Oracle® Communications Session Delivery Manager

Quick Start Guide

Release 7.3

Formerly Net-Net Central

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ORACLE

Contents

About this Guide

The *Oracle Communications Session Delivery Manager Quick Start Guide* contains a brief description of the GUI, along with information you need to login to Net-Net Central and to add a managed device (Net-Net SBC) for configuration. This guide contains brief instructions to aide you with creating and configuring:

- physical interfaces
- network interfaces
- HIP interfaces
- realms and steering pools

For information about installing Net-Net Central, see the *Net-Net Central Installation Guide*. For more detailed information about using Net-Net Central, and about the GUI, see the *Net-Net Central Core Functionality Guide*, the *Net-Net Central Element Manager Guide*, or the *Net-Net Central Configuration Guide*.

1 Getting Started with Net-Net Central

Overview

This document describes the basic steps you take to perform the following tasks:

- Logging into the Net-Net Central graphical user interface (GUI)
- Viewing license information
- Accessing Net-Net Central version information
- Adding device groups
- Adding devices (Net-Net SBC)
- Configuring devices (from configuring the physical interface to choosing a signaling service)
- Saving and activating configurations to the Net-Net SBC
- Viewing key performance indicators
- Viewing audit logs

The *Net-Net Central Quick Start Guide* does not go into details about configuration or describe configuration parameters. Also, it does not include detailed information about configuring the different signaling services. It is intended to provide you with the steps to login to Net-Net Central and some information to get you acquainted with the framework. For detailed information, refer to the *Net-Net Central Core Functionality Guide*, the *Net-Net Central Element Manager Guide*, or the *Net-Net Central Configuration Guides, ACLI View or Default View*.

Accessing Net-Net Central

You can access the Net-Net Central server by using two address formats (as shown in step 2.)

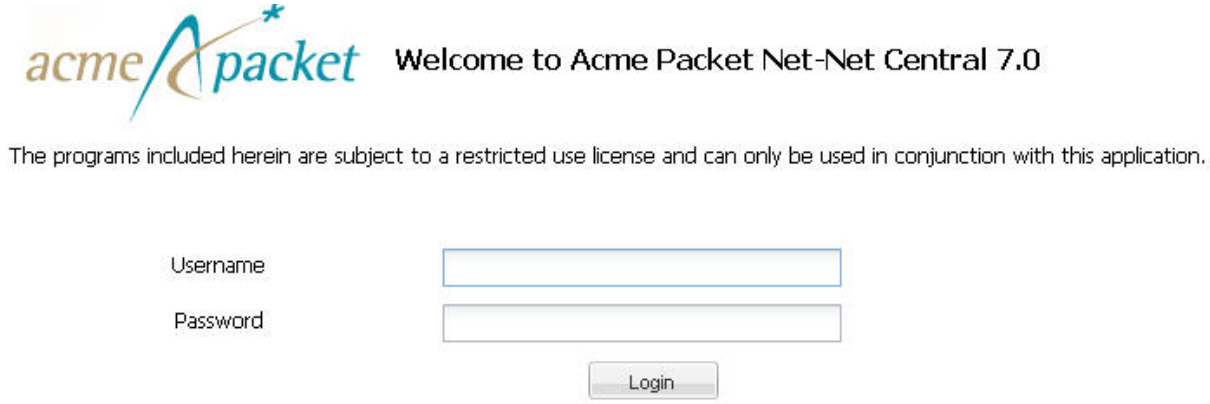
To access Net-Net Central:

1. Open a Web browser.
2. Connect to the Net-Net Central server using one of the following address formats:

   http://<*Net-Net Central server IP address*>:8080

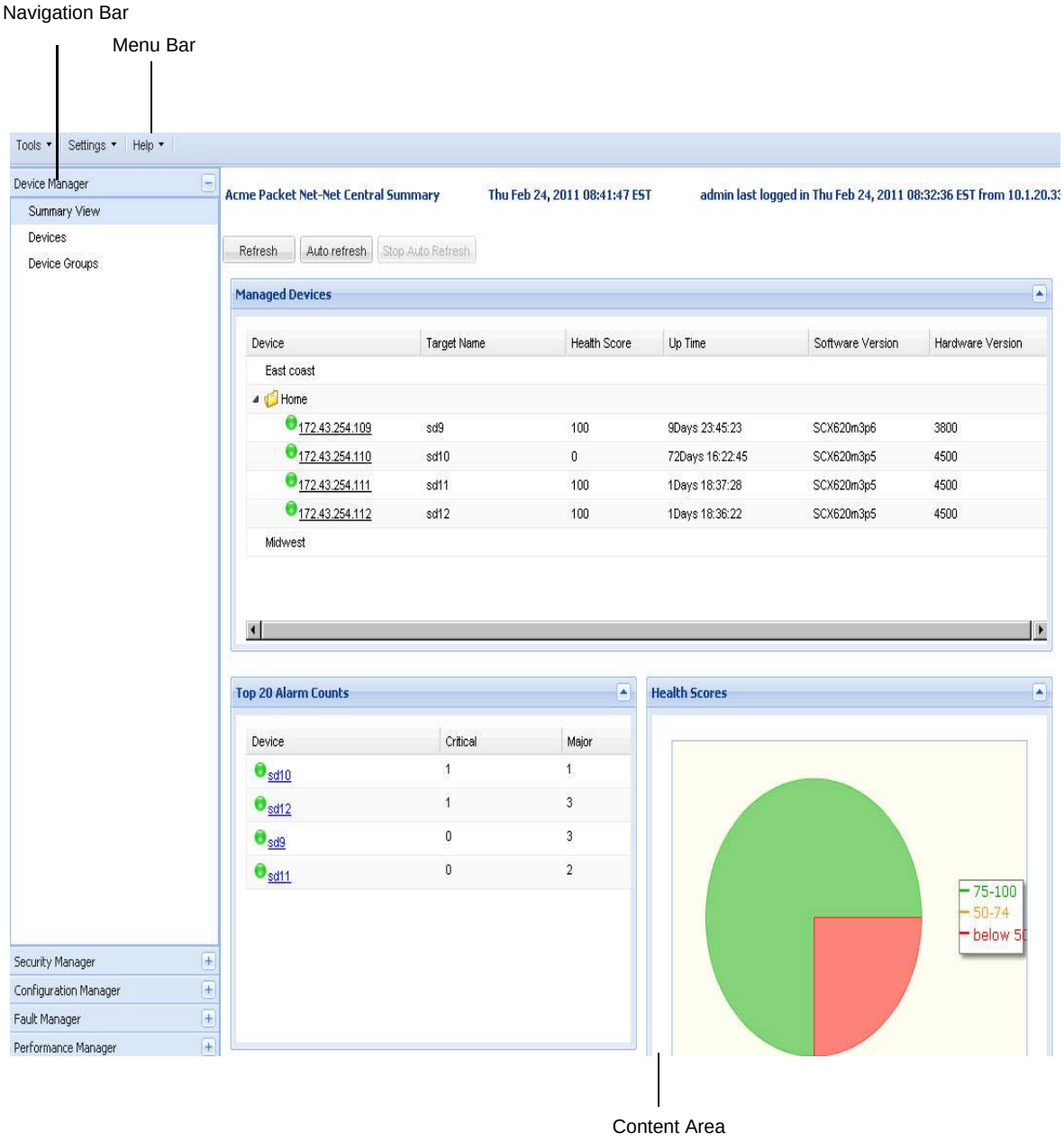
   https://<*Net-Net Central server IP address*>:8443

   The Login screen appears.



3. Enter your user name and password and click **Login**. (The default username is `admin`, with a default password of `admin`.)

You have now accessed Net-Net Central.



Note: When you login to Net-Net Central, your display will differ based on your licensed applications.

About the GUI

The top-level screen is divided into the following areas:

- Menu bar across the top of the window, which houses the drop down lists for administration, help, and monitoring tools
- Navigation bar in the left pane of the window, which contains sliders: Device Manager, Security Manager, Configuration Manager, Fault Manager, Performance Manager, and with appropriate licenses, Route Manager
- Content area on the right side of the window, where information pertaining to each slider in the navigation bar is displayed

Navigation Bar

The left pane is called the Navigation bar. The Navigation bar is divided into categories, represented by sliders. Each slider contains information specific to its slider category. The sliders found under the Navigation bar are:

- Dashboard Manager: View a summary of key performance indicators, fault, performance, and alarm statistics in a dashboard view
- Device Manger: Add and manage the device groups and devices you will work with in Net-Net Central
- Security Manager: Create groups of users, users, set password rules, configure the inactivity timer, and configure the password interval. View the audit log and/or save it to a file locally
- Configuration Manager: Load and configure your devices. Save and update your configuration changes
- Fault Manager: Monitor events, alarms, or trap data for your devices
- Performance Manager: View real-time, on-demand performance statistics for monitoring performance and utilization
- Route Manager (only if licensed): Update local route table (LRT) data on a single device or on multiple devices

  Note: Some sliders will be invisible if not licensed.

