Cisco netManager Overview

Cisco netManager is a network monitoring solution that allows you to visualize,diagnose and report status of your data and Unified Communications deployment. It monitors all components of the network to provide real-time operational status so you can identify network failures before they become catastrophic.

Cisco netManager is available in two product configurations: Cisco netManager IP Infrastructure and Cisco netManager Unified Communications. Cisco netManager IP Infrastructure provides standards-based monitoring of network devices, services, or applications on TCP/IP and Windows. Cisco netManager Unified Communications includes all features of Cisco netManager along with the additional capability to provide visibility into, and monitoring of, Cisco Unified Communications devices.

Note The ability to view and monitor Cisco Unified Communications Manager depends upon the type of licensing you have. Please see the *Quick Start Guide for Cisco netManager 1.1* for licensing information.

Cisco netManager includes the following key features:

- A web interface that provides customizable workspaces and multiuser support to monitor operational status of all supported network and office devices.
- Automated discovery of network elements. Information gathered include detailed inventory and device capability information. Cisco netManager also has the capability to import devices into the system via bulk import or a single device at a time.
- Service-level and physical topology views of network devices that display current operational, performance, and device application status. This allows for faster trouble isolation through diagnostic tools with access to embedded device management tools.
- Real-time operational and performance monitoring with system-defined thresholds and events.
- Notification services: E-mail, Short Message Service (SMS), and Simple Network Management Protocol (SNMP) traps.
- Basic diagnostics capabilities including ping, traceroute, Telnet, and Domain Name System (DNS) lookup.
- A wide variety of real-time and historical reports that provide performance and availability information related to the devices in your network. Report types include the following:
  - Performance reports: Performance data for a selected device or device group
  - Problem areas: Alerts reported across the network and across different data sources; for example, traps, syslogs, event logs, and performance errors.

  – Event history: Historical reports of all events generated by Cisco netManager for a given device or device group.

  – General: Reports on application logs, user activity, and so on.

Table 1-1 includes common tasks and corresponding sections in the online help and user guide that pertain to those tasks:

Table 1-1   ***Cisco netManager Common Tasks***

Task	Section
View service-level and physical topologies of network devices that display current operational, performance, and device application status.	Chapter 4, "Using Topology Views"
Monitor performance (CPU, disk, memory, and interface use) for critical devices.	Device List, page 2-2 Chapter 4, "Using Topology Views"
Monitor standard IP services , such as HTTP, FTP, or SMTP on a device.	Chapter 8, "Using Active Monitors"
Set up workspace views for your users.	Chapter 3, "Understanding Workspaces and Workspace Content"
Set up users and role-based security access.	Managing Users, page 13-5
Set up and route alerts to the appropriate network administrator.	Chapter 6, "Using Actions" Chapter 7, "Using Notifications"
View full reports to troubleshoot and monitor performance and historical data.	Chapter 11, "Using Reports"
Group devices by type, location, services, or some other attribute.	Using Dynamic Groups, page 2-17

Starting Cisco netManager

To quickly start Cisco netManager, you should do the following:

1. Launch the Web Interface, page 1-2

2. Discover Devices, page 1-3

3. View Network Data, page 1-3

4. Set Up Actions, page 1-4

Step 1: Launch the Web Interface

You can connect to the Cisco netManager web interface from any browser by entering its web address. This web address consists of the hostname of the Cisco netManager host and the web server port number. The default port number is 80.

For example, if your Cisco netManager host is named monitor1.cisco.com, then the web address will be http://monitor1.cisco.com:80.

> **Note**   When you use the default port number (80), you do not have to include the port number in the address.

There are two default users on the web server:

- Administrator (Username: `admin` Password: `admin`)
- Guest (Username: `guest` Password: `<password box left blank>`

For more information about user privileges, see Managing Users, page 13-5.

To change the default administrator password:

Step 1   From the web interface, click **GO > Configure > Preferences...**.

Step 2   Click **Change your password**.

