- **About:** Displays information about FPM.

Related Topics

- Understanding the Main Window
- Understanding the Report Manager

Filtering Alarms (Alarm Filter Panel)

The Alarm Filter Panel gives you detailed control of alarm collection and processing. You specify a set of parameters to filter out a selected set of alarms. Additional parameters define how often alarm collection occurs, and what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for alarm filtering.

- **Default Alarm/Error Panel**

  The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

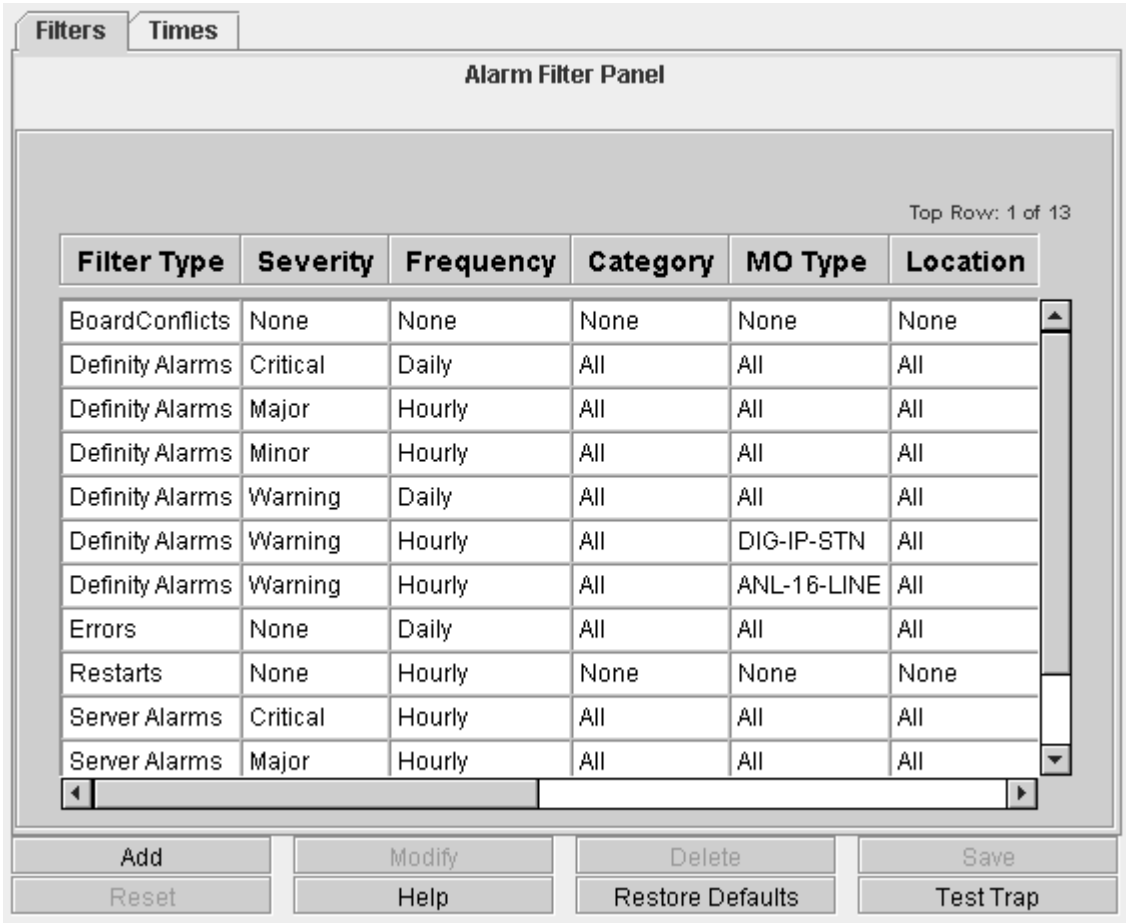
- **Custom Alarm/Error Panel**

  The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

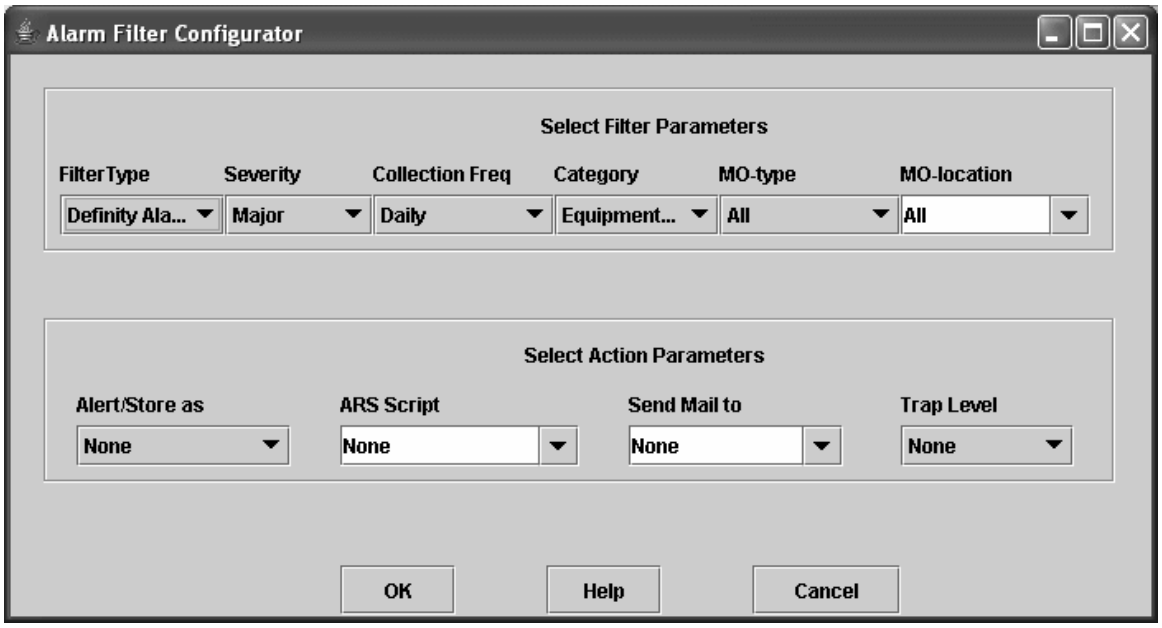
  For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Viewing Alarm Filters

Defined alarm filters are displayed as a scrolling list:



Selecting an alarm filter (or clicking **Add**) opens the selected filter (or a new filter) in the Alarm Filter Configurator.



Filter Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the upper section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Filter Type**: Select the type of alarm to be filtered:
  - **Definity Alarms:** Alarms collected from the Communication Managers and maintenance objects in the Communication Managers.

    Note:

    Definity Alarms *now includes the previous filter type:* ***Traps****. Selection of* ***Definity Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Traps*** *is no longer available.*
  - **Restart Alarms:** Restarts of the Communication Managers.

    Note:

    Restart Alarms *now includes the previous filter type:* ***Restarts****. Selection of* ***Restart Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Restarts*** *is no longer available.*
  - **Server Alarms:** Alarms collected from the Linux servers that hosts the Communication Managers.

    Note:

    Server Alarms *now includes the previous filter type:* ***Platform****. Selection of* ***Server Alarms*** *now provides both filtering on FPM and setting filters on the platform.* ***Platform*** *is no longer available.*

- **Errors:** Errors collected from the Communication Managers.
- **Board Conflicts:** Board conflicts detected in the Communication Managers (detected as conflicts between what is administered and what is actually plugged in).

- **Severity:** Select the severity of alarm to be filtered:
  - Major
  - Minor
  - **Warning** (custom filters only)
  - Critical
  - **Resolved** (custom filters only)
  - All
  - **None** (this field does not apply to this filter)

Notes:

- To receive traps for Warning and Resolved alarms, the Communication Manager must be release 3.0 or above, and **Use Custom Values** must be selected.
- The filters for warning and resolved alarms are sent to the Communication Manager g3Agent using SNMP. The agent must be properly setup and the **SNMP write community strings** must be provided when requested.
- There are a huge number of warning alarms. It is counterproductive to turn on all warning alarms on all maintenance objects. The intent of warning severity is to allow notification of events of particular interest on a limited number of crucial Maintenance Objects.

- **Collection Frequency**: select the frequency of alarm filtering:
  - **None** (this field does not apply to this filter)
  - Daily
  - Hourly

Note:

*This field is only used for **Filter Type** values **Definity Alarms, Server Alarms,** and **Errors** — those types that are collected on a schedule from the Communication Manager. This field does not apply to **Board Conflicts** or **Restart Alarms.***

- **Category**: Categories are groups of Maintenance Object types. (For example, when the **Filter Type** is *Definity Alarms*, the default *Equipment-Type* category expands to the MO group *{MediaGateways, Cabinets, Boards, Ports, Extensions, and Trunks}.* When a **Category** is chosen, the **MO-Type** contains the corresponding expanded list of Maintenance Objects.

  This field is only used for **Filter Type** values *Definity Alarms, Server Alarms, Platform, Errors* and *Traps.* This field does not apply to *Board Conflicts,* and *Restarts.*

- **MO-Type**: The Maintenance Object type can be selected from an appropriate list of Maintenance Objects within each **Category**. If a specific Maintenance Object is chosen, the filter applies only to Maintenance Objects of that type. If the value *All* is chosen, the filter applies to all Maintenance Objects in the **Category.**
- **MO-Location**: The default *All* applies the filter to all locations for the chosen **MO-Type.** If a location is specified, the filter applies only to that location.

Note:

*When the **MO-Type** is specified as **Error**, the **MO-Location** field contains the **Error Code**.*

Action Parameters: These parameters are shown in each row of the Alarm Filters panel, and in the lower section of the Alarm Filter Configurator used to define or edit alarm filters.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The alarm/trap information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The alarm/trap information is stored in the database and displayed with the selected severity.
  - **None:** The alarm/trap information is neither stored nor displayed.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*

Specifying Default Filters

The default Alarm/Error panel appears under ***Administration Root > Default Parameters > Alarms/Errors.***

The default alarm filters apply to all systems except those where custom alarm filters have been defined.

Specifying Custom Filters

The custom Alarm/Error panel appears under ***Administration Root > Voice System Parameters > [system name] > Alarms/Errors.***

For each voice system, collection can be on or off. Each voice system can use either the default alarm filter parameter values, or custom alarm filter parameters.

Adding, Modifying, and Deleting Alarm Filters

When the alarm filter panel is displayed, you can add, change, and delete filters using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Alarm Filter Configurator* with a blank form for a new filter.
- **Modify:** Select an existing filter by clicking on its row. Then click **Modify** to open the *Alarm Filter Configurator* with the selected filter parameters filled in for editing.

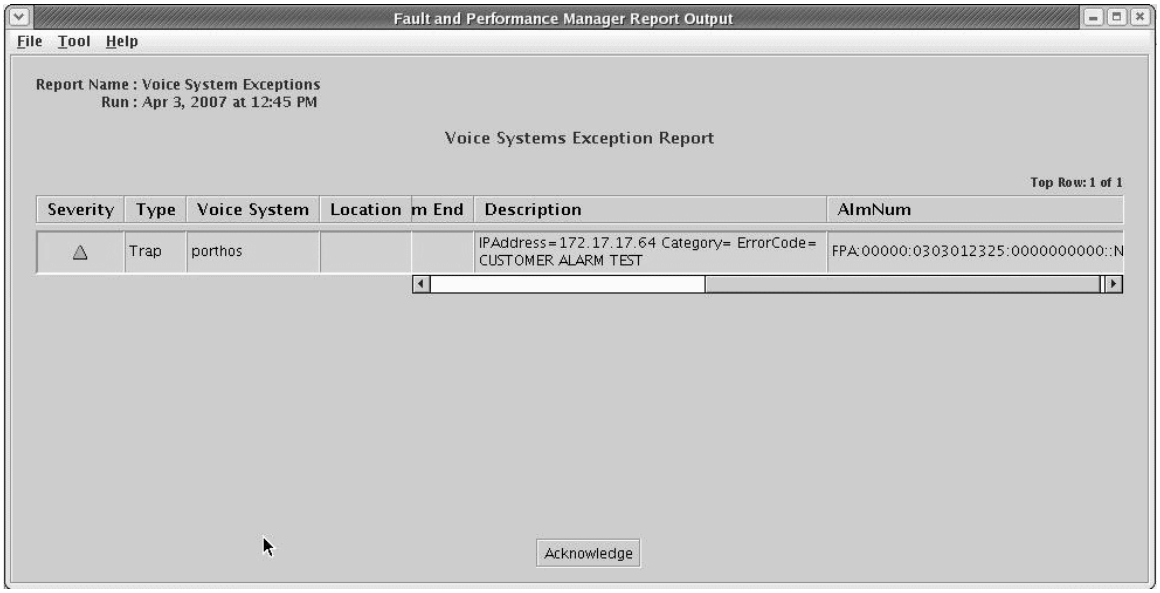
- **Delete:** Select one or more existing filters by clicking on their rows. Then click **Delete** to delete the selected filters. Multiple filters can be selected by clicking the first filter and then holding down the <shift> key and clicking the last filter.
- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.
- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

Generating Test Traps

The **Test Trap** button at the bottom of the *Alarm Filter Panel* generates a test trap.

- At the default level the **Test Trap** button is always enabled. FPM determines which voice systems have CM4.0 (load 730.0 and above) and sets those systems to generate a trap.
- At the voice system level clicking the **Test Trap** button generates a trap for that voice system. The **Test Trap** button is enabled only if the voice system has CM4.0 (load 730.0 and above).

If an appropriate alarm filter (**Type = Trap, Severity = Warning** or **All**) exists, the resulting traps display in the *Voice System Exception Report*. The Description indicates that this is a customer alarm test.



Filtering Alarms (Alarm Filter Panel)

Use this panel to set parameters for adjunct alarms and errors. There are four tabs in this panel as follows:

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Major Alarms**: Allows you to set actions to be taken for major alarm exceptions
  - **Store Exception**: check to store major alarms exception data.
  - **Alert:** check to store the alert status.
  - **Email/Notification**: check to send an email. You must fill in the destination email address.
  - **ARS Script**: check to execute an associated ARS script.
  - **Severity**: select the level of severity: **critical, major, minor, warning.** The default is **major.**
- **Minor Alarms**: Allows you to set actions to be taken for minor alarm exceptions
  - **Store Exception**: check to store minor alarms exception data.
  - **Alert**: check to store the alert status.
  - Severity: select the level of severity: critical, major, minor, warning. The default is minor.
- **Warning Alarms**: Allows you to set actions to be taken for warning alarm exceptions
  - **Store Exception**: check to store warning alarms exception data.
  - **Alert**: check to store the alert status.
  - Severity: select the level of severity: critical, major, minor, warning. The default is warning.
- **Inads Exception**: Allows you to set actions to be taken for Inads exceptions
  - **Store Exception**: check to store Inad exception data.

Voice System Parameters

If you are viewing this panel under the Voice System Parameters tree node, the following fields are also available:

- **Collection on**: sets whether or not trunk exception collection is turned on. Check to turn on. Clear to turn off.
  - **Use default values**: sets whether or not default values are used. Check to use default values.
  - **Use custom values**: sets whether or not custom values are used. Check to use custom values.

Related Topics

- How to Set Data Collection Parameters

Configuration Collection panel

The Configuration Collection panel is used to set parameters for collecting configuration data.

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Frequency:** Allows you to set configuration collection frequency parameters.
- **Times:** Allows you to set a schedule for collection of configuration data.
- **Collection Start Minute:** set the minute within the hour when configuration collection should start. Valid entries are 0-59. The default is 30.
- **Daily Collection Hour:** set the hour in the day when the configuration collection should start. Valid entries are 0-23 (24 hr. format). The default is 1.
- **Weekly Collection Day:** select the day during the week when the configuration collection should occur. Pay attention to the current time of day when you complete this field. If the hour (specified in the above field) has already passed, then the report will not run until the specified hour occurs during the following week.

Voice System Parameters

If you are viewing the Configuration Collection panel under the Voice System Parameters tree node, the following fields are also available:

- **Collection on:** sets whether or not configuration data collection is turned on. Check to turn on. Clear to turn off.
- **Use default values:** sets whether or not default values are used. Check to use default values.
- **Use custom values:** sets whether or not custom values are used. Check to use custom values.

Related Topics

- How to set data collection parameters

Performance Collection panel

Use this panel to set parameters for collecting performance data and alerting based on threshold values for any data field.

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Thresholds:** Allows you to set threshold alarms based on collected performance data.
  - **Performance Type:** Specifies the type of performance data to be used for setting thresholds.
  - **Field:** Specifies all available data fields for the **Performance Type** selected.
  - **Collection Freq:** Specifies if threshold testing is to be hourly, daily, or weekly (or not applicable).
  - **Operation:** Specifies how the data value is compared to the entered value (<, <=, =, >, >=).
  - **Threshold:** Specifies the value to be used for comparison.
  - **Alert/Store as:** Specifies the severity level associated with an alert.
  - **ARS Script:** Specifies any associated ARS script.
  - **Send Mail To:** Specifies recipients of email.
  - **Trap Level:** Specifies SNMP traps to be forwarded to other systems.
  - **NMS:** Select routing to any or all Network Management Systems in the drop-down checkbox list revealed by clicking the **NMS** button.
- **Collection Hours**: Allows you to set the schedule for collection of performance data.
  - **Collection**: Check **On** next to each day of the week that you want to schedule collection of performance data.
  - **Start Time**: Select the time (24 hr. format) to start collection of performance data.
  - **Stop Time**: Select the stop time (24 hr. time format) to stop collection of performance data.
- **Storage Limits**: Allows you to set the storage limits for performance data that is collected.
  - **Keep hourly data for**: Enter the number of days less than or equal to 186 (6 months)
  - **Keep daily peaks for**: Enter the number of days less than or equal to 730 (2 years)
  - **Keep weekly peaks for**: Enter the number of weeks less than or equal to 260 (5 years)
- **Times**: Allows you to set when performance data is to be collected.
  - **Hourly Data Collection Start Minute**: Enter the start minute for performance data collected hourly. Valid values are 0-59. The default is 7.
  - **Daily Collection Hour**: Enter the start hour for performance data collected daily. Valid values are 0-23 (24 hr. format). The default is 1.

Voice System Parameters

If you are viewing this panel under the Voice System Parameters tree node, the following fields are also available after you select a voice system:

- **Collection on**: sets whether or not performance collection is turned on. Check to turn on. Clear to turn off.
    - **Use default values**: sets whether or not default values are used. Check to use default values.
    - **Use custom values**: sets whether or not custom values are used. Check to use custom values.

Related Topics

- How to set data collection parameters

Threshold Alarm Panel

The Threshold Alarm Panel gives you detailed control of threshold alarm collection and processing. You specify a set of parameters to define threshold variables and values. Additional parameters define what actions to take when an alarm is received.

Use this panel to View, Add, Modify, and Delete parameters for threshold alarms.

- **Default Threshold Panel**

  The default Threshold panel appears under ***Administration Root > Default Parameters > Performance Collection.***

  The default Threshold panel applies to all systems except those where custom thresholds have been defined.

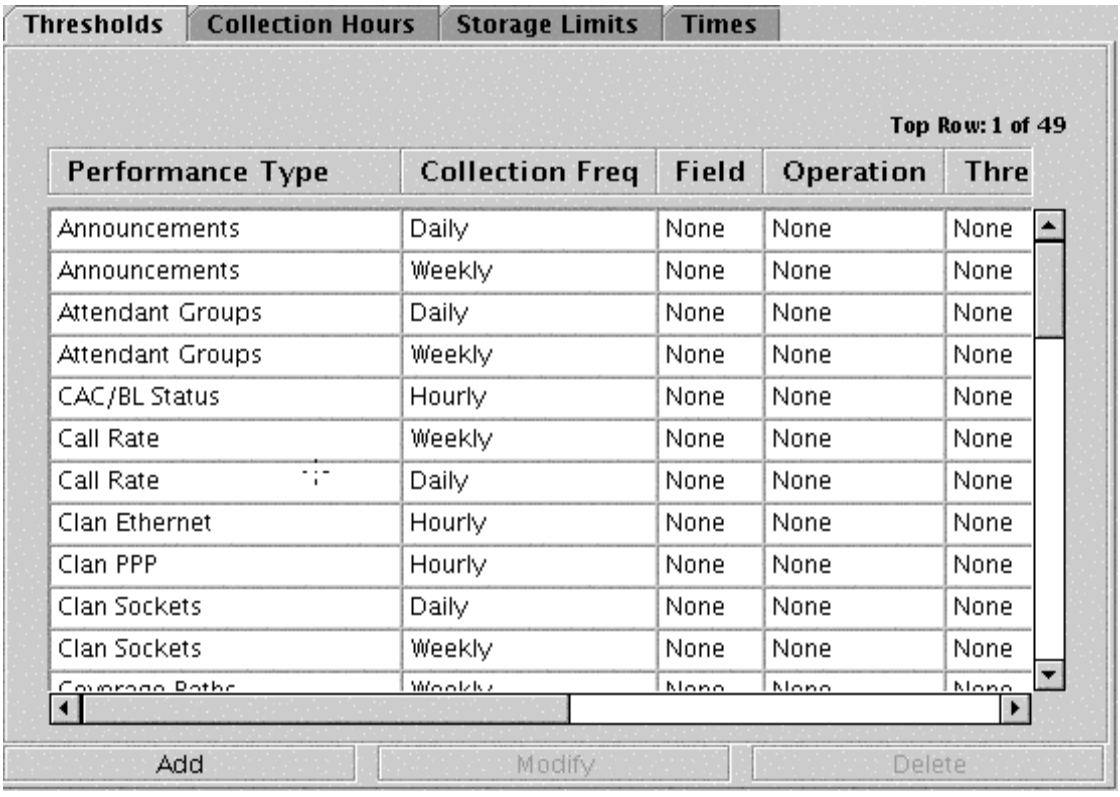
- **Custom Threshold Panel**

  The custom Threshold panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

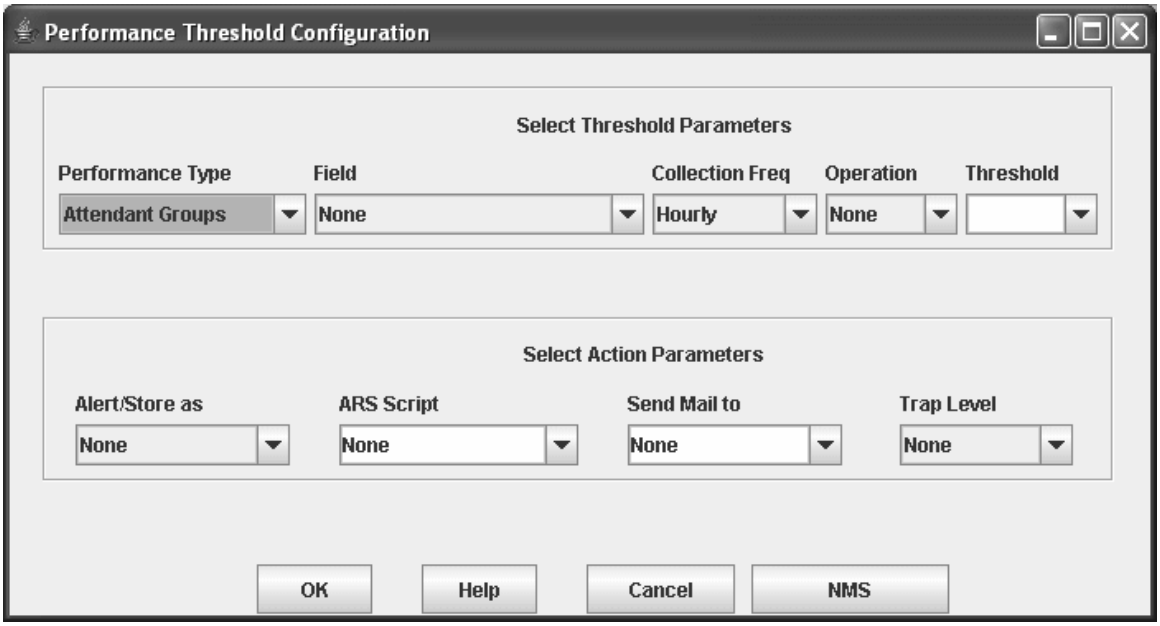
  For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Viewing Threshold Settings

Defined threshold settings are displayed as a scrolling list:



Selecting a threshold setting and clicking **Modify** (or clicking **Add**) opens the selected threshold (or a new threshold) in the Performance Threshold Configurator.



Threshold Parameters: These parameters are shown in each row of the Thresholds panel, and in the upper section of the Performance Threshold Configurator used to define or edit threshold settings.

- **Performance Type**: Select the type of threshold to be set:

Attendant Groups
Hunt Groups
Coverage Paths
Principal Data
Inter-Port Network Latency
Port Networks
Processor Occupancy
Routing Patterns
Security Violations
Switch Node Links
Tone Receivers
Trunk Groups
Trunk Groups, ISDN-PRI

Attendant Groups
Trunk Groups, Wideband
IP Codecs
IP DSP Resources
IP Signalling Groups
Announcements
CLAN Sockets
CLAN Ethernet
CLAN PPP
Call Rate
Multimedia Interface
Expansion Services Module
Voice Conditioners
Denial Events
CAC/BL Status

- **Field:** Select the data field to be tested for a threshold value:

  The fields available depend on the **Performance Threshold** selected. For each **Performance Threshold** type, all available data fields are listed.
- **Collection Frequency**: Select the frequency of threshold testing:
  - **None** (this field does not apply)
  - Hourly
  - Daily
  - Weekly
- **Operation:** Select the method of threshold testing:
  - **None** (this field does not apply)
  - **>** (data value is greater than threshold value)
  - **>=** (data value is greater than or equal to threshold value)
  - **=** (data value is equal to threshold value)
  - **<** (data value is less than threshold value)

- **<=** (data value is less than or equal to threshold value)

- **Threshold:** Enter a numeric value to be used for comparison to the data value.

