



# Cisco BTS 10200 Softswitch — Release Notes for Release 3.3 V04

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December 13, 2002

The Cisco BTS 10200 Softswitch is a class-independent software switch (softswitch) that provides next-generation integrated voice and data switching solutions for packet networks.

These release notes for the Cisco BTS 10200 Softswitch describe the enhancements and new features provided in Release 3.3 V04.

These release notes are updated as needed. Please read the applicable sections in their entirety, because they contain important operational information that can impact your network.

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*Corporate Headquarters:*  
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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# System Requirements

The Cisco BTS 10200 Softswitch consists of the following equipment:

- Call Agent/Feature Server (CA/FS)—Two application servers, each with four CPUs.  
Continuous Computing Corp. Model AXmp: 4 CPUs, 4 GBytes RAM, 4 Disks (36 GBytes each)
- Element Management System (EMS)/Bulk Data Management System (BDMS) servers—  
Two administration processors, each with one CPU.  
Continuous Computing Corp. Model AXi: 2 CPUs, 2 GBytes RAM, 4 Disks (36 GBytes each)
- Two Cisco 2924M switch routers.
- Continuous Computing Corp. Intelligent Alarm Panel (IAP)
- Power distribution unit (PDU) for DC systems.  
DC-powered systems require two (redundant) feeds of 40A at -48 VDC. AC-powered systems require two (redundant) circuits of 20A at 120 VAC.

The physical requirements for installation of the Cisco BTS 10200 Softswitch are documented in the *Cisco BTS 10200 Softswitch Building Environment and Power Site Survey*.

For more detailed information, refer to the *Cisco BTS 10200 Softswitch System Description*.

## Operator Access

Operator access to the Cisco BTS 10200 Softswitch is available only by secure shell (SSH) session to the EMS over Ethernet. Communications can be interactive or can be in batch mode using FTP.

## Installation Notes

For detailed installation procedures for the Release 3.3 V04 software, refer to the *Cisco BTS 10200 Softswitch Application Installation Guide*.

## Limitations and Restrictions

The Release 3.3 V04 software requires that the ***measurement-prov*** command use the ***type*** token “announce” rather than “anm” as it is for all other CLI commands. Entering “type=anm” for the ***measurement-prov*** command returns an error message.

## Provisioning Cisco BTS 10200 the Generate EMs or CDBs

Provision the Cisco BTS 10200 to generate either EMs or CDBs, but not both. Attempting to generate both types of records simultaneously can significantly degrade the call processing rate. Refer to the “Event Message Billing Support” section for provisioning details.

# New and Changed Information

This section lists the new features and enhancements available in Release 3.3 V04.

## New Hardware Features

The Cisco BTS 10200 Softswitch complies with Network Equipment-Building System (NEBS) Level 1 and Level 3 Requirements (SR-3580).

## New Software Features

The following new applications and services are available in Release 3.3 V04. For more detailed information on each of the applications or services described here, refer to the relevant Cisco BTS 10200 Softswitch Feature Module or manual.

- [PacketCable Features, page 3](#)
- [Inter-Office Automatic Callback, Automatic Recall, page 7](#)
- [T108 Test Line Support, page 8](#)
- [8XX Enhancement with NOA Processing, page 9](#)
- [Provisionable CLLI Codes, page 10](#)
- [Digit Manipulation Table, page 12](#)
- [SNMP Interface, page 13](#)

## PacketCable Features

The following sections provide brief descriptions of the new PacketCable features included in the Cisco BTS 10200 Softswitch software Release 3.3 V04 including:

- [Dynamic Quality of Service \(DQoS\)](#)
- [PacketCable Event Messages](#)
- [PacketCable NCS 1.0 Compliance](#)
- [Billing Data Generation Methods](#)

For more detailed information, refer to the *Cisco BTS 10200 Softswitch PacketCable Feature Module*.

## Dynamic Quality of Service

This section provides a brief overview of the PacketCable Dynamic Quality of Service (DQoS) function included in Release 3.3 V04. For more information, refer to the “PacketCable Dynamic Quality of Service Specification,” PKT-SP-DQOS-I03-020116, January 16, 2002. PacketCable defines the specifications for delivery of enhanced communication services to a consumer’s home using packet data transmission technology over the cable television hybrid fiber coax data network running the Data Over Cable Service Interface Specification (DOCSIS) protocol.

PacketCable DQoS defines a QoS architecture for the “access” portion of the PacketCable network, which is defined as the segment between the Multimedia Terminal Adapter (MTA) and the Cable Modem Termination System (CMTS), including the DOCSIS network. Cisco’s DQoS implementation uses the Cisco BTS 10200 as a Cable Management Server (CMS) and Media Gateway Controller (MGC).

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Commercial voice communications capability requires a very high level of transport and signaling performance, including:

- Absolute minimum packet delay/loss, session setup latency time, and post pickup delay.
- Provide accounting for QoS resources on a per-session basis.
- Both two-phase (reserve-commit) and single phase (commit) QoS activation models.
- Prevent (or minimize) abusive QoS usage.
- Reclamation of QoS resources for dead/stale sessions.

The DOCSIS 1.1 specification provides the network layer QoS mechanisms responsible for classifying, policing, scheduling, and marking packets once the traffic flows are established by the DQoS signaling protocols. The role of DQoS is the coordination between call signaling (NCS/MGCP), which controls access to the voice application service, and resource management, which controls access to DOCSIS network-layer resources. This coordination ensures that users are authenticated and authorized before receiving access to the enhanced QoS associated with the service. It also ensures that network resources are available end-to-end before alerting the destination MTA.

The main function of the Cisco BTS 10200 is the Gate Controller function as defined in the DQoS specification. In this role it ensures that enhanced QoS is provided only to authorized users and the use of resources is properly accounted for, consistent with the conventions of providers that are part of the Public Switched Telephone Network (PSTN), in which charging occurs only after the called party picks up. This includes prevention of utilization of reserved resources for purposes other than the session to which they are assigned.

Features supported in this release include:

- **MTA/RGW signaling (NCS)**—additional parameters required for DQoS. The Cisco BTS 10200 is enhanced to handle large number of MTA's.
- **Gate control signaling (COPS)**—a new interface to the Cisco BTS 10200. It covers the messaging and parameters required for the CMS/GC to CMTS interface supporting DQoS and CALEA related functions.
- **Admission control for up stream and downstream traffic**—allows service providers to provision the necessary parameters and/or the alternative policies as a Gate Controller, such as session class for normal voice calls or overlapping session class for emergency calls. Session classes can further enable pre-emption of already reserved resources, where the policy for pre-emption is provisioned by the service provider.
- **Call scenarios supported:**
  - On-net to on-net call without gate coordination.
  - On-net to off-net call without gate coordination.
  - Off-net to on-net call without gate coordination.
- **Residential Gateway (RGW) support.**
  - DQoS capable PacketCable MTA
  - Non-DQoS capable PacketCable MTA
- **Resource control**—ensures that the use of resources is properly accounted for. This function is performed by CMTS with the resource control data provided by the Cisco BTS 10200, such as session class, maximum sessions allowed, maximum bandwidth allowed, and so on.
- **Dynamic binding of resources**—specifically support of the call waiting feature. CMTS is directed by the CMS/CA to switch resource between gates. This function is initiated by the MTA with the information provided by the BTS over the NCS interface. The provided resource ID will be used by the MTA to perform RSVP signaling which triggers the resource binding over the DOCSIS link.

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### PacketCable Event Messages

This section describes the requirements for PacketCable Event Messages, as provided in the PacketCable Event Messages Specification, PKT-SP-EM-I03-011221, December 21, 2001.

The DQoS feature described previously is required in the PacketCable network so that PacketCable event messages can be used by the Record Keeping Server (RKS) for billing. PacketCable event messages are data records containing information about network usage and activities which are collected for billing purposes. The RKS is a trusted PacketCable network element that receives event messages from other network elements; specifically the CMS, MGC, and CMTS. The RKS is, at a minimum, a short term repository for billing event messages.

In the PacketCable architecture, event message generation is based on the half-call model. A single event message might contain a complete set of data regarding usage, or it might contain only part of the total usage information. The RKS correlates the information in multiple billing event messages and provides the complete record of service for a call, referred to as a Call Detail Record (CDR).

The physical Cisco BTS 10200 Softswitch node contains the logical network elements CMS and MGC. The billing event messages generated by CMS and MGC are sent by the Cisco BTS 10200 to the RKS.

### PacketCable NCS 1.0

This section describes the PacketCable Network-based Call Signaling Protocol (NCS) compliance portion of the *Cisco BTS 10200 Softswitch PacketCable Feature Module*.

The NCS compliance matrix is depicted in the *Cisco BTS 10200 Softswitch PacketCable Feature Module*. The individual compliance elements listed in the feature module are extracted from the PacketCable NCS Protocol Specification, PKT-SP-EC-MGCP-I04-011221, December 21, 2001.

The Multimedia Terminal Adapters (MTAs) currently supported by the Cisco BTS 10200 include:

- Motorola
- Tellabs

### Billing Data Generation Methods

The Cisco BTS 10200 Softswitch has the ability to provision billing support using either of the following billing data generation methods:

- Call Detail Blocks (CDBs)—This is traditional post-call billing data, which is assembled into Call Detail Records (CDRs) by an external billing mediation system or billing server.
- PacketCable event messages (EMs)—This is real-time call data flow, which is transferred to an external Record Keeping Server (RKS) that assembles CDRs from the EMs.

The Cisco BTS 10200 must be provisioned to generate either EMs or CDBs, *but not both*.



#### Caution

Provision the Cisco BTS 10200 to generate either EMs or CDBs, but not both. Attempting to generate both types of records simultaneously can significantly degrade the call processing rate. Refer to the provisioning steps for the call-agent-profile command (below) to see how to turn EMs on and turn CDBs off.

## Provisioning the Cisco BTS 10200 Softswitch to Generate EMs

These steps provision the Cisco BTS 10200 Softswitch to generate EMs.



## Note

The value for *id* shown in this section (CA146) is an example.

**Step 1** Login to a CLI session on the Cisco BTS 10200 Softswitch.

**Step 2** Use the following command to display the current values for the call-agent-profile table:

**show call-agent-profile id=CA146;**

where:

- *id*—Domain name of the specific Call Agent (CA), in the format CAnnn, where nnn = 3-digit number previously assigned to the CA. This value is case-sensitive (for example, CA146 and ca146 are not the same). This is the unique identifier for this Call Agent (CMS) node, which was permanently assigned at time of software installation on the Cisco BTS 10200 Softswitch.

**Step 3** If the system response indicates that this table does not exist, then you must create it using the following command. Otherwise, the EM function is not supported and EMs will not be generated.

**add call-agent-profile id=CA146; cdb-billing-supp=N; em-billing-supp=Y;**



## Caution

If the call-agent-configuration table is not created, the Cisco BTS 10200 Softswitch will generate CDBs but not EMs.

**Step 4** If the call-agent-profile table already exists, check (in the display from [Step 2](#)) to see if cdb-billing-supp is set to N (no) and em-billing-supp is set to Y (yes). If not already shown in the display, enable EM billing support by entering the following command:

**change call-agent-profile id=CA146; cdb-billing-supp=N; em-billing-supp=Y;**

where:

- *cdb-billing-supp*—Specifies whether to generate Call Detail Blocks (CDBs). The value of this optional token is a single ASCII character (Y or N); the default value is Y (yes). The value of this token must be set to N (no) if the Cisco BTS 10200 Softswitch is to provide event message generation.
- *em-billing-supp*—Specifies whether to generate PacketCable event messages. The value of this optional token is a single ASCII character (Y or N); the default value is N (no). The value of this token must be set to Y (yes) if the Cisco BTS 10200 Softswitch is to provide event message generation.



## Caution

Be sure the system is configured to generate either EMs, and not CDBs. Attempting to generate both types of records simultaneously can significantly degrade the call processing rate.

**Step 5** Enter the following command to generate EMs based on CMS and MGC logical network elements, and to specify the financial entity ID.

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**change call-agent-profile id=CA146; cms-supp=y; cms-id=12345; mgc-supp=y; mgc-id=67890; feid=9876;**



**Note** In the above command, use different (unique) IDs for cms-id and mgc-id.

where:

- **cms-supp**—Specifies if EMs are generated based on CMS functionality. The value of this optional token is a single ASCII character (Y or N); the default value is N (no). Set this value to Y (yes).
- **cms-id**—Specifies the 5-digit element ID of the CMS. The range of values is 0 through 99999. This token is mandatory if the value of the **cms-supp** token is set to Y.
- **mgc-supp**—Specifies if EMs are generated based on MGC functionality. The value of this optional token is a single ASCII character (Y or N); the default value is N (no).
- **mgc-id**—Specifies the 5-digit element ID of the MGC. The range of values is 0 through 99999. This token is mandatory if the value of the **mgc-supp** token is set to Y.
- **feid**—Financial entity ID (FEID) of the Cisco BTS 10200 Softswitch (CMS/MGC) that is included in event messages sent to the RKS for billing purposes. PacketCable zones can be divided into one or more logical financial entity IDs. A single CMS/MGC is assigned at most one FEID; however, more than one CMS can be assigned the same FEID. This optional token becomes a mandatory token if the **cms-supp** token, the **mgc-supp** token, (or both) are set to Y (yes).

## Inter-Office Automatic Callback, Automatic Recall

Inter-Office Automatic Callback (AC) is an outgoing call management feature that allows a subscriber to automatically setup a call to the last station (directory number or DN) called without having to redial the number. If the called party is busy when AC is activated, call setup is automatically performed when the called station becomes idle.

Inter-Office Automatic Recall (AR) is an incoming call management feature that allows a subscriber to automatically setup a call to the last incoming number. The AR subscriber does not need to know the calling number or the calling party of the last incoming call. If the party is busy when AR is activated, call setup is performed automatically when the original calling station becomes idle.

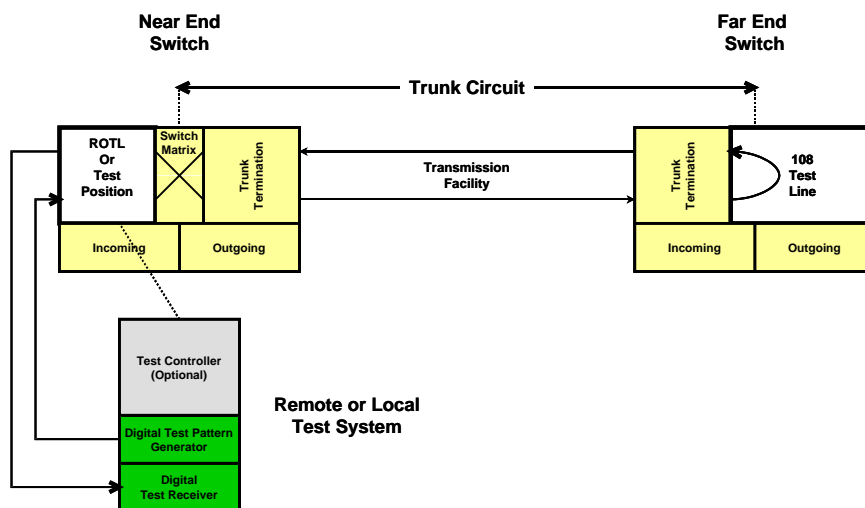
Previous releases of the Cisco BTS 10200 Softswitch software supported the AC and AR features only for calls between Cisco BTS 10200 Softswitch subscribers. The AC and AR features did not work for calls between a Cisco BTS 10200 Softswitch subscriber and a subscriber at an external office or the PSTN. To provide the AC and AR features between Cisco BTS 10200 Softswitch subscribers and external subscribers, the Cisco BTS 10200 Softswitch communicates with the PSTN through SS7 Transaction Capability Application Part (TCAP) messaging. The AC and AR features are implemented in the Cisco BTS 10200 Softswitch plain old telephone service feature server (FSPTC) using SS7.

The AC and AR features are not supported for interoffice calls during FSPTC switchovers. Subscribers who activated these features before a switchover will not receive these services during or after the switchover. This includes subscribers activating the AC and AR features on an interoffice call or PSTN subscribers activating the AC and AR features on a Cisco BTS 10200 Softswitch subscriber. Subscribers must repeat the activation procedure after the FSPTC switchover is complete.

## T108 Test Line Support

The T108 test line feature is used for determining the performance of trunks connecting digital exchange switches, including voice over packet (VoP) softswitches. Currently, Cisco BTS 10200 incoming trunks requesting 100-type test lines are routed to shared test lines for the requested tests, regardless of which gateway terminates the trunk or which gateway/IAD terminates the test line. The T108 test line feature requests a test to be performed within the same gateway where the trunk under test (TUT) is terminated, and provides a digital loopback within the gateway. The T108 test line feature supports manual and automated testing.