Step 2: Discover Devices

There are several ways to add devices to Cisco netManager. See the following sections for more information:

- Adding a New Device—Manually adds a device using its IP address or hostname.
- Using the Device Discovery Wizard—Automatically detects network devices (workstations, servers, routers, hubs, and so on), scans those devices for services, and lets you select the devices that you want to manage. The Device Discovery Wizard is only available from the Cisco netManager console. The console is only available from the server where Cisco netManager is installed (**Start > All Programs > Cisco netManager 1.1 > Cisco netManager 1.1 Discovery**).
- Importing Devices from a File—Imports multiple devices using a seed file.

Step 3: View Network Data

Begin viewing your network using the following tools:

- Topology Views
  - Service Level View displays a logical topology view of your Cisco Unified Communications network.

    > **Note**   The Service Level View is available only if you have purchased a license that monitors Unified Communication devices.

  - Physical Connectivity View gives you a visual representation of all physical devices and connections in your network. This view gives a quick snapshot of your entire network including its overall health.
- Workspaces—Contain multiple *views* that let you organize workspace content by the type of information they display.
- Reports—Used to troubleshoot and monitor performance and historical data that has been collected during the operation of the application. These reports can help you troubleshoot problem areas on your network and give you easy access to important network information.

Step 4: Set Up Actions

After selecting devices, configure actions that will notify you when changes occur on the monitored devices. For more information, see Using Actions.

After you have completed discovery and set up basic monitoring of devices and services, you can investigate the other features of Cisco netManager. The following sections contain information on navigating the web interface and the various tools available to you.

Cisco netManager Web Interface

The Cisco netManager HomeSpace workspace is the first screen you see after logging in to the web interface. For more information on your home workspace, see About Workspaces, page 3-1.

Using the GO Menu

The main menu for the web interface is housed within the GO button, located in the upper-left corner of your browser. The GO menu is visible from anywhere within the web interface.

From the **GO** menu, you can navigate to the areas you will use most in Cisco netManager, including your Home workspace views; your monitored devices list; diagnostic tools; and the configuration of the Passive, Active, and Performance Monitor libraries. Table 1-2 lists tasks available through the GO menu and provides corresponding sections in this document, to help you.

Table 1-2   GO Menu Options

Category	Operation	Section/Description
Views	Physical Connectivity View	Using the Physical Connectivity View, page 4-5
	Service Level View	Using the Service Level View, page 4-1
Devices	My Network	About the Devices Tab, page 2-2
	New Device	Adding a New Device, page 2-4
	Import Devices	Importing Devices from a File, page 2-9
	Rediscover Devices	Rediscovering Devices, page 2-14
	New From Active Discovery Results	Using the Device Discovery Wizard, page 2-6
	Web Alarms	Dismissing or Muting Web Alarms, page 6-12
Reports	Overview	Report Categories, page 11-1
	All Reports	Selecting a Report, page 11-2
	System	About System Reports, page 11-3
	Group	About Group Reports, page 11-3
	Device	About Device Reports, page 11-3
	Performance	Report Categories, page 11-1
	Problem Areas	
	General	
	Favorites	
Diagnostic Tools	Ping	Using the Ping Tool, page 4-14
	Traceroute	Using the Trace Route Tool, page 4-14
	DNS Lookup	Using the DNS Lookup Tool, page 4-14
	MAC Address	Using the MAC Address Tool, page 4-15

Category	Operation	Section/Description
Configure	Performance Monitor Library	Understanding the Performance Monitor Library, page 10-2
	Active Monitor Library	About Monitors and Actions, page 8-1
	Passive Monitor Library	Configuring Passive Monitor Listeners, page 9-1.
	Action Library	About the Action Library, page 6-2
	Action Policies	About Action Policies, page 6-21
	Credentials Library	Credentials, page 2-6
	Recurring Actions	Configuring Recurring Actions, page 6-14
	Threshold Settings	Configuring Threshold Settings, page 3-20
	Physical Connectivity View Settings	Displaying IP Address or Display Name, page 4-7
	Notification Settings	Configuring Notifications, page 7-2
	Default SNMP Timeout	Configuring Global SNMP Timeout and Retry Settings, page 12-4
	Manage Web Server	Configuring the Web Server, page 13-2
	Manage Users	Managing Users, page 13-5
	Manage Workspace Views	Managing Workspace Views, page 3-4
	LDAP Credentials	Configuring LDAP, page 13-4
	IP Security	Configuring IP Security, page 13-1
	Preferences	Changing Admin Preferences (Password Change), page 13-7
	Report Preferences	Changing the Number of Records Displayed, page 11-2

