BCM Rls 6.0

Alarm Manager

Task Based Guide

Downloading documents
For the most current versions of documentation, see the Avaya Support. Web site: http://www.avaya.com/support

Contact Avaya Support
Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Web site: http://www.avaya.com/support

Table of Contents

Alarm Manager

Overview

The Business Communications Manager (BCM) contains an Alarm Service that is used to monitor functions and events that may occur from components running on the BCM. These alarms indicate faults or informational conditions that may require resolution from the system administrator.

Examples of alarm conditions include:

- a telephony circuit on the system is down
- a service running on the BCM has been stopped by an administrator

Alarm information can be delivered by any of the following means:

- the Alarms Panel in the BCM Element Manager
- the Alarm Banner in the BCM Element Manager
- core telephony alarms show on the alarm set
- Simple Network Management Protocol (SNMP) traps for remote management of faults
- LEDs on the BCM main unit
- an e-mail destination

You can manage alarms and alarm information by configuring alarm settings, for example filtering alarms so that only the desired subset of alarms are displayed in the BCM Element Manager Alarms Panel or sent as SNMP traps administering alarms, for example acknowledging selected alarms and clearing the alarm log.

All alarms that appear in the BCM Element Manager Alarms Panel are logged in the alarms.systemlog file. This file is capped at 1 MB in size; when the file reaches this size, a new alarms.systemlog file is started.

The BCM keeps the current file as well as three previous files. The file is also capped and a new file is started when the BCM system is rebooted.

You can retrieve the alarms.systemlog files (the current file plus the three previous files) from the BCM system using the Log Management utility in BCM Element Manager (found under Administration, Logs). You can view the files using the BCM Log Browser, which can be launched in Element Manager from the File menu, then View Network Element Logs.

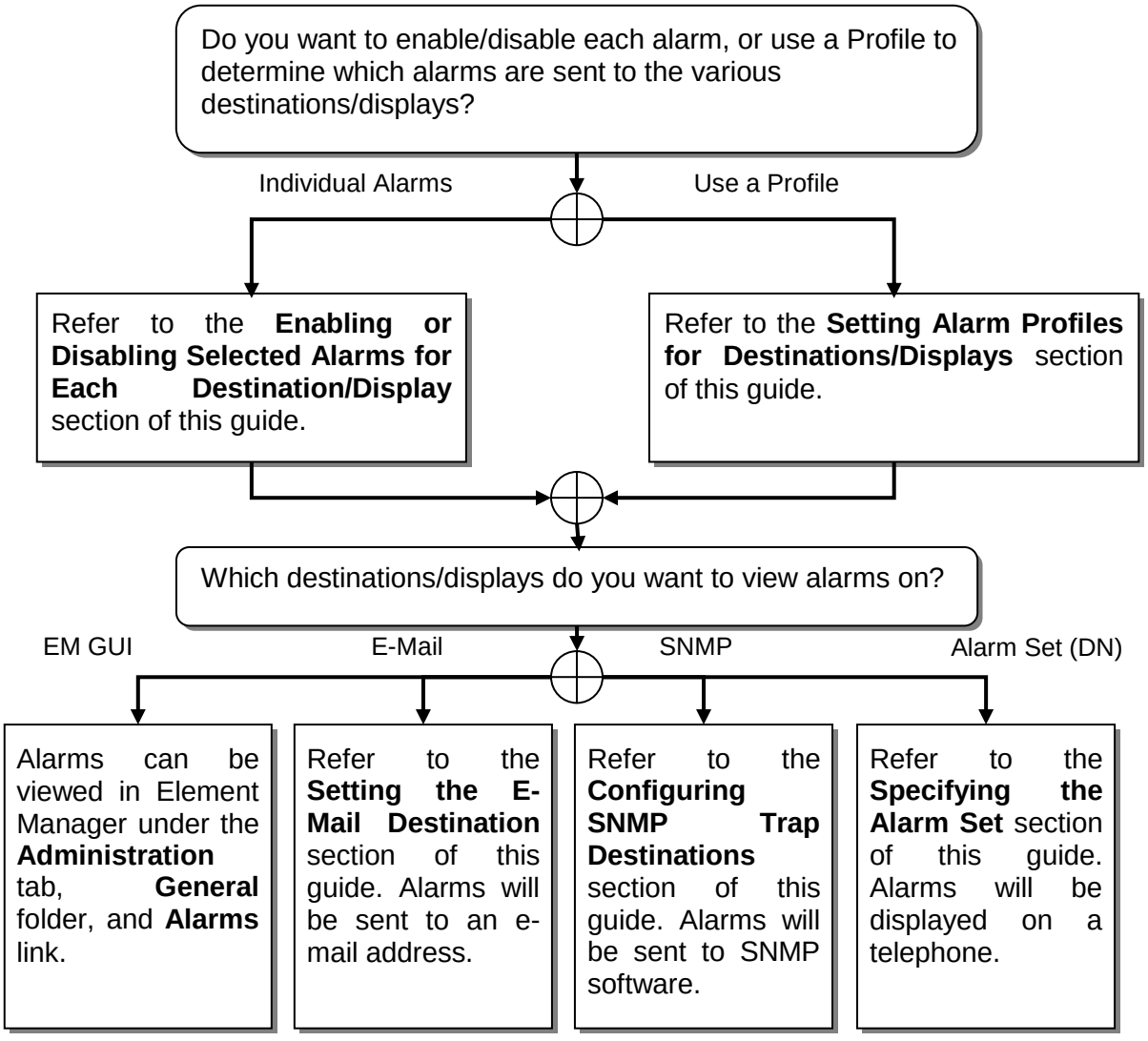
Required Information

Before configuring the Alarm Service and Alarm Manager, the following information is required:

- Which alarms should do you want to be alerted to
- How should an Administrator be notified of Alarms?