**Figure 1** T108 Test Line Operation



The T108 test line sequence is as follows:

- The near end switch originates the test sequence by placing a test call, identifying the trunk to be selected, and the test line number. A digital test pattern generator, such as a Sage 930A, is used in the test setup shown in Figure 1.
- The near end switch uses the trunk identifier to override normal call processing and select only the requested trunk.
- The far end switch responds to the destination number and connects to the T108 test line. The T108 test line enables a digital loopback.
- When the near end receives answer supervision, it conducts digital test sequences to ascertain trunk performance.
- Once the test sequences are completed, the near end releases the test call and both switches release the trunk connection.
- The far end switch can detect if the test connection exceeds a preset time, and releases the test connection if the preset time is exceeded.

The T108 test line is also used for trunk redirection (wholesale dial) for Internet services where the carrier modem termination is integrated into the trunk gateway. In this case, the integral digital stored program (DSP) normally supports modem-only transmissions.



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The T108 test line feature involves the following external interfaces:

- **Alarms**

No alarms are changed or added with this feature.

- **Billing Interface**

No changes. The billing system currently collects data for test-type calls.

- **Operator Interface**

Added—CLI command to set a global 108 test call timer in minutes (range of values is 0 through 60 minutes, default = 20 minutes)

Example: `change ca-config type=test-call-tmr; datatype=integer; value=10;`

Added—CLI command to add/change/delete 108 test call capability for each connected gateway

Example: `change destination dest-id=dallasaustin; call-type=lb-test;`

## 8XX Enhancement with NOA Processing

Effective with Release 3.3 V04, the Cisco BTS 10200 Softswitch supports network-specific Nature of Address (NOA) processing for outbound 8XX toll-free calls. To implement this feature, the service provider provisions the NOA token in the dial plan table.

The system processes outbound 8XX calls as follows:

- The CA signals the AIN FS to perform an 8XX query.
- The AIN FS performs an internal database query.
  - If an internal record is found for the 8XX number, the AIN FS provides the routing information to the CA and the call is attempted.
 

If the AIN FS query finds a record for a network-specific 8XX call in the internal database, the Database Query Type1 is set to 2 (TOLL\_FREE\_LOCAL) in the resulting call detail record (CDR).
  - If no internal record is found for the 8XX number, the next action depends on how the NOA token is provisioned in the dial plan table:
    - If the NOA token is provisioned as NATIONAL, the AIN FS performs an external service control point (SCP) query.
 

If a route is found, the CA completes the call. Otherwise the call is released.
    - If the NOA token is provisioned as network-specific, the call is released.
 

The release cause is “No Route to Destination.”

The valid values for the NOA parameter in the dial-plan table for a toll-free call are as follows:

- NATIONAL      National (significant) number
- NS0 through NS6    Network-specific (as provisioned)

### Provisioning Examples

Add dial-plan id=dp1; digit-string=888; noa=NATIONAL; dest-id=dest888nat;

Add dial-plan id=dp1; digit-string=888; noa=NS0; dest-id=dest888ns0;

## Provisionable CLI Codes

This section describes the COMMON LANGUAGE® Location Identifier<sup>1</sup> (CLLI™) Code feature implementation for the Cisco BTS 10200 Softswitch.

The COMMON LANGUAGE® Location Identifier (CLLI™) code is an 11-character descriptor field assigned to a Class 4 or Class 5 switch.

The format of CLLI Code is T<sup>1</sup>T<sup>2</sup>T<sup>3</sup>T<sup>4</sup>S<sup>1</sup>S<sup>2</sup>B<sup>1</sup>B<sup>2</sup>U<sup>1</sup>U<sup>2</sup>U<sup>3</sup> where,

T <sup>1</sup>	Town (1st character)	B <sup>1</sup>	Building (1st character)
T <sup>2</sup>	Town (2nd character)	B <sup>2</sup>	Building (2nd character)
T <sup>3</sup>	Town (3rd character)	U <sup>1</sup>	Building Subdivision (1st character)
T <sup>4</sup>	Town (4th character)	U <sup>2</sup>	Building Subdivision (2nd character)
S <sup>1</sup>	State (1st character)	U <sup>3</sup>	Building Subdivision (3rd character)
S <sup>2</sup>	State (2nd character)		

The CLLI feature includes the following functions in Release 3.3 V04:

- New tokens in the Call Agent table and Trunk Group table
- Provide CLLI code information in the CVR message
- Display CLLI code of the responding switch in response to a CVT message
- Provide originating and terminating CLLI codes in the billing record

## New CLI Command Tokens

The following CLI command tokens are added in this release:

### Own Switch Identification

The CLLI code identifying the local Cisco BTS 10200 Softswitch is provisioned in the Call Agent table.

Provisioning of the CLLI token is optional.

**Example:** `change call-agent id=ca145; clli=dalltxrcdn5;`

### Remote Switch Identification

The Cisco BTS 10200 uses the CLLI code of the remote switch for populating the call detail block (CDB) in the billing record and for circuit validation testing. The CLLI code identifying the remote switch (the switch at the far end of the trunk group) is provisioned in the TG table.

Provisioning of the CLLI token is optional.

**Example:** `change trunk-grp id=101; clli=denvcorsch3;`

## Circuit Validation Messages

The Cisco BTS 10200 supports sending and receiving of circuit validation response (CVR) messages. A CVR message is sent in response to circuit validation test (CVT) message. The implementation is based on information in document *GR-317-CORE, LSSGR: Switching System Generic Requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP)*, Issue 3 (Telcordia, November 1999).

1. COMMON LANGUAGE is a registered trademark and CLLI is a trademark of Telcordia Technologies

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### **Sending Circuit Validation Response (CVR) Message**

If the CVT is “successful”, and if both the local CLLI code (own) and remote CLLI code are available, the circuit identification name parameter is coded as shown in Figure B-17, Appendix B [GR-317-CORE], and is included in the CVR. If the circuit identification name is not available, this parameter is omitted.

If the CVT fails (CVR indicator octet is coded as “failed”) and if the own CLLI code is available, the CLLI code parameter of the CVR is coded as shown in Figure B-18, Appendix B [GR-317-CORE], and is included in the CVR. If the CLLI code is not available, this information is omitted.

### **Receiving Circuit Validation Response (CVR) Message**

When the operator initiates a diagnostic CVT command, the success or failure of the CVT command is displayed as follows:

- If the CVR message is received with a successful CVR indication, the following requirements apply:
  - R3-148 [GR-317-CORE]: If a CVR is received before the CVT timer expires with a “successful” circuit validation response indication, the CLLI code information in the circuit identification name parameter in the CVR need not be checked (against the corresponding information at the SPCS initiating the test) and shall not cause the CVT to fail.
  - R3-149 [GR-317-CORE]: If the applicable one-way trunk group or two-way trunk group requirement for CVT/CVR is not satisfied, the CVT has failed and maintenance shall be notified of the failure. If the circuit identification code has been received, it is also reported with the failure indicator to the operator.
- If the CVR message is received before the CVT timer expires with a “failed” CVR indication, maintenance should be notified that the test has failed. If the CVR message contains the CLLI code parameter (see Figure B-18, Appendix B [GR-317-CORE]), the received CLLI code is included in the failure indicator to the operator.

## **Billing Interface**

The billing call data block (CDB) contains the parameters OCLLI (CLLI of the originating TG) and TCLLI (CLLI of the terminating TG).

## **Alarms**

If a CVT message is received for an invalid CIC, the system generates a minor alarm.

If a CVR message is received with a failed indicator, or is failed locally, the system also generates a minor alarm.

## **Measurements**

The following measurements are supported:

- Number of CVT messages transmitted
- Number of CVT messages received
- Number of CVR messages transmitted
- Number of CVR messages received

## Digit Manipulation Table

The Digit Manipulation (digman) table is a new table added in the Cisco BTS 10200 Softswitch in this release to support digit manipulation. Digit manipulation was previously done in the dial plan table using **pfx\_digits** and **del\_digits**, but it was available only on the called party number. With the introduction of the digman table, the Cisco BTS 10200 Softswitch is now able to handle digit manipulation of both the calling party and called party numbers.

The following is a brief overview of what the digman table provides for the Cisco BTS 10200 Softswitch.

Digit/NOA manipulation rules can be applied to:

- Directory Number (calling number or called number)
- Nature of Address (NOA) (calling number or called number)
- Both DN and NOA

Digit manipulation can take place at several points in call processing, including:

- **Pre-translations**—In the pre-translations stage, the dial-plan-profile table is used to specify if ANI, DNIS, or both are to be manipulated. The purpose of the pre-translation stage is to normalize the digits as required during the translations stage.
- **Translations**—The dial-plan table can be used to manipulate the called party number. Simple Delete / Prefix function is supported.
- **Routing**—Routing is performed in the Analyzed Info PIC (Point In Call). The destination table and/or route table can be used to specify digit manipulation of ANI, DNIS, or both. The out-pulsing number can be normalized using the destination table. In addition, if special manipulation is required based on the route selected, it can be specified for each Trunk Group within a route.

If the called number terminates within the Cisco BTS 10200 Softswitch, and the subscriber number points to a Trunk Group, then digit manipulation rules for ANI, DNIS, or both can be specified in the Trunk Group table.

If the call is an interLATA call or requires Carrier Routing, the ANI/DNIS digit manipulation IDs specified in the destination table are ignored and carrier based routing is performed.



### Note

Although **pfx\_digits** and **del\_digits** still work in the dial plan table, if the system supports 7-digit dialing and the number is an LNP number, then you must put the digit manipulation in the digman table and reference the entry from the dial plan profile table.

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## Hardware Changes

There are no hardware changes in Release 3.3 V04.

## Software Changes

The following sections detail the software changes made in Release 3.3 V04.

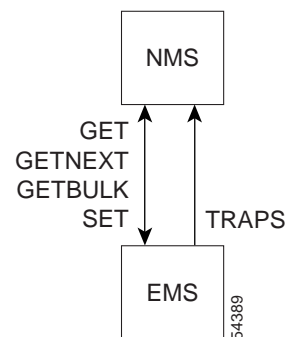
### SNMP Interface

Replace Chapter 3, “SNMP Interface,” pages 3-1 through 3-4 of the *Cisco BTS 10200 Softswitch Operations Manual* for Release 3.1, with the text on the following four pages.

#### Overview

The Cisco BTS 10200 Softswitch supports Simple Network Management Protocol (SNMP) operations that provide communications between the EMS and a service provider's network management system (NMS). The EMS sends SNMP traps to the NMS, and the NMS can query the EMS for specific data elements, as illustrated in [Figure 3-1](#). Status and control operations are also supported.

**Figure 3-1 NMS/EMS Interaction Via SNMP**



#### EMS (SNMP Agent)

The Cisco BTS 10200 Softswitch SNMP agent supports SNMPv2c operations defined by the `optcall.mib` Management Information Base (MIB). The `optcall.mib` file is located in the directory `/opt/BTSsnmp/etc` on the EMS. The `optcall.mib` file uses variables from three other MIBs: `IPCELL-TC`, `SNMPv2-TC`, and `SNMPv2-SMI`. When the NMS loads the main MIB (`optcall.mib`), it will import the other three MIBs.

#### SNMP Agent Functions

The following functions are supported by the Cisco BTS 10200 Softswitch SNMP Agent:

- Collection of statistics and traffic management data
- Status and control
- SNMP trap reports

Read access to the SNMP agent is required for the statistics and traffic management queries and for status queries. Write access is required for the control commands. Trap reports do not involve read/write access.

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Read/write access to the SNMP agent is restricted by requiring the NMS to pass a valid community string to the agent. The community string passed in by the NMS message is authenticated against a list of community strings maintained by the SNMP agent. The SNMP agent uses each string as a password, and disallows access if the password is not valid.

The SNMP community table in the Cisco 10200 Softswitch database provides persistent storage of community strings for the SNMP agent. The default value for both the read and write communities is “public”. This default value can be deleted by the user and replaced with specific communities using the following CLI commands:

- To show all read communities—**show snmpconfig type=READCOMMUNITY**
- To show all write communities—**show snmpconfig type=WRITECOMMUNITY**
- To add read community—**add snmpconfig type=READCOMMUNITY; value=.....**
- To add write community—**add snmpconfig type=WRITECOMMUNITY; value=.....**
- To delete read community—**delete snmpconfig type=READCOMMUNITY; value=.....**
- To delete write community—**delete snmpconfig type=WRITECOMMUNITY; value=.....**

The provisioned values must be ASCII strings and can be up to 64 characters long.

**Note**

---

The READCOMMUNITY, WRITECOMMUNITY, and PUBLIC tokens in the SNMP community table are case insensitive beginning in Release 3.3 V04. These tokens can be entered in uppercase, lowercase, or any combination of the two.

---

## Statistics/Traffic Measurement

Statistical data (traffic measurements) are collected for the following components of the Cisco BTS 10200 Softswitch:

- AIN Feature Server
- Billing
- Call Processing
- ISDN
- ISUP
- MGCP Adapter
- POTS / Feature Server
- SIA
- SIM
- SNMP
- Trunk group usage
- Announcement

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### SNMP Trap Reports

Traps are sent from the Cisco BTS 10200 Softswitch SNMP agent to the NMS. Traps are mapped to all alarms generated from the EMS. Any alarms that cannot be mapped to a specific trap are mapped to a generic trap. Mapped traps and generic traps contain one or more of the following information types, depending upon availability of the information:

- Severity level
- Alarm ID associated with the trap
- Alarm category
- Set/Cleared flag
- Component (instance) ID
- Component type
- Details of the trap
- Time that trap was generated

An operator of an NMS who would like to receive traps from the SNMP agent needs to add an entry with the following parameters to the SNMPTRAPDEST table using the command line interface (CLI). For more information on the specific CLI add command, refer to Chapter 31, “SNMP Trap Destination,” in the *Cisco BTS 10200 Command Line Interface Reference Guide* for Release 3.2 and Release 3.3 V04.

- Index (1 to 2147483647)
- IP address or hostname of the NMS
- Port number on which to receive traps
- Community string—(currently not used)
- Owner string—(currently not used)
- Filter types (0 to 32767 - default: 32767)

The filter types parameter is a 10-bit bitmask specifying the event types to filter and send to this address. The filter types parameter is used in combination with the filter levels parameter to provide a user-definable granular filter for traps from the SNMP agent.

- For example, in order to send only CONFIG, DATABASE, and SIGNALING event types, the binary filter is 0010001100, which converts to an integer value of 140. This integer value is entered as the token value in the CLI command (filtertypes=140).
- If all event types are to be sent, the binary filter is 1111111111, which converts to an integer value of 1023. The integer value is again entered as the token value (filtertypes=1023).
- If no event types are to be sent, the binary filter is 0000000000, which converts to an integer value of 0 as the token value (filtertypes=0).

- Filter levels (0 to 63 - default: 56)

The filter levels parameter is a 6-bit bitmask specifying what event levels to filter and send to this address. The filter levels parameter is used in combination with the filter types parameter to provide a user-definable granular filter for traps from the SNMP agent.

- For example, in order to send only INFO, MINOR, and MAJOR event levels, the binary filter is 011010, which converts to an integer value of 26. The integer value is entered as the token value (filterlevels=26).
- If all event levels are to be sent, the binary filter is 111111, which converts to an integer value of 63. The integer value is again entered as the token value (filterlevels=63).
- If no event levels are to be sent, the binary filter is 000000, which converts to an integer value of 0. The integer value is again entered as the token value (filterlevels=0).

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These values can also be viewed (read-only) using the NMS. The tree hierarchy is enterprises.ipcell.opticall.generalTraps.trapDestTable.


When this entry is made in the SNMPTRAPDEST table, the NMS can start receiving traps.

It is the responsibility of the NMS operator to apply any additional filters to the traps that are received on the NMS if more granular filtering is desired. It is also the responsibility of the NMS operator to filter the traps that are displayed on the NMS and those that are discarded.

### Procedure to Set Up Time and Weather Call Type

The following procedure for setting up a Time and Weather Call Type is provided in response to CSCdy31912.

To set up a time and weather number, complete the following steps:

- 
- Step 1** A time and weather dial plan must be created for the feature to work. To add a dial plan for time and weather, enter the following command:
- ```
CLI> add dial-plan id=dpl; digit-string=301-844; REQD_DIGITS=10; DEST_ID=inter-rte-3333;
```
-  **Note** A dial-plan-profile must be added before you can add a dial-plan id. See the *Cisco BTS 10200 Softswitch Operations* manual for the procedures for adding a dial plan and a dial plan profile.
- 
- Step 2** To add a special call type for time and weather (TW), enter the following command:
- ```
CLI> add special-call-type digit-string =844; call-type=TW; description=Time and Weather;
```
- Step 3** Verify that a digit-string for time and weather was added with a call type of TW by entering the following command:
- ```
CLI> show special-call-type digit_string=844;
```
- Reply: Success: 1 entry found.
- ```
DIGIT_STRING=844
CALL_TYPE=TW
DESCRIPTION=Time and Weather
```
- 

### Procedure for Equal Access Routing

This procedure defines how to setup a subscriber and the Cisco BTS 10200 Softswitch for equal access dialing based on inter-exchange carrier (IXC) carrier PIC. This applies to direct dialed domestic (DDD) and international direct dial domestic (IDDD) dialing and dial plans. This procedure can also be applied to local service provider equal access using the PIC2 field in the Cisco BTS 10200 Softswitch subscriber table.



This procedure assumes that all residential gateways, trunking gateways, and all other translations support the commands below.