Action Parameters: These parameters are shown in each row of the Thresholds panel, and in the lower section of the Performance Threshold Configurator used to define or edit threshold settings. **NOTE:** Routing to Network Management Systems outside of Fault and Performance Manager is on a concealed list of check boxes activated by the **NMS** button.

- **Alert/Store as:** Select the level of severity at which to alert and store.
  - **Store only:** The threshold information is stored in the database, but not displayed.
  - **Critical, Major, Minor, Warning:** The threshold information is stored in the database and displayed with the selected severity.
- **ARS Script**: The fully qualified name of any applicable ARS Script. The default is *None.*
- **Send Mail To**: The address to which to send email notification. The default is *None.*
- **Trap Level**: Select the level of severity at which to set an SNMP trap for another monitoring system.
  - **None:** Do not forward/generate a trap for this alarm/trap.
  - **Critical, Major, Minor, Warning:** Generate/forward a trap to the HP/OV NMS system. The default is *Major.*
- **NMS:** Select routing to any or all Network Management Systems in the list of check boxes revealed by clicking the **NMS** button.

Specifying Default Thresholds

The default Thresholds panel appears under ***Administration Root > Default Parameters > Performance Collection.***

The default thresholds apply to all systems except those where custom thresholds have been defined.

Specifying Custom Thresholds

The custom Thresholds panel appears under ***Administration Root > Voice System Parameters > [system name] > Performance Collection.***

For each voice system, collection can be on or off. Each voice system can use either the default threshold parameter values, or custom threshold parameters.

Adding, Modifying, and Deleting Thresholds

When the Thresholds panel is displayed, you can add, change, and delete thresholds using the buttons at the bottom of the panel:

- **Add:** Click **Add** to open the *Performance Threshold Configurator* with a blank form for a new threshold.
- **Modify:** Select an existing threshold by clicking on its row. Then click **Modify** to open the *Performance Threshold Configurator* with the selected threshold parameters filled in for editing.
- **Delete:** Select one or more existing thresholds by clicking on their rows. Then click **Delete** to delete the selected thresholds. Multiple thresholds can be selected by clicking the first threshold and then holding down the <shift> key and clicking the last threshold.
- **Save:** The **Save** button becomes active when any changes are mode to the panel. Click the **Save** button to save the changes to the database. Attempting to close the panel without saving requires a confirm dialog to save or discard the changes.

- **Reset:** The **Reset** button becomes active when any changes are mode to the panel. Click the **Reset** button to discards any changes to the panel and reloads the panel from the database.

Processor Occupancy Exceptions Panel

This panel is used to log processor occupancy data. There are two versions of this panel.

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Exception**: Allows you to set the processor occupancy exceptions.
- **Store Exception**: check to store processor occupancy exception data.
- **Alert**: check to store the alert status.
- **Email/Notification**: check to send an email. You must fill in the destination email address.
- **ARS Script**: check to execute an associated ARS script.
- **Select NMS to sent Traps:** Click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.
- **Severity:** select the level of severity: **critical, major, minor, warning.** The default is **major.**

Voice System Parameters

If you are viewing this panel under the Voice System Parameters tree node, the following fields are also available:

- **Exception:** Allows you to set how to administer processor occupancy exceptions for your voice system.
- **Use default values**: sets whether or not default values are used. Check to use default values.
- **Use custom values**: sets whether or not custom values are used. Check to use custom values.
- **Threshold**: Allows you to set occupancy threshold parameters for voice systems.

Related Topics

- How to set data collection parameters

System Groups Administration Panel

Use this panel to create new system groups and move systems into different system groups.

You might want to create groups of systems for the following reasons:

- If you are using DCS and not all of your systems belong to the same DCS configuration

  System groups need to be set up so that the Distributed Communications Service (DCS) Configuration windows (see DCS Connectivity Display and DCS Link Display) work properly when more than one DCS system is being managed. However, if all systems belong to the same DCS configuration, or if DCS is not in use, it is not necessary to create system groups.

- If you want to group systems for convenience

  By default, all systems belong to the Systems group.

What do you want to do?

- Create a system group
- Move a system to a new group
- What I want to do isn't listed here

Trunk Exceptions Panel

Use this panel to tell Fault and Performance Manager what to do when it encounters trunk exceptions.

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Lightly Used Trunks**: Allows you to set options for lightly used trunk exceptions
  - **Store Exception**: check to store exception data.
  - **Alert**: check to store the alert status.
  - **Email/Notification**: check to send an email. You must fill in the destination email address.
  - **ARS Script**: check to execute an associated ARS script.
  - **Select NMS to sent Traps:** Click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.
  - Severity: select the level of severity: critical, major, minor, warning.
- **Trunk Outages**: Allows you to set options for trunk outage exceptions
  - **Store Exception**: check to store exception data.
  - **Alert:** check to store the alert status.
  - **Email/Notification**: check to send an email. You must fill in the destination email address.
  - **ARS Script**: check to execute an associated ARS script.
  - **Select NMS to sent Traps:** Click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.
  - Severity: select the level of severity: critical, major, minor, warning.
- **Holding Times**: Allows you to set actions to be taken for ACA referrals for long and short holding times
  - **Store Exception**: check to store exception data.
  - **Alert**: check to store the alert status.
  - **Email/Notification**: check to send an email. You must fill in the destination email address.
  - **ARS Script**: check to execute an associated ARS script.
  - **Select NMS to sent Traps:** Click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.
  - Severity: select the level of severity: critical, major, minor, warning.
- **Frequency**: Allows you to set trunk collection frequency options
  - Daily
  - Hourly
- **Times**: Allows you to set a schedule for collection of trunk exceptions

- **Collection Start Minute**: set the minute within the hour when trunk exception collection should start. Valid entries are 0-59. The default is 7.
- **Daily Collection Hour**: set the hour in the day when the trunk exception collection should start. Valid entries are 0-23 (24 hr. format). The default is 1.

Voice System Parameters

If you are viewing this panel under the Voice System Parameters tree node, the following fields are also available:

- **Collection on**: sets whether or not trunk exception collection is turned on. Check to turn on. Clear to turn off.
- **Use default values**: sets whether or not default values are used. Check to use default values.
- **Use custom values**: sets whether or not custom values are used. Check to use custom values.
- **ACA Status**: an ACA status label indicates whether or not ACA is enabled on the selected system.

Related Topics

- How to set data collection parameters

Trunk Group Exceptions Panel

Use this panel to tell Fault and Performance Manager what to do when it encounters trunk group exceptions.

Default Parameters

If you are viewing this panel under the Default Parameters tree node, the following fields are available:

- **Exception:** Allows you to set the fields for administering trunk group exceptions
  - **Store Exception:** check to store trunk group exception data.
  - **Alert**: check to store the alert status.
  - **Email/Notification**: check to send an email. You must fill in the destination email address.
  - **ARS Script**: check to execute an associated ARS script.
  - **Select NMS to send Traps:** Click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.
  - Severity: select the level of severity: critical, major, minor, warning. The default is warning.
- **Calculation:** Allows you to set the fields for the traffic model and service objective to use.
  - **Model:** select the traffic model from the drop-down list. Valid values are ErlangB, ErlangC, and Retrial. The default value is ErlangB.
  - **Service Objective P. :** set the service objective. This is a numeric-only field. Valid values are 001-700. The default value is 010.

Voice System Parameters

If you are viewing this panel under the Voice System Parameters tree node, there is a table display. The table contains a row for each non-wideband trunk group in the voice system configuration. You can edit the rows in the table.

Related Topics

- How to set data collection parameters

System Exceptions Panel

Use this panel to tell Fault and Performance Manager what to do when it encounters problems collecting data or generating reports.

- **Maximum days to store exception records:**

  Enter the number of days that Fault and Performance Manager should store records about any problems it encounters collecting data or generating reports. **Valid values are 0-999. The default is 30 days.**

   **Note:**

  The longer the exception records are to be stored, the larger the database becomes. Use this to manage the size of the database and the lengths of time exception records are stored.

- **Collection Failure:**

  Use this tab to tell Fault and Performance Manager what to do when there is a data collection failure. Data collection failures could occur if the network is "down" between your Fault and Performance Manager server and your voice systems, or if a given voice system is down.

  - Check the **"Store Exception?"** check box if you want Fault and Performance Manager to store a record of the failure.
  - Check the **"Alert"** check box and select an alarm level if you want Fault and Performance Manager to display an alarm if it encounters problems collecting data.
  - Check the "**Email/Notification**" check box to send an email. You must fill in the destination email address.
  - Check the **"ARS Script"** check box to execute an associated ARS script.
  - Check the **"Select NMS to send Traps"** check box and click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.

- **Report Failure:**

  Use this tab to tell Fault and Performance Manager what to do when there is a report failure.

  - Check the **"Store Exception?"** check box if you want Fault and Performance Manager to store a record of the failure.
  - Check the **"Alert"** check box and select an alarm level if you want Fault and Performance Manager to display an alarm if it encounters problems generating reports.
  - Check the "**Email/Notification**" check box to send an email. You must fill in the destination email address.
  - Check the **"ARS Script"** check box to execute an associated ARS script.
  - Check the **"Select NMS to send Traps"** check box and click the **Details** button to reveal a list of checkboxes for defined Network Management Systems.

Related Topics

- How to set data collection parameters
- How to view or change report settings

Configuration & Status window

Board Display

This window provides the following information:

- Board configuration information, including:
  - The system name
  - The cabinet/carrier/slot location
  - The board type
  - The board code and suffix
  - The board vintage
  - The total number of ports
  - The DS1 board name (DS1 boards only)
  - The signaling mode (DS1 boards only)
  - The CSU module (DS1 boards only)
- An alert summary showing the alert counts for the selected board, and a sum of alert counts for all of the ports on the selected board
- Port information (when appropriate for the board type), including:
  - An alert indicator showing the highest alert for this port
  - The port number
  - The status (assigned, unassigned, or TTI)
- TCP/IP table (for CLAN boards only), including:
  - Connection state
  - Remote IP address
  - Remote Port
- Command buttons
  - **Busyout:** Sends the busy out command to the system for the selected board

CAUTION!

Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

Note:

Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.

- **Camp-on Busyout:** Sends the camp-on busyout command to the system for the selected board (TN2302AP, TN2302BP, or TN802B boards only).
- **Release:** Sends the release command to the system for the selected board
- **Exceptions:** Displays all exceptions for the selected board
- **Details:** Displays the Port Display for the selected port (default)(when appropriate for the board type), or connection details for CLAN boards.
- **Close:** Closes this window

Related Topics

- Board Display - ATM
- Boards Display

Board Display - ATM

This window provides the following information:

- An alert summary showing the alert counts for the selected board, and a sum of alert counts for all of the circuits on the selected board
- Board information, including:
  - The system name
  - The board's cabinet/carrier/slot location
  - The board name
  - The synchronization capable flag
  - The board type
  - The board code and suffix
  - The board vintage
- Circuit information, including:
  - An alert indicator showing the highest alert for the selected circuit
  - The port number
  - The trunk group number
  - The signaling group number
- Command buttons:
  - **Busyout:** Sends the busy out command to the system for the selected board

    CAUTION

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

    Note:

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for the selected board
  - **Exceptions:** Displays all exceptions for the selected circuit
  - **Details:** Displays the Port Display for the selected circuit (default)
  - **Close:** Closes this window

Related Topics

- Board Display
- Boards Display

Boards Display

This display appears when, in the navigation tree in the left pane of the Fault and Performance Manager main window, you click a voice system, then the "Cabinets" node, then a carrier, then a board. This display provides the following information:

- The System Name
- The board type
- The board code
- An Alert summary showing the alert severity and the count for this board.
- A Boards configuration table containing the following data about ports:
    - An icon representing the highest alert for the port
    - The port number
    - The port status
- Command buttons
    - **Exceptions:** Displays all exceptions for this board

Related Topics

- Board Display - ATM
- Board Display

Bulletin Board Display

This window provides the following information:

- System Name
- System Type
- A table containing message date and message text

Busy Out/Release Results Display

This display summarizes the results of a busy out or release of a board or trunk group.

CAUTION!

Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

Note:

Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.

Busyout/Release of Boards

The Busyout/Release of Boards Results window provides the following information:

- Configuration information, including:
  - The system name
  - The board location
- Results configuration table, including:
  - The port number
  - The result of the busy out or release for the selected board
- The voice system error code, in case of an error
- The voice system error message if there was an error
- Command buttons
  - **Close:** Closes this window

Busyout/Release of Trunk Groups

The Busyout/Release of Trunk Groups Results window provides the following information:

- Configuration information, including:
  - The system name
  - The trunk group number
- Results configuration table, including:
  - The trunk number
  - The result of the busy out or release for the selected trunk
- The Communication Manager software error code, in case of an error
- The Communication Manager software error message if there was an error
- Command buttons
  - **Close:** Closes this window

Cabinet Display

This display appears when you click "Cabinets" within a voice system node in the navigation tree in the left pane of the Fault and Performance Manager main window. This display provides the following information:

- The System Name
- The System Type and release
- An Alert summary showing the alert severity, count for this voice system, and the sum of counts for all the cabinets for this voice system
- A Cabinets configuration table containing the following data:
    - An icon representing the highest alert for the cabinet
    - Cab: the cabinet number
    - Layout: the cabinet layout
    - Type: the cabinet type
    - Building: the building location
    - Floor: the floor location
    - Room: the room number
    - Car A: the Port Network or Switch Node assigned to Carrier A
    - Car B: the Port Network or Switch Node assigned to Carrier B
    - Car C: the Port Network or Switch Node assigned to Carrier C
    - Car D: the Port Network or Switch Node assigned to Carrier D
    - Car E: the Port Network or Switch Node assigned to Carrier E
    - SRP: the name or product ID for the associated Survivable Remote Processor
- Command buttons
    - **Exceptions:** Displays all exceptions for this voice system
    - **Details:** Displays the Detailed Cabinet Display for the selected cabinet (default)

Related Topics

- Detailed Cabinet Display

Detailed Cabinet Display

This display includes either a cabinet graphic or a board table on the right side of the window. You can toggle between the graphic and table displays via the **Table View** and **Graphic View**. The graphic display shows the location and type of each board in the selected Cabinet, and each board is colored to indicate its alert level. You can double-click any board in the graphic display or in the board table to view a board display.

The Detailed Cabinet display provides the following information:

- Cabinet Configuration and Status, including:
  - System Name
  - Cabinet number
  - Layout
  - Type
  - Building location
  - Floor location
  - Room number
- An Alert summary showing the alert severity, alert counts for the selected cabinet, and a sum of alert counts for all of the boards in the selected cabinet
- Carrier information, including:
  - An alert indicator showing the highest alert for this carrier
  - Carrier ID number, type, and Port Network Number or Switch Node Number
- Board information (table), including:
  - An alert indicator showing the highest alert for this carrier
  - The cabinet/carrier/slot location
  - The board type
  - The board code and suffix
  - The board vintage
  - The total number of ports
  - The number of ports in use
  - The number of TTI ports
  - The number of PSA ports
  - The number of unused ports
- Command buttons
  - **Inventory:** Displays the inventory report for the selected cabinet
  - **Graphic View/Table View:** Toggles between the graphic and table data views
  - **Exceptions:** Displays all exceptions for the selected cabinet
  - **Details:** Displays the Board Display for the selected board (default)
  - **Close:** Closes this window

Related Topics

- Cabinet Display

Carriers Display

This display appears when you click a carrier within the "Cabinets" node, within a voice system node, in the navigation tree in the left pane of the Fault and Performance Manager main window. This display provides the following information:

- Cabinet Configuration and Status, including:
  - System Name
  - Cabinet number
  - Layout
  - Type
  - Building location
  - Floor location
  - Room number
  - Rack
- Carrier information, including:
  - A list of carriers within this cabinet
  - Alert indicators for carriers with exceptions
  - Carrier ID number, type, and Port Network Number or Switch Node Number
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected cabinet
  - **Details:** Displays details about the selected carrier

Data Modules Display

This window provides the following information:

- Data Modules information, including:
  - The system name
  - The system type and release
- An alert indicator showing alert counts for all data modules.
- Data Modules configuration information, including:
  - An alert indicator showing the highest alert for the selected data module
  - The data module extension
  - The data module location
  - The data module type
  - The data module name
- Command buttons
  - **Exceptions:** Displays all exceptions all data modules
  - **Details:** Displays the Port Display for the selected data module (default)

DCS Connectivity Display

This window provides the following information:

- DCS Connectivity configuration information, including:
  - The system name
  - The system type and release
  - The PBX ID of the voice system
- An alert indicator showing alert counts for all DCS components on the selected link.
- DCS Links information, including:
  - The name of the voice system on the far end of the selected link
  - The PBX ID of the voice system on the far end of the selected link
  - The DCS signaling type
  - The number of trunk groups
  - The number of trunks
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected DCS link
  - **Details:** Displays the DCS Link Display for the selected DCS link (default)

Related Topics

- DCS Link Display

DCS Link Display

This window provides the following information:

- DCS link configuration information, including:
  - The system name of the voice system
  - The PBX ID of the voice system on the selected link
  - The name of the voice system on the far end of the selected link
  - The PBX ID of the voice system on the far end of the selected link
- An alert indicator showing alert counts for all DCS components on the selected DCS link
- Trunk Groups information, including:
  - An alert indicator showing the highest alert for the selected trunk group
  - The voice system endpoint name
  - The PBX ID of the endpoint voice system
  - The trunk group number
  - The trunk group name
  - The number of trunks
  - The trunk group type
  - The trunk signaling type
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected DCS link (both ends)
  - **Details:** Displays the Trunk Group Display for the selected trunk group (default)
  - **Close:** Closes this window

Related Topics

- DCS Connectivity Display

ESS/LSP Configuration Display

This window provides the following information:

- System Name
- System Type

For each ESS or LSP, the following information is provided:

- name
- IP address
- The Service State (newer systems) or whether the ESS or LSP is available for translation update (older systems)
- the date and time when the translations were last updated

LSP Server Configuration Display

This window provides the following information:

- System Name
- System Type
- IP address and type for each LSP server

Media Gateway Stacks Display

This display appears when, in the navigation tree in the left pane of the Fault and Performance Manager main window, you click a system group node, then a system node, then the " MGStacks" node. This window provides the following information for the selected media gateway stacks:

- Media Gateway Stacks configuration and status information, including:
  - The system name
  - The system type
- An alert summary showing the alert counts for all the media gateway stacks
- Media gateway stacks information, including:
  - An alert indicator showing the highest alert for this media gateway stack
  - The media gateway stack number
  - The IP address for the media gateway stack
  - The system name
  - The system description
  - The system location
  - The system contact
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

    CAUTION!

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

    Note:

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port
  - **Exceptions:** Displays all exceptions for this port
  - **Close:** Closes this window

Related Topics

- Media Gateway Stack Display
- Media Module Configuration and Status Display
- Media Modules Display

Media Gateway Stack Display

This display appears when, in the navigation tree in the left pane of the Fault and Performance Manager main window, you click a system node, then the "MGStacks" node, then a specific media gateway stack. This window provides the following information:

- Media Gateway Stack configuration and status information, including:
  - The system name
  - The media gateway stack number
  - The hub address
  - The system name
  - The system description
  - The system location
  - The system contact
- Media Gateway information, including:
  - An alert indicator showing the highest alert for this media gateway
  - The media gateway number
  - The media gateway name
  - The IP address for the media gateway
  - The serial number of the media gateway
  - The node number of the voice system
  - The IP address for the active controller
  - The hardware type
  - The media gateway vintage
  - The suffix (indicates the board version)
  - The media gateway recovery rule number
  - The media gateway recovery rule type
  - The stack position
  - The stack number
  - The controllers
- Command buttons
  - **Refresh Recovery Rule:** Reads the recovery rule from the selected media gateway
  - **Exceptions:** Displays all exceptions for this media gateway
  - **Details:** Displays detailed information about the selected media gateway
  - **View Recovery Rule:** Displays the recovery rule from the selected media gateway

Related Topics

- Media Gateway Stacks Display
- Media Module Configuration and Status Display
- Media Modules Display

Media Module Configuration and Status Display

This display appears when, in the navigation tree in the left pane of the Fault and Performance Manager main window, you click a system node, then the "MGStacks" node, then a specific media gateway stack node, then a media gateway node, then a media module. This window provides the following information for the selected media module:

- Board information, including:
  - The system name
  - The media module type
  - The media module code
  - The board vintage
  - The suffix (indicates the board version)
- An alert summary showing the alert counts for the selected media module
- Port information, including
  - An alert indicator showing the highest alert for this port
  - The port number
  - The port status (assigned or unassigned)
- Command buttons
  - **Exceptions:** Displays all exceptions for this port

Related Topics

- Media Modules Display
- Media Gateway Stacks Display
- Media Gateway Stack Display

Media Modules Display

This display appears when, in the navigation tree in the left pane of the Fault and Performance Manager main window, you click a system node, then the "MGStacks" node, then a specific media gateway stack node, then a media gateway. This window provides the following information for the selected media module:

- Media gateway information, including:
  - The system name
  - The media gateway number
  - The media gateway name
- An alert summary showing the alert counts for the selected media gateway
- Media modules information, including
  - An alert indicator showing the highest alert for this media module
  - The media module type
  - The media module code
  - The media module vintage
  - The suffix (indicates board version)
  - The total number of ports
  - The number of ports being used
  - The TTI
  - The PSA
  - The number of unused ports
- Command buttons
  - **Exceptions:** Displays all exceptions for this media module
  - **Details:** Displays detailed information for the selected media module

Related Topics

- Media Module Configuration and Status Display
- Media Gateway Stacks Display
- Media Gateway Stack Display

Port Display - External Device

This window provides the following information for the selected external device:

- Port information, including:
  - The system name
  - The cabinet/carrier/slot/port location
  - The board type
  - The alternate name
  - The device description
  - The product identifier
  - The building
  - The address
  - The alarm level
- An alert summary showing the alert counts for the selected port
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

     **CAUTION!**

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

     **Note:**

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port
  - **Exceptions:** Displays all exceptions for this port
  - **Close:** Closes this window

Port Display - General

This display appears when, in the navigation tree in the left pane of the main window, you click a system node, then the "Cabinets" node, then a carrier, then a board, then a port. This window provides the following information:

- Port information, including:
  - The system name
  - The cabinet/carrier/slot/port location
  - The board type
  - The code
  - The identifier for the station, trunk, etc.
  - A second equipment type for the BRI port
  - A second identifier for the station, trunk, etc.
- An alert summary showing the alert counts for the selected port, and a sum of alert counts for all of the ports on the selected board
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

     **CAUTION!**

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

     **Note:**

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port
  - **Exceptions:** Displays all exceptions for this port
  - **Close:** Closes this window

Related Topics

- Port Display - Data Module
- Port Display - Trunk

Port Display - Data Module

This display appears when, in the navigation tree in the left pane of the main window, you click a system node, then the "Cabinets" node, then a carrier, then a board, then a port. This window provides the following information for the selected data module:

- An alert summary showing the alert counts for the selected port
- Port information, including:
  - The system name
  - The cabinet/carrier/slot/port location
  - The board type
  - The data module extension
  - The data module type
  - The name assigned to the data module
  - The call forwarding extension
  - The service state
  - Maintenance Busy indicator (yes/no)
  - The connected ports
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

    CAUTION!

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

    Note:

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port
  - **Exceptions:** Displays all exceptions for this port
  - **Close:** Closes this window

Related Topics

- Port Display - General
- Port Display - Trunk

Port Display - Station

This window provides the following information for the selected station:

- An alert summary showing the alert counts for the selected port
- Port information, including:
  - The system name
  - The cabinet/carrier/slot/port location
  - The board type
  - The board serial number
  - The port ID number
  - The station extension
  - The station type
  - The station name
  - The building location
  - The floor location
  - The room location
  - The cable
  - The jack
  - The current service state
  - A Maintenance Busy indicator (yes/no)
  - Send all calls (SAC) indicator (yes/no)
  - Call forwarding destination
  - Ring cutoff active indicator (yes/no)
  - The connected port locations
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

    CAUTION!

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

    Note:

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port

- **Exceptions:** displays all exceptions for this port
- **Close:** Closes this window

Port Display - Trunk

This display appears when, in the navigation tree in the left pane of the main window, you click a system node, then the "Cabinets" node, then a carrier, then a board, then a port. This window provides the following information for the selected trunk group:

- An alert summary showing the alert counts for the selected port
- Port information, including:
  - The system name
  - The cabinet/carrier/slot/port location
  - The trunk group number
  - The trunk group member number
  - The trunk group name
  - The access code
  - The size
  - The type
  - The direction
  - The wideband indication (yes/no)
  - The service/feature
  - The ACA flag (yes/no)
- Command buttons
  - **Busyout:** Sends the busy out command to the system for this port

     **CAUTION!**

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

     **Note:**

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for this port
  - **Exceptions:** Displays all exceptions for this port
  - **Close:** Closes this window

Related Topics

- Port Display - Data Module
- Port Display - General

Port Network ATM Link Display

This window provides the following information:

- Port network ATM link information, including:
  - The system name
  - The connection (A or B)
  - The port network connection number
  - The connection name
  - The port network number
  - The ATM board location
  - The ATM switch name
  - The authority and format identifier (AFI)
  - The ATM address
  - The high-order domain-specific part
  - The end system identifier
  - The selector
- The alert counts for the selected port network link
- Command buttons
  - **Change ATM:** Displays a dialog box to set the ATM switch name
  - **Telnet ATM:** Displays a login dialog box for the ATM switch
  - **Exceptions:** Displays all exceptions for the selected link
  - **Details:** Displays the Board Display for the board associated with the selected link (default)
  - **Close:** Closes this window

Related Topics

- Port Network Connectivity Graphical Display ATM
- Port Network Connectivity Table Display ATM

Port Network Connectivity Graphical Display - ATM

This window shows a graphical display of nodes for each port network and provides the following operational characteristics:

- On a voice system PNC map, Fault and Performance Manager displays a node of each port network (PN), clearly distinguishing between processor port network (PPN) and expansion port network (EPN), and a port number label.
- For each port network on a PNC map, each node is color-coded according to the most severe active exception on that node.
- For a selected port network, the user can access the Port Network Display via a pop-up menu.
- For ATM port network connectivity, Fault and Performance Manager displays a symbol representing the ATM network and the ATM link labeled with the link number and ATM switch name.
- The user can access the ATM port network link display via a pop-up menu on an ATM link on the PNC map.
- The user can Telnet to an ATM switch via a pop-up menu on an ATM switch icon.
- Information such as ATM switch name and SRP, can be displayed via a tool tip when the cursor is placed on a port network icon or link.

