CHAPTER 4

Adding and Modifying Agents and Agent Groups

Introduction

You need two components to monitor network traffic, one or more SwitchProbes or Cisco IOS™ embedded RMON agents, and a TrafficDirector console. Once you install agents on the appropriate network segments and install and start TrafficDirector software on your management console, you must then tell TrafficDirector to recognize the agents you want to use for network monitoring. You do this by adding agents and agent groups to TrafficDirector. TrafficDirector can't monitor the traffic on any network segment until you install an agent on that segment and add the agent to TrafficDirector.

When you add a new agent to TrafficDirector, you specify a number of parameters for that agent such as agent name, IP address, number of retries, and so forth. After you add one or more agents, you can edit their parameters or remove them from TrafficDirector.

It is important to realize that when you install an agent on a network segment, the agent continuously collects and records segment data. When you add the agent to TrafficDirector, you enable TrafficDirector to monitor selected portions of the segment traffic. In some cases, you can also change certain aspects of data collection in the agent, such as setting alarms and proxy resources.

You may want to monitor network traffic from more than one agent at a time. To do this, you define one or more agent groups. An agent group is a group of agents that TrafficDirector treats as a single agent. You add, edit, and delete agent groups the same way you handle individual agents.

In this chapter you'll learn how to add, modify, and delete agents and agent groups. You'll also learn about TrafficDirector's Remote Login tool, which lets you change the configuration of an installed agent directly from the TrafficDirector console.

Adding, Modifying, and Deleting Agents

This section covers how to work with individual agents. You add, edit, and delete individual agents from the TrafficDirector Main window.

The **Agents (All)** list box, that contains the names of individual agents and selection buttons associated with those agents, appears on the left side of the Main window. A similar list box, **Agent Groups**, appears on the right side of the window.

Selecting the Agent List

You may want to view all the agents added to TrafficDirector, or only those agents included in a specific agent group.

To view all agents added to TrafficDirector, select the **All** button from the **Show option buttons at the bottom of** the Agent list box. This is the default setting. Note that the Agent list box is titled **Agents (All)**.

To view only the agents that make up a particular group:

Step 1 Select the agent group whose agents you want to view from the **Agent Groups** list box in the TrafficDirector Main window.

Step 2 Select the **Group** button from the **Show option buttons at the bottom of** the Agent list box. Notice that the list box heading changes to **Agents (Group)**, and that only the agents included in the selected group appear in the list box.

Adding a New Agent

To use TrafficDirector to monitor network traffic at a particular point on a segment, you must:

- Install a SwitchProbe or embedded RMON agent at the appropriate point on the network segment.
- Add the agent to TrafficDirector.
- Test the agent to ensure proper operation.

Once you've added and tested the agent, you can then use TrafficDirector's network monitoring tools to examine segment traffic using that agent.

To add a new agent to TrafficDirector:

Step 1 Select **All** from the **Show** option choices beneath the **Agents (All)** list box. The list box now displays all installed agents.

Step 2 From the **Agents (All)** group of buttons, select **New**. The Add Agent dialog box appears.

Step 3 Fill in the fields with the information for the agent you want to add:

- **Agent Name** is the name you choose for the agent you want to add. The agent name can be up to 15 alphanumeric characters, must start with a letter, and is case-sensitive. You can also use dashes and underscores.
- Enter the appropriate Interface number for the type of agent and protocol into the **Interface Number** field. Refer to the User Guide for your SwitchProbe or RMON agent to determine the appropriate number. The default is 1.
- Enter the **IP Address** for the agent. This must be a valid IP address and must consist of numbers separated by decimal points.
- Enter the **Read Community** string for the agent. The default read community string is **public**.
- Enter the **Write Community** string for the agent. The default write community string is **public**.
- Enter the **Retry Count**. This is the number of times TrafficDirector tries to reach the agent if it gets no response. The value must be an integer and be equal to 1 or greater. The default value is 4 times.

- Enter the **Timeout (secs).** This is the length of time TrafficDirector waits before retrying an SNMP request. The value must be an integer and be equal to 1 or greater. The default value is 5 seconds.
- Enter the **Startup File**. This is a script file that installs selected domains on the agent. The default file is **startup**.

