



Preface

Revised: July 22, 2009, OL-15636-07

Introduction

This document provides detailed troubleshooting procedures for the Cisco BTS 10200 Softswitch. It provides the procedures for troubleshooting network, subscriber, billing, operations and maintenance, system administrative problems. It also includes details for aiding troubleshooting by utilizing diagnostic and trace procedures. The maintenance personnel or troubleshooters of a Cisco BTS 10200 can use this document to better understand how to troubleshoot the Cisco BTS 10200 and quickly clear network problems.

Organization

This Troubleshooting Guide contains the following chapters:

- [Chapter 1, “Troubleshooting Overview”](#)—Provides an overview of troubleshooting the Cisco BTS 10200.
- [Chapter 2, “Audit Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Audit events and alarms.
- [Chapter 3, “Billing Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Billing events and alarms.
- [Chapter 4, “Call Processing Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Call Processing events and alarms.
- [Chapter 5, “Configuration Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Configuration events and alarms.
- [Chapter 6, “Database Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Database events and alarms.
- [Chapter 7, “Maintenance Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Maintenance events and alarms.
- [Chapter 8, “Operations Support System Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Operations Support System events and alarms.
- [Chapter 9, “Security Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Security events and alarms.

- [Chapter 10, “Signaling Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Signaling events and alarms.
- [Chapter 11, “Statistics Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot Statistics events and alarms.
- [Chapter 12, “System Troubleshooting”](#)—Provides the information needed to monitor and troubleshoot System events and alarms.
- [Chapter 13, “Network Troubleshooting”](#)—Provides the information needed to conduct network troubleshooting on the Cisco BTS 10200.
- [Chapter 14, “General Troubleshooting”](#)—Provides the general troubleshooting information needed to conduct troubleshooting on the Cisco BTS 10200.
- [Chapter 15, “Diagnostic Tests”](#)—Describes the diagnostic tests that can be performed on media gateways, subscriber terminations, and trunk terminations.
- [Chapter 16, “Disaster Recovery Procedures”](#)—Describes how to recover the database in a disaster situation, how to recover the database from another database, and how to recover data from the Call Agent shared memory.
- [Chapter 17, “Disk Replacement”](#)—Describes how to manually recover a Cisco BTS 10200 system.
- [Appendix A, “Recoverable and Nonrecoverable Error Codes”](#)—Lists normal, recoverable and nonrecoverable error codes for the Cisco BTS 10200.
- [Appendix B, “System Usage of MGW Keepalive Parameters, Release 6.0”](#)—Explains how the Cisco BTS 10200 determines the connectivity status between itself and a media gateway (MGW).
- [Appendix C, “Overload Control”](#)—Overload is a switch condition that exists when system resources cannot handle system tasks. Increases in call traffic or messages indirectly related to call traffic usually cause overload.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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Document Change History

The following table lists the revision history for the *Cisco BTS 10200 Softswitch Troubleshooting Guide, Release 6.0.x*.

Version Number	Issue Date	Status	Reason for Change
OL-15636-01	31 Mar 2008	Initial	Initial document for Release 6.0.
OL-15636-02	31 Jul 2008	Revised	Updated document for Release 6.0 MR1.
OL-15636-03	27 Oct 2008	Revised	Updated Audit (4) information and updated the events and alarms listed in this document.
OL-15636-04	10 Nov 2008	Revised	Updated the “ PSTN Trunk Testing ” section on page 15-94.
OL-15636-05	11 Dec 2008	Revised	Updated the “ Automatic Shared Memory Back Up Restore ” section on page 16-33 and the “ Signaling System 7 Trunk Termination Tests ” section on page 15-5.
OL-15636-06	5 Mar 2009	Revised	Added the “ Oracle Database Tool Restart ” section on page 13-10.
OL-15636-07	22 Jul 2009	Revised	Updated the “ Recovering Shared Memory ” section on page 16-28.