Note:

Double-clicking on an icon defaults to the first item in the pull-down menu for that icon. Double-clicking on a link defaults to the first item in the pop-up menu for that link.

- Command buttons
  - **Exceptions:** Displays all exceptions for the selected PNC.
  - **Table View:** Toggles between the graphic and table views
  - **Close:** Closes this window

Related Topics

- Port Network Connectivity Table Display ATM

Port Network Connectivity Graphical Display - Center Stage

This window shows a graphical display of nodes for each port network and provides the following operational characteristics:

- On a voice system PNC map, Fault and Performance Manager displays a node of each port network (PN), clearly distinguishing between processor port network (PPN) and expansion port network (EPN), and a port number label.
- For each port network on a PNC map, each node is color-coded according to the most severe active exception on that node.
- For a selected port network, the user can access the Port Network Display via a pop-up menu.
- For a center-stage switch PNC, port networks (PNs), switch nodes (SNs), SN-to-SN links, and PN-to-SN links are shown. The link is labeled with the fiber link number.
- For a center-stage switch PNC, the link between the SN and PN shows when the port network number uses DS1 facilities via a tool tip.
- The user can access the Switch Node Display via a pop-up menu on a switch node icon on the PNC map.
- The user can access the Fiber Link Display via a pop-up menu on a link on the PNC map.
- Information such as location, DS1, or SRP, can be displayed via a tool tip when the cursor is placed on a port network icon or link.

Note:

Double-clicking on an icon defaults to the first item in the pull-down menu for that icon. Double-clicking on a link defaults to the first item in the pop-up menu for that link.

- Command buttons
  - **Graphic View/Table View:** Toggles between the graphic and table data views
  - **Close:** Closes this window

Related Topics

- Port Network Connectivity Table Display - Center Stage

Port Network Connectivity Graphical Display - Direct Connect

This window shows a graphical display of nodes for each port network. This window provides the following operational characteristics:

- On a voice system PNC map, Fault and Performance Manager displays a node of each port network (PN), clearly distinguishing between processor port network (PPN) and expansion port network (EPN), and a port number label.
- For each port network on a PNC map, each node is color-coded according to the most severe active exception on that node.
- For a selected port network, the user can access the Port Network Display via a pop-up menu.
- For a direct-connect port network, the links are labeled with the fiber link numbers.
- The user can access the Fiber Link Display via a pop-up menu on a link on the PNC map.
- Information such as location, DS1, or SRP, can be displayed via a tool tip when the cursor is placed on a port network icon or link.

Note:

Double-clicking on an icon defaults to the first item in the pull-down menu for that icon. Double-clicking on a link defaults to the first item in the pop-up menu for that link.

- Command buttons
  - **Graphic View/Table View:** Toggles between the graphic and table data views
  - **Close:** Closes this window

Related Topics

- Port Network Connectivity Table Display Direct Connect

Port Network Connectivity Status Display

This window provides the following information:

- PNC Status information, including:
    - The system name
    - The system type and release
    - A software locked indicator (yes/no)
    - A standby busy indicator (yes/no)
    - A standby refreshed indicator (yes/no)
    - An interchange disabled indicator (yes/no)
    - A last status update indicating the NMS time of the last update to this display
- A-PNC/B-PNC Status information, including:
    - The mode (active/standby)
    - The state of health (functional, partially function, not functional)
    - InterPN index:
        - The Archangel Link Faults (number of PNs with EALs down)
        - The Neighbor Link Faults (number of PNs with LINK, RINL, or EI-SNIs neighbor link faults
        - The Hardware Faults (number of PNs affected by hardware faults in a link having an EI as an endpoint EXP-INTF)
        - The SNI Peer Link Faults (number of PNs affected by SNI peer link faults for SNIs connected to EIs)
        - The DS1C Facility Faults (number of PNs affected by DS1C facility faults)
    - InterSN index:
        - The SNL Link Faults (number of inter-switch node fibers affected by peer or neighbor link faults)
        - The SNI Hardware Faults (number of inter-switch node fibers affected by hardware faults)
- Command buttons
    - **Update:** Provides a status update from voice system with an NMS time stamp

Port Network Connectivity Table Display - ATM

This window provides the following information:

- Port Network Connectivity information, including:
  - The system name
  - The system type and release
  - The PNC (A or B)
- Alert counts for all ATM Port Network Connectivity (PNC) components
- Port Network Connection information, including:
  - An alert indicator showing the highest alert for the selected port network connection
  - The port network connection number
  - The connection name
  - The port network number
  - The ATM board location
  - The ATM switch name
  - The authority and format identifier (AFI)
  - The address format
  - The ATM address
  - The high-order domain-specific part
  - The end system identifier
  - The selector
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected PNC.
  - **Graphic View/Table View:** Toggles between the graphic and table views
  - **Details:** Displays the Port Network Link Configuration and Status display for the selected link (default)

Related Topics

- Port Network Connectivity Graphical Display - ATM

Port Network Connectivity Table Display - Center Stage

This window includes configuration tables for switch nodes, switch node links, and port network-to-switch node links, and provides the following information:

- Port Network Connectivity (PNC) information, including:
  - The system name
  - The system type and release
  - The PNC (A or B)
- Alert counts for all PNC components
- Switch node information, including:
  - An alert indicator showing the highest alert for the selected switch node
  - The switch node number
  - The carrier location
  - The building location
  - The floor location
  - The room location
- Switch node links, including:
  - An alert indicator showing the highest alert for the selected switch node link
  - The fiber link number
  - The first switch node number (SN-1)
  - The first switch node interface board
  - The second switch node number (SN-2)
  - The second switch node interface board
- Port Network links, including:
  - An alert indicator showing the highest alert for the selected port network link
  - The fiber link number
  - The switch node number
  - The switch node interface location
  - The DS1 converter location on the switch node number
  - The port network number
  - The expansion interface location
  - The DS1 converter location on the port network number
  - The converter type
- Command buttons
  - **Graphic View/Table View:** Toggles between the graphic and table data views
  - **Exceptions:** Displays all exceptions for the selected PNC

- **Details:** Displays the Switch Node Display or Fiber Link Display for the selected switch node, switch number-to-switch number link, or port network number-to-switch node number link (default)
- **Close:** Closes this window

Related Topics

- Port Network Connectivity Graphical Display - Center Stage

Port Network Connectivity Table Display - Direct Connect

This window provides the following information:

- Port Network Connectivity information, including:
  - The system name
  - The system type and release
  - The PNC (A or B)
- Alert counts for all Port Network Connectivity (PNC) components
- Port Network link information, including:
  - An alert indicator showing the highest alert for the selected port network link
  - The fiber link number
  - The first port network number (PN-1)
  - The expansion interface (EI) location for the first port network
  - The DS1 converter location for the first port network
  - The second port network number (PN-2)
  - The expansion interface (EI) location for the second port network
  - The DS1 converter location for the second port network
  - The DS1 converter type
- Command buttons
  - **Graphic View/Table View:** Toggles between the graphic and table data views
  - **Exceptions:** Displays all exceptions for the entire PNC
  - **Details:** Displays the Fiber Link Display for the selected link (default)

Related Topics

- Port Network Connectivity Graphical Display - Direct Connect

Port Network Display

This window provides the following information:

- Port Network information, including:
  - The system name
  - The port network number
  - The port network type
  - The cabinet that contains the selected port network
  - The carriers associated with the selected port network
  - The building location
  - The floor location
  - The room location
  - The name or product ID of the associated Survivable Remote Processor (SRP)
- An alert summary showing:
  - The alert counts the selected port network
  - Alert counts summed up for all of the boards in the selected port network
- Board information, including:
  - The cabinet/carrier/slot location
  - The board type
  - The board code and suffix
  - The board vintage
  - The total number of ports
  - The number of ports in use
  - The number of TTI ports
  - The number of unused ports
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected port network
  - **Details:** Displays the board display for the selected board (default)
  - **Close:** Closes this window

Fiber Link Display

This window provides the following information:

- Alert summary information, including:
  - The alert counts for the selected fiber link and associated boards
  - The alert counts for the selected fiber link
- Fiber link configuration information, including:
  - The system name
  - The system type and release
  - The fiber link number
  - The PNC (A or B)
  - The first endpoint port network number or switch node number
  - The second endpoint port network number or switch node number
  - The control state
  - The service state
- Board information, including:
  - An alert indicator showing the highest alert for this board
  - The board location
  - The port network or switch node number
  - The board type
  - The board code and suffix
  - The board vintage
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected fiber link
  - **Details:** Displays the Board Display for the selected board (default)
  - **Close:** Closes this window

Routing Patterns Display

This window provides the following information:

- Routing patterns information, including:
  - The system name
  - The system type and release
- An alert summary showing alert counts for all routing patterns.
- Routing Patterns configuration information, including:
  - An alert indicator showing the highest alert for the selected routing
  - The routing pattern number
- Command buttons
  - **Exceptions:** Displays all exceptions all routing patterns
  - **Details:** Displays the Port Display for the selected routing pattern (default)

Related Topics

- Routing Pattern Display -Trunk Groups

Routing Pattern Display — Trunk Groups

This window provides the following information:

- Routing pattern information, including:
  - The system name
  - The system type and release
  - The routing pattern number
  - The routing pattern name
- An alert indicator showing alert counts for the selected routing pattern
- Trunk Groups configuration information, including:
  - An alert indicator showing the highest alert for the selected trunk group
  - The trunk group number
  - The trunk group name
  - The trunk access code
  - The number of trunks
  - The trunk group type
  - The direction (incoming, outgoing, or two-way)
  - The Wideband indication (yes/no)
  - The service/feature for ISDN-PRI CBC trunk groups
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected routing pattern
  - **Details:** Displays the Trunk Group Display for the selected trunk group (default)

Related Topics

- Routing Patterns Display

Server Display

This display appears when you click "Server#" within a voice system node in the navigation tree in the left pane of the Fault and Performance Manager main window. This display provides the following information:

- The Server Name
- The Server IP address
- The Server Status (active/standby)
- An Alert summary showing the alert severity, count for this server
- A Port Connections table containing the following data:
    - Service: Type of service the port is supporting on the connection
    - Destination: The IP address of the far end
    - Port: The IP Port used for the connection
- Command buttons
    - **Exceptions:** Displays all exceptions for this voice system
    - **Details:** Displays the Detailed Cabinet Display for the selected cabinet (default)

Stations Display

This window provides the following information:

- Station information, including:
    - The system name
    - The system type and release
- An alert indicator showing alert counts for all stations with exceptions
- Stations with exceptions information, including:
    - An alert indicator showing the highest alert for the selected station
    - The station extension
    - The port location
    - The station type
    - The station name
- Command buttons
    - **Exceptions:** Displays all exceptions for all stations
    - **Details:** Displays the Port Display for the selected station (default)

Switch Node Display

This window provides the following switch node information:

- Alert counts for the selected switch node
- Switch node information, including:
    - The system name
    - The system type and release
    - The switch node number
    - The PNC (A or B)
    - The carrier location
    - The building location
    - The floor location
    - The room location
- Board information, including:
    - The cabinet/carrier/slot location
    - The board type
    - The board code and suffix
    - The board vintage
- Command buttons
    - **Exceptions:** Displays all exceptions for the selected switch node
    - **Details:** Displays the Board Display for the selected board (default)
    - **Close:** Closes this window

System Configuration Display

This screen summarizes key configuration information about the node that you are looking at and serves as a "gateway" into a more extensive look at the selected node. You cannot make changes to this screen.

This window provides the following information:

- System configuration information, including:
  - The system name
  - The system type and release
  - The IP address
  - The connection status
  - The change status
- An Alert summary showing the alert severity and count for the selected voice system's components
- A listing of system components (such as Cabinets, Port Networks, Trunk Groups, and so on) and any corresponding alerts
- Command buttons
  - **Exceptions:** Displays all exceptions for the selected voice system
  - **Details:** Displays the selected voice system component (default)
  - **Update:** Represents a status update from the voice system.

System Group & Adjuncts Group Graphic Display

This graphic view contains the following operational characteristics:

- For the group selected in the tree, Fault and Performance Manager displays a map with all voice systems or adjunct systems in that group.
- For DCS and IP Trunk groups, FPM displays the DCS or IP Trunks connecting the systems.
- Each icon is color-coded according to the most severe active exception on each system.
- For the selected system icon on the map, the user can access the system component status display by a pop-up menu. The choices in the menu are the same as those available in the tree node. The pop-up menu also contains the following choices: **System**, which displays the System Display for the selected system, and **Telnet to Proxy**, which displays a login window for the Proxy Agent.
- The user can access the system configuration display by double-clicking on the desired system icon.
- A DCS link between any two voice systems indicates the signaling type (ISDN, X.25) and is color-coded for the most severe active exception on the link. The signaling type is indicated via a tool tip.
- The user can access the DCS link display or IP trunk display through a pop-up menu on a selected link between two connected voice systems.

Note:

Double-clicking on an icon defaults to the first item in the pull-down menu for that icon. Double-clicking on a link defaults to the first item in the pop-up menu for that link.

Related Topics

- System Group Table Display

System Group Table Display

This window provides the following information for the selected system group:

- An alert summary showing alert counts summed up for all of the systems in the selected group
- A configuration table including:
    - An alert indicator showing the highest alert for the selected system
    - The system name
    - The system type
    - The system release
    - The PBX ID
    - The software version
    - An update ID
    - An update state
- Command buttons
    - **Exceptions:** Displays all exceptions for all systems
    - **Graphic View/Table View:** Toggles between the graphic and table data views
    - **Details:** Displays the System Display for the selected system (default)

Related Topics

- System Group Graphic Display

System Status Display

This window provides the following information:

- System name
- System type and release
- Active SPE (A or B)
- Static Occupancy: static CPU occupancy
- Call Processing Occupancy: call processing CPU occupancy
- System Management Occupancy: system management CPU occupancy
- Idle Occupancy: idle CPU occupancy
- Trunks Busied: number of trunks that have been busied out
- Stations Busied: number of stations that have been busied out
- Other Busied: number of other objects busied out
- Logins: number of user logins
- Last Alarms/Errors Refresh: NMS time of last alarms/errors collection
- Last Configurations Refresh: NMS time of last configuration collection
- Last status Update: NMS time of last status data refresh
- Current Item: Current item in the queue
- Queued Items: Items in the queue
- Command buttons
    - **Update Queue:** Requests a queue update from the voice system
    - **Update Status:** Requests a status update from the voice system
    - **Refresh Alarms/Errors:** Requests a refresh of alarm and error data
    - **Refresh Configuration:** Requests a refresh of the configuration data

Trunk Group Display

This window provides the following information:

- Trunk Group configuration information, including:
  - The system name
  - The system type and release
  - The trunk group number
  - The trunk group name
  - The trunk access code
  - The number of trunks
  - The trunk group type
  - The direction (incoming, outgoing, or two-way)
  - The Wideband indication (yes/no)
  - The service/feature for ISDN-PRI trunk groups
- An alert summary showing alert counts for all the trunks in the system
  - Alert counts for the selected trunk group
  - Alert counts for the trunks in the selected trunk group
- Trunks with exceptions information, including:
  - An alert indicator showing the highest alert for the selected trunk
  - The trunk group member number
  - The trunk group member port
- Command buttons
  - **Busyout:** Sends the busy out command to the system for the selected trunk group

    CAUTION!

    Busying out a trunk, trunk group, port, or boards can significantly interrupt the operation of your telecommunications system. Be certain that you understand the ramifications in the context of your own system before using this feature. For more information, refer to the documentation that came with your Communication Manager.

    Note:

    Busyout/release must be enabled in Avaya Proxy Agent before it will work properly in Fault and Performance Manager. To enable this capability in Avaya Proxy Agent, consult Avaya Proxy Agent Configuration, which came on the Avaya Proxy Agent software CD-ROM.
  - **Release:** Sends the release command to the system for the selected trunk group
  - **Exceptions:** Displays all exceptions for the selected trunk group
  - **Details:** Displays the Port Display for the selected trunk group (default)
  - **Close:** Closes this window

Related Topics

- Trunk Groups Display

Trunk Groups Display

This window provides the following information:

- Trunk Groups information, including:
  - The system name
  - The system type and release
- An alert summary showing alert counts for all trunk groups in the system
- Trunk Group configuration information, including:
  - An alert indicator showing the highest alert for the selected trunk group
  - The trunk group number
  - The trunk group name
  - The trunk access code
  - The number of trunks
  - The trunk group type
  - The direction (incoming, outgoing, or two-way)
  - The Wideband indication (yes/no)
  - The service/feature for ISDN-PRI CBC trunk groups
- Command buttons
  - **Exceptions:** Displays all exceptions for all trunk groups
  - **Details:** Displays the Trunk Group Display for the selected trunk group (default)

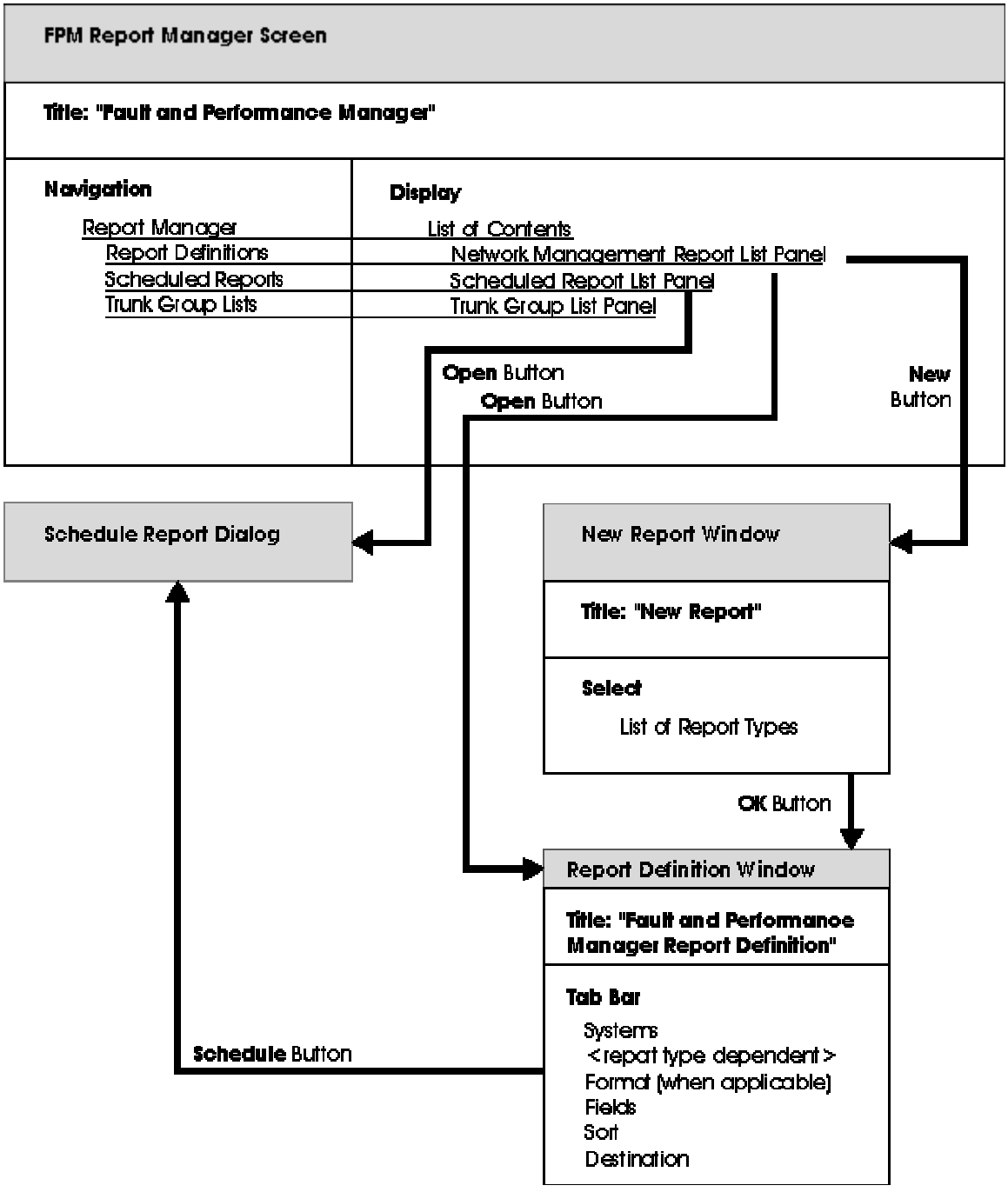
Related Topics

- Trunk Group display

Report Manager window

Report Manager Screen

From the File menu of the *Configuration and Status* screen you can select **File > Report Manager...** to open the *FPM Report Manager* screen.



The *FPM Report Manager* screen provides:

- Report Definitions

  The Report Definitions panel lists all currently defined reports.

  For new reports, you can select report type, systems, and other parameters. You can schedule when reports are run on a regular basis. You can create ad-hoc reports and run them immediately when investigating a problem.

  For the types of reports you can define, see Report Types in the following topic.

- Scheduled Reports

  You can select any regularly scheduled report that has been saved to a file and display it or print it.

- Trunk Group Lists

  You can define trunk group lists for reports that are based on network performance rather than system performance.

Related Topics

- New Report Dialog Box
- Report Types
- Defined Reports
- Scheduled Reports
- Trunk Group Lists

Reports Types

Note:

Selection of a report type does not determine whether or not you have collected and saved the necessary information for the report. See Filtering Alarms, Default and Custom System Parameters, and Performance Data for data collection information.

FPM produces many types of reports. The report types are listed below:

Notes:

- If the value in the Time Scale column is "N/A", the report is not tied to any time scale. There are two different types of Time tabs, one for the exception reports and one for performance reports. On some of the performance reports, there are limited options on the Time tab.
- The available tabs are listed under Component Selection.
- If the value in the Secondary Data column is anything other than "N/A", the Report Output dialog box has a drop-down list where you can choose to display primary data, or one or more types of secondary data.

- Configuration Reports

  Configuration reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Board Inventory (table format only)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory may include all boards or only selected systems or locations.	N/A	Systems tab Location tab	N/A
Board Report (table format only)	Board Report shows a list of installed boards (circuit packs). The report may include all boards, or it may be filtered by system, type, code, or location.	N/A	Location tab Board Type tab	N/A
Capacity Report (table format only)	Capacity Report provides used and available capacity information for a switch. The report displays information for the selected switches.	N/A	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Board Inventory (online)	Board Inventory shows a count of boards (circuit packs) by type, code, suffix, and vintage. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Board Report (online)	Board Report shows a list of installed boards (circuit packs). The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Capacity Report (online)	Capacity Report provides used and available capacity information for a switch. The inventory is filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A

- Exception Reports

  Some exception reports can be run from the **View** menu (online) on the main *Configuration and Status* screen or *System Detail* screen as well as from the *Report Manager* screen. While the online and Report Manager reports are similar, they are not identical.

Report Type	Description	Time Scales	Component selection	Secondary data
Exceptions: Adjunct Systems (table format only)	Adjunct Exceptions shows adjunct-related exceptions, for example, alarms or traps. Exceptions may be filtered by system or by time.	Time tab (Excptns)	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Exceptions: Fault/Performance Manager (table format only)	Network Manager exceptions shows exceptions related to this application, for example, failure to collect data or run a scheduled report. Exceptions may be filtered by type or time.	Time tab (Excptns)	N/A	N/A
Exceptions: Voice System (table format only)	Voice System Exceptions shows voice system-related exceptions, for example, alarms or TG GOS violations. Exceptions may be filtered by system, type, location, or time.	Time tab (Excptns)	Systems tab Types tab Location tab	N/A
Exceptions: Voice System (online)	Voice System Exceptions shows voice system-related exceptions. The exceptions are filtered automatically based on the current position in the Configuration and Status or System Detail screen.	N/A	Automatic	N/A
Exceptions: Transaction Logs	Transaction Logs shows all transactions in FPM such as logins and busyouts and releases on media modules and ports.	Time tab (Excptns)	Systems tab	N/A

- Performance Reports

  Performance reports run only from the Report Manager. However, you can go directly to the New Report dialog box from **View > Performance Data** on the main *Configuration and Status* screen.