Step 4 Click on **OK** to add the agent or **Cancel** to quit and return to the TrafficDirector window.

Step 5 Now go back to the TrafficDirector window. The new agent should appear in the **Agents (All)** list box.

Step 6 Select the new agent.

Step 7 Click on the **Test** button to confirm that the new agent is operational. If it is, you'll see a window that lists information about the agent. Testing an agent is described in the section "Testing an Agent's Operational Status" later in this chapter.

You can now use this agent to monitor segment traffic.

Editing, Viewing, and Deleting Agents

There may be times when you'll want to change an agent's parameters, or review the parameters without modifying them. Parameters are the fields you filled in when you added the agent. When you no longer need to monitor a certain part of your network, you may want to delete the agent (remove it from the TrafficDirector Main window). In this section you'll learn how to do all three.

Editing an Agent

Once you've added an agent to TrafficDirector, you can edit it at any later time. That is, you can change any of the parameters you specified when you added the agent. For example, you may want to change an agent's timeout or retry times to meet changing network conditions or monitoring requirements.

To change one or more parameters in an existing agent definition:

Step 1 Select the agent you want to edit from the **Agents (All)** list on the TrafficDirector Main window.

Step 2 Select **Edit**. The Edit Agent dialog box appears. It is the same as the Add Agent dialog box, except that the fields are already filled in for the existing agent.

Step 3 Change the fields you want to edit, using the guidelines described in the section "Adding a New Agent."

Note You cannot rename an existing agent. To change the name of an existing agent, create a new agent with the same parameters and the desired name, then delete the original agent.

Step 4 Click on **OK** to replace the original agent with the modified agent, or **Cancel** to return to the TrafficDirector Main window without modifying the agent.

Step 5 Select the agent you just modified. Then test the agent as described in the section "Testing an Agent's Operational Status" to ensure proper operation.

Viewing an Agent's Parameters

You may want to review the parameters for an agent without changing them. For example, you may have forgotten the agent's timeout value.

To view the values in each agent field without changing anything:

Step 1 Select the agent you want to view from the **Agents (All)** list box.

Step 2 Click on **View**. The View Agent dialog box appears. It is the same as the Add Agent dialog box, except that the fields are filled in for the existing agent. You cannot edit these fields.

Step 3 Click on **OK** when you are finished viewing the agent.

Deleting an Agent

As your network monitoring requirements change, you may no longer need to monitor a certain network segment. In this case you might want to delete the agent from TrafficDirector to conserve network resources. When you delete an agent from TrafficDirector, the actual agent remains connected to the network segment, gathering information, but TrafficDirector can no longer monitor the data it collects.

To delete an agent from TrafficDirector:

Step 1 Select the agent you want to delete from the **Agents (All)** list on the TrafficDirector Main window.

Step 2 Click on **Delete**. A cautionary dialog box appears asking you if you really want to delete the agent.

Step 3 Click on **Yes** to delete the agent or **Cancel** to return to the TrafficDirector Main window without deleting the agent.

The agent you deleted no longer appears in the **Agents (All)** list box. Remember that it may still be connected to the network segment and still collecting data.

Testing an Agent's Operational Status

There may be times when you need to quickly determine if a particular agent is operational, and the date and time it became operational. This is particularly true if you have many agents operating on remote segments.

You can easily test any agent added to TrafficDirector using the **Test** button next to the **Agents (All)** list box on the TrafficDirector Main window. The Test function does these things:

- It tests the agent's read and write community strings.
- It performs a ping to determine if the agent is operational.
- It reads the system interface information. Results appear in a dialog box.

You should routinely test any new or modified agent before you use it.

To test an agent:

Step 1 Select the agent you want to test from the **Agents (All)** list on the TrafficDirector Main window.

Step 2 Click on **Test**. If the agent is operational, the agent and interface information appear in a dialog box. If the agent is not operational, the information in the dialog box tells you whether the read community string, the write community string, or both, has failed.

Creating and Modifying Agent Groups

TrafficDirector provides an easy way to monitor the same network information from more than one agent at a time using the agent group. An agent group is just a collection of agents that you define. You can create new agent groups, modify groups, view group definitions, and delete groups.