Viewing Net-Net SBC License Information

There are two ways to access license information for your Net-Net Central servers:

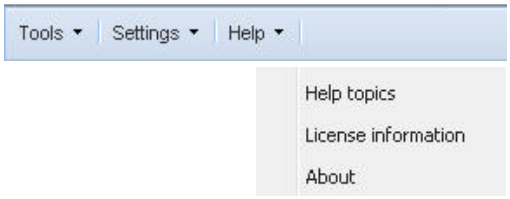
- Select License information from the Help menu in the top tool bar (shown below)
- Select License from the Device Manager navigation slider

Note: No privilege is required to view license information.

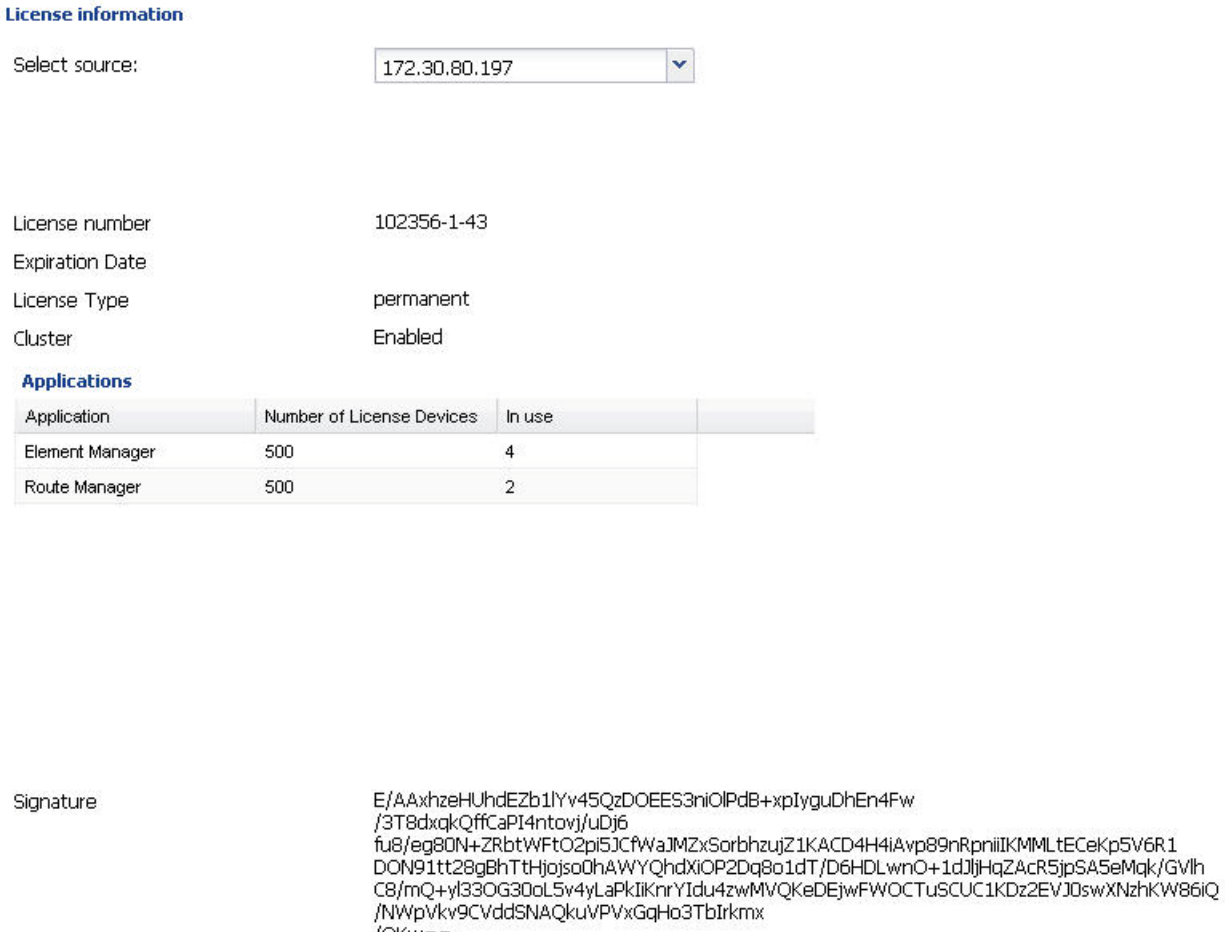
Accessing License Information

To access license information:

1. Click Help in the top tool bar. A drop-down menu appears.
2. Click **License information**.



The license information window appears.



3. **Select source:**—Click the source IP address of the Net-Net Central server you want to view license information for in the drop-down list.

   The license information for this Net-Net Central server appears.

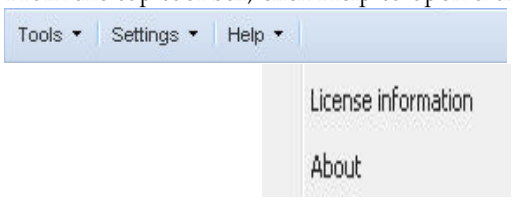
For more information about the Net-Net Central license, please see the *Net-Net Central Core Functionality Guide*.

Accessing Net-Net Central Version Information

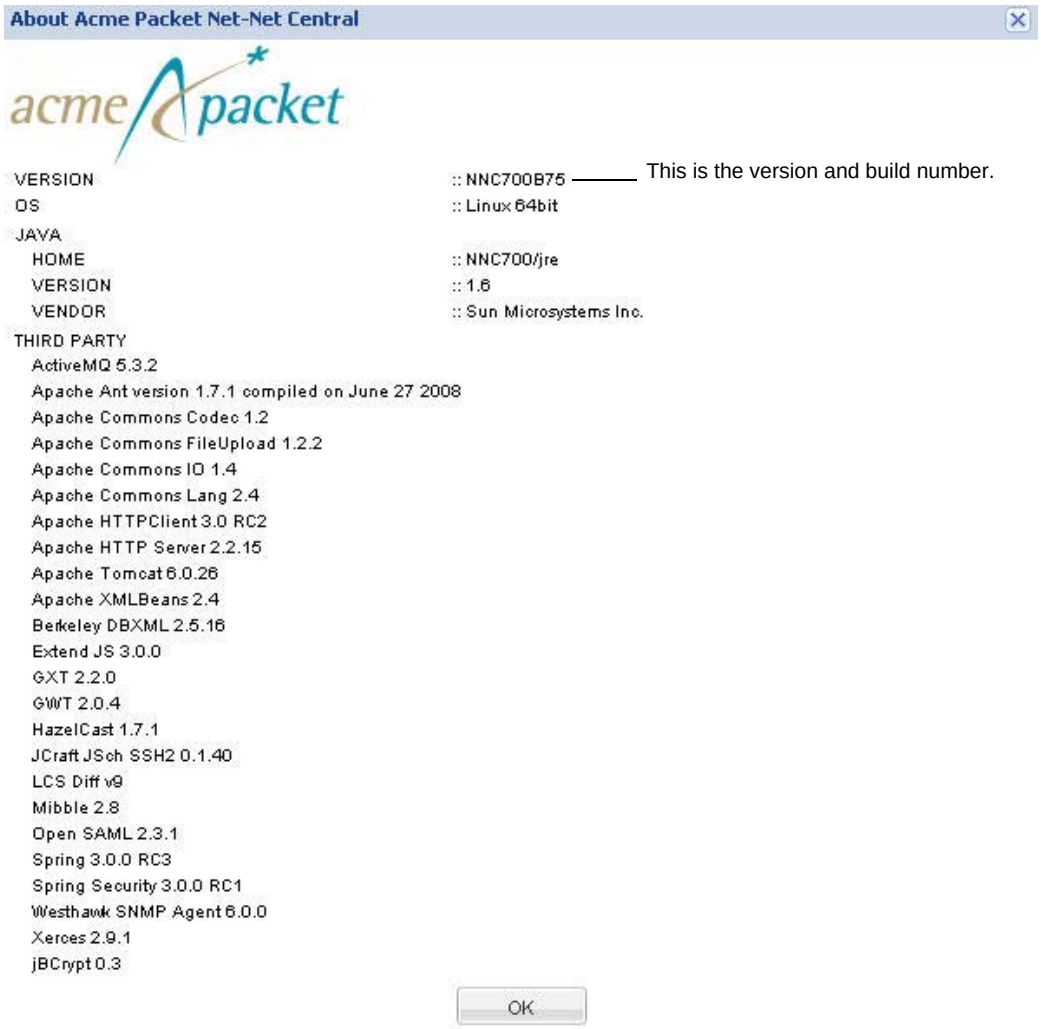
You might want to confirm the version of Net-Net Central you are using. You do this from the Help menu.