Cisco netManager Tabs
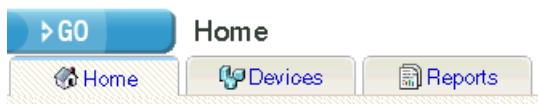
The web interface is organized into three tabs:

- Home
- Devices
- Reports

You can access each of these areas by:

- Clicking on an icon from the **GO** menu.
- Selecting one of the web interface tabs.

Home Tab

This universal workspace is designed to house the network information that you typically need. The default Home workspace view cannot be customized, but you can make a copy of it and then add different types of workspace content. This customizable view allows you to focus on certain network element information that is of importance. For more information on the Home workspace and workspace content, see Chapter 3, "Understanding Workspaces and Workspace Content."

Devices Tab

The Devices tab is where you can manage and display monitored devices. For more information, see Chapter 2, "Managing Devices."

Figure 1-1 shows an example of the Devices page.

Figure 1-1   *Devices Page*
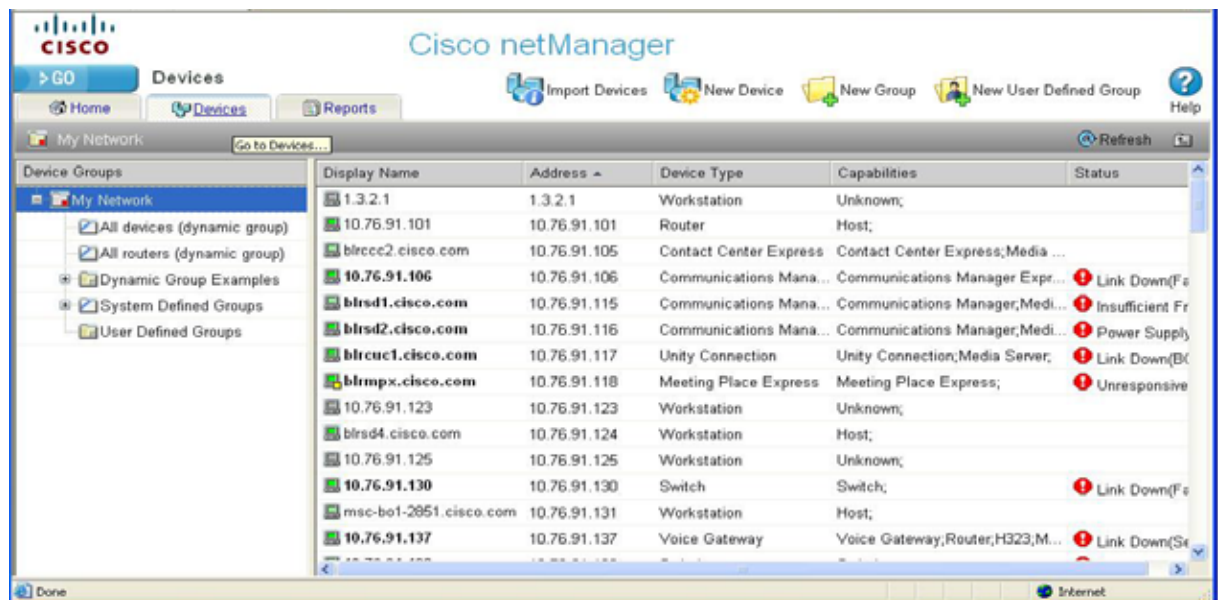
Reports Tab

The Reports tab opens the Reports page, which contains all of the Cisco netManager reports. Reports provide current status, performance, and historical data for devices and monitors. Workspaces let you focus on segments of the network and create your own views into the report data. They provide crucial network data in one location, which allows for quick and easy access. Cisco netManager offers over 100 instances of workspace content and reports. Each administrative user can have their own workspace with configurable workspace content. Once configured, these reports can help you troubleshoot problem areas on your network and allow easy access to important network information.