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Announcements	Announcements performance shows maximum in-region and out-region play requests queued, requested, and dropped. Records may be filtered by system time.	Time tab	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Attendant Groups	Attendant Group performance shows call counts and usage for the group and for individual attendants. Records may be filtered by system and time.	Time tab	Systems tab	Attendants
Performance: CAC/BL Status	Call Admission Control / Bandwidth Limitation performance shows source and destination region, connection type and status, bandwidth limit value and units, transmission and reception bandwidth and number of connections, and number of denials.	Time tab	Systems tab	N/A
Performance: Call Rate	Call Rate performance shows busiest hour and interval. May be filtered by system and time.	Time tab	Systems tab Call Rate Types tab	N/A
Performance: CLAN Ethernet	CLAN Ethernet performance shows CLAN ethernet crc counts, and delta by board. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: CLAN PPP	CLAN PPP performance shows CLAN PPP crc counts and delta by board. May be filtered by system and time.	Time tab	Systems tab Board Type tab	N/A
Performance: CLAN Sockets	CLAN Sockets performance shows CLAN socket usage, and denial counts and percentages by boards and regions. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Coverage Paths	Coverage Paths performance shows configuration, usage, and call counts. Records may be filtered by system, coverage path, and time.	Time tab	Systems tab Coverage Paths tab	N/A

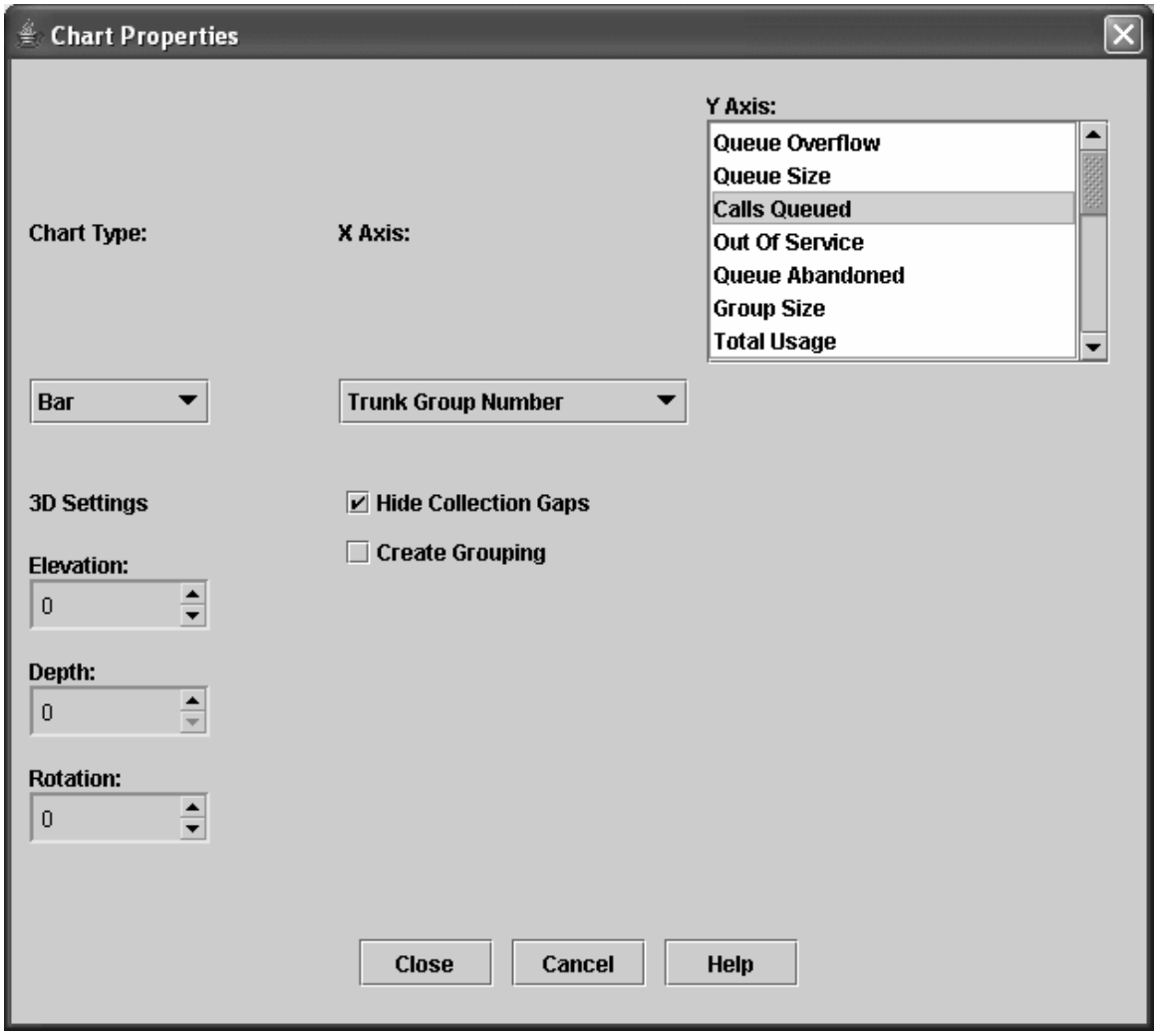
Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Denial Events	Denial Events performance shows event type, description, event data, first occurrence, last occurrence, and event count. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Expansion Services Module	Expansion Service Module performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Hunt Groups	Hunt Group performance shows configuration, usage, and call counts. May be filtered by system, hunt group, and time.	Time tab	Systems tab Hunt Groups tab	N/A
Performance: Inter-Port Network Latency	Inter-Port Network Latency shows PN connection requests and ATM setup requests with average delay in milliseconds. Records may be filtered by system, PN pairs, and time.	Time tab	Systems tab PN Connections tab	N/A
Performance: IP Codecs	IP Codecs performance shows G.711/G.732/G.729 codec usage, in CCS or Erlangs for IP codecs. Records may be filtered by system, IP codec type, and time.	Time tab	Systems tab	N/A
Performance: IP DSP Resources	IP DSP Resources performance shows configuration, usage, and peg counts for IP DSP resources. Records may be filtered by system and time.	Time tab	Systems tab	N/A
Performance: IP Signaling Groups	IP Signaling Groups performance shows packet latencies, and packets sent and lost for IP Signaling Groups. Records may be filtered by system and time.	Time tab	Systems tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Multimedia Interface	Multimedia Interface performance shows available ports/usage, total usage/allocation, denials, out of service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Port Networks	Port Networks performance shows usage and peg counts. Records may be filtered by system, PN pair, and time.	Time tab	Systems tab Port Networks tab	N/A
Performance: Principal Data	Principal Data performance shows configuration, usage, and call counts. Records may be filtered by system, principal data, and time.	Time tab	Systems tab Principal Data tab	N/A
Performance: Processor Occupancy	Processor Occupancy shows occupancy and call counts. May be filtered by system and time.	Time tab	Systems tab	N/A
Performance: Routing Patterns	Routing Patterns performance shows call counts for routing patterns and trunk groups within routing patterns. Records may be filtered by system, routing pattern, and time.	Time tab	Systems tab Routing Patterns tab	Trunk groups
Performance: Security Violations	Security Violations includes valid and invalid attempts by port type and by system. Records may be filtered by system and time.	Time tab	Systems tab	Port types
Performance: Switch Node Links	Switch Node Link performance shows usage and peg counts. Records may be filtered by system, SN link, and time.	Time tab	Systems tab Switch Node Links tab	N/A

Report Type	Description	Time Scales	Component selection	Secondary data
Performance: Tone Receivers	Tone receiver performance shows peg counts for each tone receiver type and port network. Records may be filtered by system, tone receiver type, and time.	Time tab	Systems tab Tone Receivers tab	Port networks
Performance: Trunk Groups	Trunk Group performance shows usage, peg count, and grade-of-service.	Time tab	Systems tab Trunk Groups tab	Primary Data or Average Data
Performance: Trunk Groups ISDN-PRI CBC	ISDN-PRI performance shows configuration, usage, and counts for ISDN TG	Time tab	Systems tab Trunk Groups tab	ISDN services or features, and usage allocation plans
Performance: Trunk Groups, Wideband	Wideband Trunk performance shows configuration, usage, and peg counts for wideband TGs. Records may be filtered by system, TG or TG list, and time.	Time tab	Systems tab Trunk Groups tab	N/A
Performance: Voice Conditioner	Voice Conditioner performance shows available counts/usage, H320/voice/total usage/allocation/denials, out-of-service, and blockage. May be filtered by system and time.	Time tab	Systems tab	N/A

Chart Properties Dialog Box

This dialog box allows you to set charting options for your report. It is accessed by clicking **Chart** on the Format tab of the Report Definition dialog box.



note:
Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

To set chart options, complete the following steps:

1. Set the chart format by filling in the following fields:

Field	Description
Chart Type	Select the type of chart: Bar, Stacked Bar, Line, or Pie

Field	Description
3D Settings	Set the appearance of the chart in three dimensions: **Elevation** - sets the position of the observer above the horizontal axis from -45? to +45?. A negative elevation positions the observer below the horizontal axis. (Default is 0 for a two-dimensional graph only.) **Depth** - sets the depth of the graph as a percent of the width from 0 - 500%. (Default is 0 for a two-dimensional graph only. In this case, both Elevation and Rotation are ignored.) **Rotation** - sets the position of the observer to the right or left of the vertical axis from -45? to +45?. (Positive rotation positions the observer to the right of the vertical axis; negative rotation positions the observer to the left of the vertical axis.) **Notes**: If both Elevation and Rotation are zero (0), the graph is two-dimensional and the Depth is ignored. If the Depth is a non-zero value, and either Elevation or Rotation is a non-zero value, then the graph is three-dimensional, but the effect is somewhat flat. **Tip**: To achieve the best 3D effect, each of the above settings should be a non-zero value.
X Axis	Set the X-axis to one of the Key fields previously defined for the report. The default is the voice system date and time.
Hide Collection Gaps	Check to delete gaps in the data. For example, if data collection is scheduled only during business hours (9:00 a.m. to 5:00 p.m.), setting this option ensures that gaps during off-hours and weekends are deleted.
Create Grouping	Check to group measurements according to the values of one grouping field.
Group By	If Create Grouping is checked, select one field from the key fields selected on the **Fields** tab. The default is the voice system name.
Y Axis	If Create Grouping is checked, select one Y-axis measurement from the non-key numeric fields selected on the **Fields** tab. The default is the first non-key numeric field. If Create Grouping is not checked, select up to 10 Y-axis measurements from the non-key numeric fields selected on the **Fields** tab. **Tip:** The fields available on the X- and Y-axes are the fields selected on the **Fields** tab. If you set chart properties here and then go back and change the selections on the **Fields** tab, this may change the chart in unpredictable ways.

2. Click **Close** to close the Chart Properties dialog box.

Related Topics

- How to print a report

Report Definitions Display

This window includes the following information:

- Alert indicator showing the alert level (if there is a report run failure)
- The Report Name
- The Report Type
- The Time Scale
- Command buttons
    - **New:** Displays the New Report dialog box
    - **Open:** Displays the Report Definitions dialog box for the selected report. This button is only active when a report is selected.
    - **Exceptions:** Displays an Output window showing active report failure exceptions for the selected report
    - **Delete:** Displays a confirmation dialog box to confirm deletion of a report. After the deletion is confirmed, the report and schedules are deleted, and the corresponding report row in the Report List display is deleted.
    - **Help:** Displays the online help for the Report Definitions display.

Related Topics

- Create a new report
- View or change report settings
- Run or schedule a report
- View a report
- Print a report

Report Output Window

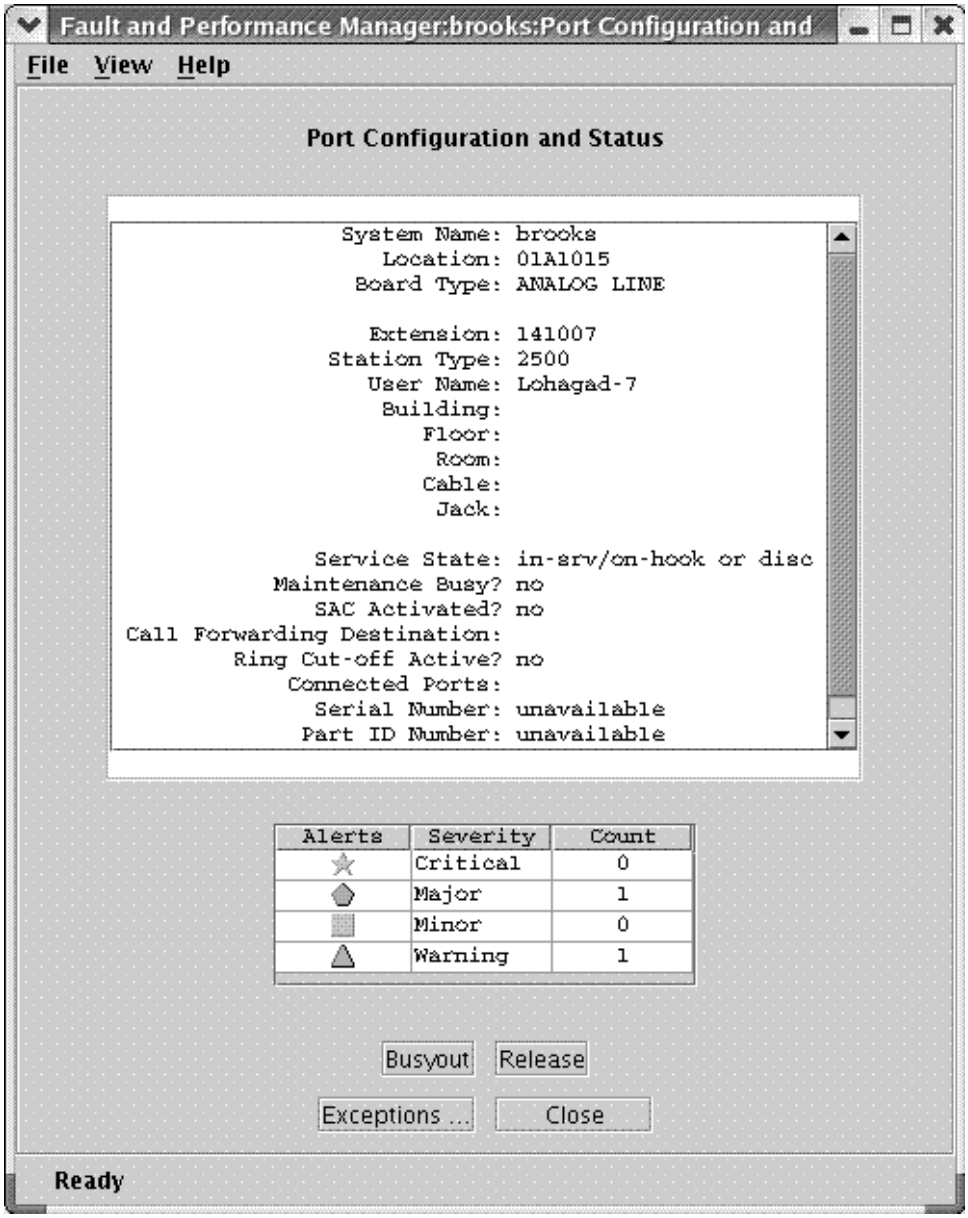
This window provides the following information:

- Report name
- Run date and time
- Time interval covered by the report (Start date and time and End date and time)
- Primary data/Secondary data combo selection box (if the report type contains secondary data types)

Menu Options

The Report Output Window includes the following menu options:

- **File:**
  - **Open>Chart:** Shows the selected report output in chart format (if supported by the report type).
  - **Open>Table:** Shows the selected report output in table format.
  - **Save As:** Opens a dialog box that lets you save the report as an HTML file.
  - **View as HTML:** Opens the report output in Internet Explorer.
  - **Close:** Closes the Report Output window.
- **Tools:**
  - **Sort:** Opens a dialog box that lets you choose sorting options.
  - **Acknowledge:** Enabled only for an exception report. Acknowledges all exceptions on the list. (The exceptions are removed from the list as they have presumably been processed.)
  - **Configuration:** Opens a configuration screen for the hardware highlighted in the Report Output Window. (Typical shown below.)



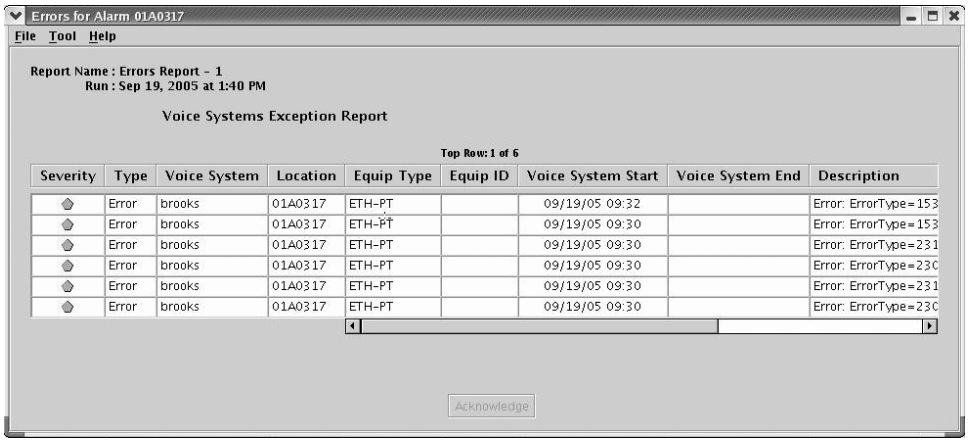
- **Error Description:** Provides an error description for the highlighted error on the Error Report. See **Associated Errors** (next).

  This window provides the following information about selected voice system errors:

  - The Maintenance Name.
  - The Error Code.
  - The Alt Name/Aux Data.
  - The Error Description corresponding to the maintenance name/error code/Alt Name if supplied by the voice system. If there is no supplied description, then "Not Available" appears in the Error Description box.)
  - A Notes text box in which any previous notes are displayed with the date and time of the last update, and in which you can enter notes pertaining to the error in question.

- Command buttons:
  - **Save:** Saves any modifications.
  - **Close:** Closes the window.
  - **Help:** Displays a help window.

- **Associated Errors:** Enabled only for an exception report. Opens the Error Report for the highlighted alarm. This shows all errors associated with the highlighted alarm.



- **TroubleShoot > Helper:** Enabled only for an exception report. Opens the Communication Manager manual page describing the selected exception. The manual page may suggest additional tests or corrective actions that can be accomplished using the SAT.
- **TroubleShoot > SAT Connection:** Enabled only for an exception report. Opens the *Login* dialog box for the selected system. You must have a user account and password on the selected system to use the SAT connection.

- **Help**
  - **Help Topics:** Displays the Help Table of Contents
  - **Current Pane:** Accesses help on the panel in the display pane
  - **About:** Displays information about Fault and Performance Manager

Schedule Report Dialog Box

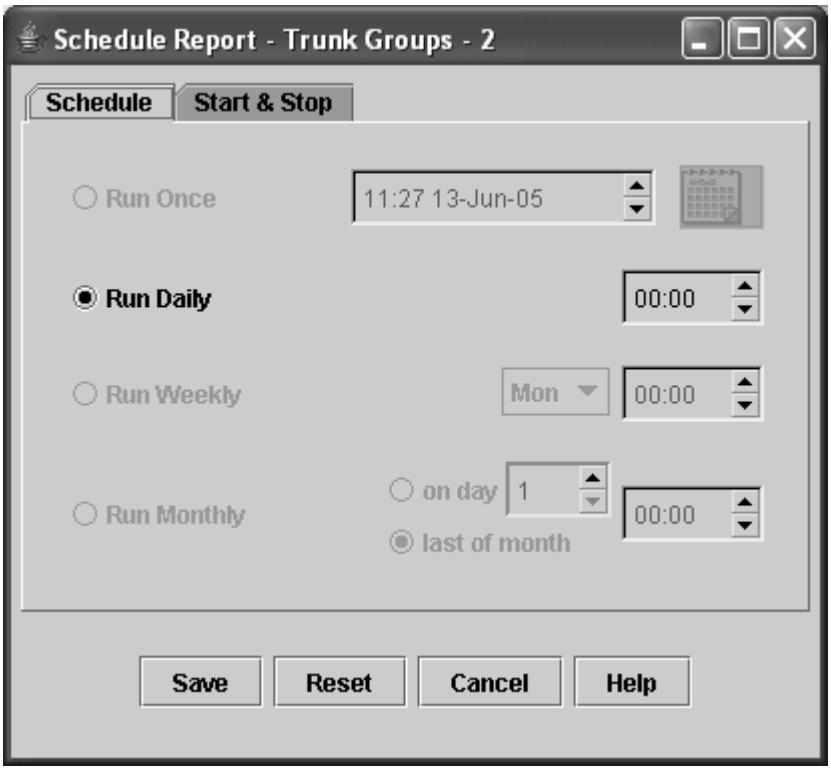
Note:

You can complete administration functions such as scheduling a report only from the server application GUI. Administration functions are not available from the Web client.

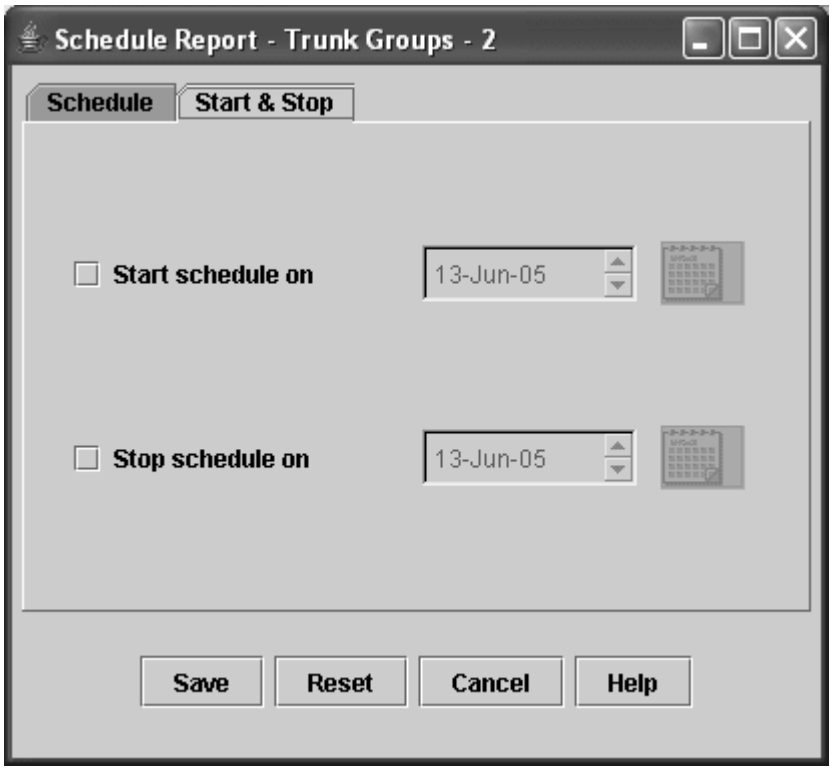
Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

This dialog lets you specify when you want a report to run.



1. Select an option button and complete the corresponding fields to define the schedule:
   - **Run once at**: Enter the date in dd/mm/yy format, and enter the time start time in military format (24 hr.)
   - **Run daily**: Enter the start time in military format (24 hr.)
   - **Run weekly**: Select a day of the week, and enter the start time in military format (24 hr.)
   - **Run monthly**: Select a day of the month, or select the last day of the month.
2. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.
3. Select the **Start and Stop** tab.



4. Select the **Start Schedule on** check box and enter a start date in dd/mm/yy format.
5. Select the **Stop Schedule on** check box and enter a stop date in dd/mm/yy format.
6. Click **Save** to save your changes or **Reset** to reset the fields to their previous values.

Related Topics

- How to run or schedule a report

Trunk Group Lists display

This display includes the following information:

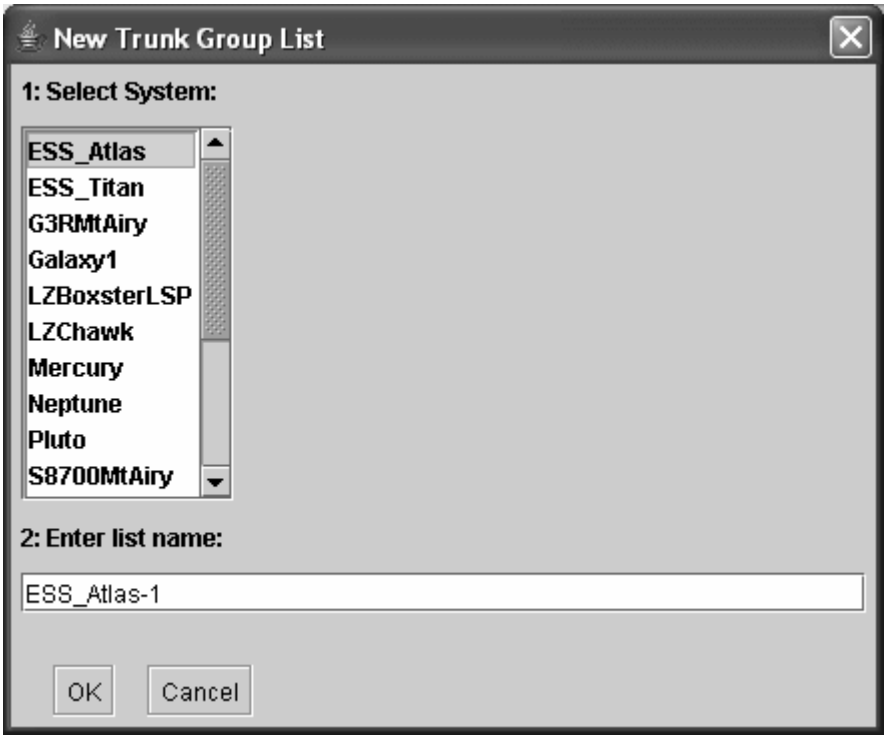
- Name of the voice system
- Name of the Trunk Group List
- Command buttons
    - **New:** Displays the New List dialog box
    - **Open:** Displays the List dialog box for the selected trunk group list. This button is only active when a trunk group list is selected.
    - **Delete:** Displays a confirmation dialog box to confirm deletion of a trunk group list. After the deletion is confirmed, the trunk group list is deleted.

Related Topics

- How to create a new trunk group list
- How to add trunk groups to the trunk group list

New Trunk Group List Dialog Box

Clicking **New** on the Trunk Group Lists display of the *Report Manager* screen opens the *New Trunk Group List* dialog box.



A trunk group list applies to one system.