Flow Chart

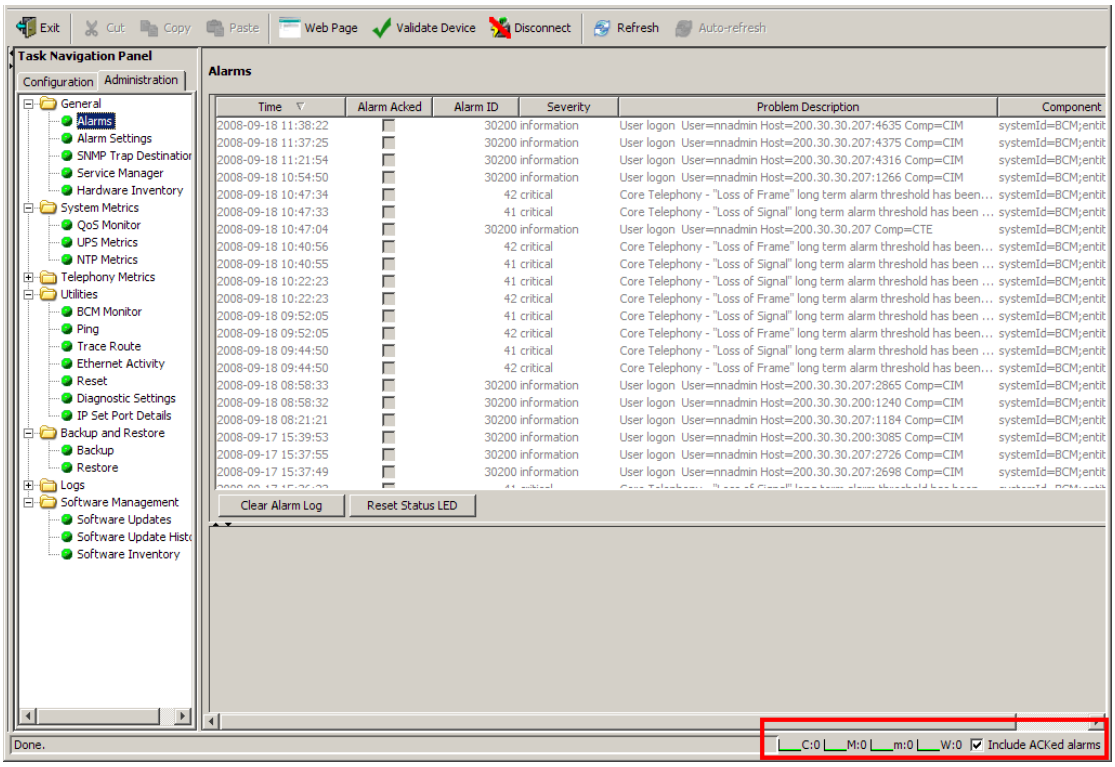
The flow chart below shows a recommended order for configuring and viewing system alarms.

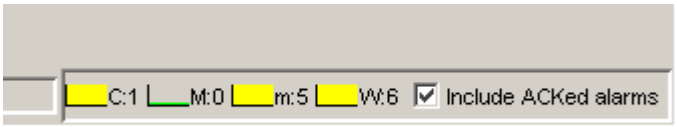


Configuration

Alarm banner

The Alarm Banner is situated on the bottom task bar of the Element Manager interface.





The Alarm Banner is visible at all times, so you do not have to navigate to the Alarms panel to view alarms. If you notice a change in alarm conditions in the Alarm Banner, for example a red mark in the Critical category, you can navigate to the Alarms Panel to view the actual alarm.

The Alarm Banner provides counts of Critical, Major, Minor, and Warning alarms; Information alarms are not included. You can specify whether to include acknowledged alarms in the Alarm Banner.

Each alarm severity counter has a graph, which represents a sample of the last 20 polling intervals. The graph has a colour to indicate a data change.

The colours are as follows:

- **Green**: There are no alarms of this severity, or there are alarms of this severity but the count has decreased since the last polling interval.
- **Yellow**: There are alarms of this severity, but they are older than at least 1 polling interval.
- **Red**: A new alarm has occurred since the last polling interval.

The BCM will scan for alarms every 30 seconds.

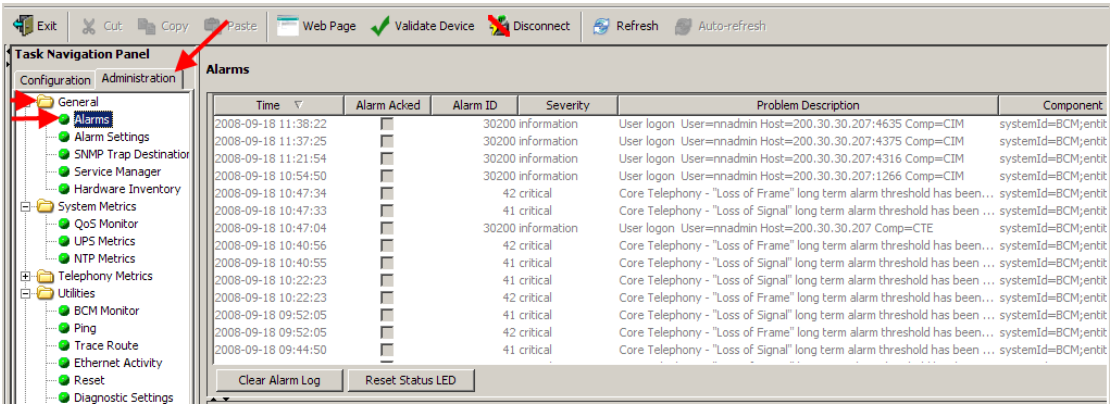
BCM Alarm Identification Numbers

You can view real-time alarm information using the Alarms screen in the BCM Element Manager interface.

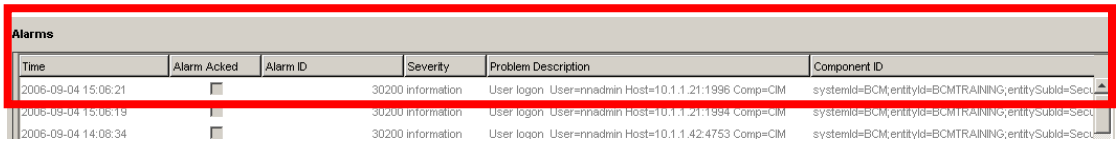
Alarms are generated by software components that are running on the BCM system, and cover BCM services and applications.

Each component has a range of alarm IDs, so that each BCM alarm has a unique alarm ID.

The Alarms can be viewed by selecting the **Administration** tab, opening the **General** folder and clicking on the **Alarms** link.



Alarm Headings



Time - the date and time of the alarm
Alarm Acked tick box - indicates whether the alarm has been acknowledged in the BCM Element Manager
Alarm ID - the unique alarm ID associated with the alarm
Severity - the severity of the alarm (Critical, Major, Minor, Warning, and Information)

Problem Description - a description of the alarm condition
Component ID - the process that has generated the alarm, in a 3-part format. The component ID always identifies the system as a BCM, includes the name of the system that generated the alarm, and identifies the component that generated the alarm. In this way, remote monitoring stations can easily identify what type of system generated an SNMP trap and which system generated the trap.

