



APPENDIX **A**

Opening a Case With TAC

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website remains available 24 hours a day, 365 days a year at this URL:

<http://www.cisco.com/techsupport>

Using the online TAC Service Request Tool represents the fastest way to open S3 and S4 service requests. (S3 and S4 service requests specify those requests in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved by using the recommended resources, your service request will get assigned to a Cisco TAC engineer. Find the TAC Service Request Tool at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests represent those in which your production network is down or severely degraded.) Cisco TAC engineers get assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

This section contains details on the type of information that you need when you contact TAC and information on methods of sharing information with TAC personnel:

- [Information You Will Need, page A-2](#)
- [Required Preliminary Information, page A-2](#)
- [Online Cases, page A-3](#)
- [Cisco Live!, page A-4](#)
- [Remote Access, page A-4](#)
- [Cisco Secure Telnet, page A-4](#)

Information You Will Need

When you open a case with the Cisco TAC, you must provide preliminary information to better identify and qualify the issue. You may need to provide additional information, depending on the nature of the issue. Waiting to collect the following information upon the engineer's request after opening a case inevitably results in resolution delay.

- [Required Preliminary Information](#)
 - [Network Layout](#)
 - [Problem Description](#)
 - [General Information](#)
- [Online Cases](#)
- [Cisco Live!](#)
- [Remote Access](#)
- [Cisco Secure Telnet](#)

Required Preliminary Information

For all issues, always provide the following information to TAC. Collect and save this information for use upon opening a TAC case and update it regularly with any changes.

- [Network Layout](#)
- [Problem Description](#)
- [General Information](#)

Network Layout

Provide a detailed description of the physical and logical setup, as well as all the following network elements involved in the voice network (if applicable):

- Cisco Unified Communications Manager(s)
 - Version (from Cisco Unified Communications Manager Administration choose **Details**)
 - Number of Cisco Unified Communications Managers
 - Setup (stand-alone, cluster)
- Unity
 - Version (from the Cisco Unified Communications Manager Administration)
 - Integration type
- Applications
 - List of installed applications
 - Version numbers of each application
- IP/voice gateways
 - OS version

- Show tech (IOS gateway)
 - Cisco Unified Communications Manager load (Skinny gateway)
- Switch
 - OS version
 - VLAN configuration
- Dial plan—Numbering scheme, call routing

Ideally, submit a Visio or other detailed diagram, such as JPG. Using the whiteboard, you may also provide the diagram through a Cisco Live! session.

Problem Description

Provide step-by-step detail of actions that the user performed when the issue occurs. Ensure the detailed information includes

- Expected behavior
- Detailed observed behavior

General Information

Make sure that the following information is readily available:

- Is this a new installation?
- If this is a previous version of a Cisco Unified Communications Manager installation, has this issue occurred since the beginning? (If not, what changes were recently made to the system?)
- Is the issue reproducible?
 - If reproducible, is it under normal or special circumstances?
 - If not reproducible, is there anything special about when it does occur?
 - What is the frequency of occurrence?
- What are the affected devices?
 - If specific devices are affected (not random), what do they have in common?
 - Include DNs or IP addresses (if gateways) for all devices that are involved in the problem.
- What devices are on the Call-Path (if applicable)?

Online Cases

Opening an case online through Cisco.com gives it initial priority over all other case-opening methods. High-priority cases (P1 and P2) provide an exception to this rule.

Provide an accurate problem description when you open a CCO case. That description of the problem returns URL links that may provide you with an immediate solution.

If you do not find a solution to your problem, continue the process of sending your case to a TAC engineer.

Cisco Live!

Cisco Live!, a secure, encrypted Java applet, allows you and your Cisco TAC engineer to work together more effectively by using Collaborative Web Browsing / URL sharing, whiteboard, Telnet, and clipboard tools.

Access Cisco Live! at the following URL:

<http://c3.cisco.com/>

Remote Access

Remote access provides you with the ability to establish Terminal Services (remote port 3389), HTTP (remote port 80), and Telnet (remote port 23) sessions to all the necessary equipment.

**Caution**

When you are setting up dial-in, do not use **login:cisco** or **password:cisco** because they constitute a vulnerability to the system.