To access Net-Net Central version information:

1. From the top tool bar, click Help to open a drop down menu.



2. Click About. The About Acme Packet Net-Net Central dialog box appears.



3. Click **OK** to close this dialog box.

Identifying Net-Net SBC Versions

You can identify the specific type of Net-Net SBC you are managing by viewing the Managed Devices table under Device Manager, Devices option. The software version and hardware version are listed, as in the example below.

Device	Target Name	Health Score	Up Time	Software Version	Hardware Version
Home					
172.43.254.109	sd9	100	0Days 5:4:1	SCX620m3p6	3800
172.43.254.110	sd10	50	62Days 21:42:11	SCX620m3p5	4500
172.43.254.111	sd11	100	62Days 21:40:59	SCX620m3p5	4500
172.43.254.112	sd12	100	18Days 1:12:32	SCX620m3p5	4500

Adding Device Groups

All devices must belong to a device group. Ideally, you create your device groups prior to adding your devices. Subsequently, when adding a device, you select the device group you want this device to belong to. When you add a new device group, the name you choose:

- Must start with an alphabetic character
- Can contain a minimum of three characters and a maximum of 50 characters
- Can contain the following characters: alphabetic, numeric, hyphens (-), and underscores (_)
- Can be a mix of upper-case and lower-case characters
- Cannot contain symbols
- Cannot be the same name as an existing group name within the same level in the hierarchy (sibling)

To add a device group:

1. Expand the Device Manager slider and click Device Groups. The Device Groups appear in the content area.
2. Click **Add**. The Add device group dialog box appears.
3. ***Device group name:**—Enter the name for this device group.

4. Click OK. The device group, Midwest, appears in the device groups.

Once you create a device group, you can move devices into the device group by:

- Specifying a device group when adding this device to be managed in Net-Net Central
- Moving devices or device groups from one device group to another device group by clicking the **Move** button

Adding Devices

Devices are the Net-Net SBCs that you manage using Net-Net Central. You create your device group, add your device, and then select the device group this device will belong to. You can add a single device or multiple devices in succession.

Adding a Single Device

When adding devices in Net-Net Central, you have the ability to add a single device, or to add more than one device in a row. To add one device only, complete the required parameters in the Add Device dialog box and click the **OK** button at the bottom of the window.

To add a single device:

1. Expand the Device Manager slider and click Devices.

   The Device table appears in the content area.

2. Click **Add**. The Add Device dialog box appears.

3. **Device type:**—Click one of two device type choices for this device in the drop down list.

   Note: The Net-Net SBC 2600 is also known as the E-series.

4. **IP address 1:**—Enter the IP address for this device.

5. **IP address 2:**—Enter the IP address for the second device, if this device is part of a cluster.

6. **SNMP community name:**—Enter the SNMP community name for this device. The SNMP community name is the name of an active community where this Net-Net SBC can send or receive SNMP information (performance and fault).

   Note: The Net-Net Central server must be configured on the Net-Net SBC as a valide community name/IP address before adding the Net-Net SBC to Net-Net Central.

7. **SNMP port:**—Enter the SNMP port number for this device, or retain the default value of 161.

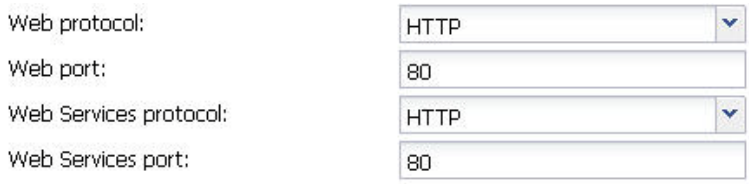
8. **User name:**—Enter an SNMP username for this device, if necessary.

9. **Password:**—Enter the SNMP password associated with the user name you entered.

10. **Web protocol:**—*(Net-Net SBC 2600 only)* Click the web protocol, HTTP or HTTPS, in the drop down list. The default value is HTTP.

11. **Web port:**—*(Net-Net SBC 2600 only)* Enter the web port for this device. The default value is 80.
12. **Web Services protocol:**—*(Net-Net SBC 2600 only)* Click the web protocol, HTTP or HTTPS, in the drop down list. The default value is HTTP.
13. **Web Services port:**—*(Net-Net SBC 2600 only)* Enter the web port for this device. The default value is 80.



From here, you set the device group for this device.

14. **Device Group**—Click **Set device group**. The Set device group dialog box appears.
15. Click the device group you want this device to belong to.
16. Click **OK** to add the device group.
17. Click **OK** to add this single device. Your device appears in the device group and the dialog box closes.

Adding Multiple Devices

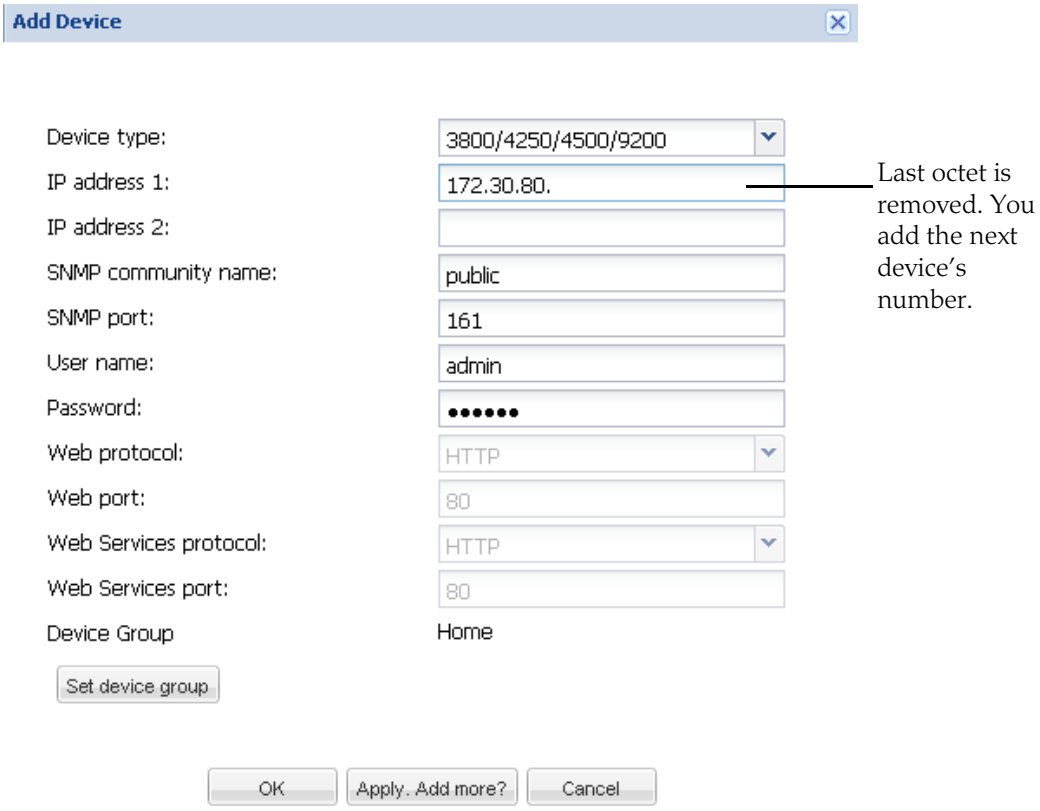
To add multiple devices, once you complete the required parameters in the Add Device dialog box for the first device, you retain most of the original information you entered by clicking the **Apply. Add more?** button.

When you click **Apply. Add more?**, the Add Device dialog box remains open with your originally-entered values, but the last octet of the management IP address is deleted so you can rapidly add another device, for example, 172.30.80.**112**, 172.30.80.**125**, and so on.

To add multiple devices:

1. Perform steps 1 through 17 in Adding a Single Device (15) above.
2. Click **Apply. Add More?** to add this device. A Success box appears.
3. Click **OK**. Your device is added to the device group.

The Add Device dialog box **remains open** with the same values, except for the **IP address 1** field. The last octet in the **IP address 1** field is removed.



4. **IP address 1**—Enter the last octet of the IP address.

   If required, revise other fields in the Add Device dialog box.

5. Click **OK** to add this device and no more.
6. Click **Apply. Add more?** to add this device and keep this Add Device dialog box open to add additional devices.

Adding a Device Group

If while adding a device, you notice that the device group you want is not in the list, you can add it from the Set Device Group dialog box.

1. From the Set device group dialog box, click **Add**. The Add Device group dialog box appears.
2. ***Device group name:**—Enter the name for this device group.

   For more information about naming criteria, see Adding Device Groups (14)

3. Click OK. A dialog box appears.

4. Click **OK**.

You are ready to load and configure your device.