For more information on reports and workspaces, see the following:

- Chapter 11, "Using Reports"
- Chapter 3, "Understanding Workspaces and Workspace Content"

Reports can be sent on a regular basis to an e-mail address you identify through the Recurring Report feature. Reports configured and viewed from the Reports tab are fully functioning reports. Miniature versions of these reports, or workspace content, are available for display purposes only in a workspace.

Figure 1-2 shows an example of the General Reports page.

Figure 1-2   General Reports Page
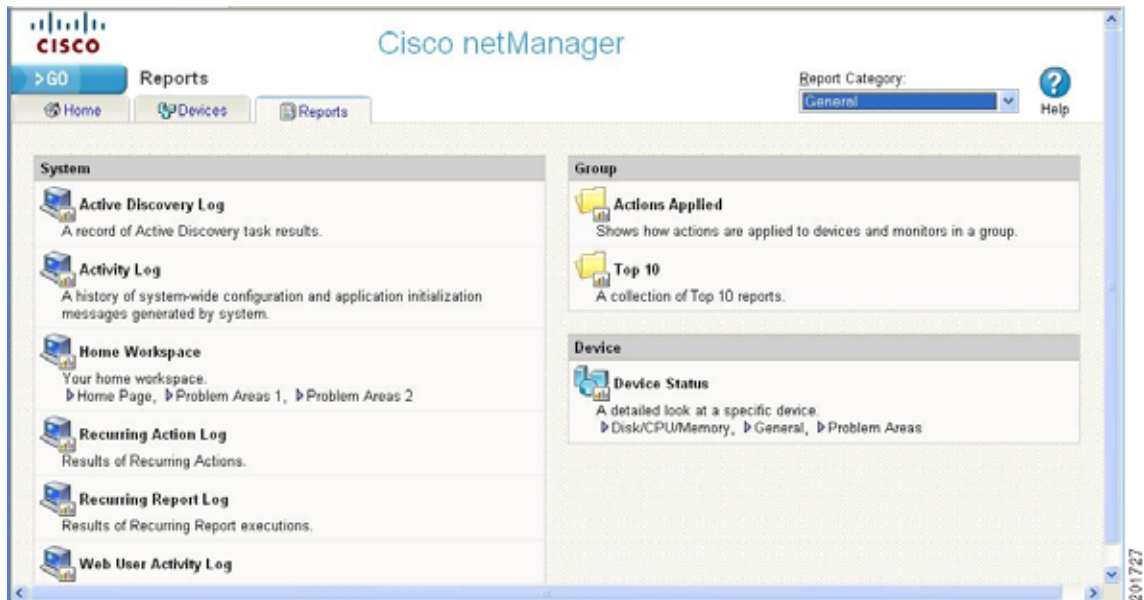
Report Category Menu

The Report Category menu allows you to jump to different report categories.

Device Management

After installing Cisco netManager you can import device credentials using a seed file or add individual devices manually or as a map. The device list shows a summary of all monitored devices in your network and also allows you to perform various tasks using the context menu. For more information, see Chapter 2, "Managing Devices."

Workspaces

Workspaces are designed to house network and device information that you typically need to view. There are two types of workspaces: Home and Device Status. Home workspace contains various network information and Device Status workspace displays device-level information. Workspaces contain multiple *views* that let you organize workspace content by the type of information they display. When you begin customizing your workspace views, you should consider the types of information you need to view most often, the devices to which you need to pay closest attention, and the level of detail you want to monitor through a particular workspace view. You should also take into consideration the type of workspace, and the types of workspace content you can add. For more information on workspaces and workspace content, see Chapter 3, "Understanding Workspaces and Workspace Content."