1. Select the system.
2. Enter a name for the list.
3. Click **OK**.

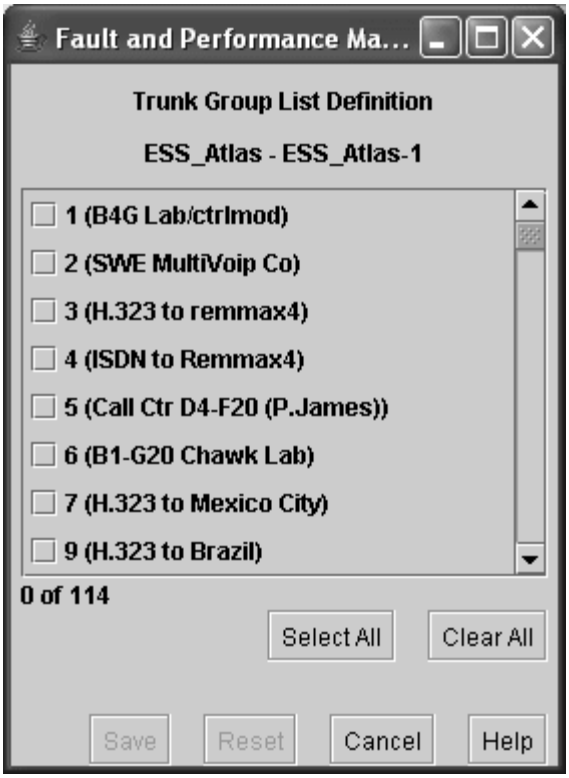
   The Trunk Group List Definition dialog box opens.

Related Topics

- Trunk Group List Definition dialog box
- Trunk Group Lists

Trunk Group List Definition dialog box

The *Trunk Group List Definition* dialog box displays when you click **Open** on the Trunk Group List display, or when you click **OK** on the New Trunk Group List dialog box.



All trunk groups on the system associated with this trunk group list are displayed.

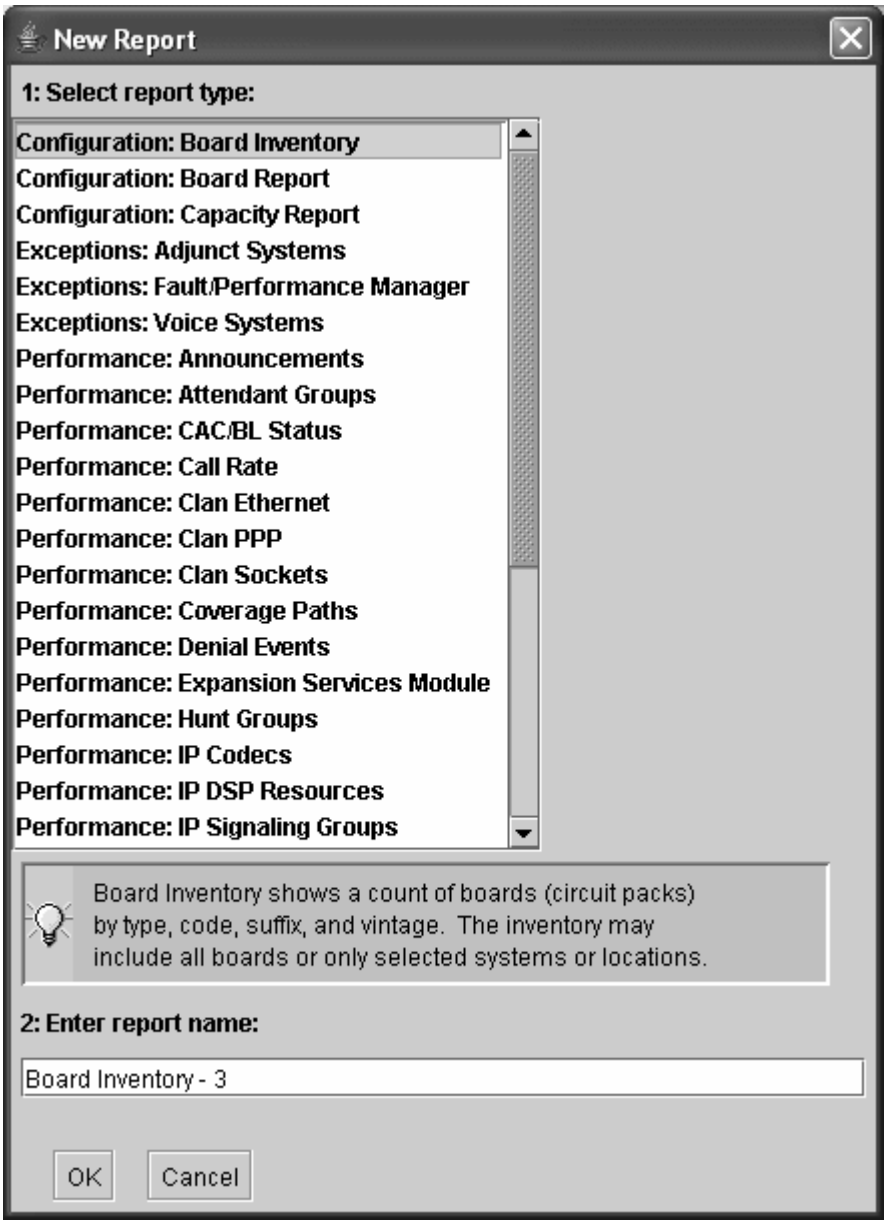
1. Check any or all of the trunk groups.
2. Click **Save**.

Related Topics

- New Trunk Group Lists dialog box
- Trunk Group Lists

New Report Dialog Box

Selecting **View > Performance Data...** from the *Configuration and Status* screen or the *System Detail* screen opens the New Report Dialog Box. You may also open the New Report Dialog Box by clicking **New** on the Report Definition screen. The New Report Dialog Box is used to select a report type and assign a report name.



To define a new report, follow these steps:

1. Select the report type from the available list.

   FPM displays a description of the selected report type in the information box below the report type list box.

2. Enter a unique name for the new report in the **Enter Report Name** text box.
3. Click **OK** to create the new report.

FPM displays the Report Definition Dialog Box. This dialog box contains different tabs depending on the type of report you are creating.

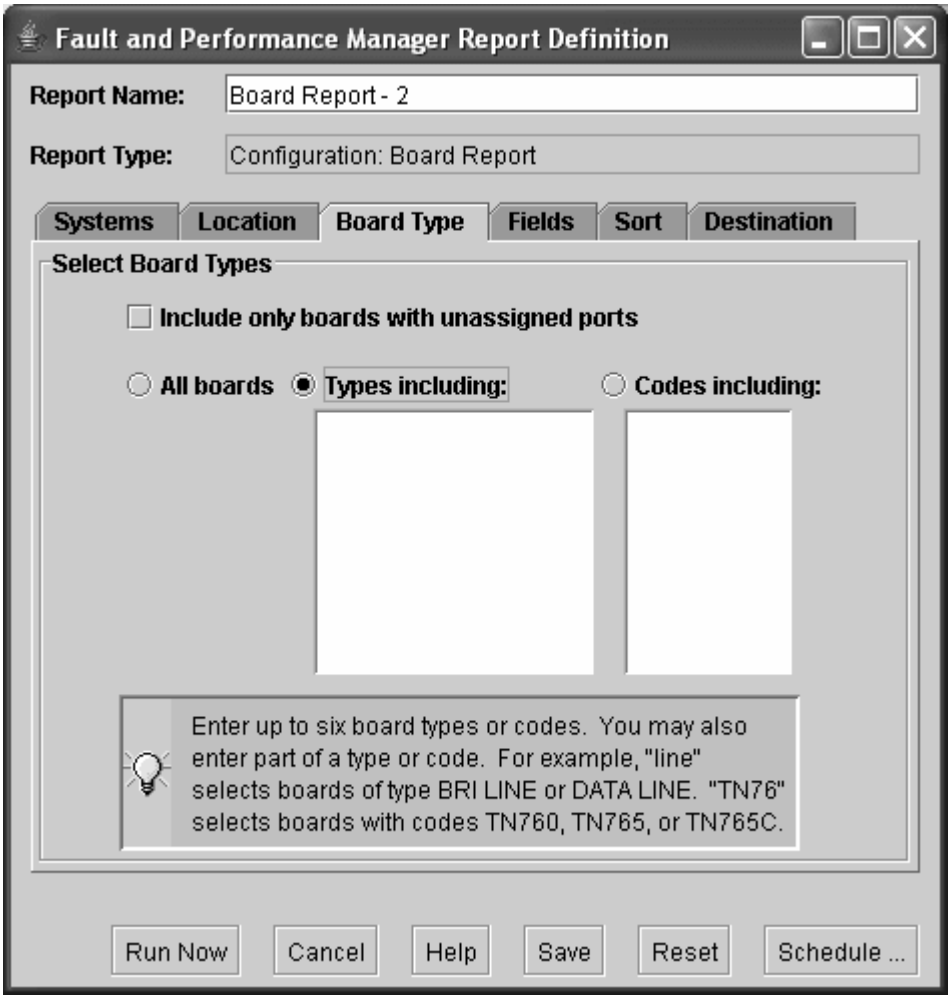
Related Topics

- Report Definition Dialog Box
- Report Definition screen
- How To Create a New Report
- How To Run or Schedule a Report
- How To View a Report
- How To Print a Report

Report Definition tabs

Board Type Tab

This tab allows you to specify the boards to include in your report.



To make board selections, follow these steps:

1. On the **Select Board Types** box, complete the following fields:
    - Include only boards with unassigned ports: Check or clear as desired.
    - **All boards**: Select to include all boards in your report.

      Note:

      If you want a more selective report, select either Types including or Codes including below.

      *If you do not select **All boards**, then you must enter up to six sub-strings to match against board types or board codes plus suffixes. The report includes boards that match any one of the sub-strings you enter.*

- **Types including**: Enter up to six sub-strings of board types to include in your report.

  For example if you enter type "line", the report includes boards of types ANALOG LINE, BRI LINE, DATA LINE, DIGITAL LINE, and PDATA LINE.

  
  Note:

  Types are always uppercase, but the matching ignores case.

- **Codes including**: Enter up to six sub-strings of board codes to include in your report.

  For example, if you enter code "TN76", the report includes TN760, TN765, and TN765C.

  
  Note:

  Codes are always uppercase, but the matching ignores case.

2. After selecting the board types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Components Tabs

You can restrict the performance report to one or more components.

If you selected all voice systems on the Systems tab, then all systems and all components are included in the report. In this case, there is no component tab selection.

If you select specific voice systems in the Systems tab, then you can use the corresponding Components tabs to limit report data to specific components. Refer to the following table.

Performance Report Type	Tab Title
Hunt Groups	Hunt Groups
Inter-Port Network Latency	PN Connections
Port Networks	Port Networks
Routing Patterns	Routing Patterns
Switch Node Links	Switch Node Links
Tone Receivers	Tone Receivers
Trunk Groups Trunk Groups, ISDN PRI CBC Trunk Groups, Wideband	Trunk Groups

Destination Tab

This tab allows you to select the report output destination and print the reports.

To set the report output destination, follow these steps:

1. Select one or more of the following report destinations:
    - **Screen** to send the report to the screen display.
    - **Print** to send the report to the specified print destination.

      Click the **Setup** button to specify a print command or a printer for the report or to specify height and width of the text on the page.
    - **File** to send the report to the specified file destination.

      Click the **Save As** button to specify the directory, file name, and file format (ASCII or HTML (default)).

Note:

The ASCII file format is intended primarily as input to other applications; for example, expert systems or spreadsheet programs.

Select one of the following options:

- **Replace** to overwrite the file with the latest data, or
- **Automatically append time stamp to file** to create a new report each time the report is run

- **E-Mail** to send the report to a specified email address. Enter one or more email addresses.

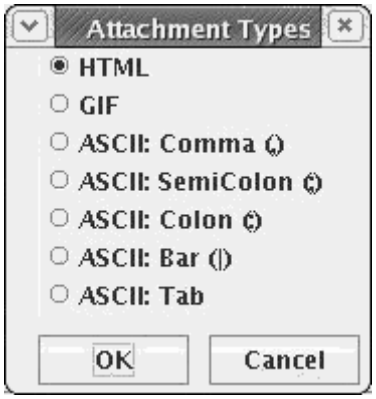
Note:

Spaces are invalid in the email address field. If you use internal type addresses (such as first initial and last name), specify the first initial, a dot, and the last name rather than using spaces. Separate multiple entries with commas but no spaces.

Note:

*Even when only email output is desired, **File** must be checked and a valid directory on the Linux server is required in the associated text box. Click **Save As** to save the report under a specific name. If you do not check **File** and supply a valid Linux server directory, the resulting file will have an incorrect extension.*

If you select E-Mail, you can also select Attachment Type in the Attachment Type dialog box:



Selecting HTML (default) generates the report as a web browser readable table. Selecting any of the ASCII formats gives delimited fields suitable for importing into a spread sheet. For reports that are formatted as charts, an additional choice (GIF) is available to present the chart as a picture.

2. After selecting the output destinations, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   **Note:**

  *File must be checked and a local PC directory is required in the associated text box. Click **Save As** to save the report under a specific name.*

- Schedule

  Opens the Schedule Report dialog box.

   **Note:**

  *File must be checked and a valid directory on the Linux server is required in the associated text box. Click **Save As** to save the report under a specific name.*

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

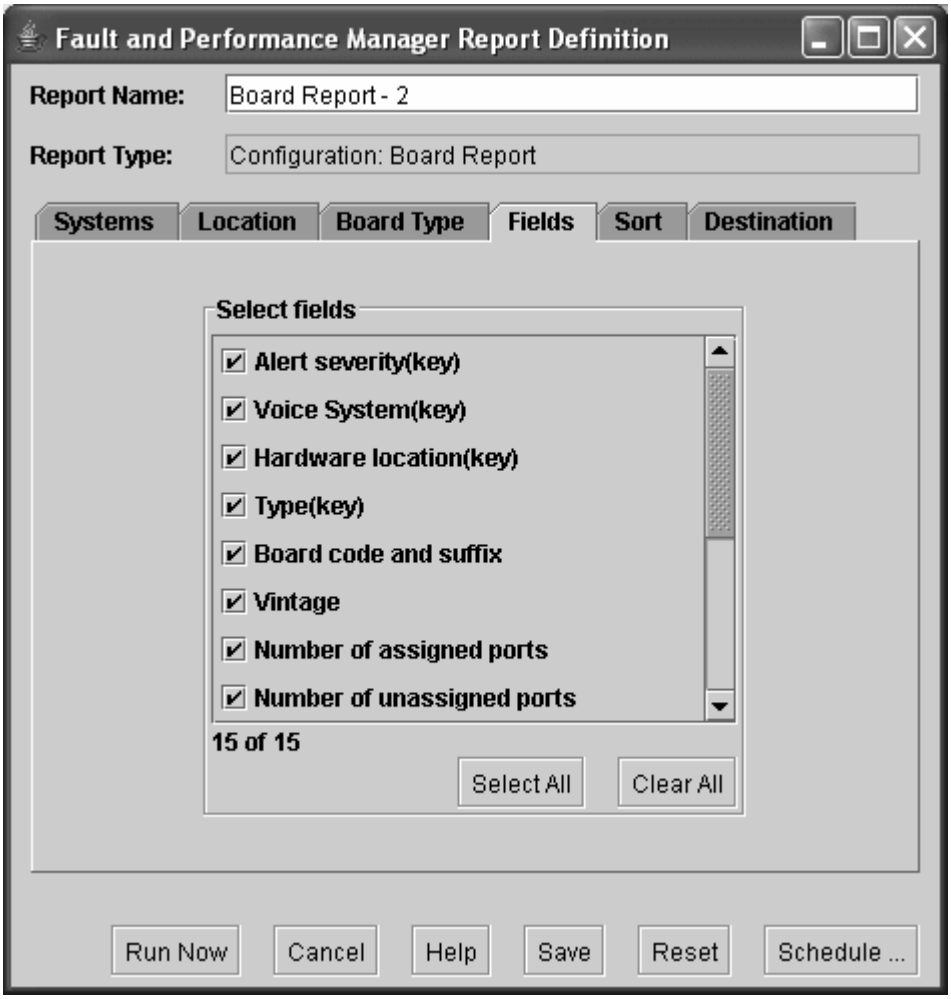
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Fields Tab

This tab allows you to select the data fields to include in your report.



The list of fields depends on the report type. All fields available in the data records used for the report are listed.

To select the data fields, follow these steps:

1. Select the data fields to include in the report (by default all data fields are selected.)

   The order of the fields in the report is the same as the order the fields in this list. The fields selected here determine the fields that are available for sorting and charting on the Sort tab and Format tab respectively. The word "key" in parentheses identifies Key fields. These are the fields that uniquely identify a record, for example, date and time, system name, and sometimes component identifier (trunk group number). Each report should include at least one key field. Some report types have "secondary" data fields. For example, a Routing Pattern report has an hourly record for each routing pattern, which is called the "primary" record. The data fields in this record are the primary data fields. In addition, each primary record has a number of "secondary" records, one for each trunk group in the routing pattern. The "secondary" data fields appear in the selection list after the primary data fields, and are indicated by a different background color. If you include both primary and secondary data fields in a report, the report output shows several tables and charts.

- Use the **Select All** button to select all fields.
- Use the **Clear All** button to clear any selections.

2. To select the units in which traffic usage measurements are presented, select one of the following options:

Note:

These buttons are only available for Performance reports.

- Show traffic in CCS
- Show traffic in Erlangs

3. After selecting the fields, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Format Tab

This tab allows you to select the output format for your report.

Note:

Scheduling takes place on the Linux server. To create graphics, the X-windowing system MUST be started, and must be running when the report runs.

To set output format options, follow these steps:

1. Choose the output format for the report by selecting either the **Table** option button (default) or the **Chart** option button.
2. If you select the **Chart** option button, click the **Chart options** button to specify the Chart Properties and click Close when you are done.

   For help completing the fields, click **Help** on that screen.
3. After selecting the report format, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

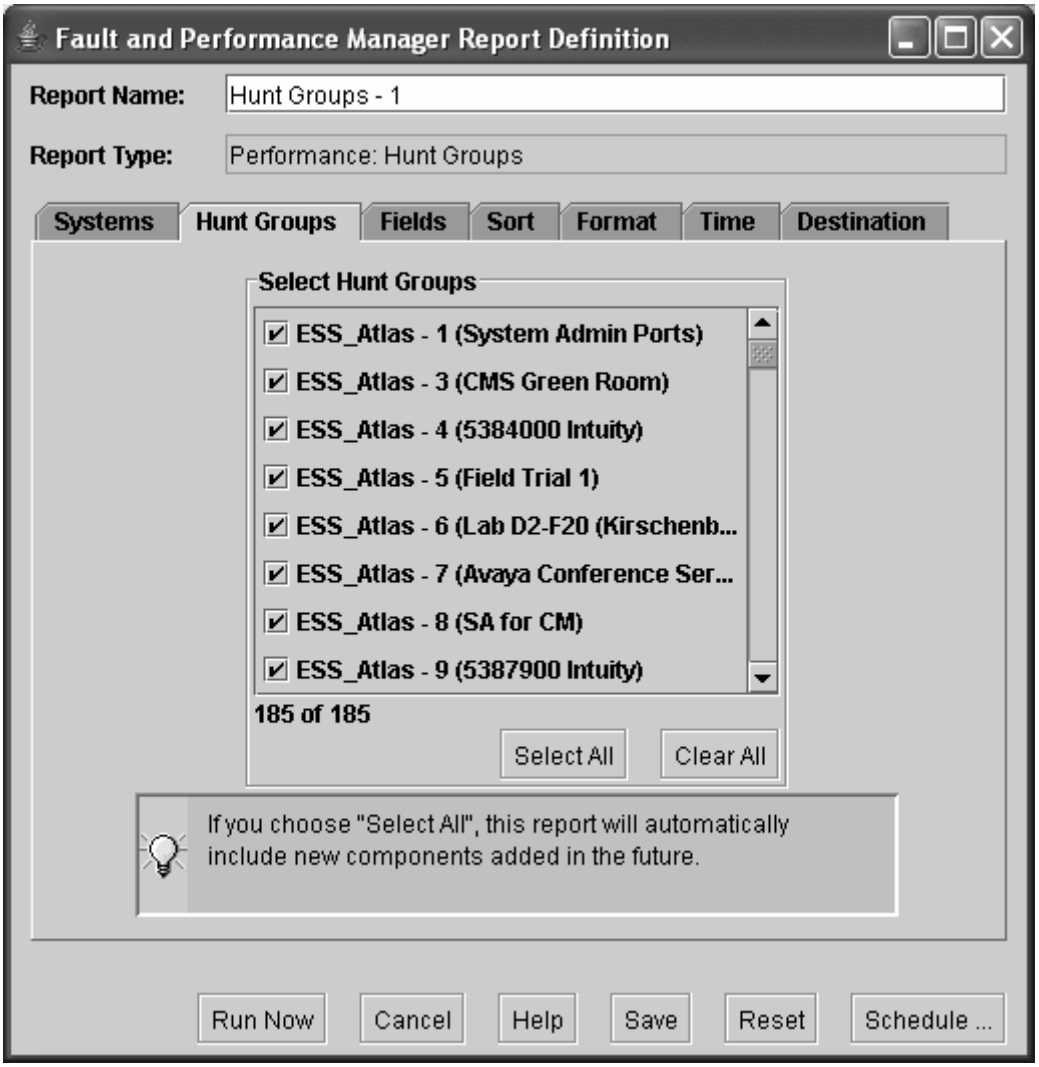
  Displays a help screen for the selected tab.

Related Topics

- Chart Properties Dialog Box

Hunt Groups Tab

This tab allows you to select the hunt groups to include in your report.



To select hunt groups, follow these steps:

1. Select the Hunt Groups to include in the report.

   Fault and Performance Manager displays a list of hunt groups for the systems selected on the Systems tab. The list includes the system name, the hunt group number, and the hunt group name, if known. Note that it is possible that Fault and Performance Manager may receive performance data for a new hunt group before Fault and Performance Manager receives configuration data. In this case, the hunt group name is not shown until configuration data is collected. (See Configuration Collection for more information.)

   - Use the **Select All** button to select all hunt groups.
   - Use the **Clear All** button to clear any selections.

2. After selecting the hunt groups, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

- Save

  Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

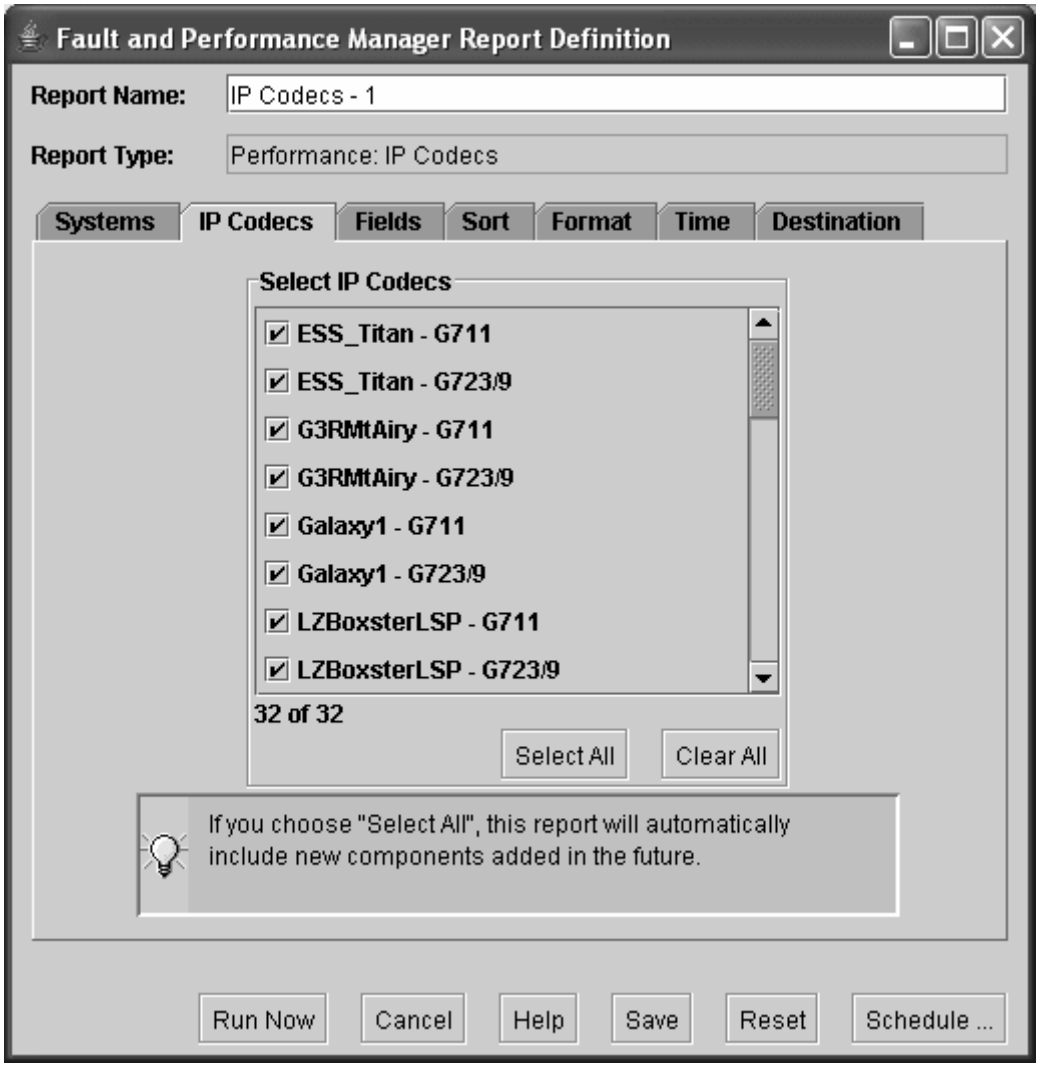
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

IP Codecs tab

This tab allows you to specify which IP codec types to include in your report.