Note: For additional information about adding and managing devices, please see the *Managing Devices* chapter of the *Net-Net Central Core Functionality Guide.*

Loading and Configuring Devices

This section provides an overview of the Net-Net SBC configuration process. The recommended configuration order consists of the following:

- Physical layer
- Network interface
- Realm and steering pool/media manager
- Signaling services (SIP, H.323, MGCP)

The configuration process is the same for C-series, D-series, and E-series Net-Net SBCs.

> **Note:** The specific Net-Net SBC features supported by this release of Net-Net Central differs depending on which version of a Net-Net SBC you are configuring. Refer to the specific Configuration Guides for details.

Configuration Process

Once you have added a device, the following steps represent an overview of the configuration tasks performed in Configuration Manager:

1. Associate your added devices with your Element Manager license.
2. Load a device configuration (Net-Net SBC).
3. Edit device parameters.
4. Apply your changes.
5. Update the configuration (with your changes) by selecting one of three choices:
   - Save & activate configuration (default)
   - Save configuration
   - Activate configuration

Associating Devices

You must associate the devices you added in Adding Devices (15) before you can load your device configurations. When you associate a device you link it to your Element Manager license. Your license allows you to configure a set number of devices at one time.

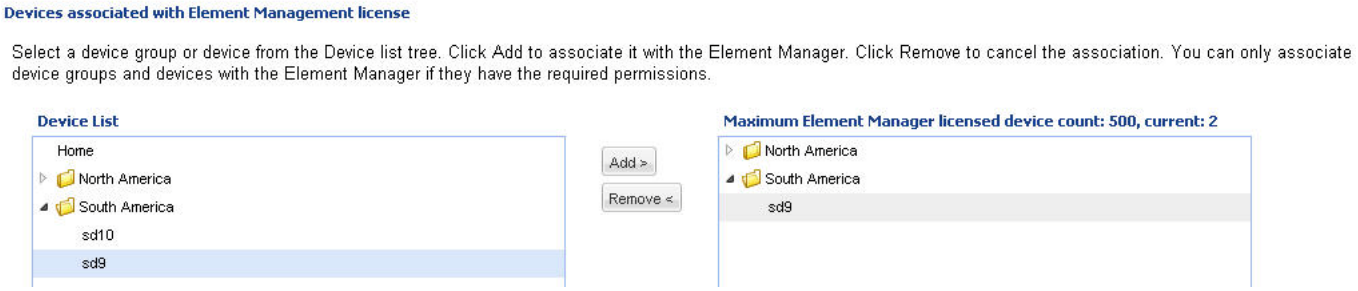
For more information about licensing, see the *Net-Net Central Core Functionality Guide, Viewing Net-Net Central License Information.*

You can associate one device at-a-time, or you can associate all devices within a device group, if your license permits.

To associate a device to the Element Manager License:

1. Expand the Configuration Manager slider.
2. Click Devices. The Device table appears in the content area.
3. Click **Add devices**. The Devices associated with Element Manager license appears in the content area.
4. From the Device list, expand your device group folder and click the device you want to associate.

5. Click Add > to move your device to the Maximum Element Manager licensed device count table.



6. Click **OK**. A success dialog box appears.
7. Click **OK**.

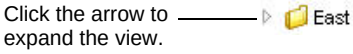
   Your device is associated with your Element Manager license so you can load your device configuration.

Loading Device Configurations

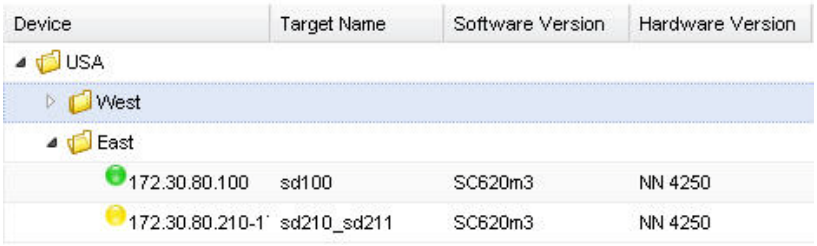
You load a device's configuration by retrieving the device's configuration from the Net-Net SBC and loading it into the Net-Net Central database. To do this, you target the specific device you want to load from the Configuration Manger device table. This process is called loading a local configuration copy. It is an on-demand process, whereby you do not have to replicate large device configurations and retains the Net-Net SBC as the master database.

To load a device for configuration:

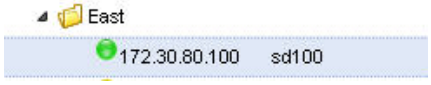
1. Expand the Configuration Manager slider.
2. Click Devices. The Device table appears in the content area.
3. Click the arrow next to the device group folder to expand the list of devices within this device group.



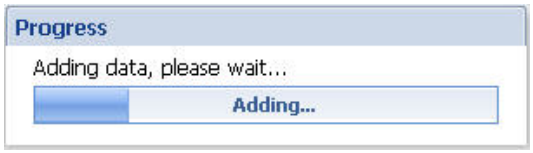
   The list of devices appears for this device group.



4. Click the device you want to load and click **Load**.



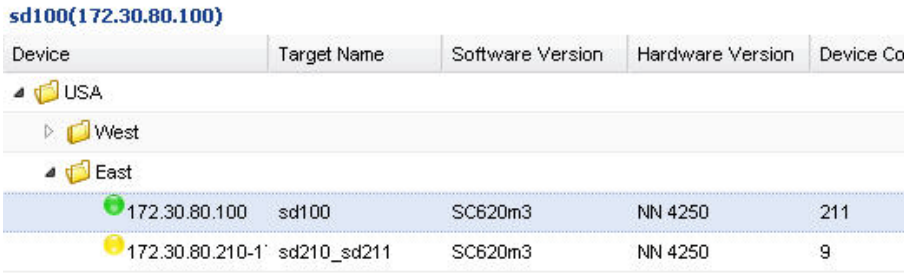
A Progress dialog box appears.



5. A Success dialog box appears. Click **OK**.

Your device's configuration is loaded and appears as a heading above the Devices table.

This is your loaded device.



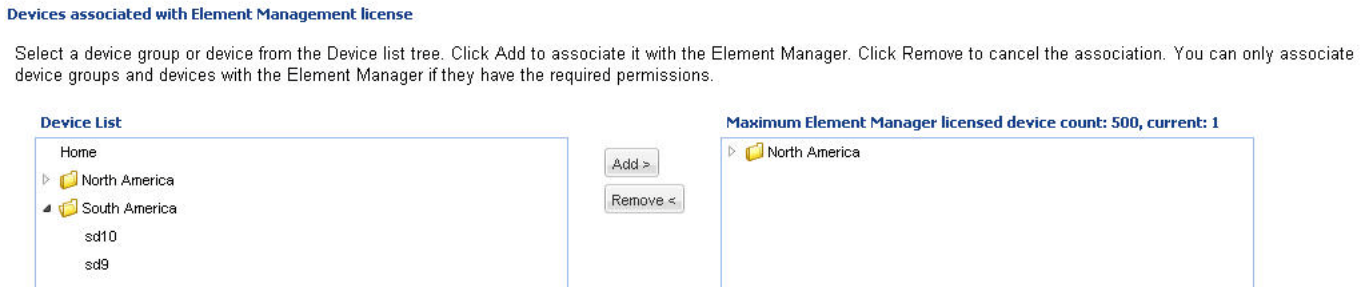
Note: For detailed configuration instructions, please see the *Net-Net Central Configuration Guide*.

Removing an Associated Device

You can remove a device from the Maximum Element Manager licensed device count table, thereby removing the association to the Element Manager license.

To remove a device from the Element Manager License:

1. Expand the Configuration Manager slider.
2. Click Devices. The Device table appears in the content area.
3. Click **Add devices**. The Devices associated with Element Manager license appears in the content area.
4. From the Device list, expand your device group folder and click the device you want to remove.
5. Click Remove < to move your device from the Maximum Element Manager licensed device count table back to the Device List.



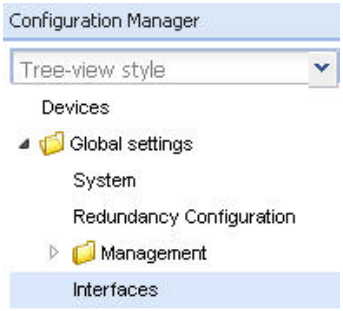
Your device is removed from the Maximum Element Manager licensed device count table. If you remove the last device in a device group, the device group folder is also removed.

Creating Physical Interfaces

This section describes how to create physical interfaces on your Net-Net SBC using Net-Net Central.