Figure 1-3 shows an example of a Device Status workspace.

Figure 1-3   Device Status Workspace

Topology Views

Cisco netManager provides two topological views of your network:

- Service Level View displays a logical topology view of Unified Communication devices in your network.

- Topology View displays a physical topology view of all the physical connections and devices in your network.

For more information, see Chapter 4, "Using Topology Views." Figure 1-4 shows an example of a Service Level View.

Figure 1-4   *Service Level View*
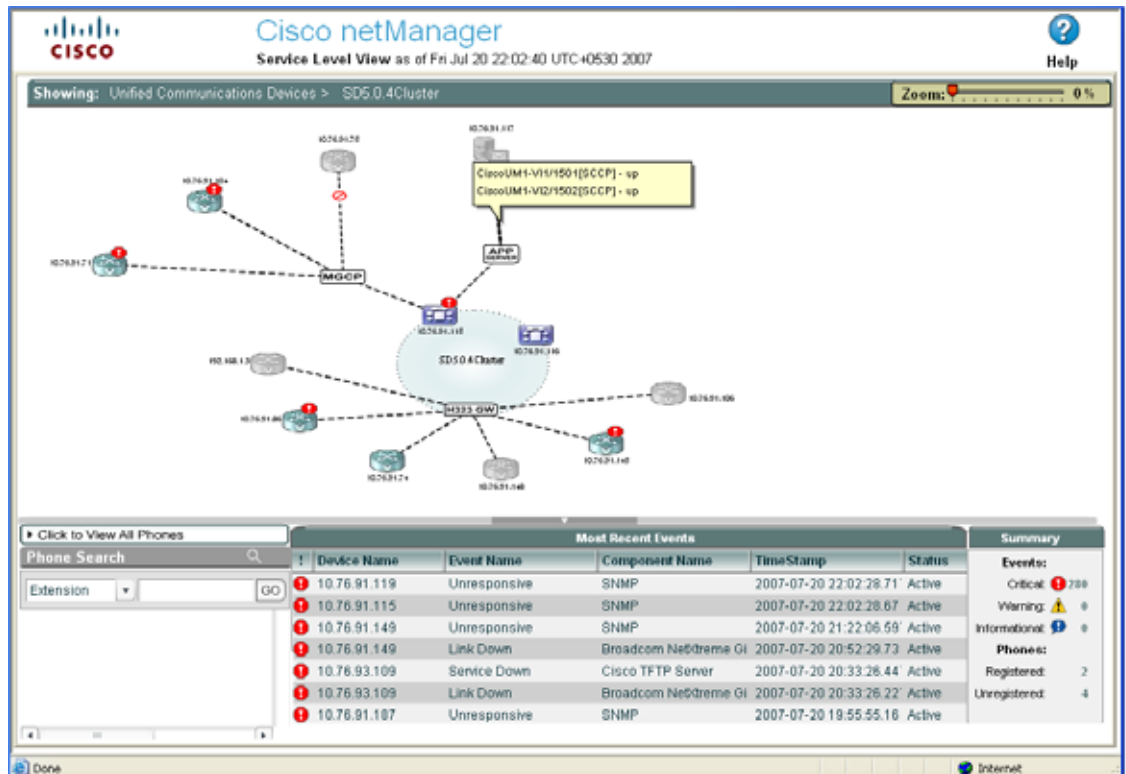
Polling and Listening

Cisco netManager actively polls devices to determine their status. You can use preconfigured monitors, or create your own, to poll services on a device, and to passively listen for messages sent across the network. Monitors can also report on device performance by checking and reporting on device resources, such as disk, CPU, and interfaces. For more information on polling and monitors see the following:

- Chapter 5, "Polling"
- Chapter 8, "Using Active Monitors"
- Chapter 9, "Using Passive Monitors"

Actions

Depending on the responses received from polling, or the types of messages received, Cisco netManager initiates actions to notify you of any change on your network. Actions speed problem resolution through options such as alerting via e-mail or pager, or restarting a service. For more information on actions, see Chapter 6, "Using Actions."