For general carrier and US domestic dialing information see <http://www.nanpa.com>



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To set up a subscriber for equal access routing, complete the following steps:

- 
- Step 1** Add the carrier ID. This sets the carrier up and puts it in-service.
- ```
add CARRIER ID=0288; STATUS=INS; INTER=Y; INTRA=Y; INTL=Y; CASUAL=Y; CUT-THRU=Y;
OP-SERVICES=Y; SEND-CN=N; SEND-CSP=Y; USE-DIAL-PLAN=N;
```
- Step 2** Change PIC1 to the appropriate interlata and international carrier PIC. This pre-subscribes a subscriber to a carrier so the subscriber does not have to dial 101+4 digit carrier code + the number to make the call.
- ```
change subscriber; id=motfb4/1;name=John Doe;PIC1=0288;PIC2=NONE;PIC3=NONE;
```
- Step 3** Add an interlata dummy route. This is required to set up a dial plan.
- ```
add route id=EA-IXC;lcr=n;tgnl-id=null;
```
- Step 4** Add a route-guide. This is also required to set up a dial plan.
- ```
add route-guide id=EA-IXC;policy-type=route;policy-id=EA-IXC;
```
- Step 5** Add a destination for interlata calls. This is also required to set up a dial plan.
- ```
add destination dest-id=Interlata-IXC;call-type=InterLata;route-type=route;
route-guide-id=EA-IXC;
```
- Step 6** Add dial plan entries for all US supported NPAs. This allows verification that a subscriber can call a particular NPA.
- ```
add dial-plan id=dp-mot;digit-string=201;reqd-digits=10;dest-id=Interlata-IXC
```
- Step 7** Add an international dummy route. This is required to set up an international dial plan.
- ```
Add route id=INTL-IXC;lcr=n;tgnl-id=null
```
- Step 8** Add the international route-guide. This is also required to set up an international dial plan.
- ```
add route-guide id=INTL-IXC;policy-type=route;policy-id=INTL-IXC;
```
- Step 9** Add the international destination. This is also required to set up an international dial plan.
- ```
add destination dest-id=INTL-IXC;call-type=INTL;route-type=route;route-guide-id=INTL-IXC;
```
- Step 10** Add international dial-plans for all supported country codes. This allows verification that a subscriber can call a particular country.
- ```
add INTL-DIAL-PLAN ID=RTP01; CC=34; MIN-DIGITS=6; MAX-DIGITS=16;dest-id=INTL-IXC
```
- Step 11** Add the SS7 Feature Group D (FGD) equal access trunk group to the IXC switch. This builds a trunk to the next service provider.
- ```
add ss7-tg-profile id=IXC-FGD; type= A7; cot-orig=y; cot-freq=10;T-IAM=20;
add trunk-grp id=205;call-agent-id=CA146; tg-type=ss7;
dpc=214-110-205;traffic-type=tandem;
sel-policy=DSC;glare=all;tg-profile-id=IXC-FGD;dial-plan-id=Incoming;No-answer-tmr=240;CLL
I=RLGHIXC;
```
- 
-  **Note** Consult GR-394 for SS7 parameters that must be sent in SS7 messages through the FGD interface.
- 
- Step 12** Add the SS7 trunks to the IXC switch. This sets up the actual bearer channel.
- ```
add trunk cic-start=1; cic-end=24; tgn-id=205; mgw-id=C0201_VISM5;
termination-prefix=vism/tl-1/; termination-port-start=1; termination-port-end=24;
equip trunk-termination tgn-id=205; cic=1-48;
```
- 
-  **Note** This assumes that the trunks will be controlled in service when ready.
-

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**Step 13** Add the route to the IXC switch. This provides the path to the service provider providing equal access.

```
add route id=SS7-IXC;lcr=N;tnl-id=205;
```

**Step 14** Add the route-guide to the IXC switch. This is required to route to a service provider.

```
add route-guide id=SS7-IXC;policy-type=route;policy-id=SS7-IXC;
```

**Step 15** Add the route-guide to the Carrier table. This provides the path to route directly to a service provider.

```
change CARRIER ID=0288; STATUS=INS; INTER=Y; INTRA=Y; INTL=Y; CASUAL=Y; CUT-THRU=Y;
OP-SERVICES=Y; SEND-CN=Y; SEND-CSP=Y; USE-DIAL-PLAN=N; route-guide-id=SS7-IXC;
```



**Note** The parameters datafilled above may differ based on the IXC carrier, however, this should be typical data fill for most IXCs.

**Step 16** Add circuit code (only if the TNS parameter is required).

```
add circuit-code tgn-id=205; nat-cc=9; opr-cc=14; nat-opr-cc=14; sac-cc=9; da-cc=9;
```



**Note** The parameters datafilled above may differ based on the IXC carrier, however this table is datafilled only if there are special requirements. The Cisco BTS 10200 Softswitch default values work for most IXCs.

## Enhancements

The section describes enhancements that have been incorporated into the Cisco BTS 10200 Softswitch software in Release 3.3 V04. The DDTs IDs listed in [Table 1](#) are Cisco internal tracking numbers.

**Table 1** Enhancements

DDTS ID	Headline	Enhancement
CSCdw63217	Security enhancements	<p>RequestLogger is enhanced to include a new interface which allows classes outside of the CPI to log command history.</p> <p>The EMS supports an entry in the command history to indicate that a user has logged into or out of the BTS 10200, which contains the user name, time, date, and terminal information.</p> <p>The CMS adapter logs all transactions in the command history. As a result, most event level items are stored in this history. In addition, an invalid login attempt or use of an invalid security certificate, are also logged in the command history.</p>
CSCdw79719	State token for add/delete/show command event-queue	The <b>show</b> command is enhanced so that it shows the status of both the active and standby states.
CSCdx21154	RHM monitors /tmp disk space	RHM is enhanced to periodically monitor the /tmp disk space and platform is shut down when the /tmp disk space reaches the critical threshold.

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Table 1 Enhancements (continued)

DDTS ID	Headline	Enhancement
CSCdx25215	Platform start script now backs up the data directory	<p>When a platform goes down or is switched over due to an abnormal condition, trace logs alone are not sufficient to determine the root cause of the problem. Shared memory data would be useful; however, if the system is restarted before the data directory is saved, this important data is lost.</p> <p>The platform start script is enhanced so that the PMG automatically saves a copy of the data directory when the platform starts. The recommended practice is to keep two backup copies in case an original fault is followed by a secondary fault in start up.</p> <p>This enhancement provides additional help for TAC and Cisco BTS 10200 support in identifying problems in the field.</p>
CSCdx35680	Register new events for TCAP	Alarm events for the SCCP, TCAP, and INAP layers have been added for the TCAP framework.
CSCdx43263	A new process EMA has been added	A new process, PacketCable Event Message Adapter (EMA), has been added in the Call Agent.
CSCdx44927	CALEA requirements for abandoned calls	<p>When a station provisioned for surveillance on the Cisco BTS 10200 Softswitch makes a call that's abandoned without dialing any digits or after dialing some digits, an origination message and release message are expected at the LEA.</p> <p>In the partial dial situation, the customer entered digits field should contain the partially-dialed digit string. The availability of partial digits is dependent on the digit map downloaded to the access device and if a critical timer expired or was canceled by entering a "#."</p>
CSCdx46511	Diagnostic ss7-trunk-termination test=4 modified to show local or remote state	The diagnostic ss7-trunk-termination test=4 (CQM) has been modified to show local or remote state.
CSCdx48883	Support now available for 0+7D dialing	<p>A hard coded check to not allow 0+7D calls has been removed. The LOCAL-7D-DIALING flag in the POP table should be set to "Y". The ZERO-PLUS flag in the DESTINATION table must also be set to "Y."</p> <p>The DNIS-DIGMAN-ID must be set up to prefix NPA or the DIAL-PLAN table should be set up to prefix NPA. The digit map needs to be modified to replace 0[2-9]xx[2-9]xxxxxx with 0[2-9]xxxxxx.T[0[2-9]xxxxxxxx).</p>
CSCdx53249	PMG enhanced to check process status more often in some circumstances	Previously PMG checked process status once every second during bring up and switchover. This time interval has been decreased so that PMG detects process status more often and thereby decreases switchover time.
CSCdx67757	Perform pstack dumps only if necessary making switchovers faster	<p>The CREATE_THREAD() function in IPC has been enhanced:</p> <ol style="list-style-type: none"> <li>1. pstack dumps are done only when the number of threads cancelled is not equal to the number of threads created.</li> <li>2. end_all_threads() sleeps only as long as the number of threads cancelled is not equal to the number of threads created.</li> </ol>

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Table 1 Enhancements (continued)

DDTS ID	Headline	Enhancement
CSCdx67773	Apache server also installed on Call Agent boxes	The Apache Server is now installed on CA boxes, but it is not started via inittab; initially it is started manually.
CSCdx74854	Provision the desired Solaris services for security	<p>The user of the CLI, MAC, CORBA, FTP, and other user interfaces can now enable or disable standard UNIX (Solaris) services on the Cisco BTS 10200 Softswitch. This feature does NOT support configuration of the resources, just whether they are enabled or disabled based on the current configuration.</p> <p>The services covered in these new commands include FTP, Telnet, echo, discard, daytime, chargen, SMTP, time, finger, sunrpc, exec, login, shell, printer, uucp, nfs, lockd, X11, dtscp, font-service, and http.</p> <p>Please note that since users are still allowed to logon to the system as “root,” that any means to control these services can be bypassed by an operator working as “root.”</p>
CSCdx75026	CPI interface provides help information for Cisco BTS 10200 commands.	<p>The CPI interface now provides preformatted text designed to be displayed without modification. The CPI help mechanism provides information about using the help mechanism.</p> <p>For help on a given command noun, which consists of a list of all commands related to a given table, this mechanism provides a URL reference to the <i>Cisco BTS 10200 Softswitch Command Line Interface Users Guide</i>.</p> <p>For help on a specific command noun/verb pair, this provides:</p> <ul style="list-style-type: none"> <li>• a list of all parameters sorted into groups of “Required” and “Optional/Conditional” parameters</li> <li>• the data format is described or, for those parameters which require a value, the list of permitted values is provided</li> <li>• the default value for the parameter is provided, if one exists</li> <li>• if the parameter is associated with a database column that has a foreign key constraint, this dependency is provided</li> <li>• all related commands are listed for each help request</li> </ul> <p>One parameter is supported: VERB = a valid verb. % is not allowed.</p> <p>Support for this verb is hard-coded in ManagedObject.java to avoid significant changes to the CommandParameter table.</p>

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Table 1 Enhancements (continued)

DDTS ID	Headline	Enhancement
CSCdx75032	An IP alias can be defined for the active EMS on the telnet interface	<p>This new feature allows the user to define an interface that can migrate between ACTIVE EMS application instances. This interface can be used by OSS operators to direct all activity to the ACTIVE EMS and not be concerned with which EMS is active. This does not impact direct access to either node, so the user can still access the specific nodes as required.</p> <p>Since this feature could be impacted by changes to the customer OSS network, this information is provisioned. A CLI command is used to manage the values for the IP alias. This information is then applied by the system manager process (SMG). Once provisioned, this information is equalized between the EMS instances.</p>
CSCdx75253	Platform supports system time change notification	Platform monitors system events and reports them to registered threads. The platform also monitors changes in system time and notifies the registered threads via IPC messages.
CSCdx76071	PMG supports SS7 and NON-SS7 AIN platforms.	<p>Process Manager (PMG) now supports both SS7 and NON-SS7-related shared memory creation.</p> <ol style="list-style-type: none"> <li>1. As part of this release new shared memory is to be created. The shared memory creation API exposed to the PMG is changed. PMG uses this new shared memory created APIs and includes the SS7-related Include files.</li> <li>2. In this release, the PMG need not link to the ACG library as creation of shared memory for ACG is now provided by the SHM library in fsain.</li> <li>3. Same holds for RDM Makefile</li> <li>4. A new entry is made in Mem.cfg for ASM aggregated parameters.</li> </ol>
CSCdx76541	Allow 50 sessions with variable timeout in SMG	This release provides 50 concurrent sessions and a provisionable time-out value of 10 to 30 minutes.
CSCdy05673	Set default slack term value in Gate Set message	A provisionable “slack term” value is provided in the Gate Set message to a CMTS. The user can provision a default “slack term” value in the CA-config table. BTS will set the value in the Gate Set message.
CSCdy05682	Incorporated T7, T8 timers as required by PacketCable ECR-2095	T7 and T8 timers have been added to the CA-config table. The T7 and T8 timers are set in the Gate Set message sent to the CMTS, using the new Gate Set message format.
CSCdy05691	After switchover, GATE-INFO is sent to audit active gates	Following a switchover, GATE-INFO is sent to the CMTS to audit active gate status to avoid hung gates.

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Table 1 Enhancements (continued)

DDTS ID	Headline	Enhancement
CSCdy10774	The named.conf file is overwritten during upgrade	<p>When upgrading to a new version of the Cisco BTS 10200, the /etc/named.conf file might be overwritten.</p> <p>This file should be backed up before performing an install or uninstall of the software. The file name used for the backup file should not be /etc/named.conf.orig.</p> <p>If the upgrade has already been performed, and the platform will not start due to nslookup errors, the /etc/named.conf file must be manually corrected.</p> <p>Changes are made to uninstall.sh to not restore the named.conf, resolv.conf, system, and inetd.conf files in order to keep user changes, if any.</p>
CSCdy22056	Date command without arguments does not return date and time	<p>The /bin/date script has been modified to return the current date and time (by calling /bin/.date) if it is called without arguments. It prints an error message if it is called with arguments, which indicates an attempt to change the date/time.</p> <p>This allows the “trivial case” use of the date command, while preventing the user from arbitrarily changing the date/time.</p>
CSCdy22420	EMA supports time change and replication of BCM event counter	<p>Support has been added to the Event Message Adapter (EMA) for the following:</p> <ol style="list-style-type: none"> <li>1. Reporting NTP time change to the RKS</li> <li>2. Replicating BCM's event counter (used in BCID generation) to the standby side so that BCM uses appropriate event counters after a switchover occurs.</li> </ol>
CSCdy27392	PacketCable EM time change provided for Daylight Savings Time.	Time Change message is sent by the BTS to the RKS when the local time is changed due to Daylight Savings Time changes.
CSCdy67940	COPS GATE-SET Event-Generation-Info flag setting	On COPS GATE-SET messages, in Event-Generation-Info, the flag should be set as 0x01. If the flag is set as 0x01, the CMTS accumulates event records as part of a batch file and sends them to the RKS at periodic intervals.
CSCdz13178	RDM has to report replication status to nodestat	RDM has to report replication status (such as port /ip address used, connection status, current replication status [such as DB Copy or Call data updates]) to the nodestat.
CSCic05344	IPC pool status in the PDM tool is now displayed properly	IPC pool status was displayed as numbers. A meaningful string (allocated, dispatched, retrieved) is now displayed.

# Caveats

Caveats describe unexpected behavior in the Cisco BTS 10200 Softswitch software Release 3.3 V04.

This section describes two types of caveats:

- [Open Caveats, page 23](#)
- [Resolved Caveats, page 39](#)

## Open Caveats

The open issues existing in Cisco BTS 10200 software release 3.3 V04 are described in [Table 2](#). The DOTS ID numbers listed in [Table 2](#) are Cisco internal tracking numbers.