If you select all systems on the Systems tab, then the IP Codecs tab does not allow you to make selections.

To select IP Codecs, follow these steps:

1. Select the IP Codecs to include in the report.

   Fault and Performance Manager displays a list of IP codecs for the systems selected on the Systems tab. The list includes the system name and the codec name.

   - Use the **Select All** button to select all hunt groups.
   - Use the **Clear All** button to clear any selections.

2. After selecting the IP Codecs, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

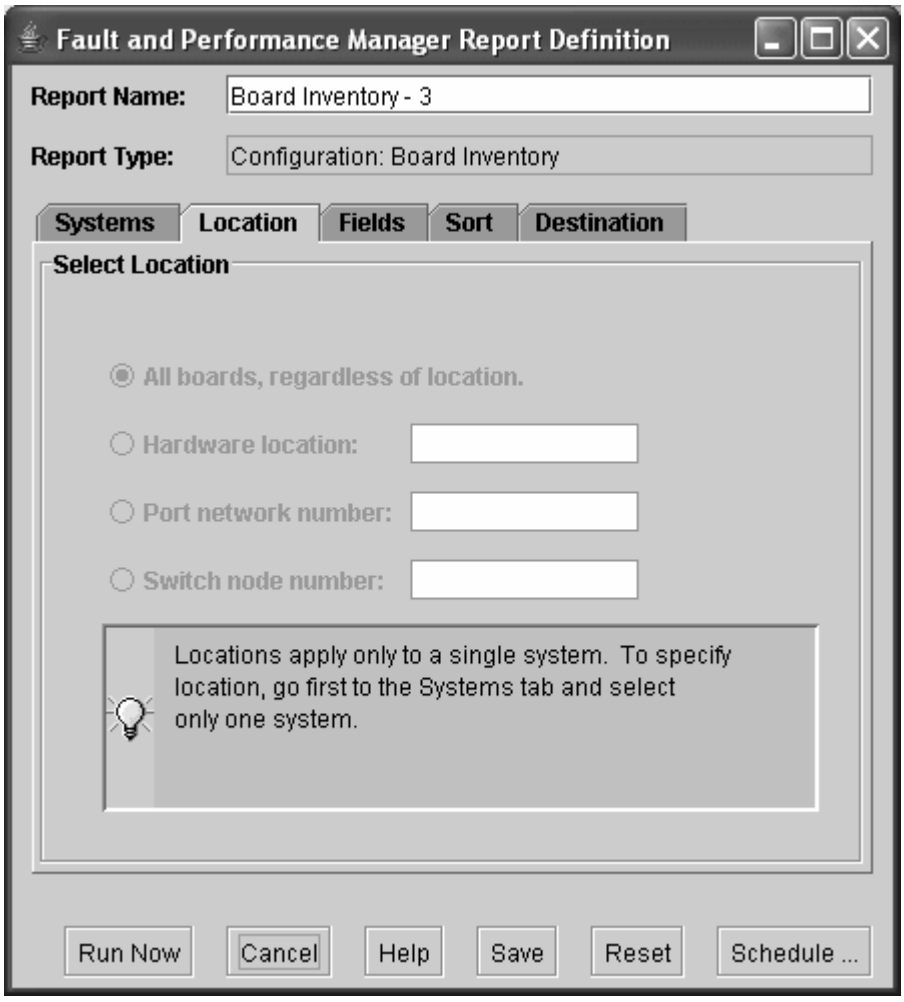
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Location Tab for Board Report

This tab allows you to specify the board information at all or one location to be included in your report.



To select exception locations, follow these steps:

1. In the **Select Location** box, specify either all boards or specific hardware, port networks, or switch nodes at one location.
    - All boards, regardless of location: Select to include all boards.
    - **Hardware location:** Enter a valid hardware location. (The system does not validate this entry. Make sure the spelling is correct.) The report includes all exceptions for hardware locations beginning with the specified location string. For example, if you enter a carrier location such as 02B, the report includes exceptions for that carrier location and exceptions at all boards and ports contained in that carrier.
    - **Port network number:** Enter a valid port network number. (The system does not validate this entry. Make sure the number is correct.)
    - **Switch node number:** Enter a valid switch node number. (The system does not validate this entry. Make sure the number is correct.)

2. After selecting the location, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

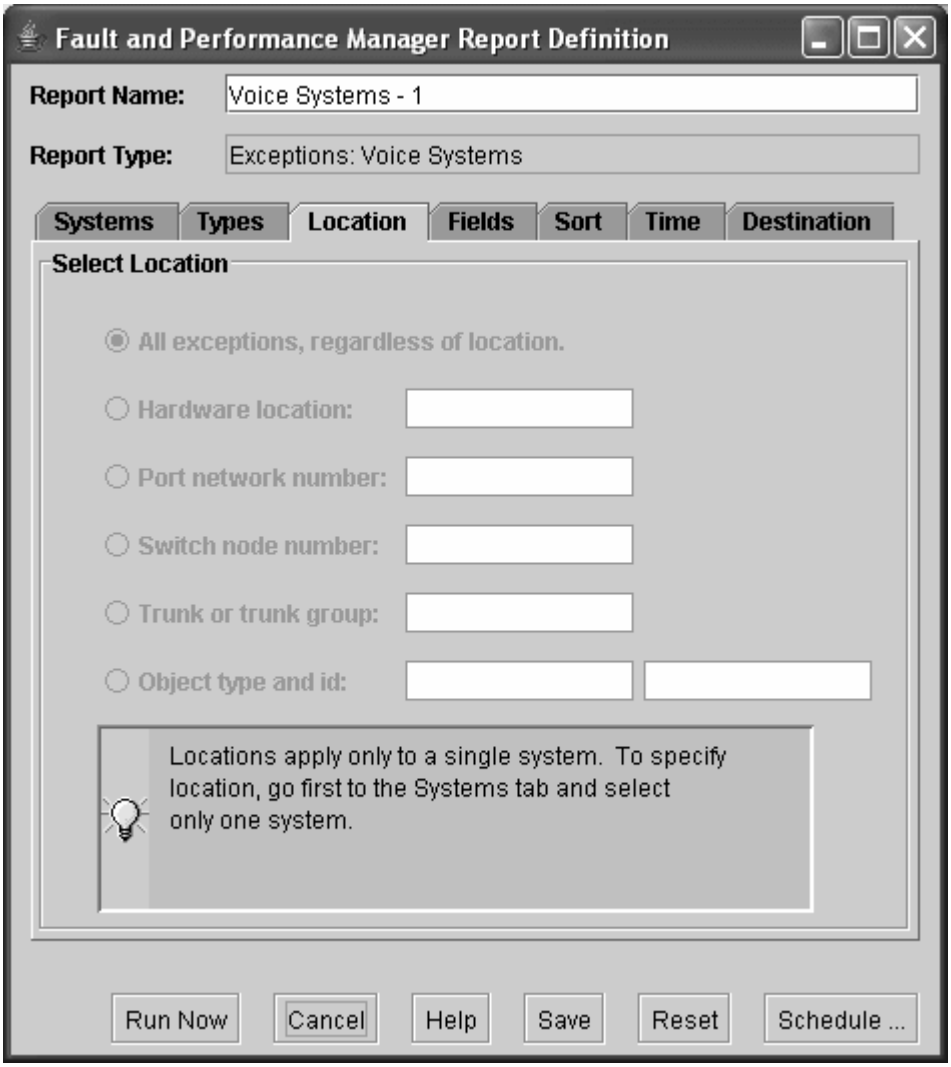
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Location Tab for Voice System Exceptions Report

This tab allows you to specify the exceptions at all or one location to be included in your report.



To select exception locations, follow these steps:

1. In the **Select Location** box, specify either all exceptions or exceptions at one location.
    - All exceptions, regardless of location: Select to include all exceptions.
    - Hardware location:

      Enter a valid hardware location. (The system does not validate this entry. Make sure the spelling is correct.) The report includes all exceptions for hardware locations beginning with the specified location string. For example, if you enter a carrier location such as 02B, the report includes exceptions for that carrier location and exceptions at all boards and ports contained in that carrier.
    - Port network number:

      Enter a valid port network number. (The system does not validate this entry. Make sure the number is correct.)

- Switch node number:

  Enter a valid switch node number. (The system does not validate this entry. Make sure the number is correct.)

- Trunk or Trunk Group:

  Enter a valid trunk group number or a trunk group and member in the format nnnn/mmmm. The report will include alarms, errors, trunk group GOS violations, restarts, board conflicts, processor occupancy exceptions, and the four trunk exception types, or a subset of these types as specified on the Types tab. (The system does not validate this entry. Make sure the entry is correct.) The report includes all exceptions that could cause an alert on the specified trunk or trunk group.

- Object type and ID:

  For object type, enter a voice system maintenance name and for object ID, enter a voice system ALT name. Up to 12 characters can be entered, including alphanumeric, a dash (-), and forward slash (/). Lower case characters are converted to upper case. (The system does not validate this entry. Make sure the entry is correct.) The report includes all exceptions whose object type and ID exactly match the entry in this field.

Tips

- To find all exceptions on a trunk group when you know the trunk group number:

  Select the **Trunk or trunk group** option button and enter the trunk group number, for example "1009". In this case, trunk group GOS violations on the specified trunk group, as well as alarms, errors, outages, light usage, and holding time exceptions for members of the trunk group, are included in your report.

- To find all exceptions on a single trunk when you know the trunk group and member

  Select the **Trunk or trunk group** option button and enter the trunk group and member, for example "1009/235". In this case, alarms, errors, outages, light usage, and holding time exceptions for the specified trunk are included in your report. Trunk group GOS violations are not included, since they are trunk group alerts rather than trunk alerts.

  or

  If you know the trunk type and the corresponding maintenance name, for example "CO-TRK" or "AUX-TRK", select the **Object type and ID** option button, and enter the maintenance name for the object type and the trunk ID for the object ID. In this case, only alarms and errors are included in your report, since the other exceptions are detected by the application, which assigns an object type of "TRUNK".

- To find exceptions on all trunks of a specific type when you know the maintenance name corresponding to the specified type:

  Select the **Object type and ID** option button and enter the maintenance name for the object type. Leave the object ID blank. In this case, all alarms and errors on trunks of the specified type are included in your report. Application-detected exceptions like trunk outages are not included in your report, since they have object type "TRUNK".

- To find exceptions on a single extension when you know the line type and its corresponding maintenance name:

Select the **Object type and ID** option button and enter the maintenance name for the object type, for example"ANL-16-L" or "DIG-LINE", and the digits of the extension for the object ID. In this case, alarms and errors on the port serving that extension are included in your report.

2. After selecting the location, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

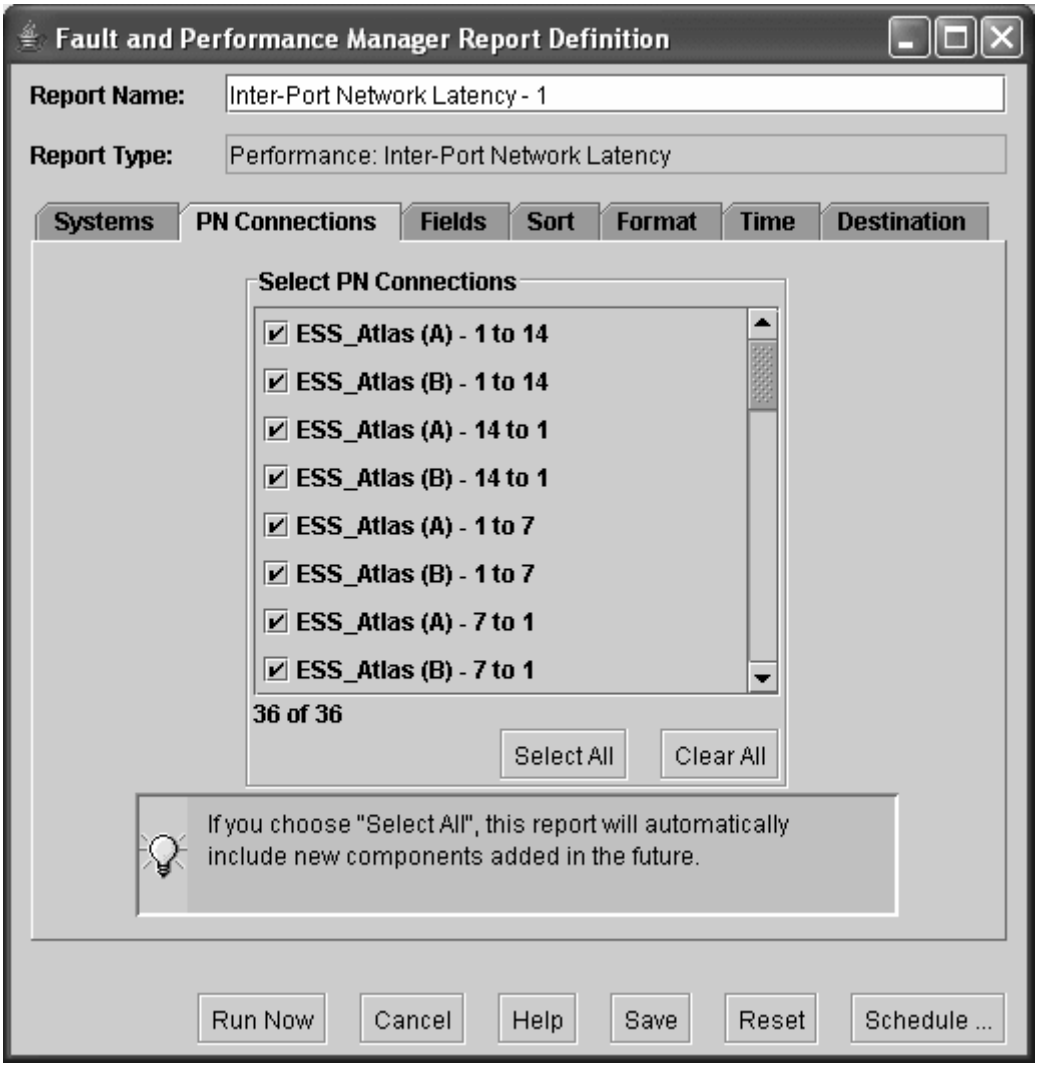
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

PN Connections Tab

This tab allows you to select the port network connections to include in your report.



To select the port network connections, follow these steps:

1. Select the port network connections to include in the report.

   The list shows only connections for which Fault and Performance Manager has collected performance data. This will not be all connections, since the voice system limits performance data collection to at most 20 connections at a time.

   - Use the **Select All** button to select all systems.
   - Use the **Clear All** button to clear any selections.

2. After selecting the connections, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

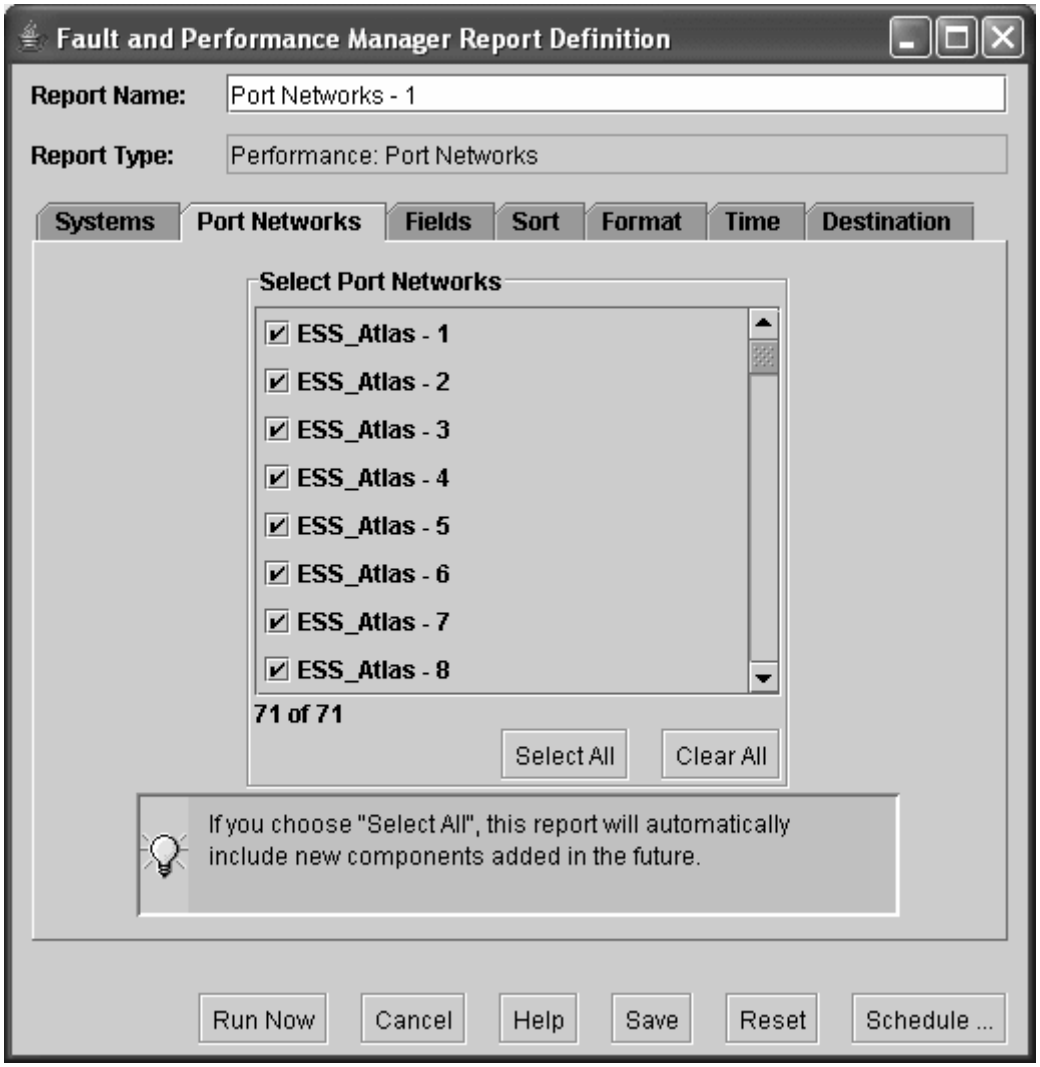
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Port Networks Tab

This tab allows you to select the port networks to include in your report.



To select the port networks, follow these steps:

1. Select the port networks to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the port networks, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

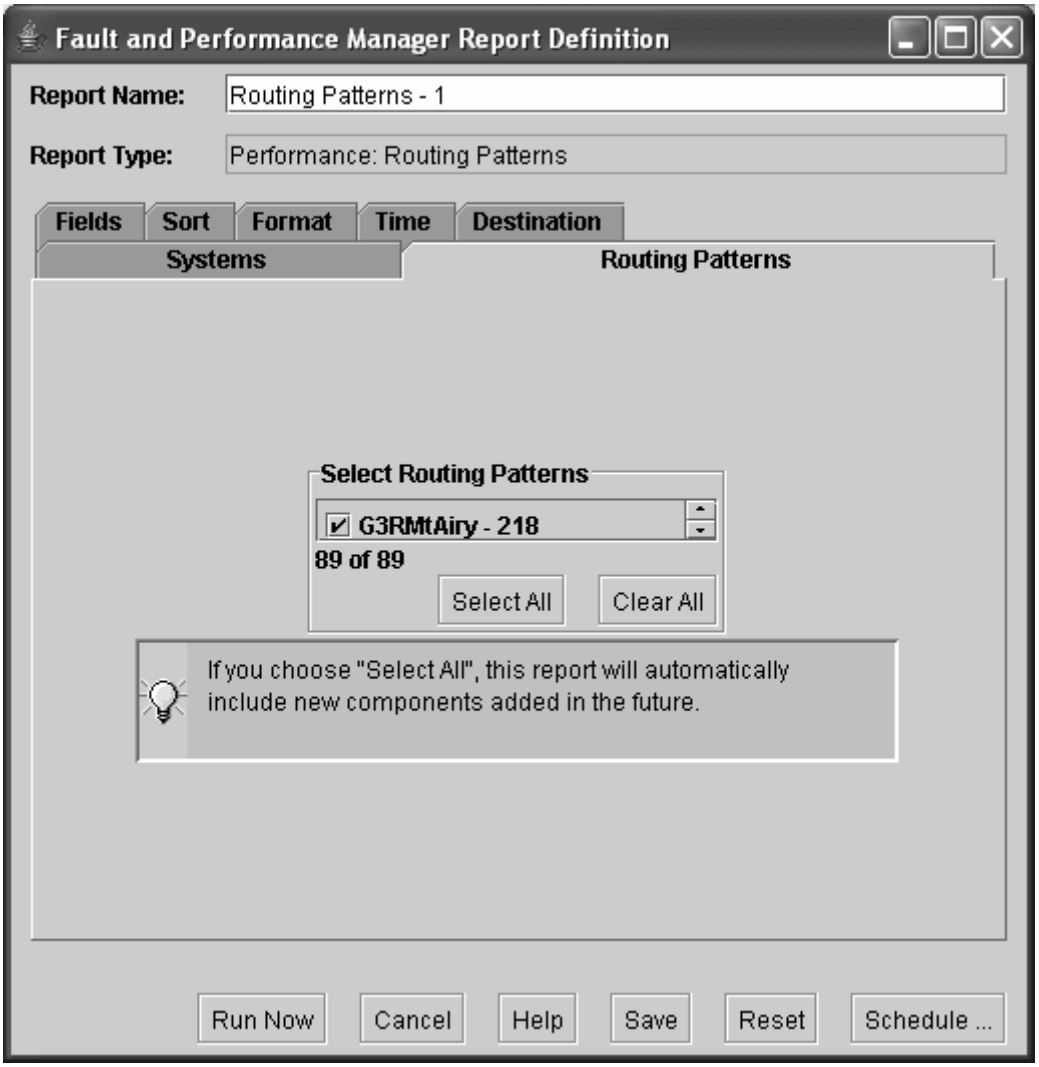
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Routing Patterns Tab

This tab allows you to select the routing patterns to include in your report.



To select routing patterns, follow these steps:

1. Select the routing patterns to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the routing patterns, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

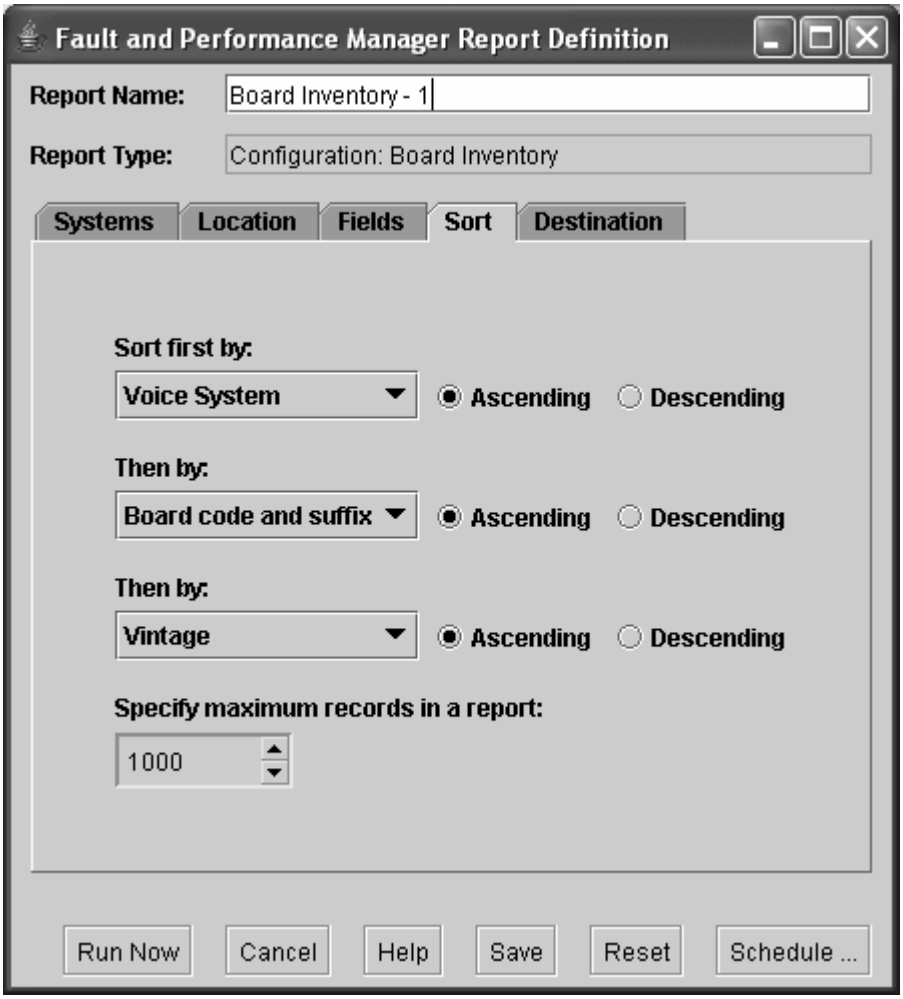
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Sort Tab

This tab allows you to select the sort options in your report.



To set sorting options, follow these steps:

1. From the **Sort** tab, select how to sort the data rows in the report:
    - **Sort first by**: select the first sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button
    - **Then by**: select the second sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button
    - **Then by**: select the third sort option from the drop-down list box, and then select the **Ascending** or **Descending** option button

Note:

*The fields you can sort on are the fields selected on the **Fields** tab. If you set sort fields here and then go back and change the selections on the **Fields** tab, this may change the sort in unpredictable ways.*

Tips

- Sort dates in descending order to get the most recent first.
- Sort severity in descending order to get the most critical first.
- Most other fields are usually sorted in ascending order.
- You can also sort rows after you run the report.

2. Enter the maximum number of records to be included in the report in the **Specify maximum records in a report** field.

   The default is 1000.

