



Preface

Revised: July 17, 2008, OL-12397-15

This document describes the features applicable to Session Initiation Protocol (SIP) devices, subscribers, and trunks. It also provides the procedures necessary to provision these features.

Revision History for this Document

This document incorporates all of the information that was contained in the previous SIP Guides for Release 4.5.x—the *Cisco BTS 10200 Softswitch SIP Protocol User Guide* and the *Cisco BTS 10200 Softswitch SIP Protocol Provisioning Guide*. In addition, it provides information on all Release 5.0 features.

| Release | Changes |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release 5.0 | In version OL-12397-15, the SIP Element State Diagram and the “SIP Trunk Group States” section on page 18 was added in the SIP Trunks chapter. |
| Release 5.0 | In version OL-12397-14, the procedure to provision the ANI screening on incoming calls were added in the “ANI Screening on Incoming Calls” section on page 42 . |
| Release 5.0 | In version OL-12397-13, the following changes were made: <ul style="list-style-type: none">• The procedure for provisioning SIP subscribers was transferred to the <i>Cisco BTS 10200 Softswitch Provisioning Guide</i>. See “Provisioning a SIP Subscriber” section on page 2-2. |

| Release | Changes |
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| Release 5.0 | In version OL-12397-12, the following changes were made: <ul style="list-style-type: none"> • A list of IETF RFC publication references was added in the “General SIP Overview” section on page 1-1. |
| Release 5.0 | In version OL-12397-11, the following changes were made: <ul style="list-style-type: none"> • SIP trigger information was updated in the “SIP Triggers” section on page 3-22. • References to cluster routing and CMS-to-MGC routing were added in Chapter 3, “SIP Trunks.” • Telephony features were moved to Chapter 2, “SIP Subscribers.” • The “Configuring the HTTP-FS, MBA, GUI-FS, and SIP Phone Services” section was deleted. • Information on SIP voice-mail features was moved to Chapter 3, “SIP Trunks.” • Information on SIP server groups was moved to Chapter 3, “SIP Trunks.” • Information was added for the following features—Automatic DNS Monitoring and Congestion Control, page 4-13 and Automatic Fault Monitoring and Self-Healing, page 4-13. • Several other technical clarifications were made (marked with change bars). |

| Release | Changes |
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| Release 5.0, continued | <p>In version OL-12397-10, the following changes were made:</p> <ul style="list-style-type: none"> • Editorial clarifications were incorporated throughout the document, and some sections were reorganized. • Chapter 4, “SIP System Features,” was expanded to include information on timers and other SIP system-wide features. • A section on SIP Server Groups was added. <p>In version OL-12397-09, a section was added to describe the implementation of the SIP Content-Length header. See the “Message Handling Based On Content-Length Header” section on page 4-12.</p> <p>In version OL-12397-08, several cross-references (links) were corrected or updated.</p> <p>In version OL-12397-07, the following changes were made:</p> <ul style="list-style-type: none"> • Information regarding the use of vertical service codes (VSCs) was added in the “Vertical Service Code Features” section on page 2-23. <p>In version OL-12397-06, the following changes were made:</p> <ul style="list-style-type: none"> • A description of the SIA process restart capability was added in the “Automatic Fault Monitoring and Self-Healing” section on page 4-13. <p>In version OL-12397-05, the following changes were made:</p> <ul style="list-style-type: none"> • Information was added to clarify that the BTS 10200 validates the hostname of the ReqUri of every received request against the list of names provisioned in the Serving-Domain-Name table. See the “SIP User Authentication” section on page 2-9. • A statement was added to the description of the Do Not Disturb (DND) feature to note that the reminder ring is not provided to SIP endpoints. See the “Comparison of SIP-Based Features and MGCP-Based Features” section on page 2-13. • (Release 5.0, Maintenance Release 1) Information was added regarding the contents of the Diversion headers and presentation values. See the “Diversion Indication for SIP Subscribers” section on page 2-12 and the “Diversion Indication for SIP Trunks” section on page 3-26. |
| Release 5.0, continued | <p>In version OL-12397-04, the following changes were made:</p> <ul style="list-style-type: none"> • (Release 5.0, Maintenance Release 1 and later) Information was added regarding the number of parameters in headers. See the “Limitations on Number of URLs, Parameters, and Headers (Release 5.0, Maintenance Release 1 and Later)” section on page 4-9. <p>In version OL-12397-03, the following changes were made:</p> <ul style="list-style-type: none"> • The procedures for installing the HTTP Feature Server (HTTP-FS) and Mini-Browser Adapter (MBA) were clarified. See the “Configuring the HTTP-FS, MBA, GUI-FS, and SIP Phone Services” section on page 2-13. • A correction was made to the add-serving domain command (auth_reqd=y). See “Provisioning a SIP Subscriber” section on page 2-2. |

| Release | Changes |
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| Release 5.0 | <p>In version OL-12397-02, the following changes were made:</p> <ul style="list-style-type: none"> • Clarification was added regarding changes to DSCP parameters in the ca-config table; changes provisioned to these parameters do not take effect until the CA platform restarts or switches over (Chapter 2, “SIP Subscribers” and Chapter 3, “SIP Trunks”). • The limitation on attended transfer was lifted in the “Call Transfer (Blind and Attended) with REFER” section on page 2-31. Attended transfer can occur on independently placed SIP subscriber calls. • Wording and formatting improvements were made to the “SIP Call Transfer with REFER and SIP INVITE with Replaces” section on page 3-44. |
| | OL-12397-01: First issue for this release. |

Audience

This guide is intended for use by service provider management and system administration personnel who are responsible for installing, provisioning, and maintaining networks that use the Cisco BTS 10200 Softswitch system.

Organization

This document is organized as follows:

[Chapter 1, “SIP Network Overview”](#)

[Chapter 2, “SIP Subscribers”](#)

[Chapter 3, “SIP Trunks”](#)

[Chapter 4, “SIP System Features”](#)

Conventions

Notes, cautions, and tips are used throughout the document where applicable.



Note

Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.



Tip

Means the following information will help you solve a problem. The tips information might not be troubleshooting or even an action, but could be useful information or information that might save time.



Caution

Means reader be careful. In this situation, you might do something that could result in equipment damage or loss of data.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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>