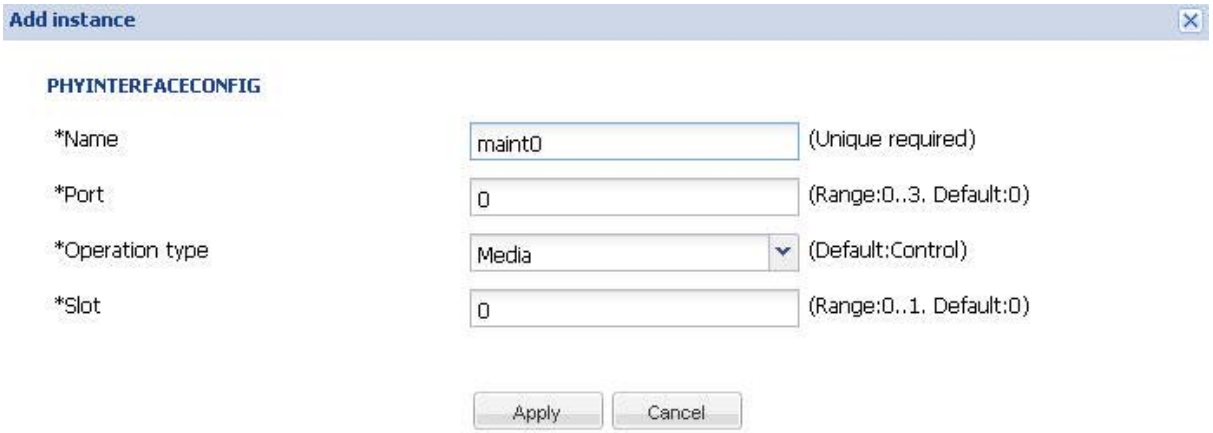
To create a physical interface:

1. Expand Configuration Manager.
2. Expand the Global Settings folder.
3. Click Interfaces. The interfaces tables appear in the content area.



4. Click **Add** under the Physical interface table. The Add instance dialog box appears.
5. ***Name**—Enter a name for this interface using any combination of characters entered without spaces. For example, **`Internet`** (for a Fast Ethernet media and signaling interface) or **`maint0`** (for a maintenance interface).
6. ***Port**—Enter the port of this physical interface. From left to right as you face the chassis, the possible values are:
   - Front interfaces—**`0`** - **`3`**
   - Rear interfaces—**`0`** - **`2`**
7. ***Operation type**—Click the type of physical interface in the drop down list. For a front media and signaling interface, set this parameter to **Media**. For a rear management interface, set this parameter to **Maintenance** or **Control**.
8. ***Slot**—Enter the slot of this physical interface: **`0`** or **`1`**
   - Front interfaces—0 is the left and 1 is the right

- Rear interfaces—0 is the only valid value



9. Click **Apply**. A success window appears indicating the successful addition of the physical interface appears.

10. Click **OK**. The newly-added physical interface appears in the Physical interface table.

    Note:

Configuring Physical Interfaces

This section describes how to configure physical interfaces using Net-Net Central.

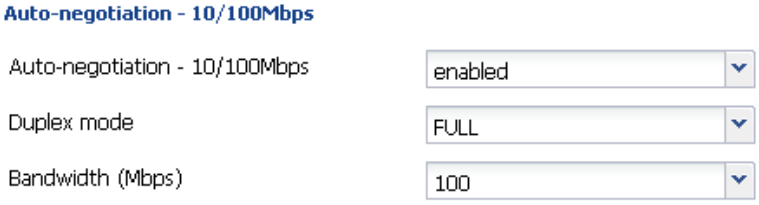
To configure the physical interface:

1. Click the new physical interface in the Physical interface table and click **Edit**. The content area displays the physical interface parameters you can configure for this physical interface (as indicated by the *Name parameter).
2. Scroll to Auto-negotiation - 10/100Mbps
3. **Auto-negotiation - 10/100Mbps**—Click enabled or disabled in the drop down list. If you retain the default value, enabled, the Net-Net SBC and the device to which it is linked can automatically negotiate the duplex mode and speed for the link.

   If auto-negotiation is enabled, the Net-Net SBC begins to negotiate the link to the connected device at the duplex mode you configure. If auto-negotiation is disabled, then the Net-Net SBC will not engage in a negotiation of the link and will operate only at the duplex mode and speed you set.

4. **Duplex mode**—Click the duplex mode in the drop down list.
   - FULL: Given an operating speed of 100 Mbps, full duplex mode lets both devices on a link send and receive packets simultaneously using a total bandwidth of 200 Mbps.
   - HALF: Given the same operating speed, half duplex mode limits the devices to one channel with a total bandwidth of 100 Mbps.

5. **Bandwidth (Mbps)**—Click a value in the drop down list to set the bandwidth for this physical interface.



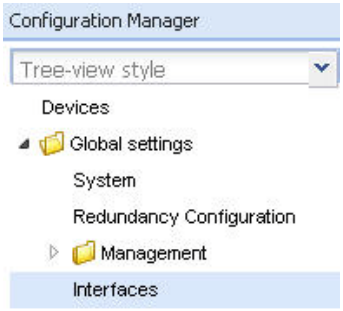
6. Click **Apply**.

Creating Network Interfaces

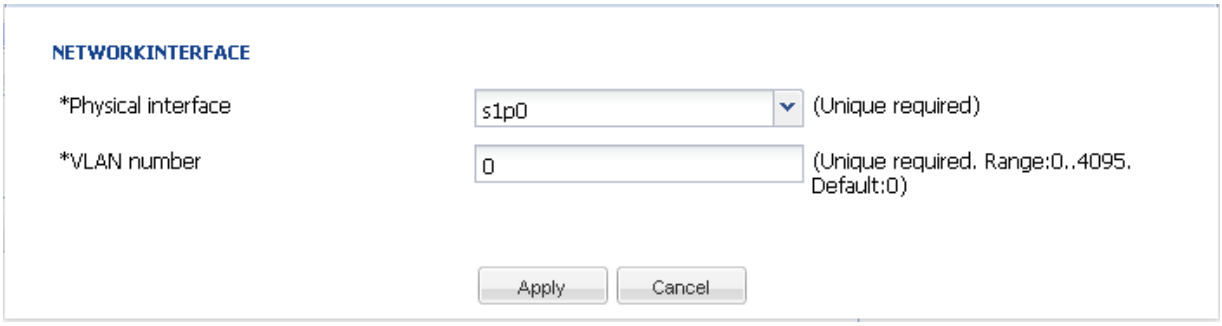
You need to create and configure the network interface(s) associated with your physical interface. You must have one default network interface for your physical interface.

To create a network interface:

1. Expand Configuration Manager.
2. Expand the Global settings folder.
3. Click Interfaces. The Interfaces window appears in the content area.



4. Click **Add** under the Network Interface table. The Add instance dialog box appears.
5. ***Physical interface**—Click the physical interface to which this network interface corresponds in the drop down list.
6. ***VLAN number**—Enter the subport ID as the VLAN number. If this network interface is not channelized, leave this set to 0. If this network interface is channelized, enter the appropriate VLAN tag.



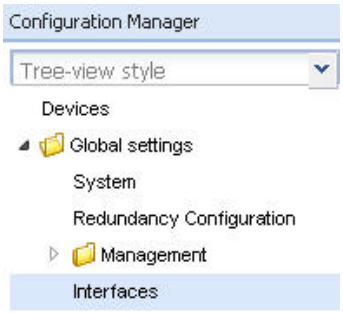
7. Click **Apply**. A success message appears.
8. Click **OK**.
9. To view this network interface in the Network interface table, click the physical interface (in the Physical interface table) this network interface belongs to.

   The network interface appears in the Network interface table.

Configuring Network Interfaces

To configure a network interface:

1. Expand Configuration Manager.
2. Expand the Global settings folder.
3. Click Interfaces. The Interfaces window appears in the content area.

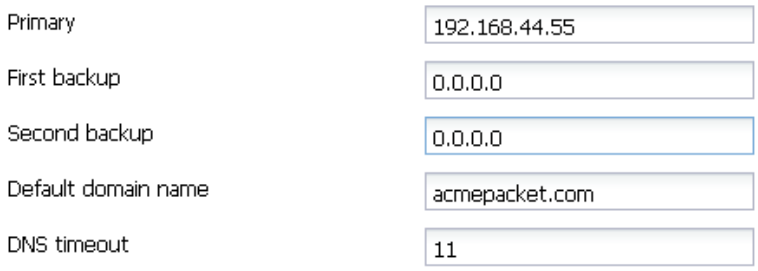


4. In the Physical interface table, click the physical interface this network interface belongs to.

   The network interface belonging to the selected physical interface appears in the Network interface table.
5. Select the network interface you want to configure and click **Edit**. The content area displays the network interface parameters you can configure for this network interface.
6. Scroll to Host.
7. **IP address**—Enter the IP Address of this network interface.
8. **Subnet mask**—Enter the subnet mask of this network interface.

