



# **Troubleshooting Overview**

This chapter, which provides a basic overview of troubleshooting in Cisco Unified Communications Manager Business Edition 3000, provides information on the following topics:

- Troubleshooting Tools, page 45-35
- General Model of Problem Solving, page 45-36
- Troubleshooting Tips, page 45-36
- Related Topics, page 45-37

### **Troubleshooting Tools**

Cisco Unified Communications Manager Business Edition 3000 provides you with the following functionality to assist you with troubleshooting your system:

- The Health Summary page in the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface (**Monitoring > Health Summary**)—This page allows you to quickly determine the health of major subsystems in your system. The page indicates whether you have a problem, and the online help for the Health Summary page provides you with possible causes and tasks that you can perform to resolve the issue. You should access this page first when you begin troubleshooting.
- The Diagnostics page in the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface (**Monitoring > Diagnostics**)—From this page, you can enable detail logging during recurring events and you can collect logs, which you can send to your technical support (either the Value Added Reseller or Cisco Technical Assistance Center (TAC)). You access this page when the Value Added Reseller, Cisco TAC, or Health Summary page indicate that you need to perform tasks on this page.
- The Cisco Diagnostics Tool—The Cisco Diagnostic Tool allows you to diagnose your system if you cannot access the Cisco Unified Communications Manager Business Edition 3000 Administrative Interface
- If you file a case with Cisco TAC, you may need additional troubleshooting tools, as described in the "Opening a Case with Cisco Technical Assistance Center" section on page 50-91.

# **General Model of Problem Solving**

When troubleshooting a telephony or IP network environment, define the specific symptoms, identify all potential problems that could be causing the symptoms, and then systematically eliminate each potential problem (from most likely to least likely) until the symptoms disappear.

The following steps provide guidelines to use in the problem-solving process.

#### Procedure

Step 1	Analyze the network problem and create a clear problem statement. Define symptoms and potential causes. In most cases, the Health Summary page, along with the online help for that page, assists you with defining the problem and potential causes of the problem.
Step 2	Gather the facts that you need to help isolate possible causes. In most cases, the Health Summary page, along with the online help for that page, assists you with defining the potential causes of the problem.
Step 3	Consider possible causes based on the facts that you gathered. In most cases, the Health Summary page, along with the online help for that page, assists you with defining the potential causes of the problem.
Step 4	Create an action plan based on those causes. Begin with the most likely problem and devise a plan in which you manipulate only one variable. In most cases, the Health Summary page, along with the online help for that page, assists you with the action plan.

- **Step 5** Implement the action plan; perform each step carefully while testing to see whether the symptom disappears.
- **Step 6** Analyze the results to determine whether the problem has been resolved. If the problem was resolved, consider the process complete.
- **Step 7** If the problem has not been resolved, create an action plan based on the next most probable cause on your list. Return to Step 4 and repeat the process until the problem is solved.

Make sure that you undo anything that you changed while implementing your action plan. Remember that you want to change only one variable at a time.



If you exhaust all the common causes and actions (either those outlined in this document or others that you have identified in your environment), contact your technical support team; in this case, either the Value Added Reseller (VAR), of if you are the Value Added Reseller, contact Cisco Technical Assistance Center (TAC).

## **Troubleshooting Tips**

The following tips may help you when you are troubleshooting Cisco Unified Communications Manager Business Edition 3000.

- Check the release notes for Cisco Unified Communications Manager Business Edition 3000 for known problems.
- Identify the approximate time of the problem.

Multiple calls may have occurred, so knowing the approximate time of the call helps TAC quickly locate the issue.

- Obtain phone statistics from phones that can display phone statistics.
- When you are running a test to reproduce the issue and produce information, know the following data that is crucial to understanding the issue:
  - Calling number/called number
  - Any other number that is involved in the specific scenario
  - Time of the call
- You can always recover more easily from a network failure if you are prepared ahead of time. To determine if you are prepared for a network failure, answer the following questions:
  - Do you have an accurate physical and logical map of your Internetwork that outlines the physical location of all of the devices on the network and how they are connected as well as a logical map of network addresses, network numbers, and subnetworks?
  - Do you know which protocols are being routed and the correct, up-to-date configuration information for each protocol?
  - Do you know all the points of contact to external networks, including any connections to the Internet?
  - Has your organization documented normal network behavior and performance, so you can compare current problems with a baseline?

If you can answer yes to these questions, faster recovery from a failure results.

- If you must collect a log file, save the log file to a USB key or desktop to prevent the system from overwriting it.
- If you plan to file a case with Cisco TAC, see the "Information You Will Need" section on page 50-92 and the "Required Preliminary Information" section on page 50-92.

### **Related Topics**

- Health Summary, page 24-1
- Troubleshooting Issues, page 47-51
- Troubleshooting from the Health Summary Page, page 46-39
- Troubleshooting From the Diagnostics Page, page 46-41
- Troubleshooting When You Cannot Access the Graphical User Interfaces, page 46-44