**Table 2**    *Open Caveats*

DOTS ID	Description	Workaround
CSCdx02249	Secondary CA does not come up after switchback	<p><b>Symptom:</b> If a second switch-over occurs shortly after the initial switch-over, OMNI is not stabilized and the CA will not be in a proper working state.</p> <p><b>Impact:</b> Calls that use SS7 signaling cannot be completed.</p> <p><b>Conditions:</b> A switch-over occurs. OMNI is not yet stabilized when a second switch-over occurs and the switch-back “kills” it.</p> <p><b>Workaround:</b> The platform does not update last-switch-over time, so be sure to wait at least 10 minutes after a switch-over to let OMNI stabilize before attempting another switch-over.</p>
CSCdx05784	Duplicated CDR records for the same call.	<p><b>Symptom:</b> Duplicate billing records are recorded.</p> <p><b>Impact:</b> The billing record for a single call can appear in the billing data more than once. The duplicate records are visible both in the billing FTP file and in the output of the <i>report billing-record</i> command.</p> <p><b>Conditions:</b> This problem is seen in conjunction with BILLING 29 (CDB Send failed) alarms. The BILLING 29 alarms may, in turn, be instigated by running the <i>report billing-record</i> command.</p> <p><b>Workaround:</b> Duplicate billing records can be identified by examining the “OverallCorrelationId” field of the billing record(s). If two records have the same overall correlation ID, they are duplicates.</p> <p><b>Note:</b> Correlation IDs can repeat for unrelated calls, but this should only happen approximately <math>2^{32}</math> (4,294,967,296) records after a given correlation ID first appears.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdx07689	Temp Rel fails on FWD offnet calls.	<p><b>Symptom:</b> When a call is forwarded out ISUP due to certain feature like CFB,CFNA, etc.and the originator hangs up at the exact time the call is forwarded, then an abandon is sent to the ISUP and ISUP sends in a temp failure for the call.</p> <p><b>Impact:</b> There is no negative impact for this issue, the call is not dropped.</p> <p><b>Conditions:</b> This only exists on calls forwarded out ISUP where the originator abandons the call.</p> <p><b>Workaround:</b> None.</p>
CSCdx08615	BCM should not send RLC until call completed.	<p><b>Symptom:</b> BCM sends RLC before call is actually completed.</p> <p><b>Impact:</b> Call is prematurely terminated.</p> <p><b>Conditions:</b> BCM should not send a RLC until the call is completely deleted.</p> <p><b>Workaround:</b> Hang up and place call again.</p>
CSCdx27042	Billing server trap has varbind=ignore.	<p><b>Symptom:</b> FTP of files to billing server is unsuccessful.</p> <p><b>Impact:</b> Files must be re-sent.</p> <p><b>Conditions:</b> When the billing- server attempts to FTP the files to the configured billing server address and there is a problem, the EMS will send a trap indicating that there was a problem. However, this trap has a varbind which tells the trap manager to ignore it based on the MIB.</p> <p><b>Workaround:</b> None. MIB will have to be changed.</p>
CSCdx47728	<p>The CA sends the wrong r value under CRCX.</p> <p><b>Note:</b> This introduces a new requirement, Use the “r:xx” parameter coming from AUEP to perform the create connection action (CRCX).</p>	<p><b>Symptom:</b> The subscriber is in faulty state.</p> <p><b>Impact:</b> The IAD responds with a 524 response for the MDCX, putting the subscriber in faulty state.</p> <p><b>Conditions:</b> The gateway sets the “r:” parameter to the default value “be” if it is not included in the MDCX message. This default value conflicts with the value in the CRCX message.</p> <p>The CA, when sending a CRCX for a CFNA to a subscriber, sends “r:cl” instead of “r:be,” which was originally sent by the AUEP from the IAD.</p> <p><b>Workaround:</b> This could be fixed from the gateway by not assuming the default value if the “r:” parameter is not included in the MDCX message.</p> <p>From the CA, provision the subscriber to always use the “be” value.</p>



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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdx51589	Digit parser not working correctly for table ani-wb-list	<p><b>Symptom:</b> Inserting hyphens in a digit string results in an “invalid length” error.</p> <p><b>Impact:</b> Cannot use hyphens in digit strings.</p> <p><b>Conditions:</b> Hyphens should not be included in the total length of a digit string.</p> <p><b>Workaround:</b> None. (Increase length field by 3 characters.)</p>
CSCdx52231	Digit parser not working correctly for table changed-number	<p><b>Symptom:</b> Inserting hyphens in a digit string results in an “invalid length” error.</p> <p><b>Impact:</b> Cannot use hyphens in digit strings.</p> <p><b>Conditions:</b> Hyphens should not be included in the total length of a digit string.</p> <p><b>Workaround:</b> None. (Increase length field by 3 characters.)</p>
CSCdx53378	Digit parser not working correctly for table cust-grp	<p><b>Symptom:</b> Inserting hyphens in a digit string results in an “invalid length” error.</p> <p><b>Impact:</b> Cannot use hyphens in digit strings.</p> <p><b>Conditions:</b> Hyphens should not be included in the total length of a digit string.</p> <p><b>Workaround:</b> None. (Increase length field by 3 characters.)</p>
CSCdx61610	CLI used to change termination and shared memory is corrupted	<p><b>Symptom:</b> When using the CLI to modify the termination, the CLI response is successful; however, shared memory is not being updated as expected.</p> <p><b>Impact:</b> Trunk-idx is 0 and call fails.</p> <p><b>Conditions:</b> Check shared memory used in ./ca_... ./data termination table (38) and shown trunk-idx is 0. Off-hook from SAGE got no response from CA.</p> <p><b>Workaround:</b> Delete the terminations and add them back again with the correct information.</p>
CSCdx66743	AC not working when Switch FSPTC from primary to secondary	<p><b>Symptom:</b> Automatic-Callback and Automatic-Recall features are not supported for inter-office calls when the FSPTC switches over.</p> <p><b>Impact:</b> Subscriber who activated any of these features before the switchover will not receive the service.</p> <p><b>Conditions:</b> Subscriber activating AC/AR on an inter-office call, and FSPTC switches over, or PSTN Subscriber activating AC/AR on BTS10200 subscriber, and FSPTC switches over.</p> <p><b>Workaround:</b> Subscriber needs to repeat the activation procedure after FSPTC switchover is complete.</p>

Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdx76010	<p>Call data not replicated on failover, resulting in CIC state mismatch</p> <p><b>Note:</b> The root cause of this problem is the platform stopping the “replication pipe” when it detects a fault on the Active side, so there is always possibility of the RDM queue not being flushed.</p> <p>Also, since the peripheral (adapter) processes are not stopped immediately, it is also possible for adapters to process some of the signaling messages and change the CIC state while the platform is trying to bring down other processes.</p>	<p><b>Symptom:</b> Both IRDP (ISL) links failed on the primary side (side A) causing a switchover to the secondary (side B).</p> <p><b>Impact:</b> Both sides of the CA lost communication due to the loss of the dual redundancy link, thus preventing RDM from replicating the CIC states.</p> <p><b>Conditions:</b> During failover some of the processes, such as S7M/S7A/BCM, are still processing callp messages received from the far end. Some of these callp messages, in turn, resulted in releasing of stable calls. Since the RDM was not able to replicate some of this data (for example, an active call becoming IDLE), the result ended up with a trunk state mismatch.</p> <p>Side B might still have the trunk state as ACTIVE, while in fact the trunk involved in the call has already been released prior to Side A being completely taken down.</p> <p><b>Workaround:</b> An audit has to be done on the side that is becoming active to reconcile the CIC states to the remote CIC states.</p>
CSCdx83432	Subscriber-termination can be brought IS during diagnostics	<p><b>Symptom:</b> Diagnostic fails due to subscriber termination being brought in-service (IS).</p> <p><b>Impact:</b> Cannot complete diagnostics.</p> <p><b>Conditions:</b> While diagnostic procedures are being run, it should not be possible to bring a subscriber termination in-service (IS).</p> <p><b>Workaround:</b> Do not bring subscriber terminations in-service while running diagnostics.</p>
CSCdx83483	Trunk circuit removal while TC is in transient state is possible	<p><b>Symptom:</b> Call is terminated.</p> <p><b>Impact:</b> Call cannot be completed because the trunk circuit is removed by placing it in MAINT state.</p> <p><b>Conditions:</b> If a call is up and a graceful OOS is done on the trunk circuit it goes OOS PENDING. If a graceful MAINT is attempted it should fail, but it passes and brings down the call.</p> <p><b>Workaround:</b> Do not attempt graceful MAINT while trunk circuit is in-service or OOS PENDING. Ensure that circuit is OOS before invoking graceful MAINT.</p>
CSCdx83532	Null for field term-id in table subscriber causes dbm error.	<p><b>Symptom:</b> User datafilled a sub id with term-id set to null.</p> <p><b>Impact:</b> This caused a db invalid index error and the transaction-queue became stuck.</p> <p><b>Workaround:</b> Delete this subscriber, then add it back correctly.</p>
CSCdx83721	No INTL_OPERATOR call type	<p><b>Symptom:</b> Cannot reach the international operator.</p> <p><b>Impact:</b> Cannot make operator-assisted international calls.</p> <p><b>Conditions:</b> There is no INTL_OPERATOR in call-type table.</p> <p><b>Workaround:</b> Use OPERATOR call type.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdx85039	Call content missing one direction of streams in call transfer scenarios	<p><b>Symptom:</b> Call content captured at DF server was missing one direction of the voice streams at the tapped subscriber. In this case, the voice stream of the off-net subscriber could not be heard.</p> <p><b>Impact:</b> Does not meet CALEA requirements.</p> <p><b>Conditions:</b> Made an off-net to on-net call, then the on-net subscriber (A) transferred the incoming call to another on-net subscriber (B).</p> <p><b>Workaround:</b> None.</p>
CSCdy04964	ISDN: service message interop problem w/ Nortel 81c	<p><b>Symptom:</b> SERVICE message not being responded to by a remote Nortel PBX.</p> <p><b>Impact:</b> Unrecognized SERVICE message.</p> <p><b>Conditions:</b> SERVICE message sent from BTS has protocol discriminator of 0x43 (network management) as compliant to ANSI specs; Nortel PBX only recognizes protocol discriminator of 0x3 in SERVICE message.</p> <p><b>Workaround:</b> Configure SERVICE-SUPP=N in isdn-tg-profile table.</p>
CSCdy05664	MDN & CFB able to call forward busy MDN primary to MDN secondary	<p><b>Symptom:</b> Activation of call forwarding features (CFU, CFB, or CFNA) for TARGET_MARKET North-America does not check for the subscriber having MDN feature.</p> <p>The subscriber can activate call forwarding to his own or another MDN number, but the call forwarding will fail and the subscriber will not know that it fails.</p> <p><b>Impact:</b> MDN subscribers can activate forwarding features to himself using other MDN numbers.</p> <p><b>Conditions:</b> TARGET_MARKET=North-America Subscriber having MDN feature Subscriber activating forwarding features</p> <p><b>Workaround:</b> 1. Do not provide MDN feature to subscribers planning to use call forwarding features.</p> <p>2. Tell subscribers that they should not try to activate call forwarding to their own number.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy05972	NCS SDP parameter order not honored	<p><b>Symptom:</b> Using the NCS protocol, if the 'm' parameter is sent in any position except the second to the last the call will fail.</p> <p><b>Impact:</b> Any call using NCS protocol and the 'm' parameter is sent in an order not expected like the second to the end, the call will drop.</p> <p><b>Conditions:</b> This only happens with the NCS protocol and when the 'm' parameter is sent in any other position except the second to the last.</p> <p><b>Workaround:</b> Make sure the gateway sends the sdp parameters in the expected order.</p>
CSCdy12366	PRI origination to CIDCW active line - No CID/CNAM info displayed	<p><b>Symptom:</b> When making a call from a PRI line to a CIDCW line on net, the CID/CNAM info is not being displayed. The CIDCW line is engaged in a call and is on a IAD analog port.</p> <p><b>Impact:</b> All PRI originating lines will not be displayed to all CIDCW lines.</p> <p><b>Conditions:</b> Make a call from a PRI interface to IAD and terminate to a IAD analog line with CIDCW assigned and active. Check the CIDCW display.</p> <p><b>Workaround:</b> Remove CNAM from the terminal.</p>
CSCdy18145	call-agent-profile allows cms-id = mgc-id	<p><b>Symptom:</b> Cisco BTS 10200 version 3.3, allows the mgc-id to be set the same as the cms-id.</p> <p><b>Impact:</b> Cannot distinguish between CMS and MGC activity in alarms, event messages, or logs,</p> <p><b>Conditions:</b> When provisioning a call-agent-profile the system allows mgc-id to equal cms-id. This is an invalid configuration per the PacketCable Event Messages Specification (PKT-SP-EM-I03-011221).</p> <p><b>Workaround:</b> Be sure that these two IDs are not the same.</p>
CSCdy18307	Excessive RDM traces from FullDownloader.c:633	<p><b>Symptom:</b> The RDM FullDownloader thread prints excessive trace messages while DB Copying.</p> <p><b>Impact:</b> This might adversely impact the performance of call processing during DB copy during high traffic periods.</p> <p><b>Conditions:</b> This occurs when the mate machine is brought up during high traffic periods.</p> <p><b>Workaround:</b> Bring up standby machine during low traffic periods.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy19400	T306 is not started when announcement is played on ISDN termination	<p><b>Symptom:</b> CA does not start T306 timer after sending PROGRESS message when an announcement is played. The circuit gets hung if the originator does not release the call.</p> <p><b>Impact:</b> If a call is made and then connected to the announcement server, the originator must drop the call or it will hang.</p> <p><b>Conditions:</b> This defect involves calls that get connected to announcement servers.</p> <p><b>Workaround:</b> ANM is added timer to tear down the connection when it expires.</p>
CSCdy21735	DQoS endpoint still ringing after CA failover	<p><b>Symptom:</b> A calls B. B rings and A hears ring back tone. Switch-over occurs at CA. B has not answered and is still ringing. Even after B picks up, A still hears ring back tone until it (A) goes on-hook.</p> <p><b>Impact:</b> If the call is not stable when the CA switchover occurs, then the user has to hangup and try the call again. On the terminating side the ring will not stop until the user answers.</p> <p><b>Conditions:</b> This happens when gateways don't handle encapsulated RQNT with DLCX (this is a variation of DLCX where all connections are deleted, i.e., DLCX without Call Id and Conn Id). This behavior is configured in the Call Agent as DLCX supported (Y/N).</p> <p>All IOS gateways support encapsulated RQNT with DLCX; however, it should be noted that gateways are not required to support this according to the protocol.</p> <p><b>Workaround:</b> Originator hangs up. Terminator picks and hangs up. Originator calls again.</p>
CSCdy23189	BTS: SIA exits after one virtual IP went down via cable pullout	<p><b>Symptom:</b> SIA process exited and CA went out of service on the active node after cables were removed from qfe0-3.</p> <p><b>Impact:</b> Switchover to standby machine occurs. Normal BTS failover impacts are experienced.</p> <p><b>Conditions:</b> This initially resulted in the ACTIVE node showing that everything was up, including the virtual IPs, but after five minutes the SIA process exited and the CA went out of service, resulting in a switchover to the standby machine.</p> <p><b>Workaround:</b> The outage is occurring because the DNS server is unreachable. To ensure redundancy of the DNS lookup function in the event of a network/cable outage, it is recommended that two DNS units be reachable via separate networks with diverse routing paths.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy23604	Dup RTP packets not sent by CMTS for 2nd party tap in CF for NDQoS CALEA	<p><b>Symptom:</b> Feature calls, such as CFNA and CFU, will not send duplicated RTP stream to the DF server properly if the middle parties are wiretapped.</p> <p><b>Impact:</b> Calls will work fine, but the duplicated RTP path will not be sent to the DF server for tapping.</p> <p><b>Conditions:</b> This is due to the fact that if the middle parties are wiretapped, we need to delete the original gate and create a new gate based on the exchanged SDP info.</p> <p><b>Workaround:</b> None. Code fix is required.</p>
CSCdy27601	CDR ANI is incorrect when no ANI on incoming call	<p><b>Symptom:</b> Incorrect ANI information in CDRs.</p> <p><b>Impact:</b> This could impact revenue if it occurs on a billable call.</p> <p><b>Conditions:</b> Problem occurs when an incoming call does not have ANI info. The CDR contains old ANI info and since there is no new ANI to overwrite it, the old ANI info remains,</p> <p><b>Workaround:</b> None.</p>
CSCdy27700	BTS10200: 180 Ringing is sent without SDP	<p><b>Symptom:</b> 180 ringing is sent to the originating SIP endpoint without any SDP.</p> <p><b>Impact:</b> SIA needs to wait until it gets an SDP before sending out 180 ringing.</p> <p><b>Conditions:</b> A call is made from a SIP phone to a PSTN phone via BTS. The call comes to BTS over a SIP trunk and a 5850 GW is used as the trunking GW. The IAM is sent out to a DMS and when the ACM comes back from the DMS, 180 ringing is sent to the originating SIP endpoint without any SDP.</p> <p><b>Workaround:</b> None.</p>
CSCdy30920	Call Waiting with Codec Selection Fail	<p><b>Symptom:</b> No voice path among all parties.</p> <p><b>Impact:</b> When H323 is involved in a call, the call cannot be up speeded because H323 does not support up speeding.</p> <p><b>Conditions:</b> MGCP (A) with qos id=G729 calls h323 (B) with only G729 available in the codec list at the h323 gateway. This call completes with a G729 codec. A (MGCP) has CWD activated. A also has the capability to do PCMA. C (h323) calls A (MGCP) and C hears RBT and A gets CWT. C(h323) is only configured for PCMA. A (MGCP) hookflashes and dials 2 to answer C. PCMA is the codec for this call. A(MGCP) hookflashes again and dials 3 for 3-way conference, but there is no voice path among all the parties.</p> <p><b>Workaround:</b> Use the same codec for all endpoints.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy37084	Sendevent does not show up in FMG.log	<p><b>Symptom:</b> Sendevent.sh -s 2 -l 2 -i 2 was typed and nothing appeared in the file FMG.log</p> <p><b>Impact:</b> Events do not show up on FMG.log file.</p> <p><b>Conditions:</b> Running of test case Event_Management_NA_SNG_00016 did not work.</p> <p><b>Workaround:</b> Issue the command “CLI&gt; subscribe event-report type=all; severity=all”, then any events issued (either through normal operation or sendevent.sh) can be seen.</p>
CSCdy46844	“Cannot receive SIP messages from network” alarm does not clear	<p><b>Symptom:</b> BTS 10200 software version 3.3 does not properly clear “Cannot receive SIP messages from network” alarms.</p> <p><b>Impact:</b> If the alarm remains on after the port conflict has been resolved and the process that issued the alarm has been successfully restarted, there is no direct service impact.</p> <p><b>Conditions:</b> This alarm is issued when the a process using the SIP stack cannot open the port it is configured to use. This can happen if the BTS is not configured properly, or if some other program running on the BTS is using the port that the process is configured to use.</p> <p>If a process that uses the SIP stack cannot open the port it is configured to receive messages on, it will issue this alarm and exit. In order to get the system to work properly, the port conflict must be resolved and the process must be restarted.</p> <p><b>Workaround:</b> Follow the steps described in the alarm description to remove any port conflicts.</p> <p>Before restarting the call agent, use the CLI to manually clear the alarm. Then restart the call agent and verify the alarm is not issued again.</p> <p>The current alarm description does not tell the operator to clear the alarm.</p>
CSCdy47391	Unable to display all sub /trunk termination status via COBRA interface	<p><b>Symptom:</b> When user inputs ID for all subscribers id=*@mgw, EPOM came up with error: java.lang.NullPointerException</p> <p><b>Impact:</b> Cannot view all subscribers using EPOM.</p> <p><b>Conditions:</b> Current EPOM is able to display individual CIC for a specified trunk group when the user selects to view trunk-termination status. However, it failed to display for all CICs in a trunk group.</p> <p><b>Workaround:</b> Use CLI command to view all subscribers,</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy48410	batch file execution may halt while executing large files	<p><b>Symptom:</b> Batch execution of large files may halt unexpectedly.</p> <p><b>Impact:</b> Batch file execution becomes unavailable after this error. Active EMS Unix server has to be restarted to continue executing batch CLI commands. Command execution speed drops as the file size gets bigger.</p> <p><b>Conditions:</b> It may happen if the batch command file has more than 5000 lines.</p> <p><b>Workaround:</b> Large batch files should be divided into smaller files. For example, each file may contain 500 lines.</p>
CSCdy53932	DNS server down caused CA146 OOS due to DNS cache was not enabled	<p><b>Symptom:</b> During DNS server maintenance, BTS call agent process (CA146) went out of service due to DNS query time out.</p> <p><b>Impact:</b> CA146 goes OOS.</p> <p><b>Conditions:</b> Currently in the worst case scenario the longest time the MGA can wait for DNS lookup is 20 seconds.</p> <p><b>Workaround:</b> Enable DNS cache.</p>
CSCdy55778	TSAP-ADDR for mgw appends. if not FQDN	<p><b>Symptom:</b> Calls do not go through.</p> <p><b>Impact:</b> Calls cannot be completed.</p> <p><b>Conditions:</b> TSAP_ADDR is configured as “o5-emptaa1” in the mgw_profile. In the trace log, it says “Invalid IP address: o5-emptaa1.”</p> <p>This happens when the TSAP_ADDR in mgw_profile is configured as a name where the last character of the name is a digit.</p> <p><b>Workaround:</b> Configure TSAP_ADDR as a name where the last character is not a digit. For example, TSAP_ADDR could be configured as “o5-empta” or “o5-empta.yy.com” but not “o5-empta1.”</p>