Alarms are, sorted by date and time by default, with the newest at the top of the table. The Alarms table displays from 100 to 1000 alarms.

BCM Component	Alarm ID Range
Core Telephony	0-999
Operating System	1000-1999
Software Updates	2000-2999
Persistent Data Repository	5000-5999
Date and Time	6000-6999
Modem Call Control	8000-8999
Service Manager	10000-10999
Platform Status Monitor	11000-11999
Backup and Restore	12000-12999
UPS	13000-13999
Configuration Change	16000-16999
System Set Based Admin	17000-17999
Startup Profile	19000-19999
System Authentication	30000-30999
Keycodes	31000-31999
Media Services Manager	40000-40999
CTE	41000-41999
Call Detail Recording	42000-42999
Voice CTI	43000-43999
IVR	46000-46999
Unistim Terminal Proxy Server	50000-50999
PVQM	50501-50999
VoIP Gateway	51000-51999
Media Path Server	52000-52999
Media Gateway Server	53000-53999
IP Telephony Provider	56000-56999
Survivable Remote Gateway	57000-57999
LAN Driver	60000-60999
ALG	64000-64999

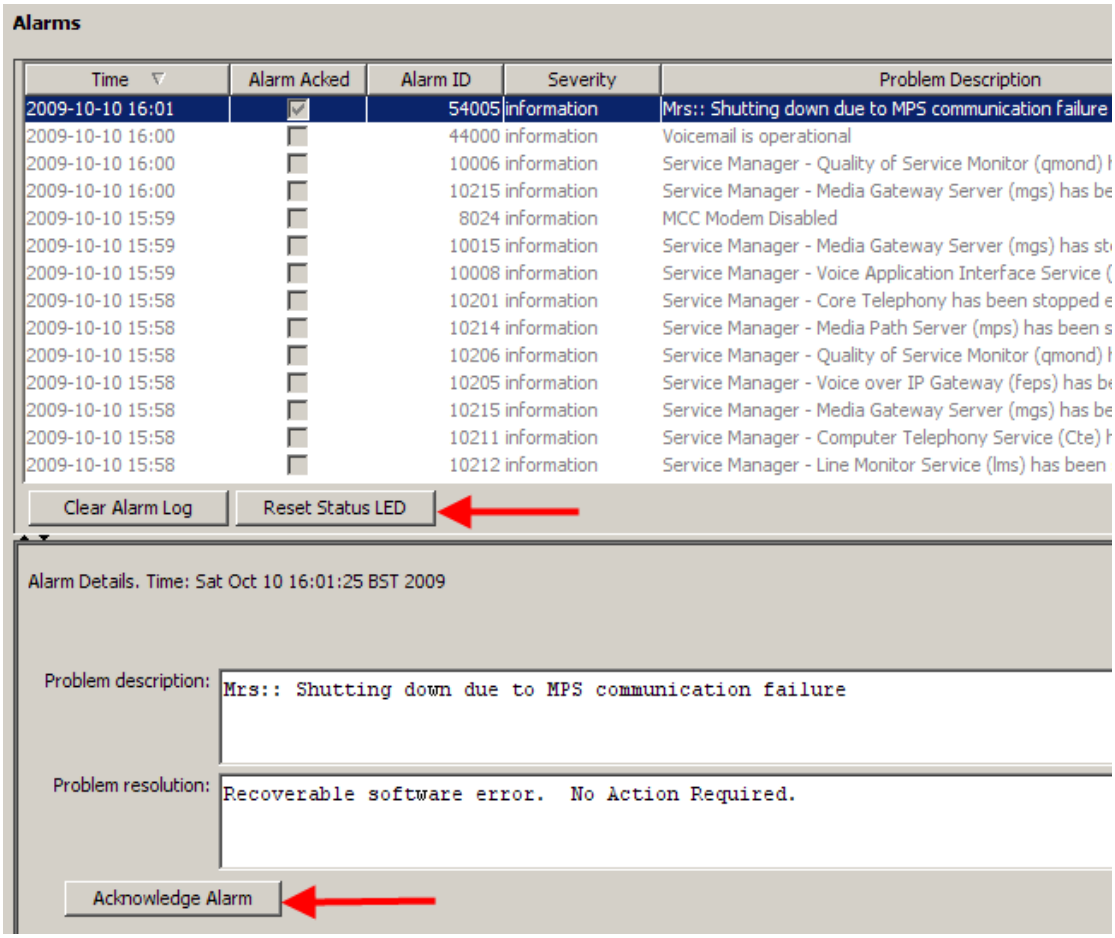
The BCM's LED's

When an alarm condition occurs on the system, the Status LED on the front of the BCM main unit changes to reflect the alarm condition. In normal operation, both LEDs are green. All alarms with a severity of Major and Critical change the Status LED to solid red on the BCM front panel, except in the event of a Failed Startup Profile, which is indicated by a flashing red LED.

Using the BCM Element Manager, you can reset the Status LEDs on the front panel of the BCM to a normal state.

Once the Status LED has changed to red in response to a Critical or Major alarm condition, it remains in the alarmed state until you reset it using the

BCM Element Manager. You would acknowledge the Alarm and then select the Reset LED's button the LED will then return to a Green state.



Alarm Settings

You may want to alter alarms from the default alarm status so that you can reduce the number of alarms that are displayed in the Alarms table, sent via SNMP traps, displayed on the Alarm set, or sent to e-mail destinations. You can specify how alarms are handled, according to your needs.
You can specify the following settings for alarms:

- The maximum number of alarms to display in the Alarms Panel (from 100 to 1000)
- Whether to enable or disable SNMP traps for certain alarms; by default, all Critical and Major alarms are sent as SNMP traps if you have specified one or more trap destinations
- Whether to display certain alarms in the Alarms table; by default all Critical, Major, Minor, and Warning alarms are displayed in the Alarms table
- Whether to display certain alarms on the alarm set; by default, only core telephony Critical and Major alarms are sent to this set
- Whether to send certain alarms to an e-mail destination.