9. Scroll to Gateways.
10. **Primary IP Address**—Enter the primary gateway that this network interface uses to communicate with the next hop.
11. **Secondary IP Address**—If needed, enter the secondary gateway of this network interface.

12. Scroll to DNS.
13. **Primary**—Enter the DNS server of this network interface.
14. **First backup**—If needed, enter the secondary DNS server of this network interface.
15. **Second backup**—If needed, enter the third DNS server of this network interface.
16. **Default domain name**—Enter the default domain for use with DNS queries.
17. **DNS timeout**—Enter the DNS timeout value.

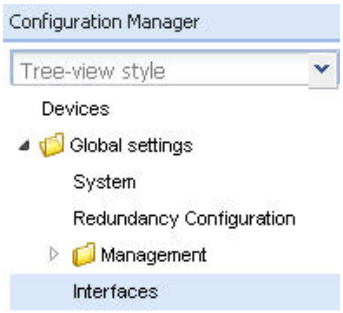


18. Click **Apply**.

Configuring HIP Interfaces

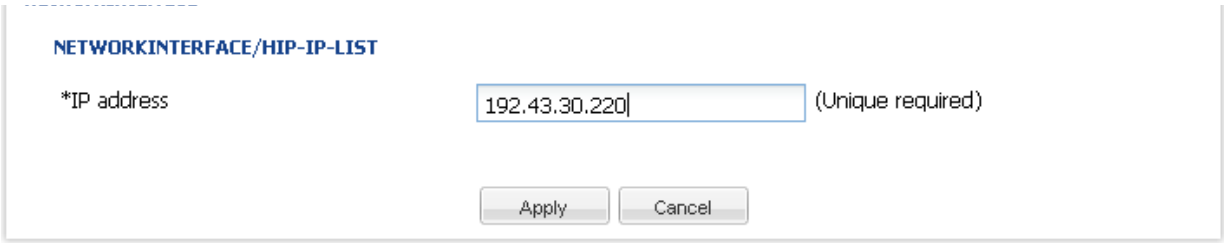
To configure administrative service functionality on a front interface, you must define the IPv4 addresses on the front physical interfaces of your Net-Net SBC where you will receive administrative traffic. Adding Host-in-Path (HIP) entries automatically opens the well-known port associated with a service.

1. Expand Configuration Manager.
2. Expand the Global settings folder.
3. Click Interfaces. The Interfaces window appears in the content area.



4. In the Physical interface table, click the physical interface this network interface belongs to.

   The network interface belonging to the selected physical interface appears in the Network interface table.
5. Select the network interface you want to configure and click **Edit**. The content area displays the network interface parameters you can configure for this network interface.
6. Scroll to Host-In-Path.
7. Click **Add.** The Add instance window appears.
8. ***IP address**—Enter the IPv4 address on this network interface that is allowed to pass traffic to the host. Entries are IPv4 addresses of front panel network interfaces. Enter the appropriate IPV4 address that corresponds to the type of traffic. For:
   - SNMP: Set the IPv4 address where port 161 is opened. This lets SNMP traffic enter the Net-Net SBC and reach the host.
   - Telnet: Set the IPv4 address where port 23 is opened for Telnet access.
   - FTP: Set the IPv4 address where ports 20 and 21 are opened. This lets standard FTP packets enter the Net-Net SBC and reach the host.
   - ICMP: Set the IPv4 address to pass standard ping packets to the host.



9. Click **Apply**.

10. Click **Apply** at the bottom of the network interface window to complete network interface configuration.

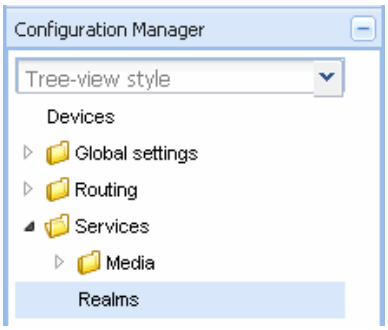
Configuring Realms and Steering Pools

You can assign multiple realms to a network interface. This section describes how to create and configure realms on your Net-Net SBC from Net-Net Central.

Creating Realms

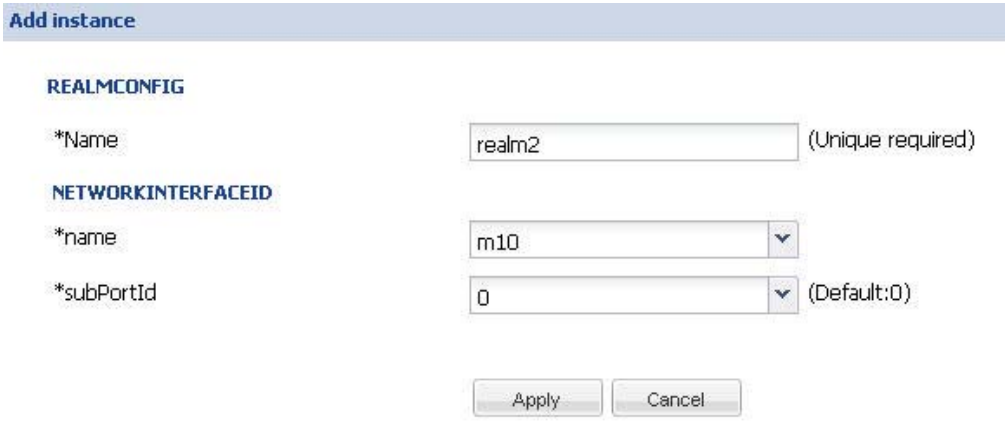
To create a realm:

1. Expand Configuration Manager.



2. Expand the Services folder.
3. Click Realms. The Realm window appears in the content area.
4. Click **Add**. The Add instance window appears.
5. Under REALMCONFIG, ***Name**—Enter the name of the new realm you are creating. The name uniquely identifies the realm. You will use this parameter in other configurations when asked for a realm identifier value.
6. Under NETWORKINTERFACEID, ***name**—Click a physical interface in the drop down list.
7. ***subPortId**—Click the sub port ID in the drop down list for the network interface to which you are assigning this realm. The default value is 0.

   This is the interface and subport through which this realm can be reached by ingress traffic, and through which this traffic exits the system as egress traffic.



8. Click **Apply**. A Success message appears.
9. Click **OK**.

The newly created realm appears in the Realm window. From here, you configure the IP address prefix.

1. Click the realm you created in the Realm table.
2. Click **Edit**. The realmConfig window appears in the content area.
3. Click the Realm tab.
4. **IP address prefix**—Enter the IP address prefix and subnet mask combination to set the criteria the Net-Net SBC uses to match packets sent or received on the network interface associated with this realm. This matching determines the realm, and subsequently what resources are used for that traffic.

   This parameter must entered in the correct format where the IP address comes first and is separated by a slash (/) from the subnet mask value. For example, `172.16.0.0/24`.

   If you leave this parameter set to its default, `0.0.0.0/0`, then all addresses will match.

5. Click **Apply**.

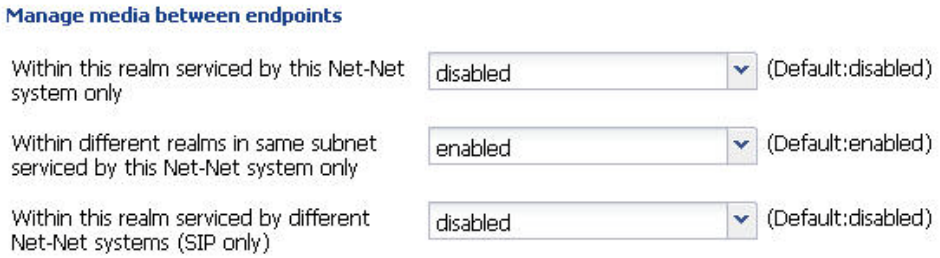
Configuring Realms

To configure the realm:

1. In the Realm tab of the Realm window, scroll to Realm services profiles.
2. **Bandwidth limit (kilobits per second), Session admission control**—Enter the maximum bandwidth resources available for this realm.

3. Scroll to Manage media between endpoints.
4. **Within this realm serviced by this Net-Net system only**—Click enabled in the drop down list to set the behavior of media steering when endpoints within the same realm are communicating.
5. **Within different realms in the same subnet serviced by this Net-Net system only**—Click enabled in the drop down list to set the behavior of media steering when endpoints located in different realms, but that are connected to the same network interface, are communicating.

6. **Within this realm serviced by different Net-Net systems (SIP only)**—Click enabled in the drop down list to include multi-system release information in SIP requests sent to this realm.