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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy61772	BCM: must not report a DP to SIM when awaiting instruct for previous DP	<p><b>Symptom:</b> Asynchronous events usually caused by user action (Abandon, Disconnect, HookFlash, Answer, Exception) currently result in BCM reporting to SIM a NOTIFY for a DP without regard to the current state of the relationship.</p> <p><b>Impact:</b> When this occurs, BCM may be in the middle of processing a sequence of instructions, or BCM may be awaiting instructions for a previously reported DP, and so on.</p> <p>The effect of these events results in unpredictable behavior, erroneous behavior and, in some cases, catastrophic failure resulting from SIM or SSF being transitioned to an unplanned non-integral state.</p> <p><b>Conditions:</b> User action, such as Abandon, Disconnect, HookFlash, Answer, or Exception.</p> <p><b>Workaround:</b> BCM will not report a DP if it is awaiting instructions for a previously reported DP or if it is currently processing instructions received from a FS.</p> <p>The instructions from a FS could be consequent to a previously reported DP or due to an asynchronous event occurring at the FS. BCM will queue up DPs to be reported and report them singly and in sequence to SIM.</p>
CSCdy61807	SIM: Indicate last instruction in a set, in INSTRUCT message to BCM	<p><b>Symptom:</b> Asynchronous events usually caused by user action (Abandon, Disconnect, HookFlash, Answer, Exception) currently result in BCM reporting to SIM a NOTIFY for a DP without regard to the current state of the relationship.</p> <p><b>Impact:</b> Loss of some feature functionality.</p> <p><b>Conditions:</b> When a set of instructions are received from a FS, SIM forwards them to BCM one at a time, sending the next INSTRUCT only after receiving a successful response to each. SIM will indicate in each INSTRUCT message to BCM whether or not more instructions are forthcoming. When an INSTRUCT is received by BCM with the indication that there are no more instructions in the set, BCM can report the next DP after sending the INSTRUCT response for the last INSTRUCT.</p> <p><b>Workaround:</b> None.</p>
CSCdy61823	SIM: Send a 500 response to FS sending instructions at inopportune time	<p><b>Symptom:</b> Erratic feature behavior or loss of feature.</p> <p><b>Impact:</b> A feature may not be provided.</p> <p><b>Conditions:</b> Race conditions introduced by concurrent asynchronous events at feature servers and call agent.</p> <p><b>Workaround:</b> None.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy68085	No ring back is sent when a subscriber with CW is called from mobile sub	<p><b>Symptom:</b> Mobile (cell) caller does not hear ring back tone when calling a BTS subscriber with CW feature.</p> <p><b>Impact:</b> Calls might not be completed.</p> <p><b>Conditions:</b> Subscriber A has call waiting activated and is talking to subscriber B who is on-net. An off-net mobile (cell) subscriber is calling subscriber A, subscriber A receives an RQNT with 'L/wt' telling it to play call waiting tone to subscriber A indicating an incoming call, but BTS never sends a G package 'rt' or 'rbk' to the terminating GW (IAD2421) so it can play a ring back tone to the mobile subscriber.</p> <p><b>Workaround:</b> None.</p>
CSCdy72183	Cannot configure different netmasks in hostconfig	<p><b>Symptom:</b> After jumpstart of a EMS, the hostgen file in the /opt/setup directory needs to be updated per information from the NIDS, but there is no provision in the hostgen parameters for a different netmask for each of the three external networks (NETWORK1, NETWORK2, and NETWORK3).</p> <p><b>Impact:</b> This results in wrong /etc/hosts and /etc/netmasks files being created, which have to be hand edited to put in the correct values.</p> <p><b>Conditions:</b> It is assumed that all three networks will have the same netmask, which may not be true in all cases. The ENDFIX argument for each of the machines, which is applied later to each of the three networks, is also taken to be only one. This may not always be the case; the last octet of all three networks may be different. This also leads to wrong information being filled in the /etc/hosts file.</p> <p><b>Workaround:</b> Hand edit the /etc/hosts and /etc/netmasks file and put in the correct values for each of the three external networks.</p>
CSCdy72985	Cannot equip the termination of mlhg.	<p><b>Symptom:</b> When a subscriber is provisioned as MLHG (one subscriber ID with any terminals), one cannot do an equip/unequip or control command on the subscriber.</p> <p><b>Impact:</b> Users can not make calls to or receive calls from that subscriber.</p> <p><b>Conditions:</b> When a subscriber is provisioned as a MLHG (one subscriber ID with many terminal to it), all attempts to equip the termination fail.</p> <p><b>Workaround:</b> None.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy76798	redundant billing-server does not appear to be working	<p><b>Symptom:</b> EMS initiates FTP transportation to billing server A, but does not switch to billing server B when billing server A is disconnected.</p> <p><b>Impact:</b> Billing records might be lost.</p> <p><b>Conditions:</b> When EMS initiates FTP transportation, it sticks with that server even when the server is disconnected.</p> <p><b>Workaround:</b> Remove and restore the BDMS's.</p>
CSCdy78749	CLI account is not disabled/locked after 45 to 90 days with no activity.	<p><b>Symptom:</b> User accounts do not lock after a period of inactivity.</p> <p><b>Impact:</b> None, this is an enhancement / new feature.</p> <p><b>Conditions:</b> User account has long period of inactivity.</p> <p><b>Workaround:</b> System administrator can delete users that are no longer accessing the system.</p>
CSCdy80561	EMS CLI ran out of memory during show subscriber	<p><b>Symptom:</b> Show commands resulting in large amounts of data cause the JVM to run out of stack space (memory).</p> <p><b>Impact:</b> Subscribers will hear dead air in these cases.</p> <p><b>Conditions:</b> This occurs when the IP network has problems, and therefore, MGA does not get adequate responses to their messages.</p> <p><b>Workaround:</b> When the network comes back, this situation will clean itself up.</p>
CSCdy81313	Dead air on calls following IP outage and recovery	<p><b>Symptom:</b> When the IP network has difficulties, MGA will have problems responding to the delete connection message sent by BCM to MGA.</p> <p><b>Impact:</b> Caller terminates call due to apparent dead connection.</p> <p><b>Conditions:</b> Problem seems to be in MGCP command sequencer.</p> <p><b>Workaround:</b> None.</p>
CSCdy85260	Suspend timer set to 0 does not work.	<p><b>Symptom:</b> When the suspend timer is set to 0, the call should be released immediately without setting the timer. However when the value is set to 0, the call is never released by the terminating end, the originator needs to release the call.</p> <p><b>Impact:</b> Subscriber's line is hung.</p> <p><b>Conditions:</b> Setting this value to 0 will cause the terminator to never release the call, and wait for the originator to release.</p> <p><b>Workaround:</b> In table ca-config, set the TERMINATING_IMMEDIATE_RELEASE flag to Y which will tell BCM to handle the call as immediate release--NO TRD.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdy86586	Alarm not issued for 70% disk utilization	<p><b>Symptom:</b> No maintenance alarm #59 issued when disk is filled more than 70%.</p> <p><b>Impact:</b> Disk could be filled and records lost if maintenance alarms are not issued.</p> <p><b>Conditions:</b> Disk was filled to much more than 70% and no alarm was issued. When disk space fills to 70% system should issue maintenance alarm #59.</p> <p><b>Workaround:</b> None.</p>
CSCdy87871	800 dip that returns local number sends 0110 tns to access	<p><b>Symptom:</b> Some 800 calls may fail with an announcement.</p> <p><b>Impact:</b> 800 call failures for local intralata numbers</p> <p><b>Conditions:</b> 800 calls fail if the N00 TCAP response has carrier id of 0110 and translated number is local to the access tandem to which the call is being sent. TNS with carrier id of 0110 gets populated in the IAM to the access tandem, which in turn tries to dip the already translated number.</p> <p><b>Workaround:</b> Create a separate trunk group that has a carrier id of 0110, then route calls over that trunk-grp. The IAM will not contain TNS parameter as carrier id is defined on the trunk-grp.</p>
CSCdz03077	Unable to place call after taking a trunk-term OOS/INS, mode=graceful	<p><b>Symptom:</b> Unable to place calls.</p> <p><b>Impact:</b> Cannot place calls.</p> <p><b>Conditions:</b> Placing ISDN to ISDN call through a Lucent PBX and taking the trunk termination OOS and INS with mode = graceful. After bringing the trunk termination INS the next call fails with "No circuit/channel available" error message.</p> <p><b>Workaround:</b> None.</p>
CSCdz03475	Critical database alarm generated for alert.log shows deadlock detected	<p><b>Symptom:</b> Update on a child table fails with a deadlock error, which is a critical database alarm.</p> <p><b>Impact:</b> In deadlock situations one transaction is rolled back.</p> <p><b>Conditions:</b> EMS OPTICALL schema has many tables with parent-child relationship. For update and delete operations on a parent table the child table is locked (in shared lock). In the situation when process A updates on a parent table (before commit), then process A updates the child table while process B also attempts to update the child table (without commit), then process B executes another update on the same child table, process A's update on the child table fails with a deadlock error.</p> <p>This error occurs only when multiple processes are updating or deleting parent and child tables. INSERT statement isn't affected.</p> <p><b>Workaround:</b> The alarm directs the operator to look into the alert.log file, which points to related trace file(s) in the /data1/dump/udump directory. The trace file logs the failed SQL statement. The operator can then execute the SQL statement manually from the Oracle PL/SQL interface.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdz04433	CNM get_remote_sdp() does not work in SIP to Announcement Server call.	<p><b>Symptom:</b> When a SIP phone dials a number that is not in the dial plan and gets routed to an announcement, the announcement is not heard on the SIP phone.</p> <p><b>Impact:</b> This is only an impact on the SIP phones. The call cleans up and the problem does not have any adverse affects on the system.</p> <p><b>Conditions:</b> This only effects SIP to announcement calls.</p> <p><b>Workaround:</b> None.</p>
CSCdz05865	XML/Corba sometimes provides malformed XML	<p><b>Symptom:</b> Certain values in XML cause errors in the XML parser.</p> <p><b>Impact:</b> This problem can cause errors in EPOM's XML parser.</p> <p><b>Conditions:</b> The problem occurs in special situations in which "&lt;" and "&gt;" characters are embedded in reply text.</p> <p><b>Workaround:</b> Use valid values in commands so that error message are not transmitted via XML.</p>
CSCdz07020	EMS platform does not meet performance requirements	<p><b>Symptom:</b> The EMS platform is not capable of supporting a call agent running at rated capacity of 100 calls per second.</p> <p><b>Impact:</b> System does not meet stated performance.</p> <p><b>Conditions:</b> During soak tests running approx. 30 calls per second with background SNMP and provisioning activity the EMS CPU is 0% idle for the duration of the soak test.</p> <p><b>Workaround:</b> Under investigation.</p>
CSCdz10259	ISDN called party number truncated to 19 digits.	<p><b>Symptom:</b> The BTS truncates the called number to only 19 digits, and fails this international call with no route to destination cause.</p> <p><b>Impact:</b> With this limitation, dial around international calls from ISDN cannot be executed.</p> <p><b>Conditions:</b> An ISDN call is made by dialing a dial around operator assisted international call. The dialed number is 1019999-01-861234567890 (21 digits).</p> <p><b>Workaround:</b> None.</p>
CSCdz15836	Operator call fails with operator system access in OCT 3a	<p><b>Symptom:</b> Operator call fails.</p> <p><b>Impact:</b> Users cannot reach operator.</p> <p><b>Conditions:</b> Problem found during pri-pbx interop testing with Nortel-NI. Call flow is as follows: Phone1----PBX---PRI---IAD---PRI-backhaul----BTS----SS7</p> <p>When making an operator call from Phone1 off PBX, Nortel PBX does not send 0 in the called party number, but marks operator system access in oct 3a, which gets rejected with cause mandatory information element missing.</p> <p><b>Workaround:</b> None.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdz36865	CoderType field is missing for G729 call	<p><b>Symptom:</b> The "coder type" field in the billing record sometimes is not populated when it should be.</p> <p><b>Impact:</b> The "CODERTYPE" line will be missing from the output of the "report billing-record" CLI command. The field will be unpopulated in the flat file.</p> <p><b>Conditions:</b> This problem has been reported on an MGCP-to-MGCP call where a G.729 codec was used.</p> <p><b>Workaround:</b> None.</p>
CSCdz37125	Round-robin of announcement trunk groups fails	<p><b>Symptom:</b> Only one trunk group in an announcement route will be selected even if more than one is provisioned and Round Robin is set.</p> <p><b>Impact:</b> Minor, the trunk group that is provisioned first will always be the one that is provided.</p> <p><b>Conditions:</b> Trunk group selection method is set to RR (round robin) for announcement trunks, but when making calls the trunk in TGN1_ID is always selected even though TGN2_ID is also populated. RR works for selecting H.323 trunks.</p> <p><b>Workaround:</b> Provision only one trunk group per announcement route.</p>
CSCdz45786	CLI sessions unable to issue status and control commands	<p><b>Symptom:</b> Since upgrade to v.21 sometimes CLI sessions are unable to status and control.</p> <p><b>Impact:</b> Status and control commands do not work. Show commands continue to work.</p> <p><b>Conditions:</b> Problem appears to be random, but it only seems to happen when there are a lot of users logged in and running CLI.</p> <p><b>Workaround:</b> Logging out of CLI and then back in normally fixes it.</p>
CSCdz48717	CFNA would not work for calls coming from CCM subscribers	<p><b>Symptom:</b> When a call is made from the call manager via H323 if the called subscriber has call forward no answer assigned, then the call to the third endpoint will fail.</p> <p><b>Impact:</b> This problem only occurs when a call comes in from CCM-cisco call manager via H323. This is a slow start call which means that SDP is not exchanged until the answer occurs.</p> <p><b>Conditions:</b> This problem occurs when a call from CCM over H323 using slow start comes into the BTS and the call is attempted to be CFNAed. This call has no adverse affects on the system.</p> <p><b>Workaround:</b> None.</p>

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Table 2 Open Caveats (continued)

DDTS ID	Description	Workaround
CSCdz52685	911 call with ODR default routing fails.	<p><b>Symptom:</b> 911 call fails.</p> <p><b>Impact:</b> 911 calls cannot be completed.</p> <p><b>Conditions:</b> During 3.3 V04 upgrade a 911 call is placed from a CAS trunk group. The call is routed using policy-odr with the default calling number. The call fails if the calling number DEFAULT is used.</p> <p>The CA-CONFIG table default-odr is incorrectly provisioned with "default" (lowercase) instead of "DEFAULT" (uppercase).</p> <p><b>Workaround:</b> Reprovision the CA-CONFIG table default with "default" (lowercase).</p>
CSCdz53077	Office code can not be added properly if DN_GROUP contains uppercase letters.	<p><b>Symptom:</b></p> <p><b>Impact:</b></p> <p><b>Conditions:</b> The DN_GROUP XXXX is appended to the digit_string in the office_code table if the DN_GROUP=XXXX instead of xxxx.</p> <p><b>Workaround:</b> The BTS either needs to accept both lowercase and uppercase, or the CLI Guide needs to specify that the DN_GROUP has to be lowercase when provisioning the office_code table.</p>
CSCdz53865	POTS feature server Core	<p><b>Symptom:</b> POTS feature server had a core dump.</p> <p><b>Impact:</b> Feature server had to be restarted.</p> <p><b>Conditions:</b> SIGSEGV was caused in FSPTC while accessing an invalid pointer stored in a subscriber record.</p> <p>Based on the stored data in the subscriber record, user's first attempt for CFU-Activation was treated as "2nd attempt within 2 minutes". From the logs it was verified that the data wasn't stored in last hour of this attempt. This indicates that the data may have been in the subscriber record a long time. Information available so far does not point to reason/scenario which can lead to this data being stored for long time (normally the data is stored for 2 minutes). Investigation for the same will continue.</p> <p><b>Workaround:</b> Even though we do not know the root cause of the problem, the immediate issue of SIGSEGV can be fixed by not accessing the memory in this scenario, which will not affect any functionality.</p>

## Resolved Caveats

Resolved caveats listed in this section include only those critical and major caveats that were found during system test or critical issues found during customer verification tests of earlier releases and resolved in Release 3.3 V04. DDTS ID numbers listed in [Table 3](#) are Cisco internal tracking numbers.