Profiles can be set against the various alarm destination types, along the following criteria:

- Critical
- Critical/Major
- Critical/Major/Minor
- All
- None

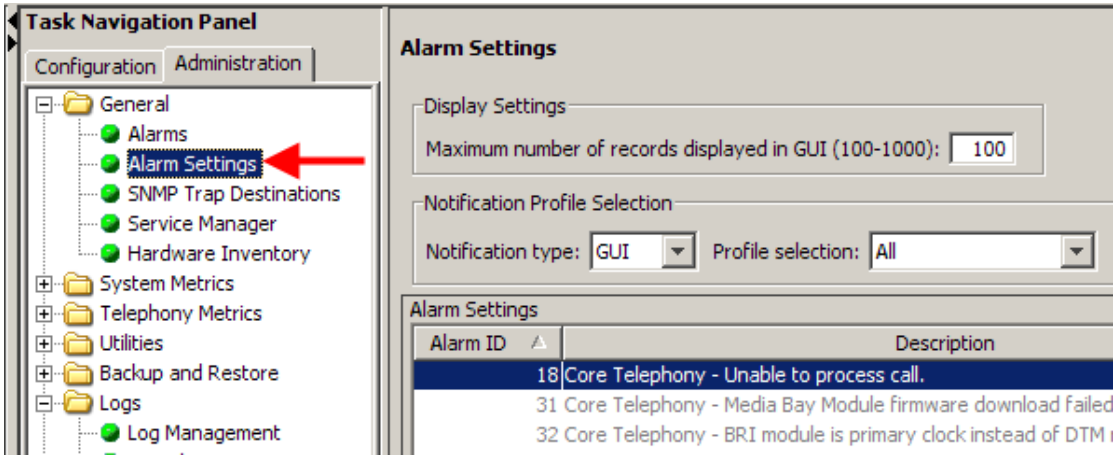
The application of this facility would allow only Critical alarms to be sent to e-mail destinations for example, or to stop sending alarms to the Alarm Set.

You can also test a selected alarm. This allows you to test whether the LED or alarm displays/destinations are functioning as expected. Testing an alarm generates an alarm in the system. Alarms generated using the Test Alarm feature are identified in the Alarms table by the words "Test Event" in the alarm Problem Description field.

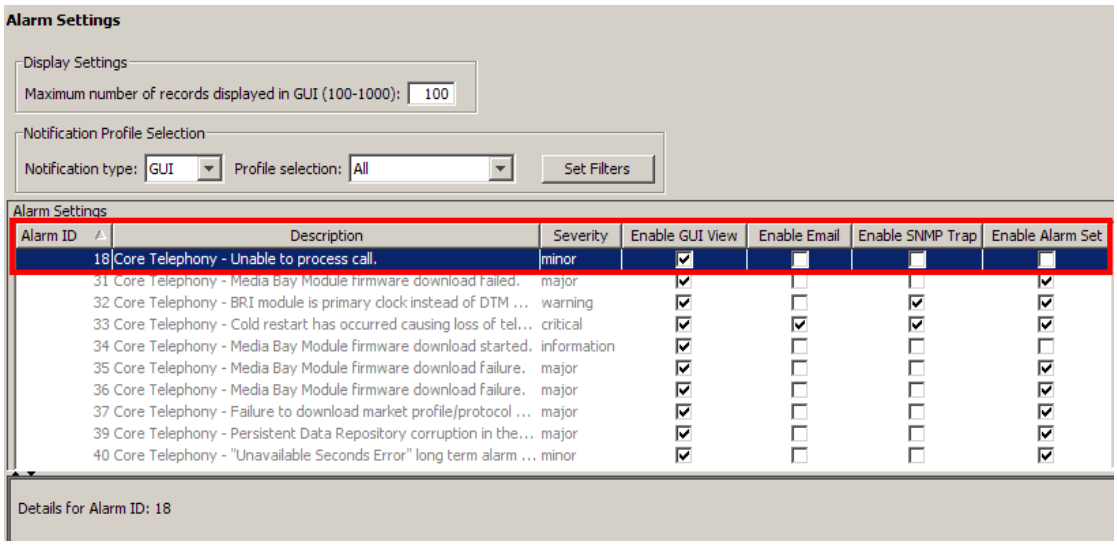
Enabling or Disabling Selected Alarms for Each Destination/Display

Use the following procedure to determine which alarms are sent to the various destinations or displays, on a per alarm basis.

1. From the **Administration** tab open the **General** folder, and then click the **Alarm Settings** link.

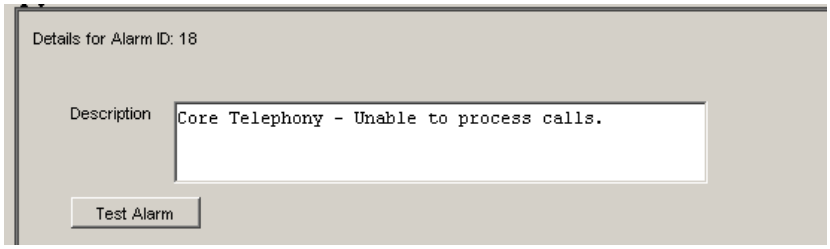


2. In the **Alarms** table, select an alarm.



3. For each destination/display, i.e. GUI, e-mail, SNMP, or Alarm Set, clear or tick the check box as appropriate. This will determine if the selected alarm is sent to that destination/display.

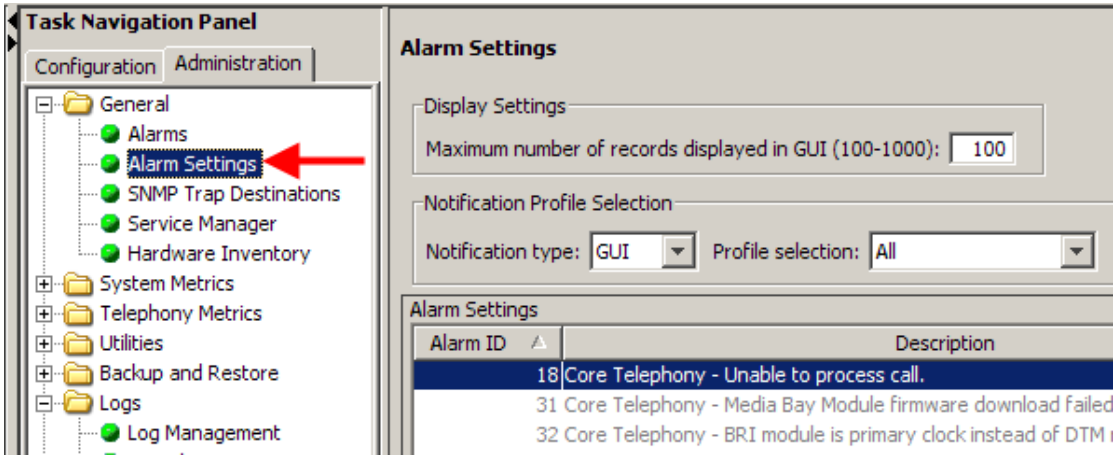
4. A description of the alarm can also be viewed at the bottom of the **alarms** panel.



