



## CHAPTER

# 1

## What Is Network Assistant?

Network Assistant is an application that manages standalone devices and device groups—communities and clusters—from anywhere in your intranet. Using its GUI, you can perform multiple configuration tasks without using command-line interface (CLI) commands. You can apply actions to multiple devices and ports at the same time for VLAN and quality of service (QoS) settings, inventory and statistics reports, link and device monitoring, software upgrades, and many other networking features.

Network Assistant gives you two graphical views of a device group:

- A topology view, showing devices that are eligible to join the community or cluster, link information between devices, and other connected clusters.
- A front-panel view from which you can monitor the real-time status of the devices and perform many configuration tasks. The devices and port LEDs in the view look like the physical devices and port LEDs.

A community is a device group that can contain up to 20 connected network devices. Network Assistant uses the Cisco Discovery Protocol (CDP) automatic discovery capability to find eligible network devices and to add them to a community. When a network device is added to a community, it becomes a *member device*. Network Assistant manages, configures, and monitors each member on an individual basis; therefore, each member must have an IP address assigned to it.

Most Cisco network devices that have IP addresses, such as routers and access points, can belong to a community. For a specific list of network devices that can belong to a community, see the release notes. For information on community limitations, see the “[Community Limits](#)” section on page 4-2.

The main reason for creating a community is so that you can manage Cisco cluster-capable devices as well as noncluster-capable devices in the same logical group, regardless of their physical location, and regardless of the software installed on the devices. Network Assistant supports the creation, modification, deletion, and management of multiple communities.

A cluster is a device group that can contain up to 16 connected network devices, but they have to be cluster-capable Catalyst devices. The devices belong exclusively to one cluster; they do not participate in other clusters. You assign an IP address to a device that will become the *command device*. The IP address of the command device is the single point of access that Network Assistant uses to configure, manage, and monitor the command device and the member devices.

A community offers these benefits that a cluster does not:

- Communities can manage routers, access points, and switches. Clusters can only manage switches.
- The device limit for communities is 20, but the device limit for clusters is 16.
- Network Assistant can communicate securely with every member in a community. In a cluster, Network Assistant communicates with member devices through the command device, but the communication is secure only between Network Assistant and the command device. It is not secure from the command device to member devices.

- If a community member fails, Network Assistant can continue to manage the other members. If a cluster command device fails, Network Assistant cannot manage the other members of the cluster unless a cluster standby device has been configured.
- Communities have fewer restrictions than clusters about where members are located and how they are connected to each other. For more information on cluster member restrictions, see the online help.
- If candidate devices do not have CDP enabled, you can still create a community and add the devices manually. Clusters cannot be created without CDP being enabled on all the candidate devices.

Network Assistant features include front panel and topology views of device groups. See [Chapter 2, “Network Assistant Features,”](#) for more information.

For information on setting up communities, see [Chapter 4, “Planning and Creating Communities.”](#)

For information on setting up device clusters, see Chapter 4, “Planning and Creating Clusters” of the [Getting Started with Cisco Network Assistant](#) document, version 1.0.