*CISCO CONFIDENTIAL***Table 3**    *Resolved Caveats*

<b>DDTS ID</b>	<b>Description</b>
CSCdu03520	CQM Fails for CIC range when sent from the CLI
CSCdu12799	Cleanup internal thread structures in IPC on thread cancellation/exit
CSCdu24104	ANNC SEND_ANSWER does not work for ACR
CSCdu43961	Stdout from processes should be line buffered
CSCdu46893	CA sets CICs IDLE awaiting response to RLC
CSCdv10502	911 can be put on hold by Centrex subscriber
CSCdv25360	ssf and sim changes for TERMINATE and NOTIFY crossing problem
CSCdv26491	MGCP codec-types not mapping to standards
CSCdv87249	Invalid error from CHP lib - get_entity_indexes()- t_conn_id is 0
CSCdv88204	SUS message not sent when CFNA involved (any call forward or transfer)
CSCdv90681	BCM - CTXG sub with TWC does not receive busy after dialing invalid number
CSCdw01814	KAM needs to handle fault detection/recovery properly when CPU overloaded
CSCdw03030	Errors need to be eliminated
CSCdw14479	EMS platform exit left behind Java orphaned processes
CSCdw16766	Missing Mandatory IE in Alert message
CSCdw21044	SC1D/SC2D Tables Allow any Information to be Entered
CSCdw22859	Billing needs to check if QOS messages arrived for abandoned call.
CSCdw26383	No option to provide in-band tones on ISDN originations
CSCdw31559	BTS diag ss7-trunk-termination test=2 fail due to TOS set wrong
CSCdw43387	MGA - ca-config trigger is not available
CSCdw50934	CallerID showing GMT as time zone instead of local time zone
CSCdw51015	SUS message is not generated for SS7-H323 call
CSCdw61017	BCM rejects IAM containing reserved called party nature of address
CSCdw62246	China dial-plan feature id
CSCdw62310	The CMS XML Translator for the Homework project
CSCdw62853	3.2 new development
CSCdw63217	Security requirements for the Homework Project
CSCdw63262	System Management features for the Homework project
CSCdw64582	SIM has performance issues
CSCdw71821	TECH-PREFIX-GRP Table excepts Invalid Tech-Prefix
CSCdw71907	Field TG in table subscriber receives invalid column name
CSCdw72308	MGCP-H323 reattempt 6 times with different conference ID
CSCdw72666	Change of sub dn1 does not update table dn2subscriber
CSCdw72723	Implement inter-office AC/AR feature
CSCdw79265	CPRK-CLEAR traffic measurement not pegged after cprk is cleared.
CSCdw79719	State token for CLI command add/delete/show even-queue NOT implemented
CSCdw80034	H3A Delay Time unacceptable (12 sec) after CTRL_END_PROCESS message
CSCdw80124	ENHANCEMENT: Need multiple IP addresses on fewer Ethernets
CSCdw85046	Tone cannot be conferenced for China Residential CW/TWC
CSCdw94766	BORG Project Development (SGA)
CSCdx01905	Exception DP reported in wrong leg



*CISCO CONFIDENTIAL***Table 3**    *Resolved Caveats (continued)*

DDTS ID	Description
CSCdx03204	BTS does not handle graceful shutdown RSIP from 5400 correctly
CSCdx08857	OAMP Application Test Suite
CSCdx17599	Unnecessary free of message buffer and VerifyReqHeader for all calls
CSCdx18267	911: need to support interaction with TWCD
CSCdx21154	RHM need to monitor /tmp disk space
CSCdx23021	TGA: use new API application provided.
CSCdx25215	Platform start script should backup the data directory
CSCdx27449	Remove deprecated TPM API.
CSCdx28302	Northbound updates cause audit failure.
CSCdx28952	Feature Support: idx_replace_idx() should support IDX triggers
CSCdx28973	SIM: Save and print state of processing threads
CSCdx30067	Command parameter table incorrect for USER_NAME in activity-summary
CSCdx32283	SIA cleanup: CCB holding local SDP heap not necessary.
CSCdx32416	New counters for POTS, SIP
CSCdx32652	108 test calls need to be supported in BTS
CSCdx32668	Support of CAS blocking/unblocking feature
CSCdx33242	Improve switchover time in TGA and Traffic (EMS) code
CSCdx33278	Sia and Sim go active times need to be reduced
CSCdx33288	Billing: on net calls tagged as off net
CSCdx33294	Create an ipc priority scheme for common and platform specific messages
CSCdx33646	BORG dbm2 development
CSCdx33697	BORG project development - OAMP Applications
CSCdx33740	Changes for BORG
CSCdx33832	Trigger event in FIM when feature-interaction not supported
CSCdx34571	Use DEFAULT-POP when POP is assigned.
CSCdx34759	ENHANCEMENT: PMG state machine needs to be restructured for going active
CSCdx34760	Last stage of schema related change, db sizing change
CSCdx35074	BCM needs events added for routing errors
CSCdx35615	Call Park/Retrieval is not working
CSCdx35680	Register events for BORG project
CSCdx36219	H323 slow start to slow start calls
CSCdx36767	Improve switchover times for billing
CSCdx36791	POTS FS framework code review defects
CSCdx36870	SIS: CCB print tool should print prov resp info list and prov resp Q
CSCdx36884	SIM: Re-use FsInfo struct if a FS needs to be Notified after receiving BYE
CSCdx36903	EMS sends wrong values to H3A process when provisioning h245TunnelControl
CSCdx37200	Provision CW-Deluxe feature
CSCdx37240	Disallow subscriber to activate CFx to his own DN
CSCdx37949	C utilities need to move to CUTL library from CMN library
CSCdx37979	No local time zone option in POP table for China
CSCdx38135	Need additional trace topics for new libraries

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdx38437	ASM enhancements for BORG release
CSCdx38685	DQoS feature support
CSCdx38699	DQoS feature support
CSCdx38701	DQoS feature support
CSCdx39084	Delay in call processing when POTS feature server is not running
CSCdx39100	Sync command allows user to input incorrect target
CSCdx39520	G723 codecs not supported
CSCdx39704	Making CDSL-API Header file independent of FSPTC-DBM.
CSCdx39776	PMG core after 2.1V13 installation - installation problem or operator error
CSCdx39928	This defect is needed for all 3.2 software upgrade checkins
CSCdx39948	SIM cored when making 3-way call
CSCdx40339	Change MGA process binary name from mga2 to mga
CSCdx40350	BCM fails to send LPT req on incoming COT call
CSCdx40362	Dial China PSTN, BTS should stop playing local tone
CSCdx40380	Silence is played when no associated dial-plan is provisioned.
CSCdx40475	Dumping excessive pstacks is very expensive
CSCdx40743	LCO es_cci need to use hex value
CSCdx40773	SIS: should print the config parameters at startup and shutdown
CSCdx40812	Audit - do not display mismatch when call-agent sides value is null
CSCdx41184	Suppress the ISDN compilation warnings
CSCdx41395	DN2subscriber range add fails to 11 digit DN
CSCdx41474	remove compile warnings for S7M/S7A
CSCdx41535	Enable parallel builds for Borg and Non-Borg projects.
CSCdx41585	CDP Tables does not allow SPEED_CALL, Custom-Dial-Plan does.
CSCdx41617	SSF: should delay freeing relations with no subscriptions & send TERMINATE
CSCdx42691	LogReport was generated for DLCX 250 return code
CSCdx42808	Import the BORG TCAP Adapter Library code for the first time
CSCdx42832	SIA Re-organization of functions and files.
CSCdx42854	BTS does not copy the timestamp header from provisional 18x to PRACK
CSCdx42865	GOS Conditional Trywait could possibly end up in an infinite loop
CSCdx42919	SIM: trace error in source proc_sip_msg.c is a core possibility
CSCdx43197	Sip applications need new API to open receive port
CSCdx43246	IPCQMsgDispatch not allowing thread type=0, instance=1
CSCdx43263	Add a new process EMA
CSCdx43329	Java wrapper does not allow passing in arguments into java programs
CSCdx43362	SNMP changes for Release 3.3 of the BTS10200
CSCdx43511	BTS sends 481 for cancel message in PRACK scenario
CSCdx43822	Upgrade to V12 caused 2 copies of init to run -- hub does not run
CSCdx43985	PacketCable EventMessaging stack development
CSCdx43990	RADIUS stack development for PacketCable
CSCdx44114	BCM did not send setup response to MGA after call is answered

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdx44118	ANM enhancement Phase 3
CSCdx44150	SIM: leaks CCB when BYE received from FS after EDP-N NOTIFY
CSCdx44374	H323 GW fails to ack the receiving of a GCF
CSCdx44861	CAS termination becomes faulty after retransmission.
CSCdx44927	BTS does not meet CALEA requirements for abandoned calls
CSCdx44936	BTS does not meet CALEA requirements for abandoned calls
CSCdx45357	PacketCable Event Message support in BCM
CSCdx45376	Release 3.3 schema design changes
CSCdx45388	Could not bring up CICs in service, after provisioning
CSCdx45423	Use old wrapper for SAD as the common one does not work for SAD
CSCdx45951	CF*-Act does not send correct release cause for call-barring due to nod-restrict
CSCdx46504	Audit command does not leave space between descriptions
CSCdx46511	Diag ss7-trunk-termination test=4 does not shows local or remote state
CSCdx46558	Equip trunk-termination does not update status in Oracle
CSCdx46745	CLI reports wrong result for reset trunk-termination command
CSCdx47230	H323 process went down, during the China Testing
CSCdx47720	Feature Support: Need utility getUTCOffset to support PacketCable Event Msg
CSCdx47749	SIM:TERMINATE crossing INSTRUCT results in SIP CCB leak
CSCdx47897	Tech prefix not being registered with GK
CSCdx48883	TWC requesting support for 0+7D dialing
CSCdx48921	BTS SIP uses ansi92 version for the ISUP MIME type. It should be ansi.
CSCdx49006	MGA stuck in init loop after failover
CSCdx49281	ENHANCEMENT: Create a generic list class for use by all
CSCdx49814	OLI info not sent in IAM when CF or CT to switched 8XX number
CSCdx50238	Create new trans table in SHM for PacketCable DQOS
CSCdx50418	Common wrapper has to call end_all_threads()
CSCdx50602	CFNA and CFU calls would not release, CIC will bounce between RES & SUS
CSCdx51499	SIS: SipCcb space needs to be reclaimed for tran data to prevent realloc failure
CSCdx51573	Process does not startup after system install
CSCdx51835	Cannot add token into table annc-trunk
CSCdx51841	FIM does not inhibit CWD on CHD invocation
CSCdx51979	Cannot hook flash after dialing digits during feature call
CSCdx52005	CUTL library string function improvement
CSCdx52275	Component id in Event should reflect originating resource
CSCdx52292	Changes required to support Borg Signaling Gateway adapter
CSCdx52927	New Arguments in platform.cfg for ESA
CSCdx53002	Field in nod-wb-list is invalid in table cos-restrict
CSCdx53249	PMG should check process status more often in some circumstances
CSCdx53301	Event/Alarm enhancements for R3.3
CSCdx53550	Call not established to SIP endpoint on redirection to different number.
CSCdx53566	need to add mgcp_cas_block_unsupp

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdx53683	Proper events need to be armed if fax event is received and is not ACTIVE
CSCdx53786	BTS Fails to Release Active Calls after receiving RSIP Forced and Restart
CSCdx54665	Fields NOA and NEW-NOA in table dial-plan should not be case sensitive
CSCdx55310	EMS getting watchdog timeouts on all links
CSCdx55330	PDM tool core-dumps when sending a message to PMG.
CSCdx55334	H3A not generating core --- hung on malloc call
CSCdx55669	SIP Parser: Notify MWI does not work. Event in message is not found.
CSCdx55714	SIP Parser: 3XX with diversion hdr with unknown reason fails parser.
CSCdx55733	SIA: Receiving Invite with Redirecting number error does not send 400.
CSCdx55798	Adi Slf attempts to validate non DN collected-info DialedDigits.
CSCdx55809	Centrex subscribers are not barred on call-type basis for ADI features.
CSCdx56676	SDP: traces should use own topic name
CSCdx57292	Unit OOS should be FAULTY not FAULTY-NORMAL or FAULTY-FORCED.
CSCdx58266	Need generalized configuration file parser
CSCdx58350	T_Busy DP reported in wrong BCSM state
CSCdx58400	Regression Unit Test Framework Library
CSCdx58456	Need new parsers to support ANI Manipulation
CSCdx59809	termination state goes to cannot be reached after switchover
CSCdx59884	two inbound calls to main mlhg sub with cfna active, 1st call does not forward
CSCdx60451	KAM needs to trace some special messages for switchover time analysis
CSCdx60505	Calling Name not displayed if Generic Name parameter length < 16
CSCdx60665	Report activity-summary command succeeds with Exception output.
CSCdx60980	The BTS doe not release the CIC from OBSY state
CSCdx61827	get_all_stat.sh failed
CSCdx61844	CAS MO terminations cannot be set to idle.
CSCdx61934	Billing records not displayed/generated.
CSCdx62182	During switchover, mga was stuck and watchdog timer for mga thread expired
CSCdx62581	Undefined NOA blocks call from Unicom PSTN
CSCdx62588	Call to Unicom H323/PSTN from one ATA changes another ATA to ACTIVE
CSCdx62589	ANI-digman does not change NOA from UNKNOWN to NATIONAL
CSCdx62590	CFU call failed due to NDC for local call not manipulate ANI
CSCdx62603	TWC call cannot return to A->B leg when A->C leg got busy tone.
CSCdx62841	New TSA process in AIN/POTS feature server platforms
CSCdx62876	Copy SIA files from CVS 3.3 to CC 3.3.
CSCdx63264	New Build Migration: For R3.3
CSCdx63850	Broadcast address being set as Mac-Address with boom in slot1
CSCdx64231	Corba interface adding only in ems database
CSCdx64326	MGA should recover temp_down indefinitely in CABLE market
CSCdx64357	SIP framework errors exist in FS code
CSCdx64488	CW disconnect timer restart during switchover
CSCdx64602	SIA: Signal handler function should only call Async-signal-safe routines

