



# Cisco BTS 10200 Softswitch SIP Call-Info Header Feature, Release 6.0.3

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The support for SIP Call-Info header in the inbound SIP invite message allows Cisco BTS 10200 Softswitch to process an incoming SIP call for a Call Forward Busy (CFB) subscriber based on the **purpose** parameter of the Call-Info header field.

When the **purpose** parameter is set to **answer\_if\_not\_busy**, BTS 10200 Softswitch ignores any active CFB service assigned for the target subscriber. That is, the softswitch does not forward calls when the target subscriber is busy. Instead, it processes the call as if CFB is inactive at the subscriber's terminal.

For more information on the CFB feature, see the [Subscriber Features](#) chapter of the *Cisco BTS 10200 Network and Subscriber Feature Descriptions Guide*.



**Note**

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The implementation of this feature is based on the Internet-Draft, *SIP Interconnect Guideline—draft-hancock-sip-interconnect-guidelines-03*.

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## Overview of the Feature

Currently, the BTS 10200 Softswitch ignores the **purpose** parameter received in the Call-Info header field of a SIP invite message. The support for the Call-Info header enables the BTS 10200 Softswitch to process an incoming SIP invite based on **purpose** parameter value, **answer\_if\_not\_busy**.



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When BTS 10200 Softswitch receives an inbound invite message with a Call-Info header field declaring **purpose=answer\_if\_not\_busy**, BTS 10200 ignores any active CFB service for the target subscriber, and does not forward the call if the target subscriber is busy. In such a situation, BTS 10200 Softswitch sends the following SIP response to the originating switch:

```
`486 Busy Here'
```

**Note**

The BTS 10200 Softswitch processes the **purpose** parameter only when the value is **answer\_if\_not\_busy**. All other values of **purpose** parameter are ignored.

However, when the target subscriber is unreachable, and the **FORWARD\_ON\_UNREACHABLE** token set to *Y* in the **FEATURE-CONFIG** table, the call is not forwarded, and BTS 10200 send the following SIP response to the originating switch:

```
`502 Bad Gateway'
```

## Provisioning the Feature

This section explains how to provision the feature. In this procedure, “you” refers to the service provider.

**Note**

The commands shown in this section are only examples; you need to enter values that are appropriate for your network and service requirements. The CLI syntax allows you to use commands in uppercase or lowercase. It also allows you to enter hyphens (-) or underscores (\_) interchangeably. (Exceptions, if any, are noted in the procedures.)

For a complete list of tokens for each CLI table, as well as the allowed values, default values, and detailed descriptions for each token, see the *Cisco BTS 10200 Softswitch CLI Database* at this website: [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/bts/6.0.3/BTS603\\_Mainpage.html](http://www.cisco.com/en/US/docs/voice_ip_comm/bts/6.0.3/BTS603_Mainpage.html)

You can provision the Call-Info header feature in the **SOFTSW\_TG\_PROFILE** table by using the **ENABLE\_CALL\_INFO\_HDR** token. When the value of **ENABLE\_CALL\_INFO\_HDR** is set to *Y*, and the Call-Info header in the inbound invite message contains **purpose** parameter =**answer\_if\_not\_busy**, the BTS 10200 ignores CFB feature for the target subscriber.

When the **ENABLE\_CALL\_INFO\_HDR** token set to *N*, the **purpose** parameter of Call-Info header is ignored by BTS 10200.

### SUMMARY STEPS

1. **add sip\_element**
2. **add softsw\_tg\_profile**
3. **add trunk\_grp**
4. **control sip\_element**
5. **control trunk\_grp**

## DETAILED STEPS

	Command	Purpose
Step 1	<b>add sip_element</b> tsap_addr=abc.xyz.cisco.com:5060;	Adds the SIP element.
Step 2	<b>add softsw_tg_profile</b> id=tg_profile-1; enable_call_info_hdr=Y; protocol_type=SIP;	Specifies if the Call-Info header should be processed by BTS 10200.
Step 3	<b>add trunk_grp</b> id=80032; softsw_tsap_addr=abc.xyz.cisco.com:5060; call_agent_id=CA146; tg_type= SOFTSW; tg_profile_id=80032; dial_plan id=abc5;	Adds the trunk group.
Step 4	<b>control sip_element</b> tsap_address= abc.xyz.cisco.com:5060; mode=FORCED; target_state=INS;	Places the SIP element in-service.
Step 5	<b>control trunk_grp</b> id=80032; mode=FORCED; target_state=INS;	Places the trunk group in-service.

## Managing the Feature

This section provides information that helps manage the Call-Info header feature.

The features interactions in BTS 10200 is impacted when the **purpose=answer\_if\_not\_busy** and the **enable\_call\_info\_hdr** is set to Y.

[Table 1](#) lists the interactions of Call-Info header feature with other features of the BTS 10200.

Table 1 Feature Interactions Table

ENABLE_CALL_INFO_HDR	Call Forward Busy (CFB)	Call Waiting (CW)	Call Forwarding No Answer (CFNA)	Voice Mail (VM) Busy	Call Forwarding Combination (CFC)	CW and CFNA	CW and CFB	Call Forward Not Reachable (CFNR)
Y	CFB is not invoked.	CW is invoked.	CFNA is invoked.	Call is not forwarded to voice mail when target subscriber is busy.	Call is not forwarded, when the target subscriber is busy. Call is forwarded when the target subscriber does not answer the call.	CW is invoked when target subscriber is busy. CFNA is invoked when target subscriber does not answer the call.	CW is invoked.	CFNR is invoked when the called subscriber is not reachable.
N	CFB is invoked.	CW is invoked.	CFNA is invoked.	Call is forwarded to voice mail when target subscriber is busy.	Call is forwarded if the target subscriber is busy or does not answer the call.	CW is invoked when target subscriber is busy. CFNA is invoked when target subscriber does not answer the call.	CW is invoked.	CFNR is invoked when the called subscriber is not reachable.

## Additional References

### Related Documents

Related Topic	Document Title
Summary of features and usage guidelines for this release	<a href="#">Cisco BTS 10200 Softswitch Release Notes</a>
Reference listing of all CLI tables and tokens	<a href="#">Cisco BTS 10200 Softswitch CLI Database</a>
SIP Features	<a href="#">Cisco BTS 10200 Softswitch SIP Guide, Release 6.0.x</a>
CFB, CW, CFNA, CFC and other call forwarding features	<a href="#">Cisco BTS 10200 Softswitch Network and Subscriber Feature Descriptions Guide</a>

## Standards

Standard	Title
SIP: Session Initiation Protocol", RFC 3261	<i>[SIP] "SIP: Session Initiation Protocol", RFC 3261, IETF, J. Rosenberg, H.Schulzrinne, G. Camarillo, A. Johnston, J. Peterson, R. Sparks, M. Handley, and E.Schooler, June 2002.</i>
The internet draft: "draft-hancock-sip-interconnect-guidelines-03"	<i>SIP Interconnect Guidelines</i>

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■ **Additional References**