3. After selecting the sort options, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

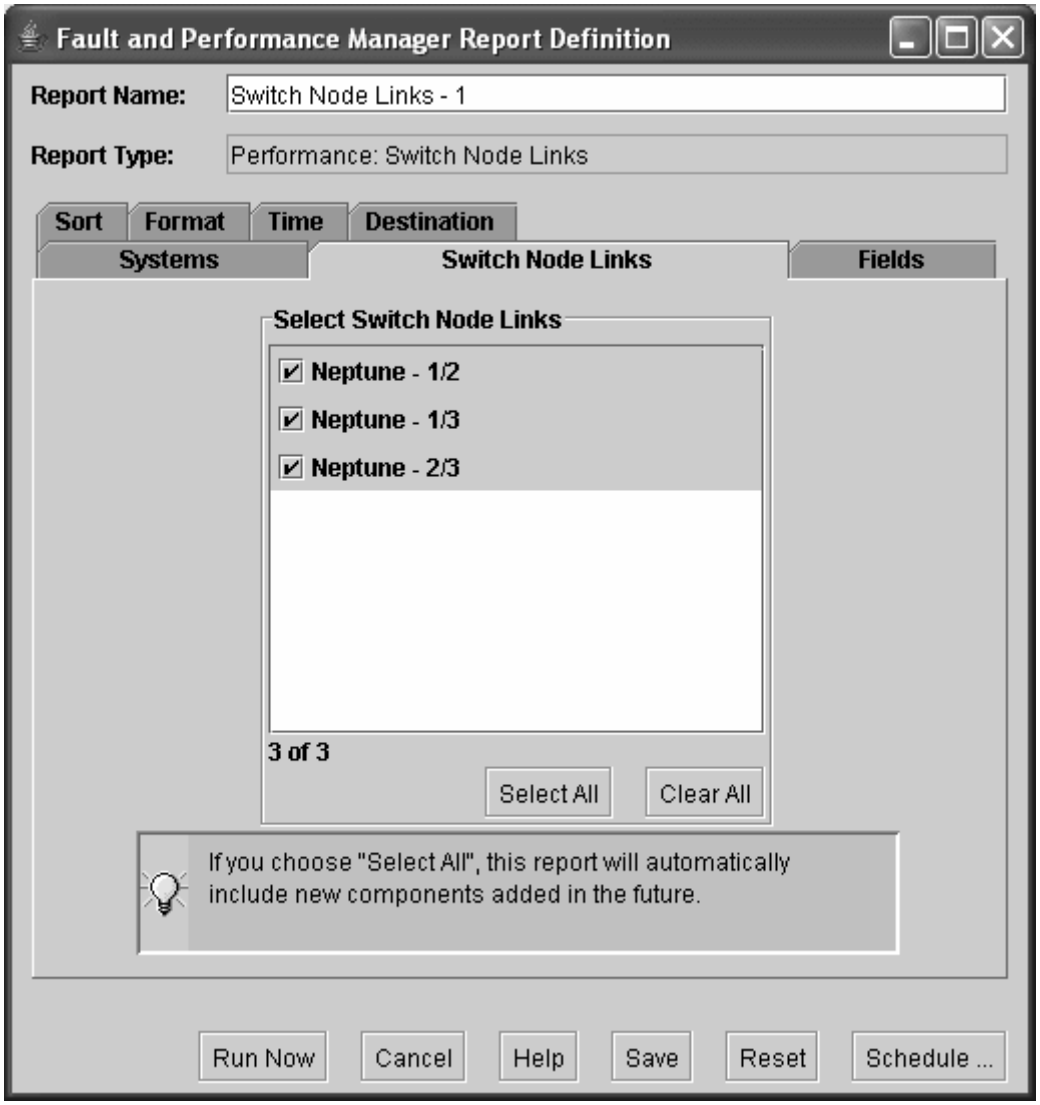
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Switch Node Links Tab

This tab allows you to select the switch node links to include in your report.



To select switch node links, follow these steps:

1. Select the switch node links to include in the report.
    - Use the **Select All** button to select all switch node links.
    - Use the **Clear All** button to clear any selections.
2. After selecting the switch node links, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

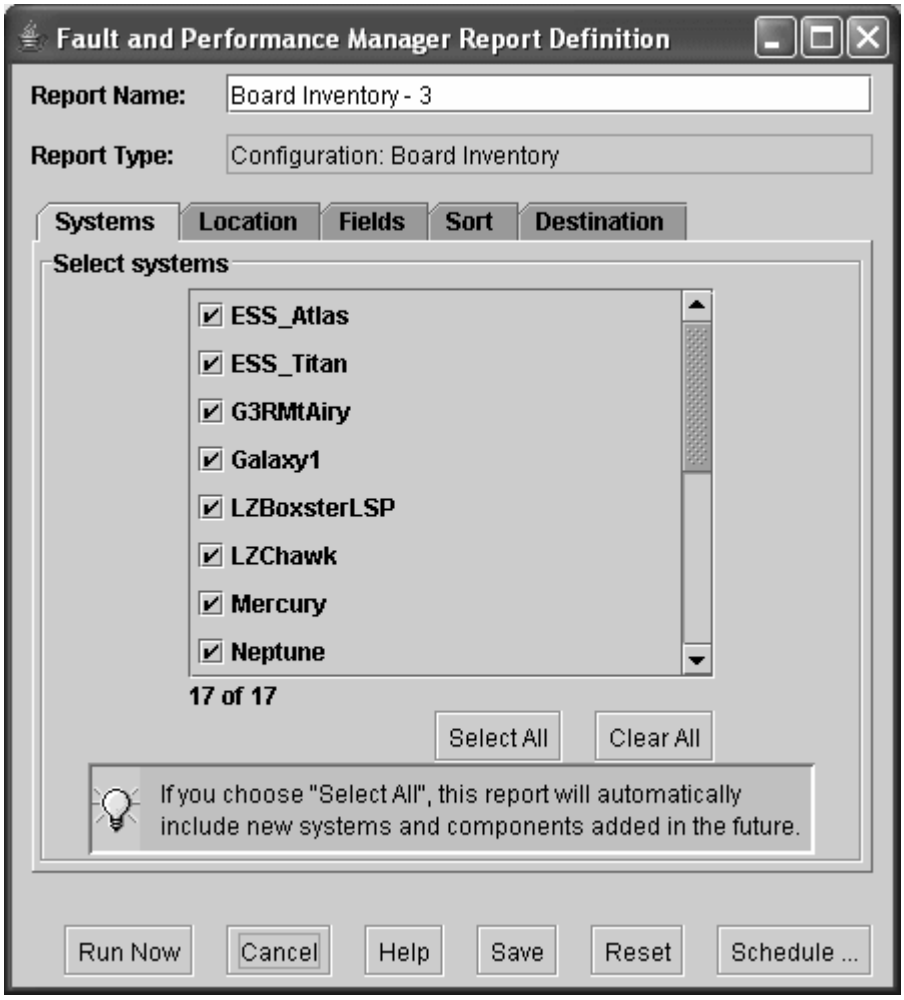
  Displays a help screen for the selected tab.

Systems Tab

This tab allows you to select the systems to include in your report.

Note:

You can only select systems for which you have administrative privileges.



To select systems, follow these steps:

1. From the **Systems** tab, select one or more systems to include in the report.
   - Use the **Select All** button to select all systems.
   - Use the **Clear All** button to clear any selections.
2. After selecting the systems, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

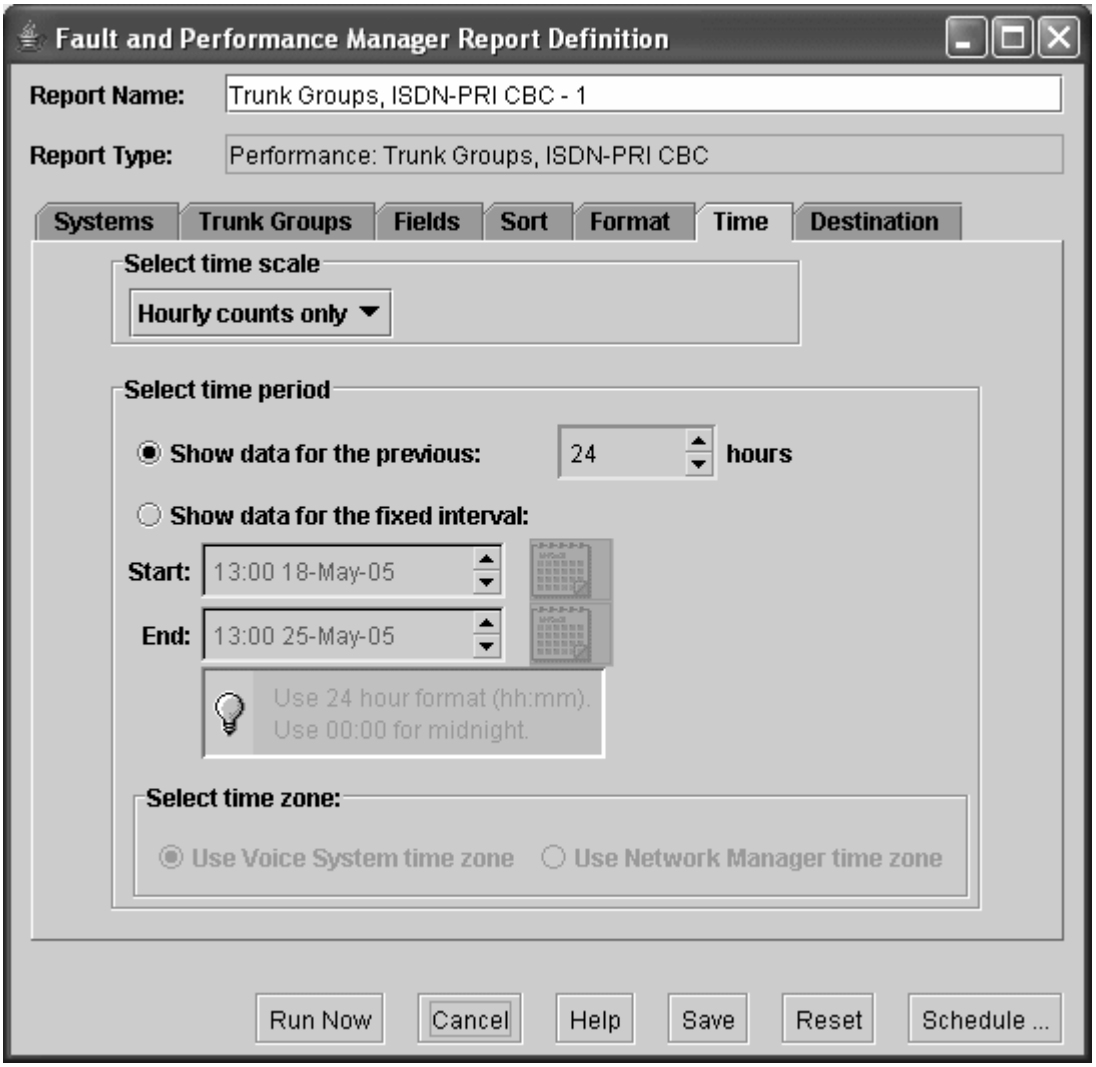
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Time Tab

This tab allows you to set time options for your report.



To set time options, follow these steps:

1. Select the time scale from the drop-down list box: **Hourly counts**, **Daily peaks** (default), or **Weekly peaks**.

   Tips

   - If you select Daily or Weekly peaks, all time windows start and end at midnight and the hour field is inactive.
   - If you select Weekly peaks, all time windows start and end at a week boundary, Monday 00:00. You can specify a different day; in this case when the report is run, the time window expands to the week boundary before and after the time window defined.

1. Choose the time period by selecting one of the following options:

- Show data for the previous

  Enter the duration in the corresponding text box. The duration unit is hours, days, or weeks depending on the time scale selected. The default is 7 days.

- Show data for the fixed interval

  Enter the start and end times and days. The end time must be later than the start time. The time is in 24-hr. format. Select the time zone: **DEFINITY time zone** or **Use Network Manager time zone**. DEFINITY time zone refers to the time at each monitored voice system. Use Network Manager time zone refers to the time on the network management station running the application.

   **Note:**

  Reports defined with Daily or Weekly peaks and Show data for the fixed interval should also use the voice system time zone. This ensures that if a voice system is in a different time zone, all peaks are reported within the time window.

3. After selecting the time information, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

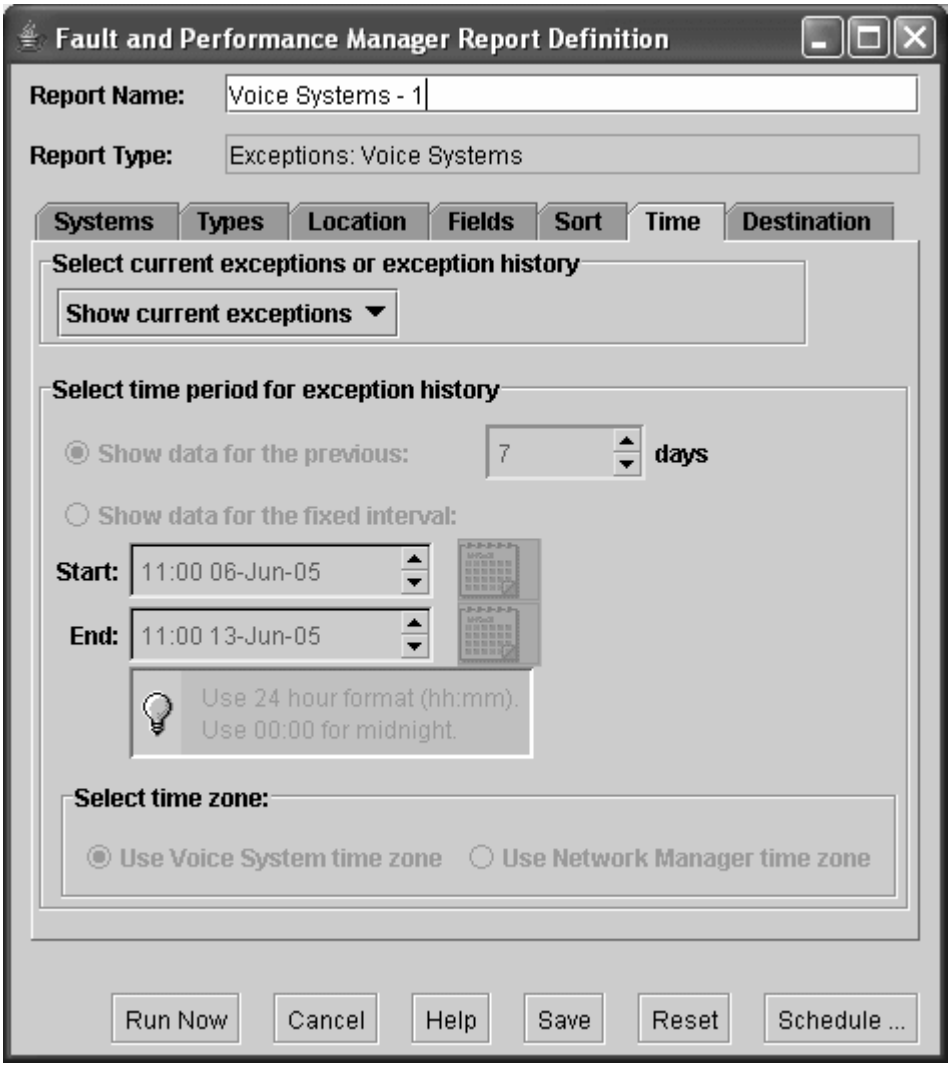
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Time Tab for Exception Report

This tab allows you to select exception time options in your report.



To set exception time options, follow these steps:

1. In the **Select current exceptions or exception history** drop-down list box, select **Show current exceptions** or **Show exception history**.

   Note:

   *When **Show current exceptions** is selected, all the other controls in this tab are inactive.*

2. Choose the time period by selecting one of the following options:

   - Show data for the previous

     Enter the duration in the corresponding text box. The duration unit is days. The default is 7 days.

- Show data for the fixed interval

  Enter the start and end times and days. The end time must be later than the start time. The time is in 24-hr. format.

- Select Time zone

  Only applies to a DEFINITY Exception Report. *Does not apply to a Fault/Performance Manager Exception Report.* If you select a fixed window for a DEFINITY Exception report, select the time zone. **DEFINITY time zone** refers to the time at each monitored voice system**. Network Manager time zone** refers to the time on the network management station running the application.

3. After selecting the time information, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

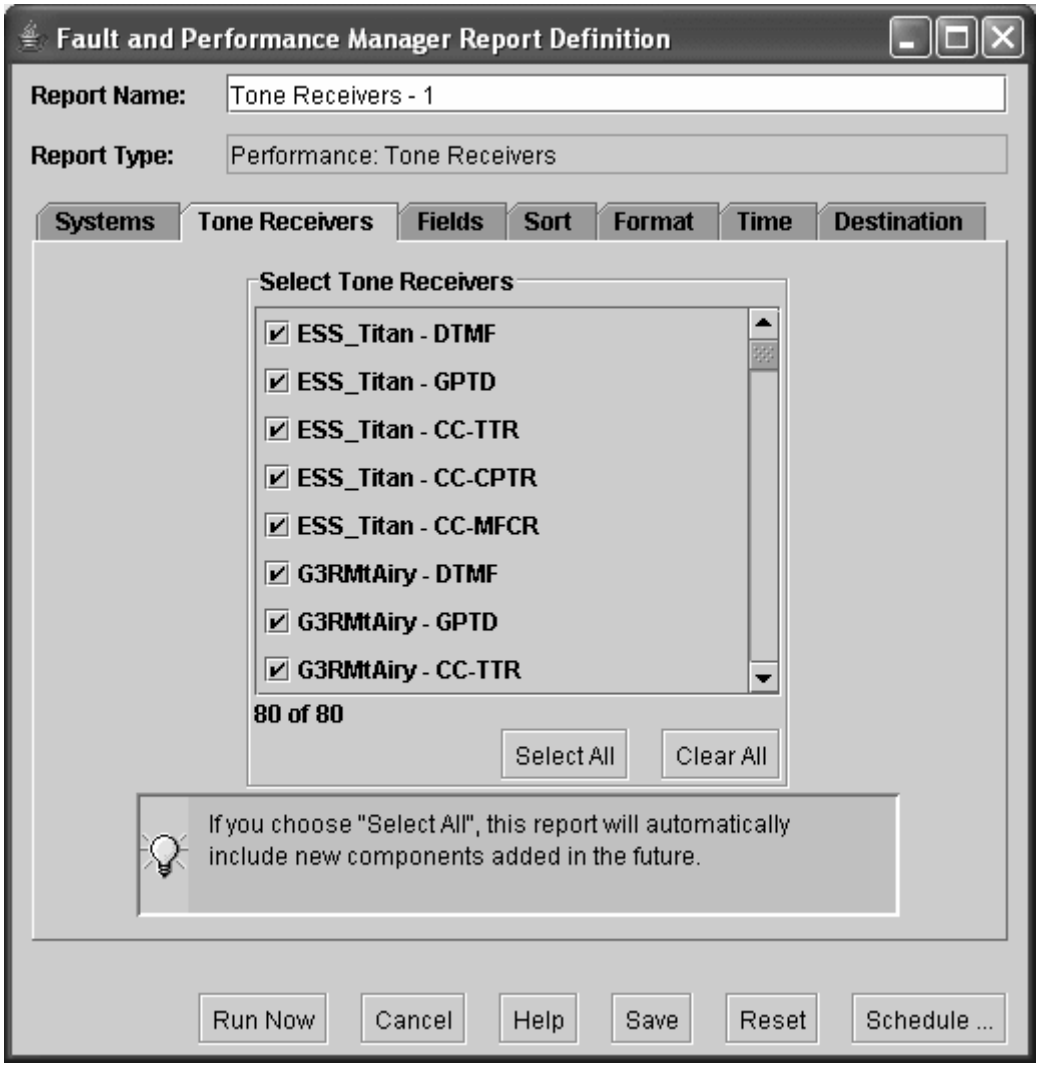
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Tone Receivers Tab

This tab allows you to select the type of tone receivers to include in your report.



To select tone receiver types, follow these steps:

1. Select the tone receiver types to include in the report.
    - Use the **Select All** button to select all systems.
    - Use the **Clear All** button to clear any selections.
2. After selecting the tone receiver types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

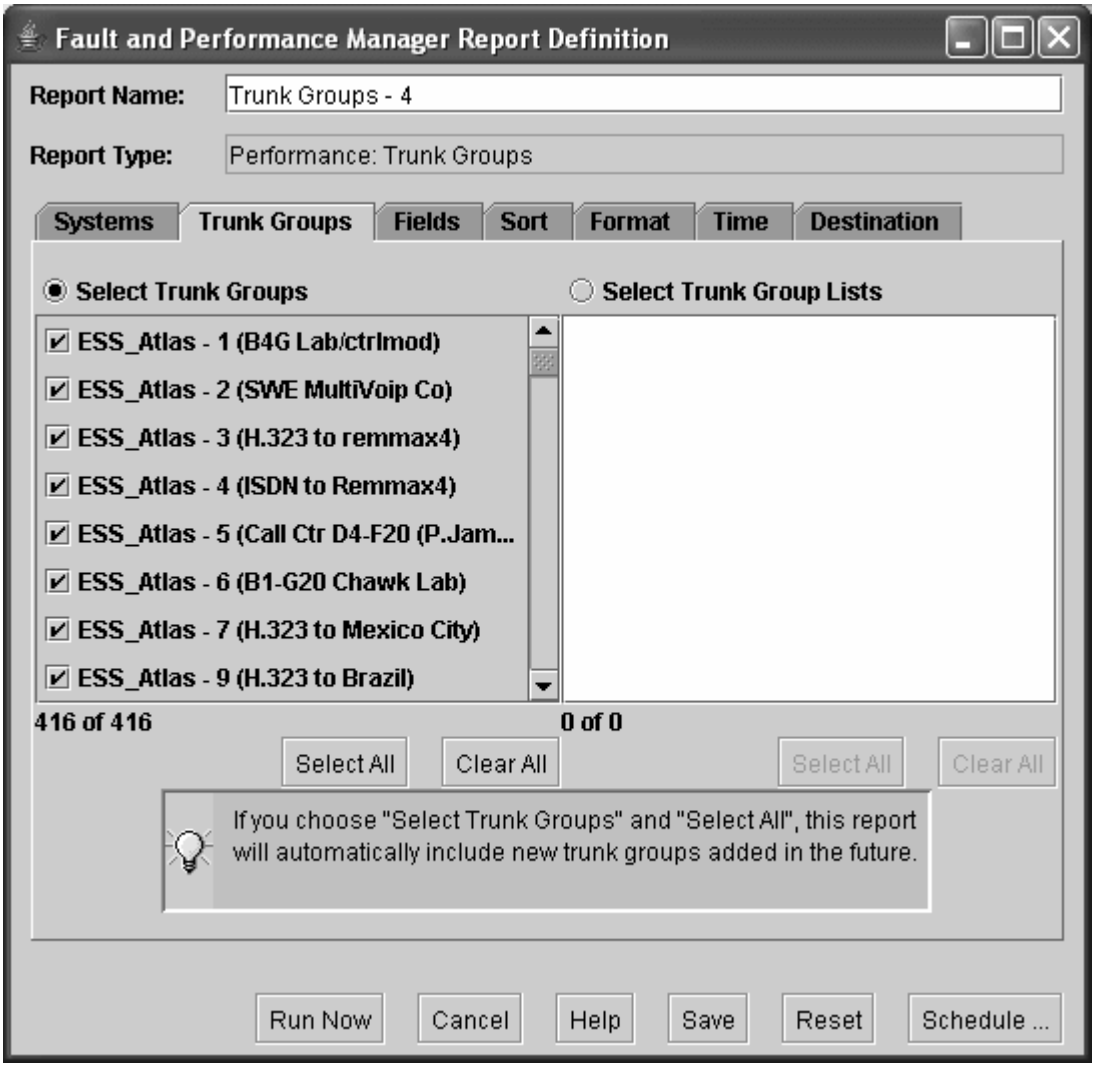
  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Trunk Groups Tab

This tab allows you to select trunk groups in your report.



To select trunk groups, follow these steps:

1. Select one of the following options:
    - **Trunk Groups** to choose one or more trunk groups.

      The displayed list includes the trunk groups for systems selected on the Systems tab. The list includes the system name, the trunk group number, and the trunk group name, if known. It is possible that Fault and Performance Manager may receive performance data for a new trunk group before it receives configuration data. In this case, the trunk group name is not shown until configuration data is collected. (See Configuration Collection for more information.)

    - **Trunk Group Lists** to choose one or more trunk group lists.

      The displayed list includes the trunk group lists for systems selected on the Systems tab. The list includes the system name and the trunk group list name. (See Trunk Group Lists to view and edit the contents of a trunk group list.)

- Use the **Select All** button to select all trunk groups.
- Use the **Clear All** button to clear any selections.

Note:

If more trunk group lists are subsequently added, they will not be automatically included. You must edit the Report Definition to include the new lists.

2. After selecting the trunk groups, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:

   - Save

     Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

   - Run Now

     Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

   - Schedule

     Opens the Schedule Report dialog box.