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdx64667	BTS sends NOTIFY without Contact header
CSCdx65180	SEGV when TCA received CANCEL_TERM_SCAN with invalid transaction id
CSCdx65226	Original Call take down in case of CFB
CSCdx65230	Interaction between AC/AR and PPS features for delayed processing fails
CSCdx65608	CAS call not restricted by COS Local Only.
CSCdx65649	Take care of Schema updates.
CSCdx65753	Field mgw-id in table mlhg-terminal should be a varchar(32)
CSCdx65850	Deprecate the old wrappers from the system
CSCdx65976	CNM should accept G. style codec names from QOS table
CSCdx66547	CheckCFG fails if host files has # in it.
CSCdx66562	Call Waiting Second leg does not provide ring back to PSTN user
CSCdx66660	omni port_daemon needs to be killed following platform stop -i omni
CSCdx66958	IPManager does not map IP for SIA on time
CSCdx67245	CNM not releasing connections on abnormal release
CSCdx67251	Accessing SIP-Msg pointer after sending, causes core-dump.
CSCdx67380	Core after CAS 100 trying messages.
CSCdx67607	For CENTREX subscriber CFU, CFNA, CFB forward incorrect ANI
CSCdx67757	Enhancement: Perform pstack dumps only if necessary
CSCdx67773	Apache server to be installed on Call Agent boxes also
CSCdx68031	MGA clears CID when DNS lookup fails
CSCdx68120	Sub allowed to forward Calls to himself.
CSCdx68174	800 translated number route by carrier need dial plan to terminated.
CSCdx68291	MGCP messages retransmitted only 2 times after NACK.
CSCdx69010	TWCD to Unicom PSTN heard both local and remote ring-back tones
CSCdx69036	H323 process got killed when DRQ not getting response from KP
CSCdx69655	A CLI command results in a warning stating MySQL is not running
CSCdx69776	Cannot activate CFU from a Centrex subscriber to a non-Centrex subscriber if they do not pick up the call
CSCdx70247	Table Dial-Plan Mandatory Fields must be the same for add/ch/del
CSCdx70731	FCP to support SCP-Db-Id OpParam
CSCdx70770	Sending more than 4K msg using SENDTO_W_TRACE causes core.
CSCdx70893	HOTV feature not available for NA; HOTVA, HOTVD and HOTVI were
CSCdx71425	H3A2 and H3A1 in infinite loop ---
CSCdx71428	No line package for NCS
CSCdx71464	Cannot use change for digman table
CSCdx71809	Maintaining Unit-Test tool UUTest for FSPTC.
CSCdx72486	Copy SIS file changes in 3.3 CVS to CC REL3.3 for copying timestamp
CSCdx72516	Reduce PMG CPU usage consumption
CSCdx72519	New Billing Process Needed for Packet Cable
CSCdx72786	Measurement_Billing_Summary schema missing columns
CSCdx73129	bmg2 dies when attempting to write records to flat file

*CISCO CONFIDENTIAL***Table 3**    *Resolved Caveats (continued)*

DDTS ID	Description
CSCdx74013	3.3. software upgrade development
CSCdx74143	Field default-std-cause-code show invalid for table cause-code-map-profile
CSCdx74388	Fields min-dn-length and max-dn-length invalid for table exchange-code
CSCdx74582	CHP: Define Version Ids for DBM CHP, PC CHP, CA CHP, FS CHP
CSCdx74854	Provision the desired Solaris services for security
CSCdx75026	CPI interface to get help information on BTS commands
CSCdx75032	IP Alias for the Active EMS on the Telnet interface
CSCdx75253	ENHANCEMENT: Platform should support system time change notification
CSCdx75417	Network ID in CIP is set to 0 on terminating end
CSCdx76023	Billing record writes a release of Net out of order as resource unavailable
CSCdx76060	BMG overwrites the call type field in the query statement.
CSCdx76063	BORG Project Development (SGA)
CSCdx76067	CNM Needs to print out verbose trace messages in cnm_billing.c
CSCdx76071	PMG should support BORG and NON-BORG AIN platform.
CSCdx76176	Parser should not fail when parsing unknown content types and attachments.
CSCdx76615	Fax_supp in H323-TG-PROFILE should be of type fax_supp_t
CSCdx76678	Socket monitoring allowing same fd to be monitored more than once
CSCdx76691	Field tg in table circuit-code should not be invalid
CSCdx77221	Enhanced build mechanisms based on EDCS-204034
CSCdx77404	Mysql_bill.sh not installed
CSCdx77450	Cannot execute ./backup_db_cold_v32.sh \$ORACLE_SID after upgrade
CSCdx77462	BORG Project development (OAMP)
CSCdx77476	Table destination field call-type should allow hyphens and underscores
CSCdx77580	Print and compare functions need to be added in ca_repl_verify
CSCdx78033	In T38 CA controlled mode, BCM does not send SAI_CCM_OOBINFO_REQ to MGCP
CSCdx78304	Use supervision type NO IMMEDIATE REL on forced and graceful control
CSCdx78366	Need to modify makefiles to conform to build process for clearcase
CSCdx78401	Centrex-id not checked before dispatching to AC/AR
CSCdx78413	Database-id of responding SCP needs to be reported in FCI to BCM
CSCdx78436	Originator phone keep ringing back even though terminator answer
CSCdx78860	Checklog script does not check location before removing files
CSCdx80016	CFNA: After call clearing leaves behind a connection
CSCdx80052	DBM API causing heap-leakage in pots process for FSPTC.
CSCdx80098	When residential gateway is put in MAINT with graceful mode, stays pending
CSCdx80155	After CA switchover, hook-flash ignored
CSCdx80508	MLHG: Line Service Type is not consistent for INDIVIDUAL subscriber.
CSCdx81594	Table h323-tg-profile not adhering to delete rules
CSCdx81611	Fax-T38-CAMODE-SUPP MGW-Profile entry DEFAULT must be N
CSCdx81641	FSPTC core dumped when AC invoked
CSCdx81815	Provisioning of table nod-restrict-list populates shared mem incorrectly



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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdx81880	CAS ANI not delivered to CAS MO operator
CSCdx82443	cSeq is not handled correctly during switchovers
CSCdx82468	CNM needs to use the right API to post ipc message to SGA
CSCdx82556	SIA IPC message leak in pool 4
CSCdx82583	Multiple call forwarding has ringback issue
CSCdx83678	When call is up, BTS10200 does not perform CQM
CSCdx83721	No Operator Call Type
CSCdx84512	No ring back on ISDN originated calls to some mobile subscribers
CSCdx84765	H3A limits codec selection to single codec
CSCdx85669	No IRR messages sent in response to IRQ
CSCdx86219	MWI tone played for feature calls requiring stutter dial tone
CSCdx86625	Makefile needs to be modified as per new template
CSCdx87244	Requirements for RO-S-103 need to be met
CSCdx87710	Makefile: migrate makefile to new form
CSCdx87769	POTS and AIN-FS need to gracefully terminate threads if one thread returns.
CSCdx87870	SIM: fix coding error in ProcessFcpList function
CSCdx88021	New Build Migration for 3.3 - for unit test drivers
CSCdx88058	STATUS msg w/wrong cause (101 instead of 97) when FACILITY is received
CSCdx88125	New HOTV TO (Time Out) value will not work if changed from default value
CSCdx89402	Incoming SIP calls requiring announcement server should now work.
CSCdx89535	H323 ignores the Presentation Indicator bits in Setup message
CSCdx89862	call-type and route-type need to be consistency when add destination
CSCdx91554	Extra un-needed MGCP RQNT message for CAS to RGW call.
CSCdx93331	ANM internal faulty management did not implement
CSCdx93497	CLI QOS Table not accepting several CODEC types
CSCdx94035	45 minute 911 call timer not working.
CSCdx94434	Makefile update
CSCdx94658	Secondary RKS in call-agent-profile should be optional
CSCdx94975	Billing record does not show call-type when cause=no_route_destination
CSCdx95305	H323 stack post octantis2 sev1/2 bug fixes
CSCdy00874	BW-list of OCB not checked in OCB deactivated state
CSCdy01950	Default T108 timer (TEST-CALL-TMR) is inaccurate
CSCdy01992	Event portion of OATS requires R3.3 update
CSCdy01997	Audit between standby side EMS to standby side CA during upgrade
CSCdy02609	BCM data blocks leak.
CSCdy02874	ECR-2092 Radius security code must be on 4-byte boundary
CSCdy02927	HOTV fails to call original number aft FSPTC switchover
CSCdy02944	BCM cores because of wrong casting by a dbm API
CSCdy03058	(Enhancement) Remove Makefiles for platform include directories
CSCdy03065	Able to configure subscriber category = ctxg-mlhg without required tokens
CSCdy03568	Migrate Makefiles

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdy03664	Warnings from LINT in the CNM 3.3 sources
CSCdy04049	Block manual changes to clock setting
CSCdy04052	Feature Interaction between NA and China CW/TWC features
CSCdy04157	install.sh does not verify proper jumpstart procedure
CSCdy04251	BCM process is in loop and dead when POLICY NXX route is used for call
CSCdy04427	CMTS is not sending QOS start message to DF Server
CSCdy05001	DLCX with I: and without C: is invalid. Tellab MTAs nack with 510.
CSCdy05067	Billing needs new-style make files
CSCdy05075	No GATE_DELETE in CFNA DQoS call
CSCdy05105	SIP stack rejects SUBSCRIBE msg containing content-length header with 415
CSCdy05323	First MDCX to the O-side is missing send-recv-resv DQoS parameter
CSCdy05429	SIA pass ISUP_VERSION instead SAI_VERSION to sipt converter
CSCdy05485	CQR has incorrect CIC status for CICs divided in two trunk groups
CSCdy05496	Codec G726-32k not send in L parameter of CRCX
CSCdy05557	show event-log fails when using start/stop parameters
CSCdy05673	Set default slack term value in Gate spec per ECR-2064
CSCdy05682	Incorporate T7, T8 timers as required by ECR-2095
CSCdy05691	After switchover, send GATE-INFO to audit active gates
CSCdy06275	CORBA needs to pool resources to speed processing.
CSCdy06323	AC and ACR interaction incorrect w/privacy=full
CSCdy06785	Incorrect Distinctive call waiting tone for the second MDN member
CSCdy07336	core dump after receiving SdpAlloc: - Failed to alloc SDP error
CSCdy07569	No voice for CFNA
CSCdy07579	H323 process leaking memory
CSCdy07640	audit call-agent returns mismatch error of shared memory status =null
CSCdy07824	Assigning CW, CIDCW to MLHG subscriber causes AR to fail.
CSCdy07980	Make codec filtering at H3A TG QOS table default OFF
CSCdy08703	calls w/o ANM disconnect after 4 minutes
CSCdy08715	In case of NCS GWs no need to play CW Tone more than once.
CSCdy08798	Event messages related event logs
CSCdy08841	NUMBER parameter no longer valid and SEVERITY is inconsistent
CSCdy09228	checklog program did not archive oversize log files
CSCdy09602	RDS incorrectly reports timeouts to application
CSCdy09960	S7M does not direct S7A to exit in a timely fashion
CSCdy10756	CA picks up wrong preferred codec when termination h323 TG not set QOS
CSCdy10767	Call failed due to different codec negotiation failure
CSCdy10811	Change of table dial-plan is using wrong digit-parser
CSCdy10864	Can not change an entry in table digman
CSCdy11028	DAT column should be type DATE for all measurement tables.
CSCdy11810	BCM core dump
CSCdy11986	Invalid fields in table carrier



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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdy12161	CA does not delete OBLV Connection
CSCdy12738	CFNA not functioning with on-net to on-net calls
CSCdy13061	no dial tone to active CFNA
CSCdy13110	Remove unnecessary TRACE log for PacketCable EM feature support
CSCdy14313	Need to be able to assign multiple MyLRNs in a POP
CSCdy14536	Slow start CFB to slow start, call failed due to codec
CSCdy14688	No communications received from feature server in trace
CSCdy14700	billing server bdms01 cores and exceeds restart
CSCdy15505	User data modified prior to pick-list check.
CSCdy15568	CNM change for DTMF RELAY for H323-H323 call
CSCdy15685	Outbound caller ID does not display on some PRI calls
CSCdy15997	MGA fails warmstart when there are thousands of gateways
CSCdy16054	Platform stop killing logins
CSCdy16577	CCM to PSTN call fails if PSTN uses a codec list
CSCdy16578	NOD-WB-LIST in COS-RESTRICT only work in BLACK list
CSCdy16581	CWD with a CCM call leg fails
CSCdy16673	RADIUS-PROFILE TSAP-ADDR does not accept port
CSCdy17109	EDCS-216305 mandates changes to architecture
CSCdy17241	Trace printing improper data
CSCdy17369	S7M dies after switchover
CSCdy17376	In the billing record fill codec field correctly for sstss calls
CSCdy17808	EMA is not registered for CA-CONFIG insert triggers
CSCdy17882	Update help files for Releases 3.2 and 3.3 of the BTS 10200
CSCdy17896	H323 GW2GK entry can be deleted while GW is in-service
CSCdy18022	dbm_sql failed to start up
CSCdy18064	ISDN calls are released when circuits are idle/active
CSCdy18278	BCM overwrites some parameters for SIP-T
CSCdy18399	CA sends RELEASE w/o cause #96 when DISC w/o cause is received
CSCdy18443	New security package from PGW to be added to BTS
CSCdy18529	Incorrect NOA for RGW to SS7 International Call.
CSCdy19189	SIP stack cannot decode SIP-T 180 ringing message
CSCdy19466	MGA auditing OOS endpoints when connectivity to GW is restored
CSCdy19695	NAS IPaddress attribute on Radius record is hard coded
CSCdy19726	Attribute Count on EM header shows wrong value
CSCdy20205	Handling remote side connection statistics in DLCX ack
CSCdy20303	Trace log stopped writing and trace log files missing
CSCdy20395	BTS needs to use mgw TSAP-ADDR for MTA-Endpoint-Name in EM per spec
CSCdy20571	h3a call leg not released when call is released immediately after SetupInd
CSCdy20581	CCM-->BTS-->IOS GW not working unless ALERTING is sent
CSCdy20657	BTS allows mgw id > 16 character, but control mgw truncates
CSCdy21613	Non-MGCP-MGCP calls ec, ss not correctly set in CRCX

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdy21635	RSVP Not working
CSCdy21653	T38 fax does not work for h323 fast-start originated calls
CSCdy21714	libSEM reports SEM not initialized
CSCdy21969	Signaling Start message gets generated on off-hook (no dialed number)
CSCdy22420	EMA needs to support time change and replication of BCM event count
CSCdy22436	OAMP Performance and Resource Consumption improvements
CSCdy22532	EM-BILLING-SUPP not changed during initial ca-profile add
CSCdy22645	No FEID on Call Answer Message
CSCdy22833	SIA always sends PI #8 to BCM in Progress request and Alerting request
CSCdy23117	Corba needs to provide compatibility check with clients
CSCdy23118	No Carrier Identification Code on Interconnect Start/Stop
CSCdy23663	INTER AC not working when term sub goes off-hook during special rings
CSCdy23756	Provide incorrect controller address for MoveCIDeletePL OP
CSCdy23962	EMS cant register with SNMP (Level now Severity)
CSCdy24049	Invoke of CPRK caused FSPTC to core dump
CSCdy24212	NAS IP address not populated for EM Encoding Version 3
CSCdy24264	Maintenance event and alarm could not display because mismatch type=Maint
CSCdy24384	Changing qos on CAS main sub caused transaction-queue problem
CSCdy24897	SIP-T mime attachment lost Content-Transfer-Encoding
CSCdy25464	Sequence Number in EM_Header is always all zeros
CSCdy25505	Event_time in EM_Header is always all zeros
CSCdy25721	Traffic Measurements cannot be displayed.
CSCdy25777	EMA Cores at Trace statement in library
CSCdy26179	FEID truncated
CSCdy26223	Mate version comparison is not being done correctly, causing replication to fail
CSCdy26498	BTS fails to do an LNP dip on an 800 SCP response with a ported number
CSCdy27059	MGCP-TERM-INIT-LEVEL based initialization feature not working
CSCdy27392	PacketCable EM Time Change needed for Daylight savings etc.
CSCdy27461	CA sends RELCOMP w/cause 34 instead of 44 when channel is OOS
CSCdy27471	cos-restrict cannot be changed to null for subscriber
CSCdy27938	CNDB feature is not working properly.
CSCdy27991	Wrong Call-Type in Billing Record
CSCdy28423	circuits get hung when CALLP (another DS1) is received
CSCdy28597	Static build of rdm fails because of ssf and cnm libs.
CSCdy29533	Core dump when making DQoS to SIP call
CSCdy29653	Update TCA per code review
CSCdy29796	BTS does not check Radius authenticator
CSCdy30116	800 route by carrier without dial-plan, sub orig. is not working
CSCdy30150	Neg-testing after down/up pri & back dchannel unable to place new calls
CSCdy30736	No Answer Timers not working
CSCdy31014	Mac GUI will not start with telnet nor ssh