You may resolve many issues very quickly by allowing the TAC engineer remote access to the devices through one of the following methods:

- Equipment with public IP address.
- Dial-in access—In decreasing order of preference: analog modem, Integrated Services Digital Network (ISDN) modem, virtual private network (VPN).
- Network Address Translation (NAT)—IOS and private Internet exchange (PIX) to allow access to equipment with private IP addresses.

Ensure that firewalls do not obstruct IOS traffic and PIX traffic during engineer intervention and that all necessary services, such as Terminal Services, start on the servers.

**Note**

TAC handles all access information with the utmost discretion, and no changes will get made to the system without customer consent.

Cisco Secure Telnet

Cisco Secure Telnet offers Cisco Service Engineers (CSE) transparent firewall access to Cisco Unified Communications Manager servers on your site.

Cisco Secure Telnet works by enabling a Telnet client inside the Cisco Systems firewall to connect to a Telnet daemon behind your firewall. This secure connection allows remote monitoring and maintenance of your Cisco Unified Communications Manager servers without requiring firewall modifications.

**Note**

Cisco accesses your network only with your permission. You must provide a network administrator at your site to help initiate the process.

Firewall Protection

Virtually all internal networks use firewall applications to restrict outside access to internal host systems. These applications protect your network by restricting IP connections between the network and the public Internet.

Firewalls work by automatically blocking TCP/IP connections that are initiated from the outside, unless the software is reconfigured to allow such access.

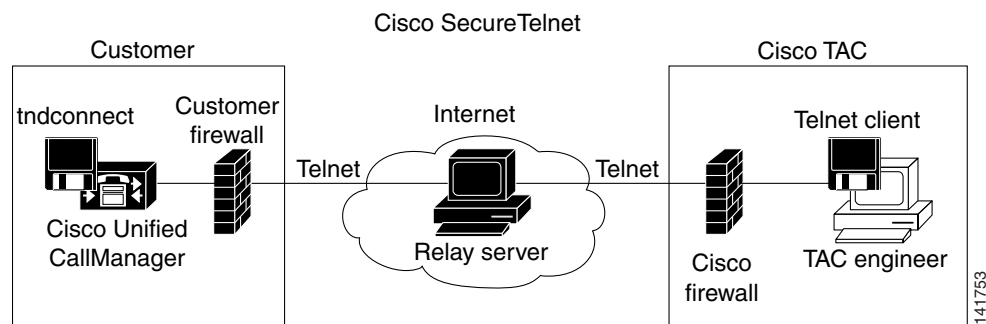
Corporate networks normally permit communication with the public Internet but only if connections directed to outside hosts originate from inside the firewall.

Cisco Secure Telnet Design

Cisco Secure Telnet takes advantage of the fact that Telnet connections can easily be initiated from behind a firewall. Using an external proxy machine, the system relays TCP/IP communications from behind your firewall to a host behind another firewall at the Cisco Technical Assistance Center (TAC).

Using this relay server maintains the integrity of both firewalls while secure communication between the shielded remote systems get supported.

Figure A-1 Cisco Secure Telnet System



Cisco Secure Telnet Structure

The external relay server establishes the connection between your network and Cisco Systems by building a Telnet tunnel. This enables you to transmit the IP address and password identifier of your Cisco Unified Communications Manager server to your CSE.



Note

The password comprises a text string upon which your administrator and the CSE mutually agree.

Your administrator starts the process by initiating the Telnet tunnel, which establishes a TCP connection from inside your firewall out to the relay server on the public Internet. The Telnet tunnel then establishes another connection to your local Telnet server, creating a two-way link between the entities.



Note

The Telnet client at the Cisco TAC runs in compliance with systems that run on Windows NT and Windows 2000 or with UNIX operating systems.

After the Cisco Communications Manager at your site accepts the password, the Telnet client that is running at the Cisco TAC connects to the Telnet daemon that is running behind your firewall. The resulting transparent connection allows the same access as if the machine were being used locally.

After the Telnet connection is stable, the CSE can implement all remote serviceability functionality to perform maintenance, diagnostic, and troubleshooting tasks on your Cisco Unified Communications Manager server.

You can view the commands that the CSE sends and the responses that your Cisco Unified Communications Manager server issues, but the commands and responses may not always be completely formatted.