Once you've defined an agent group you can use TrafficDirector's monitoring and analysis tools with that group in exactly the same way as with a single agent. The difference is that you can compare traffic from different agents in the same graphical presentation. For example, if you want to monitor and compare enterprise-level traffic in three different segments, you can put agents on all three segments, add them to TrafficDirector, create an agent group for them, and use Traffic Monitor to compare the traffic from all three segments on a single graph.

Creating an Agent Group

When you add a group of agents you simply select the agents you want to include in the group, give the group a name, and add the new group to TrafficDirector.

To create a new agent group:

Step 1 Click on **New** from the **Agent Groups** set of selection buttons on the TrafficDirector Main window. The Add Agent Group dialog box appears.

Step 2 Select the agents you want to belong to this group from those listed. You can have up to 60 agents per group.

Step 3 Enter a group name. The agent group name can be up to 15 letters, and is case-sensitive. You can use numbers, letters, dashes, or underscores in the name, but it must start with a letter.

Step 4 Click on **OK** to add the new agent group to TrafficDirector, or **Cancel** to return to the TrafficDirector Main window.

The new agent group appears in the Agent Groups list box on the Main menu.

Editing an Agent Group

You may want to add to or reduce the number of agents included in a particular agent group. Do this by editing the agent group.

To edit an agent group:

Step 1 Select the agent group you want to edit from the **Agent Groups** list on the TrafficDirector Main window.

Step 2 Click on **Edit.** The Edit Agent Group dialog box appears. It is the same as the Add Agent Group dialog box, but the agents that belong to the group are already highlighted.

Step 3 Highlight the agents you want to include in the group. De-highlight those that are no longer to be in the group.

Step 4 Click on **OK** to edit the agent group or **Cancel** to return to the TrafficDirector Main window.

Viewing an Agent Group

You may want to see which agents are included in a particular agent group. There are two ways to do this. The first way is as follows:

Step 1 Select the agent group you want to view from the **Agent Groups** list box.

Step 2 Click on View. The View Agents Groups dialog box appears. It is the same as the Add Agent Group dialog box , except that you can't include or exclude any agents.

Step 3 Click on **OK** when you are finished viewing the agent group.

The second way to view the agents in an agent group is as follows:

Step 1 Select **Groups** in the **Show** field beneath the **Agents (All)** list box in the TrafficDirector Main window.

Step 2 Select the agent group. The left list box now shows only agents that belong to the selected agent group. Notice that the heading of this list box changes to **Agents (Group)**.

Deleting an Agent Group

When an agent group is no longer useful, you can delete the group for clarity and convenience. You can redefine the same or a similar group at a later time if needed. Remember that an agent group is just a logical grouping. When you delete an agent group, the individual agents it included are still listed in the **Agents (All)** list box in the Main window.

To delete an agent group from TrafficDirector:

Step 1 Select the agent group you want to delete from the **Agents (Groups)** list box.

Step 2 Click on **Delete**. A cautionary dialog box appears asking you if you really want to delete the agent group.

Step 3 Click on **Yes** to delete the agent group, or **Cancel** to return to the TrafficDirector Main window without deleting the agent group.

Configuring an Agent Using Remote Login

Every agent is configured according to a number of parameters such as IP address, read/write community string, and timeout. You may want to change these parameters at certain agents as your network management needs change.

The traditional problem in reconfiguring agents has been that agents may be physically located all over the world. TrafficDirector's Remote Login tool solves this problem by letting you configure agents directly from TrafficDirector through the network, regardless of where they are located.

To configure an agent using Remote Login:

Step 1 Select the agent you want to reconfigure from the **Agents** list box on the TrafficDirector Main window.

Step 2 Click on **Remote Login** from the TrafficDirector Main window. The Remote Login.

Step 3 Refer to the appropriate agent manual for configuration instructions.

Step 4 Change agent parameters in accordance with the instructions in the agent manual. To change a parameter, enter the parameter number in the selection field at the bottom of the window, then modify the parameter.

Step 5 To make your changes at the agent, enter the number for the **Reset Agent** choice.

Step 6 To exit Remote Login, enter **exit** into the selection field.