   - Reset

     Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

   - Cancel

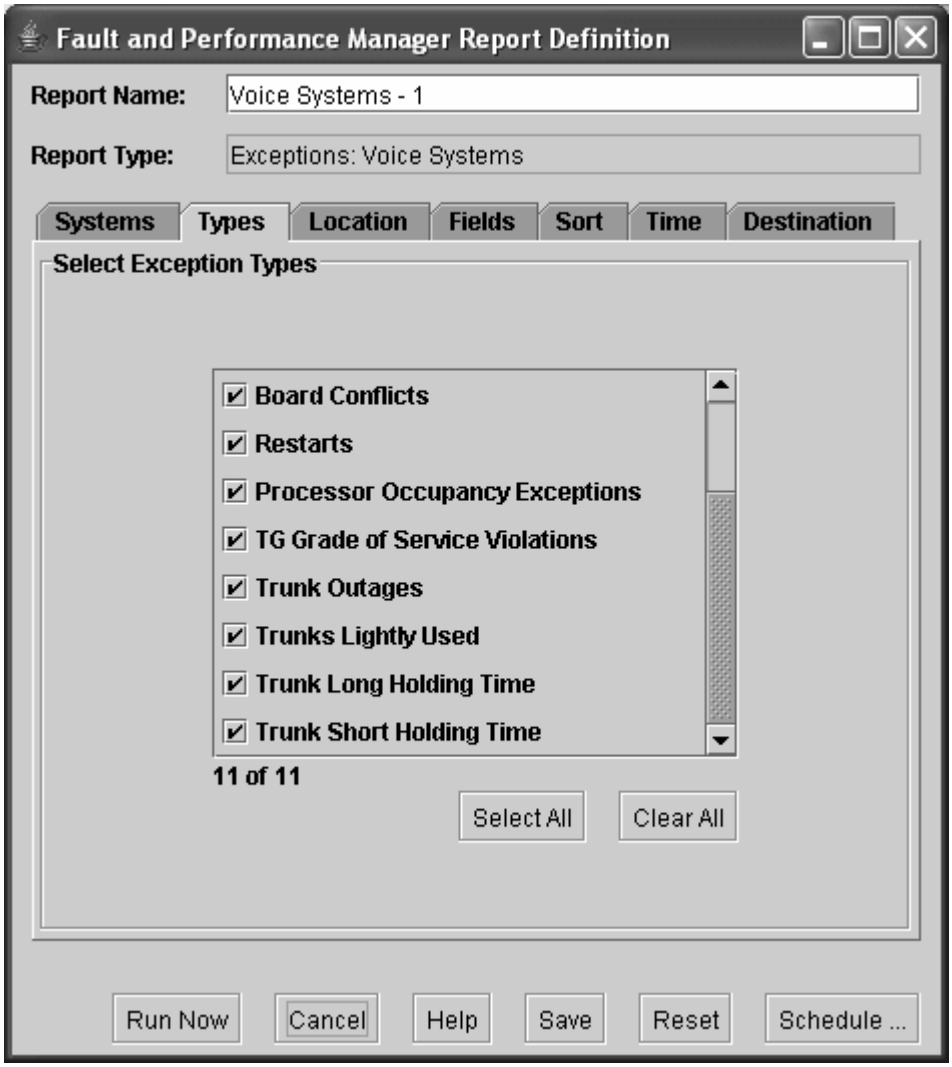
     Cancels the report definition and closes the dialog box without saving any changes.

   - Help

     Displays a help screen for the selected tab.

Types Tab

This tab allows you to select the types of exceptions to include in your report.



To select the types of exceptions, follow these steps:

1. Select the types of exceptions that you want to include in your report by selecting each one in the **Select Exception Types** list box. (At least one type must be selected.)
    - Use the **Select All** button to select all exception types.
    - Use the **Clear All** button to clear any selections.
2. After selecting the exception types, click another tab to continue defining the report, or click one of the buttons at the bottom of the screen:
    - Save

      Saves the current report definition. This button is active for new reports that have not yet been saved, and for any report to which changes have been made.

- Run Now

  Runs the current report on demand. While the report is running, a progress dialog box displays information about percentage completion and provides a Cancel button to stop the report. A message box appears when the report has been run successfully. If the report run fails, a warning dialog box is displayed that describes the reason for the failure.

- Schedule

  Opens the Schedule Report dialog box.

- Reset

  Resets the report definition to the last saved version. If this is a new report that has not yet been saved, the report definition is reset to its initial default values.

- Cancel

  Cancels the report definition and closes the dialog box without saving any changes.

- Help

  Displays a help screen for the selected tab.

Miscellaneous

Important New Features

1. New Features in Release 5.0

- **CM-SES Co-residency.** - The Avaya Communication Manager (CM) and SIP Enablement Server (SES) can be co-resident. This will be indicated in the **Server Type** field of the *System Configuration* screen.
- **Increased Attendant Consoles.** - The Performance: Attendant Groups report can display up to 414 attendant consoles based on up to 100 attendant consoles for a complex switching system when represented as a "Mega Switch," and up to 314 attendant consoles for a geographically dispersed network of cabinets/media-gateways/remote offices.
- **G450 Media Gateway.** - The G450 media gateway is supported similarly to other media gateways.
- **Transaction Log.** - A Transaction Log report has been added to the Exception Report group. It logs transactions including the userID, transaction, and results of the transaction.
- **Malibu Media Gateways (J2320, J2350, J4350, and J6350).** - The Malibu media gateways are supported similarly to other media gateways.
- **Filter Types** - Filter typesin the Alarm Filter Panel have been simplified.
- **Platform Alarm Filtering.** - Alarm filtering for a specific platform can specify a specific error code. Alarm filtering can also be specified for restart alarms by level.
- **Additional Maintenance Object (MO) types** for Help Desk function:
    - VAL-BD (Voice Announcement over LAN Circuit Pack)
    - DID-TRK (DID Trunk)

New Features in Release 4.0

- **AAA Server: CM Radius/LDAP Support.** - FPM 4.0 uses Common Prompts for Automatic Login sequences so that customers will be able to use external authentication servers for authentication into CM.
- **Improvements to CM Logging.** - CM 4.0 command history (in syslog) includes new fields that track variables changed together with original and new values. A secondary user name indicates which FPM user made the changes. (FPM uses a common login to CM for all users.)

  Note: list and display type commands do not log the secondary user since they do not affect system configuration.
- **Dial Plan Expansion** - Extensions may be up to thirteen characters including digits and (up to 3) punctuation characters. The use of periods or hyphens to break up long strings of digits improves readability and accuracy.
- **Up to 9000 announcements per CM.**
- **Support for the S8300C processor board** - Replaces earlier S8300x processor boards.
- **Additional Maintenance Object (MO) types** for Help Desk function:
    - MG-VOIP (Media Gateway DSP Resources)
    - MG-DS1 (Media Gateway DS1 Trunk)

- IPSV-CTL (IP Server Interface Control
- CLAN-BD (Control LAN Circuit Pack)
- VAL-BD (Voice Announcement over LAN Circuit Pack)
- DID-TRK (DID Trunk)
- ETH-PT (Control LAN Ethernet Port)

New Features in Release 3.2

The ability to generate a capacity report that displays available and used capacity information for the selected voice systems.

- Fault and Performance Manager displays only those elements that you have permission to administer. (The elements that you can administer are specified in Avaya Integrated Management Database.)
- Distributed database and collection architecture enhancements that enable you to manage larger networks of voice systems and adjuncts with improved performance of the user interface.
- Support of a Secure Services Gateway (SSG) as a managed element with Fault and Performance Manager and for “modem-free” alarm processing of adjunct/messaging alarms.

New Features in Release 3.1:

- Support for the following processors and boards:
  - S8720 Next Generation S87xx Server
  - S8400 Server TN Form Factor
  - Support G250-DCP Media Gateway
  - Support G250-T1/E1 Media Gateway
    - 16X Analog MM
    - 40 Port POE HDMM
  - Crossfire Duplication [TN2602AP]
- Support for Processor Ethernet and Enhanced LSP
- Support for Alarm Refinements
- Managed Security Service
- Selective Router – Provide audible indication
- Helpdesk Assist Feature
- Performance Data Alerting
- Additional Element Support via SNMP

Beginning with Release 3.0:

- Support for the S8500B server
- Support for the following media modules and boards:
  - G250 Media Gateway
  - Crossfire board - TN2602AP IP media processor
  - MM716 analog 16-port (12 line + 4 trunk) media module
  - MM720 trunk/line side BRI 8-port media module

- New user interface that provides a server view, a DCS view, and an IP trunk view of the network
- Support for Enterprise Survivable Servers (ESS), which enables MCC1, SCC1, G600, and G650 media gateways to receive control from alternate sources when the primary S8500 server or S8700 server cannot communicate with these gateways.
- Support for the Auto Fail Back Configuration feature, which enables you to configure a "recovery rule" for each G250, G350, and G700 media gateway.
- The ability to receive traps from Avaya Converged Network Analyzer (CNA).
- The Help Desk feature, which will help you troubleshoot alarms on Avaya Communication Manager.
- Enhanced trunk reports.
- Additional voice system reports:
    - Collect/Report List Measurement Coverage Path Data - Daily
    - Collect/Report List Measurement Coverage Path Data - Hourly
    - Collect/Report List Measurement Principal Data - Daily
    - Collect/Report List Measurement Principal Data - Hourly
- Support for third-party voice system report
- Enhanced trap forwarding and filtering
- The ability to poll for clear alarms on Avaya Communication Manager

Beginning with Release 2.1:

- A user account and password are required to logon to Fault and Performance Manager (FPM).
- Your account and password are assigned by a System Administrator using the Integrated Management Database (IMD). In addition to your account and password, you are assigned a privilege level.
- The menus that appear when you use FPM are appropriate for your privilege level. If you can’t find a menu or you think a menu is missing, please contact your System Administrator and verify that you have the correct privilege level for your needs.

Legal Notices

Notice

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Warranty

Avaya Inc. provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language as well as information regarding support for this product, while under warranty, is available through the following Web site: http://www.avaya.com/support.

Preventing Toll Fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Fraud Intervention

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, in the United States and Canada, call the Technical Service Center's Toll Fraud Intervention Hotline at 1-800-643-2353.

How to Get Help

For additional support telephone numbers, go to the Avaya support Web site: http://www.avaya.com/support. If you are:

- Within the United States, click the Escalation Management link. Then click the appropriate link for the type of support you need.
- Outside the United States, click the Escalation Management link. Then click the International Services link that includes telephone numbers for the international Centers of Excellence.

Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - Avaya's customer system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- Your Avaya-provided telecommunications systems and their interfaces
- Your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

TCP/IP Facilities

Customers may experience differences in product performance, reliability and security depending upon network configurations/design and topologies, even when the product performs as warranted.

Standards Compliance

Avaya Inc. is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Avaya Inc. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user. Pursuant to Part 15 of the Federal Communications Commission (FCC) Rules, the user is cautioned that changes or modifications not expressly approved by Avaya Inc. could void the user's authority to operate this equipment.

Product Safety Standards

This product complies with and conforms to the following international Product Safety standards as applicable:

- Safety of Information Technology Equipment, IEC 60950, 3rd Edition including all relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A.
- Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-00 / UL 60950, 3rd Edition
- Safety Requirements for Customer Equipment, ACA Technical Standard (TS) 001 - 1997
- One or more of the following Mexican national standards, as applicable: NOM 001 SCFI 1993, NOM SCFI 016 1993, NOM 019 SCFI 1998

The equipment described in this document may contain Class 1 LASER Device(s). These devices comply with the following standards:

- EN 60825-1, Edition 1.1, 1998-01
- 21 CFR 1040.10 and CFR 1040.11.

The LASER devices operate within the following parameters:

- Maximum power output: -5 dBm to -8 dBm
- Center Wavelength: 1310 nm to 1360 nm

Luokan 1 Laserlaite

Klass 1 Laser Apparat

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposures. Contact your Avaya representative for more laser product information.

Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international EMC standards and all relevant national deviations:

Limits and Methods of Measurement of Radio Interference of Information Technology Equipment, CISPR 22:1997 and EN55022:1998.

Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement, CISPR 24:1997 and EN55024:1998, including:

- Electrostatic Discharge (ESD) IEC 61000-4-2
- Radiated Immunity IEC 61000-4-3
- Electrical Fast Transient IEC 61000-4-4
- Lightning Effects IEC 61000-4-5
- Conducted Immunity IEC 61000-4-6
- Mains Frequency Magnetic Field IEC 61000-4-8
- Voltage Dips and Variations IEC 61000-4-11
- Powerline Harmonics IEC 61000-3-2
- Voltage Fluctuations and Flicker IEC 61000-3-3

Federal Communications Commission Statement

Part 15:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Part 68: Answer-Supervision Signaling

Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- answered by the called station,
- answered by the attendant, or
- routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user.

This equipment returns answer-supervision signals on all direct inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered.
- A busy tone is received.
- A reorder tone is received.

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

REN Number

For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

This equipment complies with Part 68 of the FCC rules. On either the rear or inside the front cover of this equipment is a label that contains, among other information, the FCC registration number, and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

For G350 and G700 Media Gateways:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the rear of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. The digits represented by ## are the ringer equivalence number (REN) without a decimal point (for example, 03 is a REN of 0.3). If requested, this number must be provided to the telephone company.

For all media gateways:

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed 5.0. To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

REN is not required for some types of analog or digital facilities.

Means of Connection

Connection of this equipment to the telephone network is shown in the following tables.

For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/REN/ A.S. Code	Network Jacks
Off premises station	OL13C	9.0F	RJ2GX, RJ21X, RJ11C
DID trunk	02RV2-T	0.0B	RJ2GX, RJ21X
CO trunk	02GS2	0.3A	RJ21X
	02LS2	0.3A	RJ21X
Tie trunk	TL31M	9.0F	RJ2GX
Basic Rate Interface	02IS5	6.0F, 6.0Y	RJ49C
1.544 digital interface	04DU9-BN	6.0F	RJ48C, RJ48M
	04DU9-IKN	6.0F	RJ48C, RJ48M
	04DU9-ISN	6.0F	RJ48C, RJ48M
120A4 channel service unit	04DU9-DN	6.0Y	RJ48C

For G350 and G700 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/REN/ A.S. Code	Network Jacks
Ground Start CO trunk	02GS2	1.0A	RJ11C
DID trunk	02RV2-T	AS.0	RJ11C

Manufacturer's Port Identifier	FIC Code	SOC/REN/ A.S. Code	Network Jacks
Loop Start CO trunk	02LS2	0.5A	RJ11C
1.544 digital interface	04DU9-BN	6.0Y	RJ48C
	04DU9-DN	6.0Y	RJ48C
	04DU9-IKN	6.0Y	RJ48C
	04DU9-ISN	6.0Y	RJ48C
Basic Rate Interface	02IS5	6.0F	RJ49C

For all media gateways:

If the terminal equipment (for example, the media server or media gateway) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact the Technical Service Center at 1-800-242- 2121 or contact your local Avaya representative. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. It is recommended that repairs be performed by Avaya certified technicians.

The equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

This equipment, if it uses a telephone receiver, is hearing aid compatible.

Canadian Department of Communications (DOC) Interference Information

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Declarations of Conformity

United States FCC Part 68 Supplier's Declaration of Conformity (SDoC)

Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC's Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site: ttp://www.avaya.com/support.

All Avaya media servers and media gateways are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at: http://www.part68.org/ by conducting a search using "Avaya" as manufacturer.

European Union Declarations of Conformity

CE

Avaya Inc. declares that the equipment specified in this document bearing the "CE" (Conformité Europeénne) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC). This equipment has been certified to meet CTR3 Basic Rate Interface (BRI) and CTR4 Primary Rate Interface (PRI) and subsets thereof in CTR12 and CTR13, as applicable.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative and are available on the following Web site: http://www.avaya.com/support.

Japan

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Document Copies

To order copies of this and other documents:

Call: Avaya Publications Center
Voice 1.800.457.1235 or 1.207.866.6701
FAX 1.800.457.1764 or 1.207.626.7269

Write: Globalware Solutions
200 Ward Hill Avenue
Haverhill, MA 01835 USA
Attention: Avaya Account Management

E-mail: totalware@gwsmail.com

For the most current versions of documentation, go to the Avaya support Web site: http://www.avaya.com/support.

Trademarks

AUDIX, CONVERSANT, DEFINITY, and INTUITY, are trademarks or registered trademarks of Avaya, Inc.

All other trademarks or registration marks mentioned in this help system are property of their respective owners.

Help System

What Does This Help System Cover?

Fault and Performance Manager's online help is designed to help you use Fault and Performance Manager day-to-day.

The accompanying printed documentation provides two functions:

- It is a self-paced training guide for persons interested in increasing their understanding of the system.
- It contains a complete set of on-line help topics.

For additional information about the following subjects, please see separate documentation:

- Installing, upgrading, configuring, or removing Fault and Performance Manager

  Please refer to Fault and Performance Manager installation documentation.

- Your Network Management System (NMS)

  Please refer to the documentation provided with the NMS.

- Your operating system

  Please refer to the documentation provided with your operating system.

- Data in the reports that Fault and Performance Manager generates

  Please refer to the documentation provided with your Communication Manager.

How To Use Online Help

What Do You Want To Do?

- View the table of contents
- View the index
- Search the help system
- Change the font size
- Print a help topic
- Exit help
- Functions not supported
- What I want to do isn't listed here

Common Help Problems

- Hyperlink does not work:

  All hyperlinks should work. Please send us feedback about any broken links and we will fix them in the next release of the product. Include the name of the help topic!

- No index entry for what I am looking for:

  Please send us feedback.

- Search feature finds no entries for what I am looking for:

  Please send us feedback.

View the online help Table of Contents (top)

The Table of Contents provides topics organized for easy access.

1. Click the Table of 

button.
2. To open a book, click on it.
3. To view a help topic, click on it.

View the online help Index

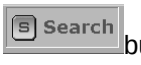
The Index provides topics organized alphabetically by keywords assigned by the author of the help system.

1. Click the 

button.
2. Either:
   - Type the word you are looking for and press **Enter**, or
   - Scroll down to the index entry you want.
3. Click the help topic you want to view.

Search the online help system (top)

The Search feature provides a full text search.

1. Click the 

button.
2. Type the word you are looking for and press **Enter**.
3. Click any of the topics that appear in the list.

Note:

You can also use the general  *box near the top right corner of the screen to search. The effect is to automatically click the* ***Search*** *button, copy the contents of the search box to the input field, and find a list of topics that contain it.*

Change the Help Font Size (top)

Font size is the size of characters in the online help. The Fault and Performance Manager help system does not allow you to change the type size displayed. However, if you find the type size to be a problem, send us your feedback! We take your comments into account each time we update the help system.

Print a Help Topic (top)

- To print a help topic, display the help topic (as described above) and then click the browser  button.
- To set up your printer, click the browser  button.

Exit Help (top)

- To exit the online help, click the "X" at the top right corner of the help window.

Functions Not Supported (top)

- Print all help topics (See Printed Documentation.)
- Add my own notes to a help topic
- Bookmark a topic
- Make the help system stay on top of the application
- Change the size of the typeface within help topics

What I Want to do isn't Listed Here (top)

As the authors of this online help system, we have made every effort to anticipate your questions and information needs. However, in this instance, we obviously missed!

You can help us improve this online help system by telling us more about the situation you are in and the precise information you were looking for. Feel free to send us suggested text for a new link! Or a suggestion for a new topic! Or just tell us what you were looking for.

We keep a record of all the customer comments that we receive. With each new release, we go through the list and implement fixes for as many of the comments as we can.

You can put your suggestion on our list by contacting us at the email address listed in the topic, Giving Us Your Feedback. Thanks in advance for your comments and suggestions!

Contacting Us

Before You Call

Before you call, please have the following information available:

- your name and number (in case we need to call you back)
- your installation location (IL) number
- your company's main phone number
- the type of voice system
- the version of Fault and Performance Manager/Proxy Agent you are using
- the name of a person at your location who can help execute troubleshooting activities
- whether or not you have set up remote access on the Fault and Performance Manager/Proxy Agent server, and what the access information is to remotely access that computer

Remember, if the problem is with equipment or service outside of your own equipment, you need to call your vendor or service provider. If you determine that the problem is with your own equipment, such as on your own stations, switch, or trunks, give Avaya a call.

Be ready to talk about:

- the problem you want to solve
- a log of the steps you took and the information you gathered while performing your diagnosis of the problem
- if the problem is with a new component or feature
- if something that used to work now does not work
- any numbers involved with the problem (for example, extensions or phone numbers, trunk group numbers, phone types, or report types)
- the contents of any recorded messages received
- error messages from the switch
- type of ringback tones received on phones
- the names and numbers of your vendors
- any other pertinent information

Related Topics

- General Contact Information
- Technical Support
- Contacting us about documentation
- Contacting us about training
- Giving us your feedback

General Contact Information

For…	Contact…
Avaya's Home Page	www.avaya.com
Avaya products	www.avaya.com Then click Solutions, Products, & Services.
Online product catalog	www.avaya.com Then click How to Buy.
Security products and services	www.avaya.com Then click Solutions, Products, & Services. Then click VPN and Security.
International Alliance of Avaya Users (InAAU)	www.inaau.org

Related Topics

- Technical Support
- Contacting us about documentation
- Contacting us about training
- Giving us your feedback

Technical Support

Before you call, prepare the information that the helpline needs.

For customers located in the US:

For help with…	Contact this resource:	Contact Information
Fault and Performance Manager	Avaya's Technical Services Organization	1 800 242 2121, ext 4-1080 or 720 444 1080
Communication Manager software features and administration	Avaya's Communication Manager Helpline	1 800 225 7585
Communication Manager maintenance and repair	Avaya's Technical Services Organization	1 800 242 2121
Messaging systems	Avaya Technical Services Organization	1 800 242 2121
Toll fraud	Avaya's Technical Services Organization (Toll Fraud Helpline)	1 800 643 2353
Web-based technical support	Avaya's Customer Support web site	www.avaya.com Then click Support. Then click Online Services.

For customers located outside the US:

Contact your local distributor or Avaya representative.

Related Topics

- General Contact Information
- Contacting us about documentation
- Contacting us about training
- Giving us your feedback

Giving Us Your Feedback

To…		Contact…
Offer comments on the online help	by e-mail	document@avaya.com Subject line: FPM Help Topic "<Name of topic>" feedback. Do **NOT** send product support questions or product enhancement requests to this e-mail address.
	by fax	+ 1 732 852 2469 Attention: FPM Documentation
	by mail	FPM Documentation Team Room 3C-313 307 Middletown Lincroft Road Lincroft, NJ 07738-1526 USA
Share information with other Avaya users	over the web	www.inaau.org

Related Topics

- General Contact Information
- Technical Support
- Contacting us about documentation
- Contacting us about training

Contacting Us for Documentation

To	Use this resource	Contact Information
View documentation published after December 1, 1999	Recent Documents	www.avaya.com Then click Support. Then click Product Documentation.
Order documentation by mail	Avaya Publications Center	Globalware Solutions 148 Ward Hill Avenue Haverhill, MA 01835 USA
Order documentation by phone or fax	Avaya Publications Center	1 800 457 1235 (phone) 1 800 457 1764 (fax) If you cannot dial US 1-800 numbers, then dial: +1 410 568 3680 (phone) +1 410 891 0207 (fax)

Related Topics

- General Contact Information
- Technical Support
- Contacting us about training
- Giving us your feedback

Contacting Us About Training

For customers located in the US:

To	Use this resource	Contact Information
Search an online catalog of classes, videotapes, and computer-based training	Avaya training web site	www.avaya.com Then click Training.
Register for classes	Avaya University Registration Center	1 800 255 8988

For customers located outside the US:

Contact your local distributor or Avaya representative.

Related Topics

- General Contact Information
- Technical Support
- Contacting us about documentation
- Giving us your feedback

Glossary

A

AFI: Authority and format identifier.

Alert: An exception that meets user-defined criteria for signaling an alert on the main application window. See also Exception.

Alt Name: The equipment identifier associated with a voice system alarm or error, for example, trunk group and member, or extension. See also Maintenance name.

ATM: Asynchronous Transmission Mode.

ATM PNC: ATM Port Network Connectivity. A voice system feature that supports port network connections through an ATM network.

Aux data: Another term for Alt name.

B

BRI: Basic Rate Interface

C

CBC: Call-by-call.

CSU: Channel Service Unit.

D

DCS: Distributed Communications System

DS1: Digital Signal 1.

E

EI: Expansion Interface. A Port Network board.

EPN: Expansion Port Network.

Equipment identifier: Equipment associated with an exception, if any. It may be a voice system extension for an alarm or error, or a trunk group number or group and member for an exception detected by Fault and Performance Manager.

Equipment type: Type of equipment associated with an exception, if any. It may be a voice system maintenance name for an alarm or error, or for a board, trunk, or trunk group for an exception detected by Fault and Performance Manager.

Exception: A condition in a managed node or in the NMS that requires the attention of a network manager. It may be a voice system alarm, a performance exception, or a Fault and Performance Manager failure.

G

GUI: Graphical User Interface.

H

Hardware location: A string that locates voice system hardware at one of four levels:Cabinet (for example, 02)Cabinet and carrier (for example, 02B)Cabinet, carrier, and slot (for example, 02B06, or 01A TAPE)Cabinet, carrier, slot, and port (for example, 02B0602)

I

ISDN: Integrated Service Digital Network.

M

Maintenance name: The equipment type associated with a voice system alarm or error, for example "DIG-LINE"or "PDMODULE". See also Alt Name.

MCU: Multipoint Conferencing Unit.

Mtce name: See Maintenance Name

N

NMS: Network Management System. A general network management application (for example,HP Open View).

P

Pane: A rectangular area of a window that contains a logical grouping of data. Many Fault and Performance Manager windows show a left-hand pane with a navigation tree, and a right-hand pane that contains information corresponding to the selected tree node.

PNC: Port network connection or port network connectivity. See also ATM PNC, EI.

PPN: Processor Port Network.

PRI: Primary Rate Interface.

Proxy Agent: Avaya Proxy Agent (MPA). The system that fulfills SNMP requests for voice system data.

S

SNMP: Simple Network Management Protocol. A de facto industry standard, network management protocol used by Fault and Performance Manager.

SPE: Switch Processor Element.

SRP: Survivable Remote Processor.

T

TTI: Teletype Terminal Interface.

W

Window: A self-contained part of a GUI application. A rectangular area of the screen which may be enclosed by standard window decorations like a border, a title, and resize handles.

Index

T

V