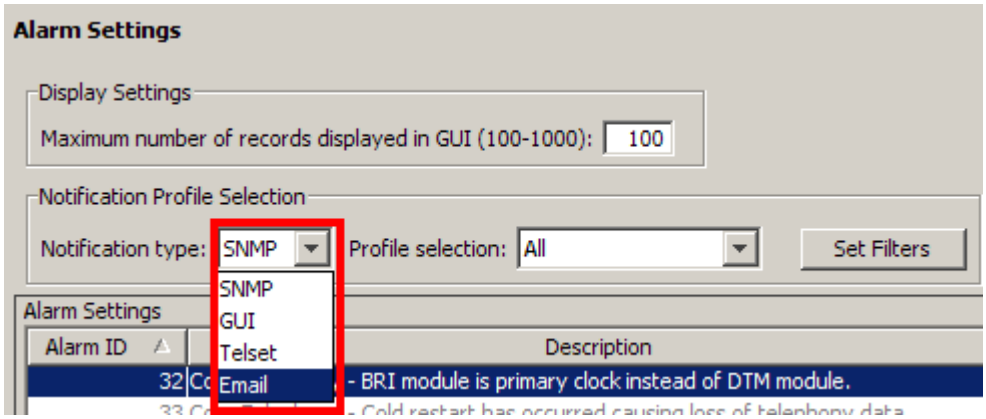
Setting Alarm Profiles for Destinations/Displays

As an alternative option to enabling or disabling alarms on a per destination/display basis, it is possible to choose which type of alarm (Critical, Major, Minor etc.) are sent to each destination/displays. It is also possible to disable sending all alarms to selected destinations/displays, the Alarm Set (telset display) for example.

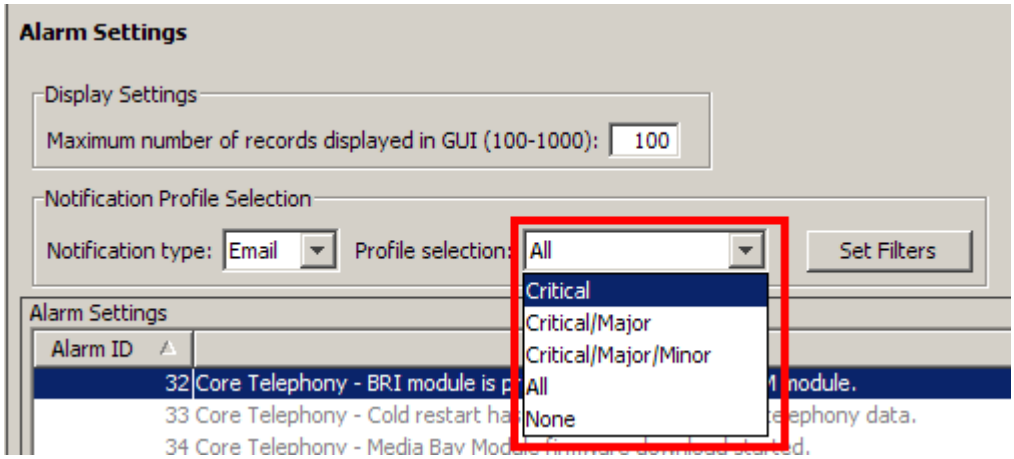
1. From the **Administration** tab open the **General** folder, and then click the **Alarm Settings** link.



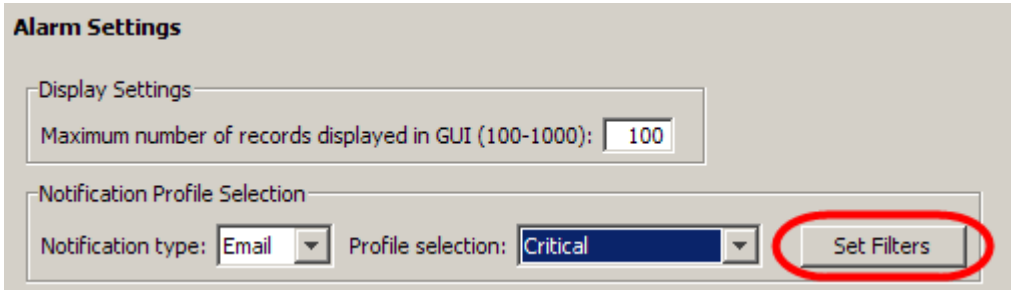
2. From the **Notification Type** field, select the destination/display you want to apply the Profile to.



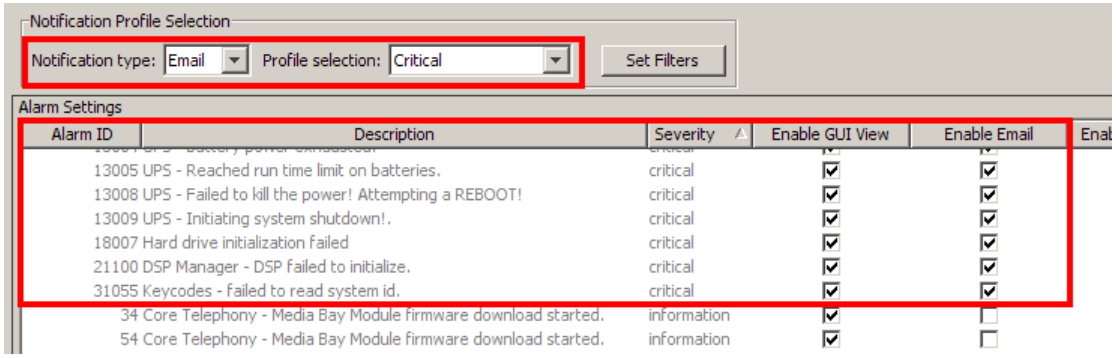
3. From the **Profile selection** field, select which types of alarms are to be sent the selected destination/display.