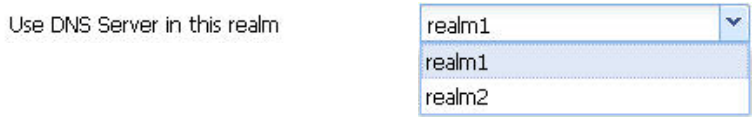
7. Scroll to Address translation profiles.
8. Set the number translations that you want to apply to this realm. Refer the *Net-Net Central Configuration Guide, Number Translations* section for realm-specific information about using address translations on your Net-Net SBC. If you are not using this feature, you can leave these parameters blank.

   Inbound—Click an inbound number translation profile in the drop down list.

   Outbound—Click an outbound number translation profile in the drop down list.

9. **Use DNS Server in this realm**—Click the realm in the drop down list whose network interface's DNS server should be used to resolve this realm's FQDN lookup.

   If you do not configure this parameter, then the realm will use the DNS information configured in its associated network interface.



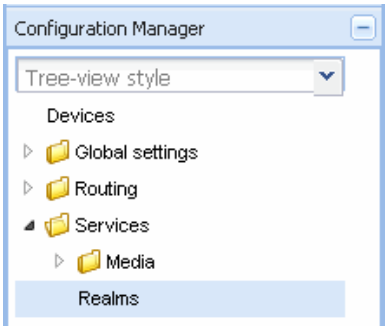
10. Click **Apply**.

Configuring Steering Pools

This section describes how to configure steering pools on your Net-Net SBC from the Net-Net Central. Steering pools are configured within realm objects in the Net-Net Central. Therefore, you do not need to explicitly set the realm when creating a steering pool.

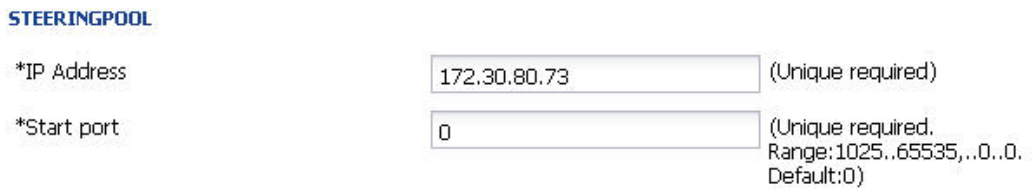
To configure the steering pool:

1. Expand Configuration Manager.



2. Expand the Services folder and click Realms. The realmConfig window appears in the content area.
3. Click the Media interface tab.
4. Click **Add.** The Add instance dialog box appears.
5. Under STEERINGPOOL, ***IP Address**—Enter the target IP address of the steering pool.
6. ***Start port**—Enter the start port of the steering pool; this is the value that begins the range of ports available to this steering pool.

   You must enter a valid port number or the steering pool will not function properly.



7. ***End port**—Enter the end port of the steering pool; this is the value that ends the range of ports available to this steering pool.

   You must enter a valid port number or the steering pool will not function properly.
8. Click **Apply**. Your entry will appear in the Realm media address section.

Configuring Signaling Services

Configure the signaling service you chose. See the *Net-Net Central Configuration Guides* for details.

Using Tool Tips

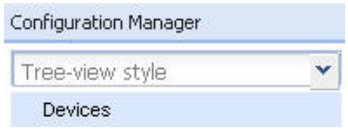
When configuring your device in Configuration Manager, position your cursor over a parameter field or checkbox to view a tool tip. Tool tips display the complete path to, and name of, the corresponding ACLI parameter. For example,

Saving Net-Net SBC Configurations

This section explains how to save the configuration changes to the Net-Net SBC and activate it. During the save process, other users are locked out of making changes to the Net-Net SBC.

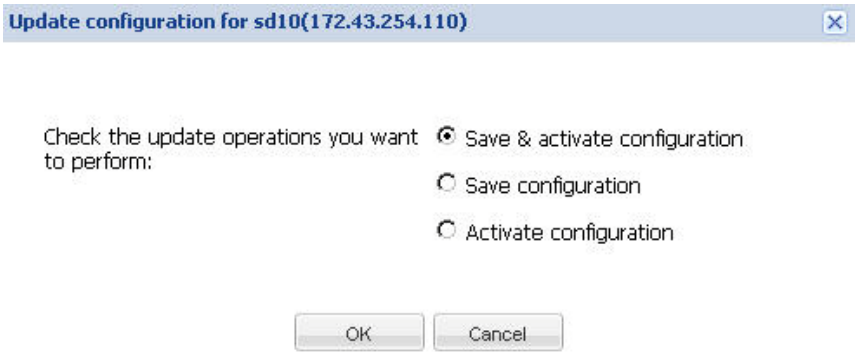
To save configuration changes to the Net-Net SBC:

1. Expand Configuration Manager and click Devices.

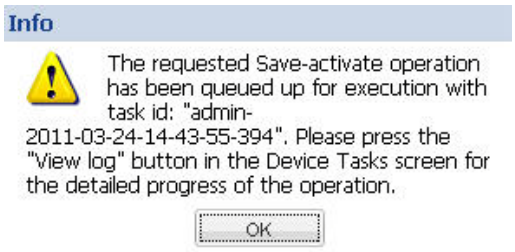
   

   The Device table appears in the content area.
2. Click the device group folder in which your device belongs to view the list of devices.
3. Click the device whose configuration changes you want to save to select it.

   Note: The device must already be loaded in Configuration Manager otherwise you will get an error message: Please load the device first.
4. Click **Update**. The Update configuration for SD dialog box appears.
5. **Check the update operations you want to perform:**—Click one of the following:
   - Save & activate configuration (default): Invokes the save/activate process
   - Save configuration: Invokes the save process
   - Activate configuration: Invokes the activate process

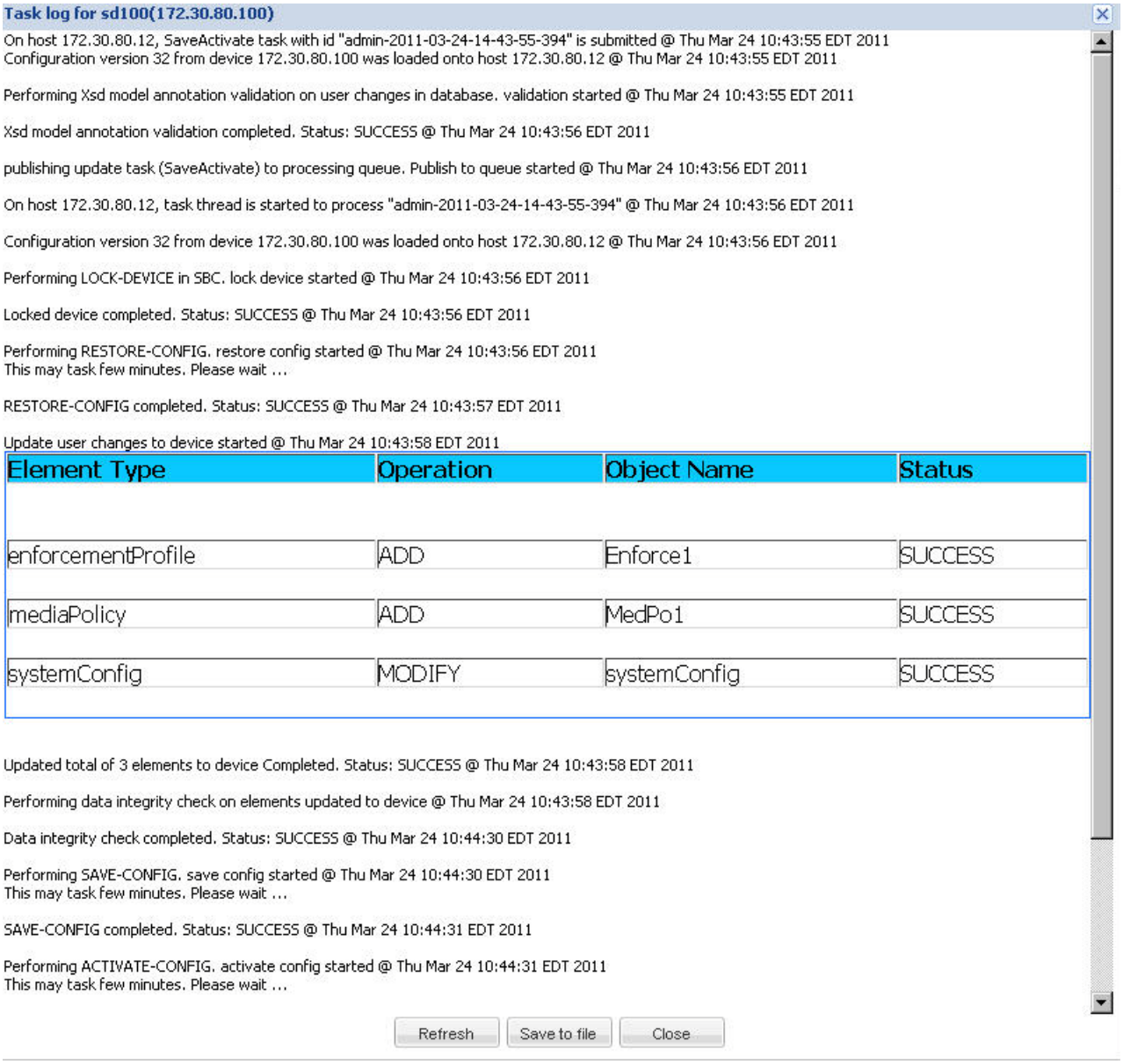


6. Click **OK**. An Info message appears, for example:



7. Click **OK**. The operation you selected, for example, SaveActivate, appears in the Device tasks table.

8. Click the operation row and **View log** for more information. The task log for this operation appears.



9. Click one of the action buttons:
   - **Refresh**: Refresh the data in the task log
   - **Save to file**: Save the data to a file locally
   - **Close**: Close the task log