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdy31174	POTS is not exit after control FS switchover
CSCdy31394	MGA process does not update watchdog timer that cause pmg to go down
CSCdy31738	BTS10200 sends 2 8XX queries to FSAIN instead of 1.
CSCdy31758	Need to exclude optional fields for non required features on event Messages
CSCdy31787	CWD 2nd call hang up first, cant go back to 1st call
CSCdy31849	Dialed digits got lost for CAS DT package originated call
CSCdy32192	BCM cannot route the call fro MYLRN when received from LNP QUERY
CSCdy32231	CWD and CFNA interaction problem
CSCdy32927	NAS-IP-Address should precede Acct-STATUS-TYpe as per EM specifications
CSCdy33024	RDM CORE in sis_set_call_data due to error in sim_set_call_data
CSCdy33186	apache web server chunk handling vulnerability
CSCdy33199	CIDCW interaction with CFNA...call answered still forwarded
CSCdy33372	H323 SlowStart call should be Cleared if QOS ID is not present in TG
CSCdy33575	Invalid BCID Generated for IO2
CSCdy33996	tracechk tool erroneously reports failure
CSCdy34046	BCM Process not checking for the Mode in the MDCX.
CSCdy34052	Default codec for the china market should be PCMA
CSCdy34069	RKS does not switch back from file on recovery
CSCdy34092	NorthBound Traffic is not working
CSCdy34493	Time_Change EM not generated
CSCdy34737	Network Specific Toll Free to SS7 gives wrong CgPN
CSCdy34764	SS7 toll free call gets incorrect OLI parameter
CSCdy34800	CAS-RGW clear back fails after failover of call agent
CSCdy34827	If TCS is received before CreateCx call fails
CSCdy35288	SCF not handling SIP BYE message properly
CSCdy35321	Chg port on gw w/out putting OOS is bad
CSCdy35553	Support for ISUP trunk (IT) package for TGCP
CSCdy35572	RADIUS-PROFILE TSAP-ADDR accepts invalid IP address
CSCdy35653	no r-dir sent in LCO for RSVP and RSVP features fails
CSCdy35775	BCM dead after CA switchover, caused by SIM relation data mismatch
CSCdy35934	Provisioning of 30 and 60 minute Collection Intervals Not Functioning
CSCdy36739	CNAME does not work for SS7-MGCP and CFB to MGCP
CSCdy38886	Miscellaneous issues with software upgrade from 2.1 to 3.3
CSCdy38922	COT fails when process S7A4 initiates request
CSCdy39006	Circuits are IDLE instead of RBLK when ISDN_Farend_init=Y
CSCdy39080	Newly added mgw not get allocated to worker thread in warm start.
CSCdy39279	Formatting wrong if try to immediately perform second CA switchover
CSCdy39523	CA fail the call when a gate control msg received with unexpected contents
CSCdy40015	open cursor error received when adding subscribers
CSCdy40022	maximum open cursor exceeded error received for office-code
CSCdy40184	Redundant SigStart msg for wiretapped terminating subscriber

*CISCO CONFIDENTIAL***Table 3**    *Resolved Caveats (continued)*

<b>DDTS ID</b>	<b>Description</b>
CSCdy40193	Table region-profile runs out of mem in shared mem
CSCdy40392	DOMAIN_NAME_CACHING_UNSUPP=Y should be defaulted to N
CSCdy40603	Clearing of TMM Reports generates Error
CSCdy40763	COT Trace not generated
CSCdy40993	Call Park timed recall is not working
CSCdy41343	No signaling stop when called party is busy
CSCdy42347	stack dump for MGA watchdog expiry
CSCdy42999	TG-Usage Summary Requests Return Database is Void of Entries Error
CSCdy43074	Share Memory mismatch after subscriber do 2nd *52 (CHD)
CSCdy43667	H3A process heap memory leak under high traffic
CSCdy43779	potsctx_repl_verify unable to print assigned features in subscriber table
CSCdy43921	“CNM, GCM code review update”
CSCdy44248	Trunk-group restore does not clear LBLK term-fault reason
CSCdy45544	200 OK is sent for invalid RSIP
CSCdy45552	soak traffic with CFU caused sim core
CSCdy46445	AC did not function right after FS switchover
CSCdy46620	Traffic measurement via SNMP is broken
CSCdy46801	New process KMS needs to be created
CSCdy46823	RNI information incorrect
CSCdy46907	Can not delete token from table special-call-type
CSCdy47278	connect/disconnect glare between appl and stack
CSCdy47290	Hop tree goes out of memory during capacity testing
CSCdy47656	call not term. for LNP ported-out. interswitch LNP call
CSCdy48180	no STATUS(99) message when SETUP w/invalid IE is received
CSCdy48549	H3A cores during capacity if socket multiplexing is on
CSCdy49376	No Call Content on TWC
CSCdy50328	AC is not working for ported-out subscriber
CSCdy50355	BCM WatchDog timer exp because of RWLock in SHM
CSCdy50371	Billing (6) Event Not Being Generated
CSCdy51821	BCM use wrong index copying FEID for CALEA call
CSCdy51833	ISUP 7d call fails to LNP lookup when prefix digits done in dial-plan-profile
CSCdy51971	show event log causes java.lang.OutOfMemoryError and locks up session
CSCdy52459	H3A stack cores after making on-net to off-net call
CSCdy52935	Intralata 1+7D and 0+7D calls failing
CSCdy53116	Revised security features to harden OS and control services.
CSCdy53384	MGA stuck in termination recovery loop
CSCdy53639	platform goes down due to trace compaction thread watchdog timeout
CSCdy53811	CPA not checking 4 out of range message length
CSCdy54272	BTS send s=on in lco when MTA does not support it.
CSCdy54345	CNM changes to support packet cable security parameters
CSCdy54361	Forwarder phone continues ringing when CFNA to offnet via SIP trunk

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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdy56810	H3A crashes in CNM library
CSCdy56900	SIM: Build a tool to print sim state information from debug file
CSCdy57188	Data in RPC field in ss7_cic table should be derived from DPC
CSCdy57230	Potential routing problem under load when not using ras
CSCdy58053	800 call without CgPN does not perform local query.
CSCdy58505	TG-Usage Summary only Reports Data on First Trunk-Grp in Database
CSCdy59000	Retransmission of command to be done at least after 5 secs after receiving provisioning
CSCdy59156	ISDN PRI call fails when receiving STATUS after CONNECT
CSCdy59796	s7m/s7a robustness
CSCdy59856	SDP is not available when sip to rgw and CFNA to sip
CSCdy61413	PlatformLastChangeOverTime not maintained by KAM
CSCdy61657	lib/cslp/racf/racf_service_logic.c has incorrect number of TRACE argument
CSCdy61912	Call Forwarding features: necessary changes basing on deep code review
CSCdy61971	Basic DQoS calls not working
CSCdy62532	Data conversion from 2.1 to 3.3 upgrade
CSCdy64086	BTS changes LCO t: value in MDCX from what was specified in CRCX
CSCdy64095	TVT crashes
CSCdy64568	MGCP_PC_SEC_UNSUPP=N should be defaulted to Y
CSCdy65161	IC circuit gets hung when BCHAN_NEG_SUPP=N and CA receives diff. channel
CSCdy65277	incorrect event msg for SS7 traffic
CSCdy65902	RDM core when data is being replicated from 2.1 to 3.3
CSCdy66435	database mismatch when audit subscriber service profile sub id=xxxx
CSCdy66823	dial-plan table no longer able to prefix digits to 7 digit calls
CSCdy66933	need omni isup_conf_info file to address exception cases
CSCdy67124	Fail to insert Gate Alloc into AVLTREE
CSCdy68088	S7M died after call-agent switchover
CSCdy68921	name and number not toggle when *67 or *95 then *66 for AC/AR
CSCdy68965	No Answer Timer does not works for International Call.
CSCdy69550	SS7 call without CgPN cannot complete to DRCW line.
CSCdy71873	MGA core when running 15cps mgcp-ip hash table overflow warnings
CSCdy73195	BCM - COS with 0 or 00 Operator call fail
CSCdy73446	Event threshold broken for EGA -EMS has High CPU as a result
CSCdy74414	EM shared memory not replicated when EM-BILLING-SUPP changed
CSCdy74415	if dn2subscriber lnp_trigger=Y switch routing through destination
CSCdy74470	Trunk Terminations go to UNEQUIP during Reset operations
CSCdy74570	RDM Core
CSCdy74585	RES (resume) message is not passed out from the BTS to h323 trunk
CSCdy75622	Remove unused third party code for copyright reason
CSCdy75631	Step to alter tablespace temp missing from hotback DB recovery
CSCdy76172	Security pkg BTShard removes lines need by omni GUI from inetd.conf

*CISCO CONFIDENTIAL***Table 3**    *Resolved Caveats (continued)*

<b>DDTS ID</b>	<b>Description</b>
CSCdy76330	Incorrect TRACE syntax
CSCdy76337	fs/lib/tcaf/tcaf_lm_alarm_hdlr.c - incorrect TRACE syntax
CSCdy76361	ca/sga/sga_isup_handler.c has incorrect TRACE0 syntax
CSCdy77068	Upgrade from 3.1 to 3.3
CSCdy77830	BLP.log should not have password in plain text
CSCdy77879	SUBSCRIBER 1+TOLL fails when POP field ITP=N and trace level=5
CSCdy79347	Encoding error in LCO while sending MDCX for DQoS calls
CSCdy79840	needs to change mem.cfg files to reflect new changes in sizes for 3.3
CSCdy80000	BLV teardown send off hook warning tone to subscriber
CSCdy80674	BTS 3.3 Call Failure Trap not encoded correctly
CSCdy81971	Fix TRACEs in C++ code
CSCdy83677	AR - send sub id with garbage information
CSCdy84852	Need new triggers and scripts to limit EMS down time
CSCdy85362	SS7 Generic Name parameter sends 16 characters
CSCdy85597	Loading watchdog timer w/default in updateRSIPDelayInTermTable()
CSCdy85688	Connection is not deleted after user abandon the call with invalid digits.
CSCdy86352	BTS fails parsing SDP from Harris Modem
CSCdy89602	Service Instance EM has wrong RelBCID/BCID for Call Waiting
CSCdz00392	CA146: orphaned process found, switchover, SS7 failed
CSCdz00394	Alarm not defined correctly in ReportParameters.cfg
CSCdz01888	BLG core after blg dies and restarts
CSCdz03250	DQOS CFNA not working properly
CSCdz03461	IPmanager prog runs at wrong nice state
CSCdz04544	After installing security packages, the system must be rebooted at end of instal
CSCdz06016	EMA dies due to Recv thread watch dog
CSCdz06317	ISDN data got corrupted when upgrade load from 2.1 to 3.3
CSCdz06384	CALL_AGENT_TSAP_ADDR got corrupted in table rudp-backhaul-session
CSCdz06694	/opt become full, BDMS stopped generating CDR logs
CSCdz08090	connection is not cleared upon 502 Active connection exists
CSCdz08366	Changing MGCP-MAX-UNREACH-COUNT/MGCP-MAX-FAULT-COUNT lower bound to 0
CSCdz08396	Call is received on a non-existent termination CA seems to hang
CSCdz08396	Call is received on a non-existent termination CA seems to hang
CSCdz08484	International dial plan fails after 2.1 to 3.3 upgrade.
CSCdz08501	dchannel goes down/up intermittently
CSCdz08701	rel 2.1 upgrade fails to convert Mid-call feature
CSCdz09304	ISDN local call mapped to CdPN TON=3 (network specific)
CSCdz09797	ISDN tg-profile changed to inband-info=n on 2.1-3.3 upgrade
CSCdz09987	rel 2.1 upgrade fails to convert traffic_type in trunk-grp table.
CSCdz13178	ENHANCEMENT: RDM has to report replication status to nodestat
CSCdz15218	Software Upgrade: connection ID is not replicated during fallback



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Table 3 Resolved Caveats (continued)

DDTS ID	Description
CSCdz16674	CRCX_ACK was not reported to CNM for dollar CRCX
CSCdz19741	EM Service Activation not generated
CSCdz20056	Lost of dial-tone after recovery from lost of ip connectivity
CSCdz20947	annc trks are idle, calls get busy, annc trks hang
CSCdz21165	NOD_WB_LIST type for some block calls were set to NONE during upgrade.
CSCdz24192	Sync SUBSCRIBER_FEATURE_DATA cause oracle error
CSCdz24722	Call Agent passes call on a termination with ss7 cic table error
CSCdz24763	EMS gives Network Device Already in Use Errors Statusing Subscribers
CSCdz25893	G711u should map to PCMU in QOS table during 3.3 upgrade
CSCdz26349	data conversion for upgrade from 2.1->3.3
CSCdz26515	BTS generates incorrect Single Interface Restart message
CSCdz27017	BTS change packetization period to p:68
CSCdz27541	MGA core dumps after 11 hours of traffic
CSCdz28039	Traffic Not Being Collected After 10 Days of System Time
CSCdz29593	ANM core dump at startup
CSCdz29911	Wrong index_t is used for copying of sub index
CSCdz30985	Outgoing HB (Heart Beat) period exceeds MAX and shuts down platforms
CSCdz31231	BDMS01 OUT Service due to CallDetail table is full
CSCdz33172	3.3 to 2.1 fallback failed
CSCdz34907	tz_localtime is setting external variable tzname
CSCdz36027	data replication problem -- AVL tree corrupt for table trunk-grp
CSCdz36027	data replication problem -- AVL tree corrupt for table trunk-grp
CSCdz37559	Allow release 3.3 to be protocol compatible with ECN-02148
CSCdz40696	ISDN will cause CA out of service when fallback from 2.1 to 3.3
CSCdz43454	mga spitting out wrong trace: Invalid type of service, tos=255
CSCdz43543	BTS does not send DLCX after receiving a 526
CSCdz46560	ANM failed in ModifyCL
CSCdz46744	AUEP keep-alives (pings) stop after IP address change of MTA
CSCdz48149	Correct status application broken by CSCdz13178
CSCdz48216	s7a interworking, some ACMs result in progress=0 being sent to PRI
CSCdz52339	SIP sends privacy information to POTS in the CallingDN instead of separeate param
CSCic04603	Implement priority handling in IPC mechanism
CSCic05344	IPC pool status in the PDM tool is not displayed properly
CSCic06186	Additional DN2 Sub Entries can be added
CSCuk35667	ACR does not reject incoming call from SS7 with CLI missing

## Documentation Updates

This section contains known documentation changes.

## CISCO CONFIDENTIAL

The following information was changed in the *Cisco BTS 10200 Softswitch Command Line Interface Reference Guide* to reflect changes since Release 3.1:

- Deleted—DEFER value for the H245-TUNNELING token in the h323-gw table.  
The H323 gateway (h323-gw) table defines the capabilities of each H.323-based gateway. The H245-TUNNELING token in the h323-gw table previously accepted one of three values: DEFAULT, DEFER, or DISABLE.  
The requirement for the DEFER value was there because of a defect in IOS-based gateways, which has since been fixed. The DEFER value is not valid and is not accepted effective with Release 3.2. (See CSCdy55256, “SS7 to H323 with H.245 TUNNELING=DEFER does not complete.”)




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**Note** Changes applicable to a specific software release are so noted in the reference guide.

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The following information was added to the *Cisco BTS 10200 Softswitch Building Environment and Power Site Survey* for DC-powered systems:

- The nominal current rating for a complete Cisco BTS 10200 system is 26A at -48 VDC, and the maximum current rating is 40A at -48 VDC.

The following information was changed in the *Cisco BTS 10200 Softswitch Network Site Survey for Software Installation* to reflect changes to the opticall.cfg installation file since Release 3.1:

- Added—parameters for POTS TCA process
- Removed—Allow Telnet Sessions

The following information was changed in the *Cisco BTS 10200 Softswitch Network Information Data Sheet for Software Installation* to reflect changes to the opticall.cfg installation file since Release 3.1:

- Added—Target Market=North America




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**Note** Target Market=China is not valid for Release 3.3 V04.

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- Added—parameters for POTS TCA process
- Added—comment regarding MEM\_CFG\_SELECTION (not used)
- Added—comment on GDRS\_ENABLED parameter
- Added—comment on H323\_ENABLED parameter
- Added—BDMS INSTALLING LIST parameter
- Updated—DNS parameters (to match opticall.cfg file)
- Removed—Allow Telnet Sessions

## Related Documentation

The Release 3.3 Feature Modules and Release Notes should be used in conjunction with the following Cisco BTS 10200 Release 3.1, Release 3.2, and Release 3.3 documents:

- *Cisco BTS 10200 Softswitch Physical and Network Site Surveys and Data Sheets*
- *Cisco BTS 10200 Softswitch Cabling Procedures*
- *Cisco BTS 10200 Softswitch Application Installation Procedures*



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- *Cisco BTS 10200 Softswitch System Description*
- *Cisco BTS 10200 Softswitch Operations Manual*
- *Cisco BTS 10200 Softswitch Event Messages Guide*
- *Cisco BTS 10200 Softswitch Billing Interface Guide*
- *Cisco BTS 10200 Softswitch Command Line Interface Reference Guide*
- *Cisco BTS 10200 Softswitch CORBA Installation and Programmer's Guides*

All Cisco BTS 10200 Softswitch user documentation can be accessed through the following location:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/bts10200/index.htm>

The Cisco BTS 10200 Softswitch user documentation is password protected. Consult your Cisco representative for access.

## Feature Modules

Release 3.3 Feature Module documentation includes the following:

- *Cisco BTS 10200 Softswitch PacketCable Feature Module*
- *Cisco BTS 10200 Softswitch Inter-Office Auto Callback–Auto Recall Feature Module*

## Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>



**Note**

Documentation for the Cisco BTS 10200 on the World Wide Web sites listed above is currently available only through password access. Contact your Cisco representative for assistance.

### Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.



**Note**

Documentation for the Cisco BTS 10200 is not currently available on the Documentation CD-ROM.

## Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products Marketplace:  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
- Registered Cisco.com users can order Documentation CD-ROMs through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

## Documentation Feedback

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## Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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To access Cisco.com, go to the following website:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

### Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

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

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

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

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

### Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

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