4. Now click on the **Set Filters** button.



5. In this example, only Critical alarms will be sent to an e-mail destination.

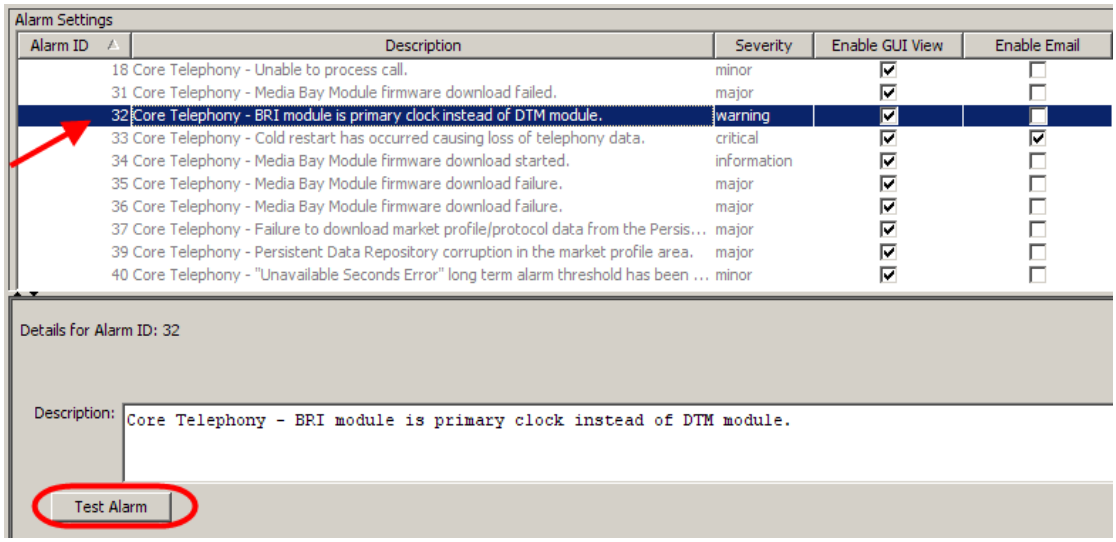


Testing an Alarm

If you want to determine if alarms are being sent to the appropriate destinations/displays, you can test the alarm using the following procedure.

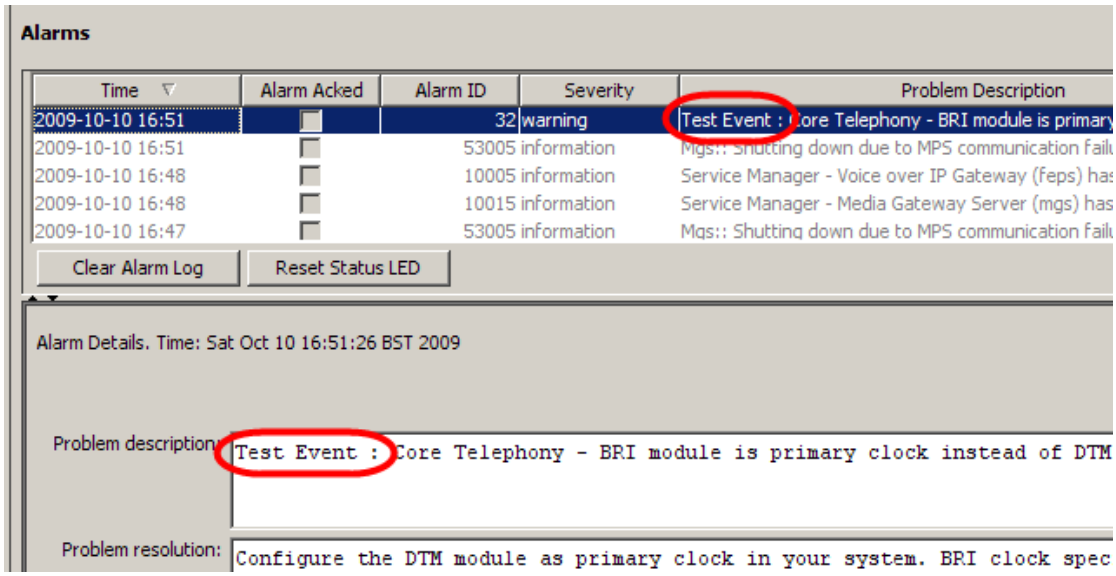
Alarms generated using the Test Alarm feature are identified in the Alarms table by the words "Test Event" in the alarm Problem Description field.

1. In the **Alarms** table, select an alarm.



2. Click the **Test Alarm** button.

3. In the Alarms table, "Test Event" is displayed in the alarm Problem Description field.



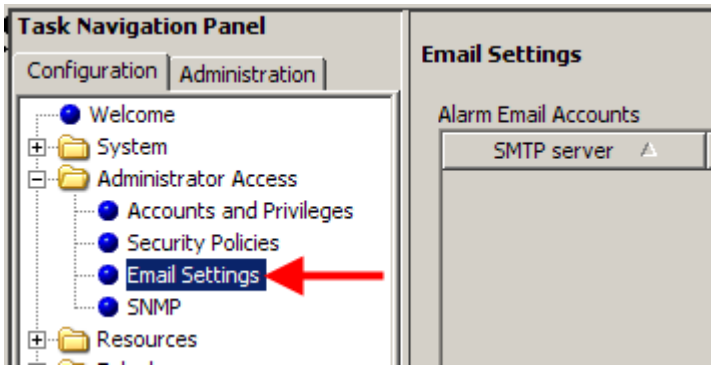
Setting the Destinations/Displays

In order for the alarms to be notified to the intended recipients, the various destinations/displays should be set correctly.

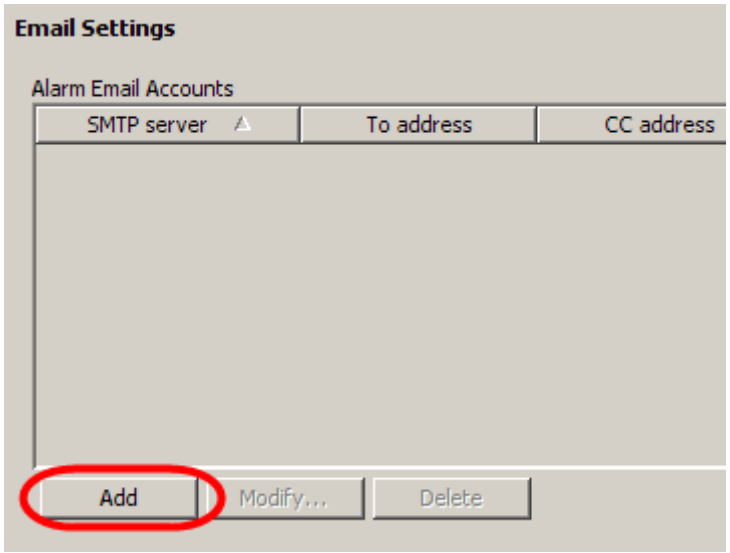
Setting the E-Mail Destination

Use the following procedure to configure which e-mail address receives the selected alarms.