Accessing Key Performance Indicators

This section shows you how to access key performance indicators found in the Summary View under the Dashboard Manager slider. The information displayed is a combination of fault, performance, and other statistics gathered for the Net-Net SBC, and is displayed in a dashboard format. The information includes:

- Date and time of login
- Local date and time (with time zone adjustment) of the Net-Net Central server
- A list of all devices by either IP address or host name
- Alarm status summary
- Key performance indicators (KPI): top 20 alarm counts, health scores, top 20 CPU usage, top 20 memory usage, and top 20 call rate
- A list of logged-in users with session start times and locations (IP addresses)

Summary View for Clusters

For clusters, the top-level displays and the device-specific summaries are shown for the active Net-Net SBC in the cluster. Statistics are not shown for the Net-Net SBC in standby mode.

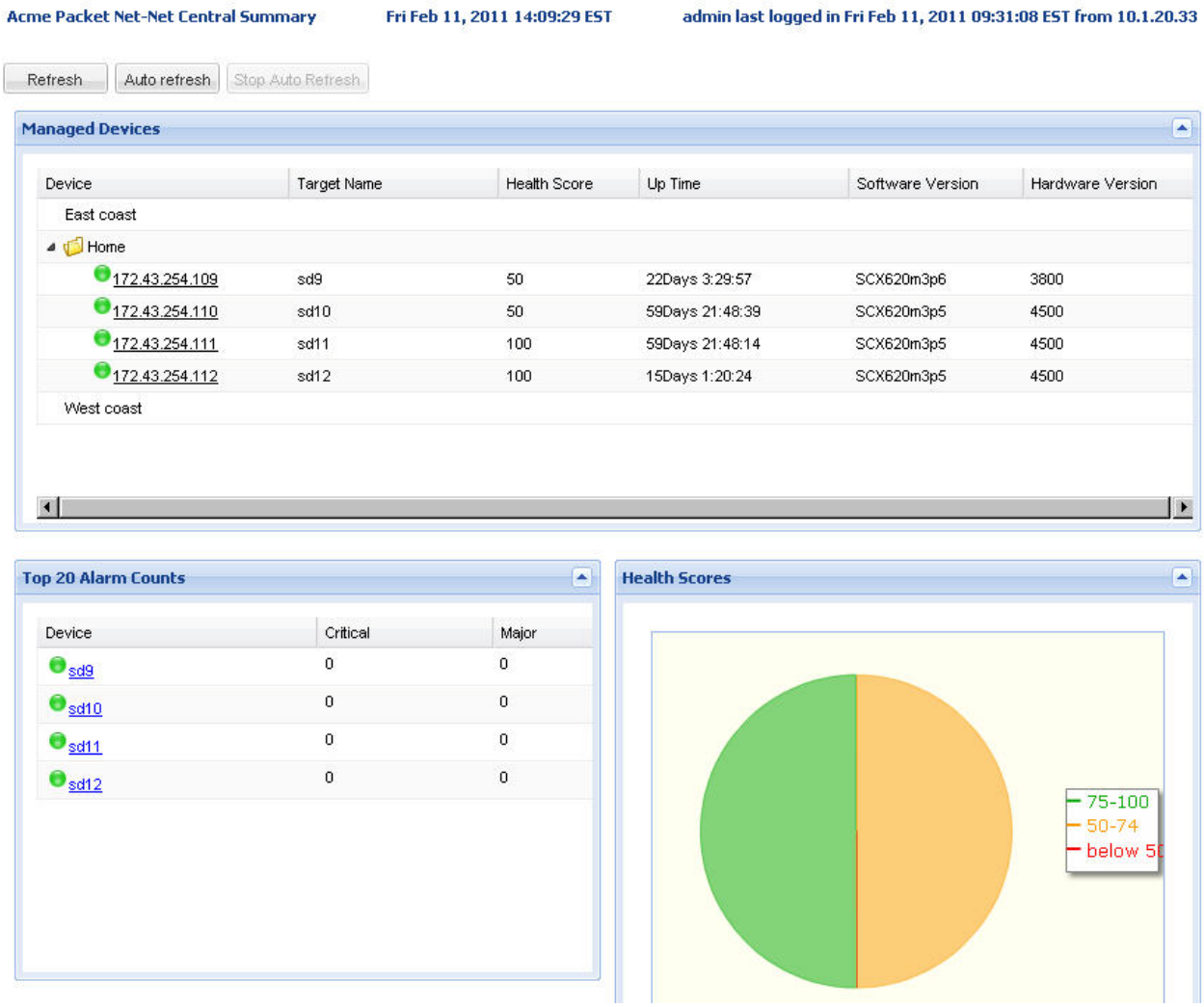
Accessing Summary View

To access summary view information:

1. Expand the Dashboard Manager slider and click Summary View.

The summary view appears in the content area.

Below is a partial image of the summary view display. You must scroll down in the content area to see all of the summary view data. The top of the content area contains a title bar with the current local time of the Net-Net Central server and the IP address and time of the last successful login.



For detailed information about key performance indicators, see the *Summary View* chapter of the *Net-Net Central Element Manager Guide*.

Viewing Audit Logs

This section explains how to access the audit log's data. The audit log provides information about the changes made using the Net-Net Central. Audit trails enable you to view all operations that have been performed, the time they were performed, whether they were successful and who performed them. All users can access the Audit logs from the Security Manager slider, under Audit log.

To access audit logs:

1. Expand the Security Manager slider.
2. Click Audit log to expand the folder.

3. Click View. The Audit log table appears in the content area. For example:

Audit log

Search Criteria: All

Refresh | Search | Show all | Viewing 1-50 of 239 | Page 1 of 5

Username	Time	Category	Operation	Status	Device
admin	2011-05-03 08:23:30	Authentication	Login user	Success	
admin	2011-05-03 08:23:53	Device	Add device group	Success	
admin	2011-05-03 08:24:00	Device	Add device group	Success	
admin	2011-05-03 08:24:01	Authentication	Login user	Success	
admin	2011-05-03 08:24:30	Device	Add device	Success	172.30.80.100
admin	2011-05-03 08:24:55	Device	Add device	Success	172.30.80.170-172.30.8(
admin	2011-05-03 08:25:27	Device	Add device	Success	172.30.80.115
admin	2011-05-03 08:25:35	Device	Add device	Success	172.30.91.115
admin	2011-05-03 08:39:53	Configuration	Save and Activate Confi	Failed	172.30.80.100
admin	2011-05-03 08:41:08	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 08:42:02	Configuration	Modify element	Success	172.30.80.100
admin	2011-05-03 08:42:19	Configuration	Request Save and Activ	Success	172.30.80.100
admin	2011-05-03 08:52:36	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 08:52:57	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 08:54:00	Configuration	Load Configuration	Success	172.30.80.170-172.30.8(
admin	2011-05-03 08:54:22	Configuration	Load Configuration	Success	172.30.80.115
admin	2011-05-03 08:54:41	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 08:54:42	Configuration	Load Configuration	Failed	172.30.80.100
admin	2011-05-03 08:56:23	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 08:57:01	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 09:01:24	Configuration	Load Configuration	Success	172.30.80.100
admin	2011-05-03 09:01:40	Device	Delete device	Success	172.30.80.100
admin	2011-05-03 09:02:43	Device	Add device	Success	172.30.80.100
admin	2011-05-03 09:30:18	Authentication	Login user	Success	

4. Click a row in the Audit log table and click Details. The Audit log details window appears.

Audit trails include the following information:

- Name of the user who performed the operation
- Time the operation was performed by the user
- Category of operation performed by the user
- Specific operation performed by the user
- Address of the management server accessed
- IP address of the client that was used
- Device the user performed operation upon
- Status of the operation performed by the user, whether it was successful or failed
- Description of the operation

5. Click **OK** to exit the window.
6. Click **Save to file** to save it to a file locally.
7. Click **Refresh** to refresh the data in the audit log.