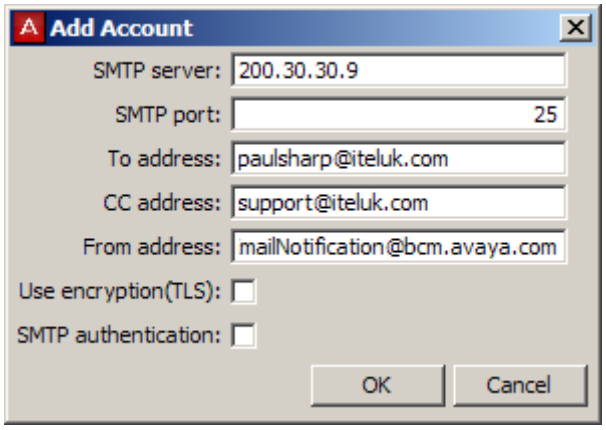
1. In Element Manager, click on the **Configuration** tab. Open the **Administrator Access** folder, and click on the **E-Mail Settings** link.



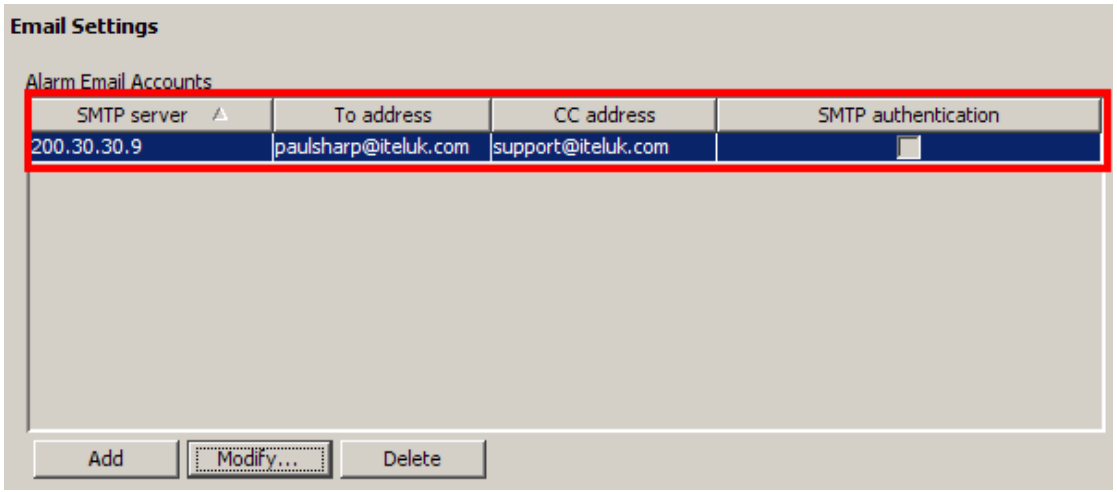
2. In the **E-Mail** settings area, click on the **Add** button.



3. Enter the details of the e-mail server (SMTP server) and destination address. Click **OK** when complete.



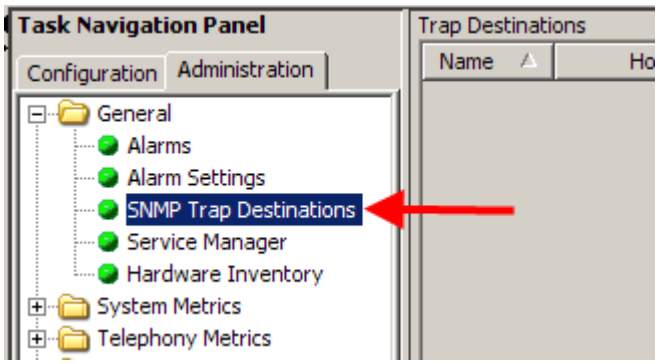
4. The account will be added to the list, and will be the destination for sending the specified alarms to.



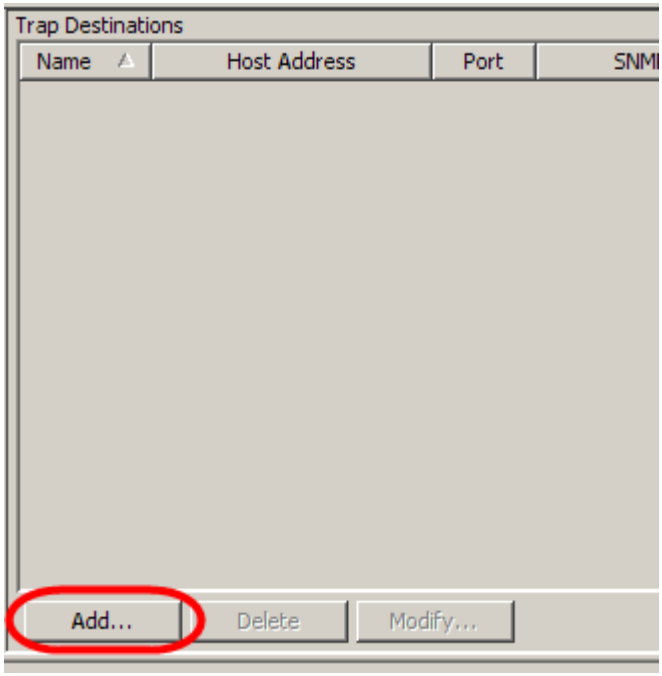
Configuring SNMP Trap Destinations

Use the following procedure to configure which SNMP trap destinations will receive the selected alarms. SNMP software is required at the destination to view the alarm information.

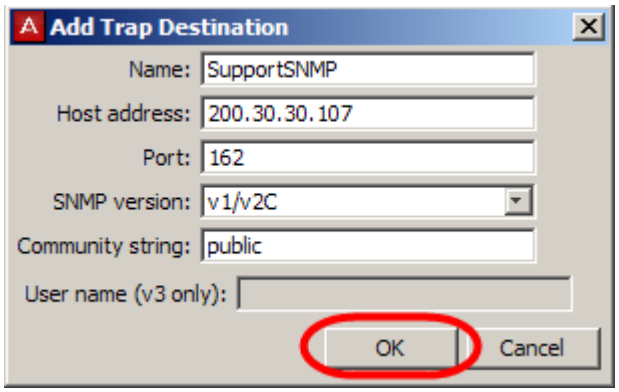
1. In Element Manager, click on the **Administration** tab. Open the **General** folder, and select the **SNMP Trap Destinations** link.



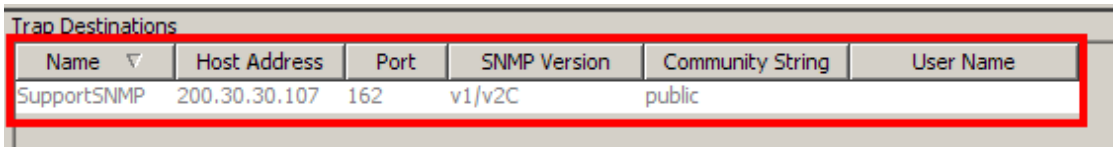
2. Click on the **Add** button at the bottom of the **Trap Destinations** window.



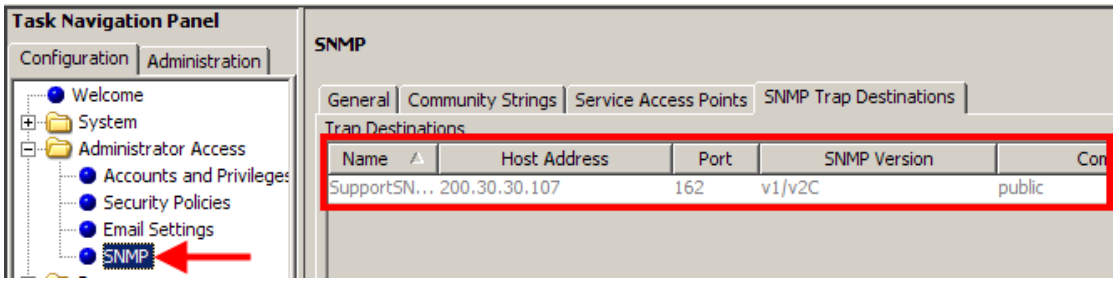
3. Enter the details of the SNMP destination (such as SNMP **Host address**, **SNMP version**, and **Community string**), and click **OK**. The **Port** number is entered as 162 by default.



4. The Trap Destination will be added to the list, and will be used as the destination to send the selected alarms to.



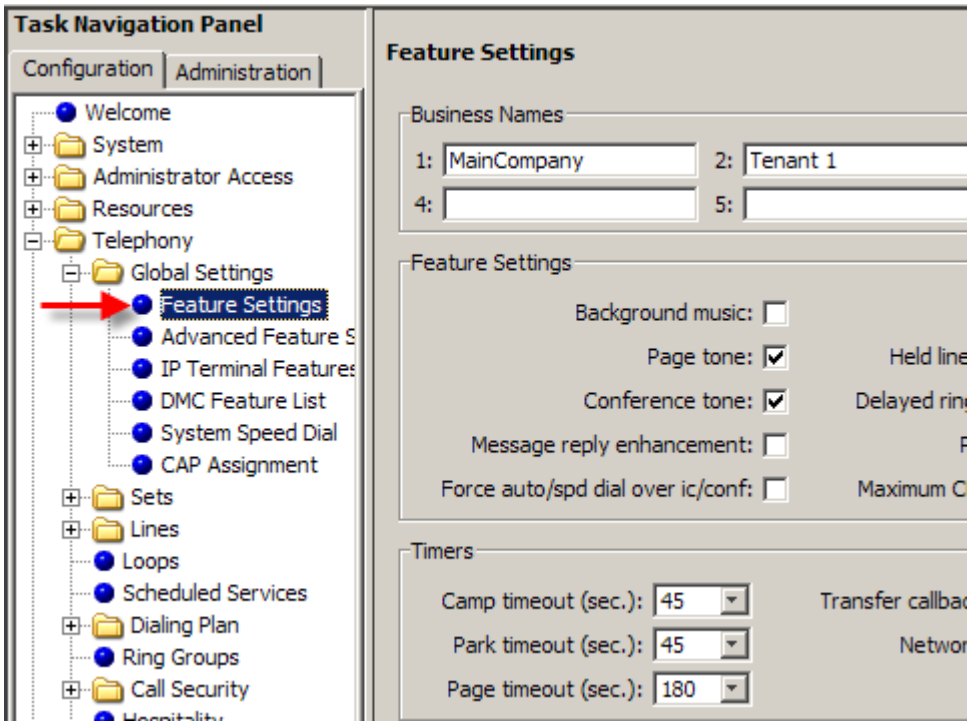
5. This account will also be created in the main SNMP configuration area under the **Configuration** tab, **Administrator Access** folder, **SNMP** link, **SNMP trap Destinations** tab.



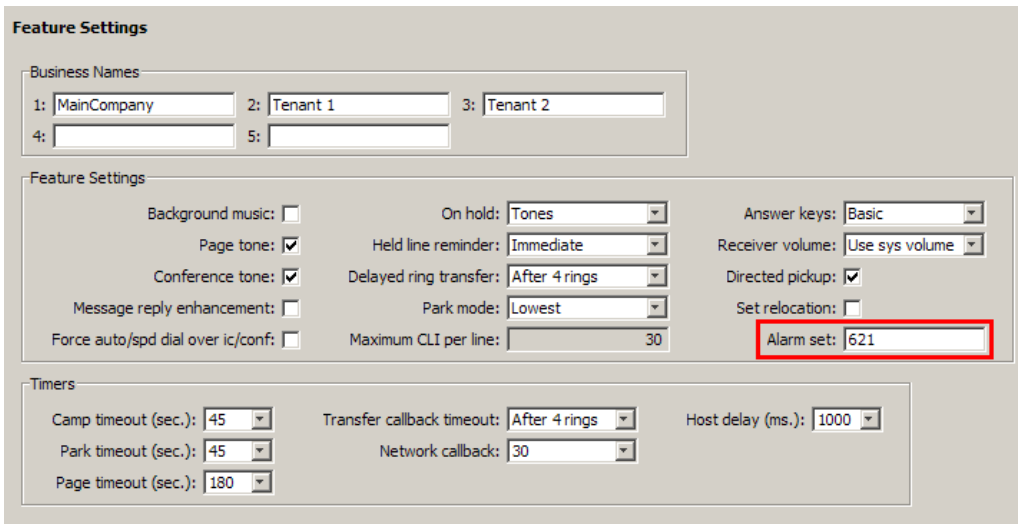
Specifying the Alarm Set

Use the following procedure to specify which telset (DN) receives the selected alarm information.

1. In Element Manager, click on the **Configuration** tab. Open the **Telephony** folder, and select the **Feature Settings** link.



2. In the **Feature Settings** area, enter the required DN to receive the selected alarms in the **Alarm Set** field.



3. The specified DN will now receive the selected alarms.

Avaya Documentation Links

- Fault and Performance Management