



# CHAPTER 6

## References

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This chapter provides reference material applicable to the H.323 implementation.

### Interoperability Data for Cisco IOS, Cisco CallManager, and MGCP

Table 6-1 through Table 6-7 provide information on the interoperability of the Cisco BTS 10200 Softswitch with H.323 IOS-based gateways, Cisco CallManager, and MGCP-based gateways.

The call configurations use the designations A, B, and C:

**A = Input (incoming signaling from a remote endpoint)**

**B = MGCP-based subscriber line controlled by the Cisco BTS 10200 Softswitch, with the specific feature subscribed and activated**

**C = Output (outgoing signaling to a remote endpoint)**

Table 6-1 lists interoperability support for the Call Forwarding Unconditional (CFU) feature. In this case, the configured elements interoperate in the following manner:

A→B(CFU)→C — A calls B (B has CFU activated). The call is forwarded to C.

A↔C — A is connected to C.

**Table 6-1** CFU Interoperability Support Using H.323

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Supported
Cisco CallManager	H.323 IOS	Supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Supported
MGCP	H.323 IOS	Supported

**Table 6-1 CFU Interoperability Support Using H.323 (continued)**

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

[Table 6-2](#) lists interoperability support for the call forwarding busy (CFB) feature. In this case, the configured elements interoperate in the following manner:

A->B(CFB)->C — A calls B (B has CFB activated). The call is forwarded to C.

A<->C — A is connected to C.

**Table 6-2 CFB Interoperability Support Using H.323**

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Supported
Cisco CallManager	H.323 IOS	Supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Supported
MGCP	H.323 IOS	Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

[Table 6-3](#) lists interoperability support for the call forwarding no answer (CFNA) feature. In this case, the configured elements interoperate in the following manner:

A->B(CFNA)->C — A calls B (B has CFNA activated). The call is forwarded to C

A<->C — A is connected to C.

**Table 6-3 CFNA Interoperability Support Using H.323**

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Not supported
Cisco CallManager	H.323 IOS	Not supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Not supported
MGCP	H.323 IOS	Supported

**Table 6-3** CFNA Interoperability Support Using H.323 (continued)

A (Incoming)	C (Outgoing)	Supported or Not Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

Table 6-4 lists interoperability support for the three-way call (TWC) feature. In this case, the configured elements interoperate in the following manner:

A->B — A is connected to B.

B->C — B calls C to establish TWC.

A, B, C TWC — A, B, and C are connected on TWC.

**Table 6-4** TWC Interoperability Support Using H.323

A (Incoming)	C (Outgoing)	Supported or Not Supported
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Supported
Cisco CallManager	H.323 IOS	Supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Supported
MGCP	H.323 IOS	Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

Table 6-5 lists interoperability support for the call waiting (CW) and call waiting deluxe (CWD) features. In this case, the configured elements interoperate in the following manner:



**Note** The interoperability for this case applies with or without codec up-speed.

A<->B — A connected to B.

C->B — C calls B.

A is on hold C<->B — B puts A on hold, and C is connected to B.

**Table 6-5** CW and CWD Interoperability Support Using H.323

A (Incoming)	C (Outgoing)	Supported or Not Supported
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Supported

**Table 6-5 CW and CWD Interoperability Support Using H.323 (continued)**

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
Cisco CallManager	H.323 IOS	Supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Supported
MGCP	H.323 IOS	Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

**Table 6-6** lists interoperability support for the consultative call transfer (consultative CT) feature *without* codec speedup.



**Note** Consultative CT means that the transferring party (caller B) is connected to the transferred-to party (caller C) before completion of the connection of the transferred party (caller A) to caller C. Codec speedup refers to the transition to a codec type with a higher compression rate (such as PCMU or MCMA) during the call.

A<->B — A is connected to B.

A is on hold B->C — B puts A on hold, and calls C.

B<->C — B is connected to C.

B is on hook A<->C — B goes on hook, and A is connected to C.

**Table 6-6 Consultative CT without Codec Speedup—Interoperability Support Using H.323**

<b>A (Incoming)</b>	<b>C (Outgoing)</b>	<b>Supported or Not Supported</b>
H.323 IOS	H.323 IOS	Supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Supported
Cisco CallManager	H.323 IOS	Not supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Not supported
MGCP	H.323 IOS	Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

Table 6-7 lists interoperability support for the consultative call transfer (consultative CT) feature with codec speedup.

A<->B — A is connected to B.

A is on hold B->C — B puts A on hold, and calls C.

B<->C — B is connected to C.

B is on hook A<->C — B goes on hook, and A is connected to C.

**Table 6-7 Consultative CT with Codec Speedup—Interoperability Using H.323**

A (Incoming)	C (Outgoing)	Supported or Not Supported
H.323 IOS	H.323 IOS	Not supported
H.323 IOS	MGCP	Supported
H.323 IOS	Cisco CallManager	Not supported
Cisco CallManager	H.323 IOS	Not supported
Cisco CallManager	MGCP	Supported
Cisco CallManager	Cisco CallManager	Not supported
MGCP	H.323 IOS	Supported
MGCP	MGCP	Supported
MGCP	Cisco CallManager	Supported

## Related Documents

Related Topic	Document Title
Hardware and Software Interoperability with the Cisco BTS 10200 Softswitch	<i>Cisco BTS 10200 Softswitch Release Notes for Release 7.0</i>
General flow of provisioning steps	<i>Cisco BTS 10200 Softswitch Provisioning Guide, Release 7.0</i>
Reference information on all of the Cisco BTS 10200 CLI tables and tokens in the database	<i>Cisco BTS 10200 Softswitch CLI Database</i>
General troubleshooting information	<i>Cisco BTS 10200 Softswitch Troubleshooting Guide, Release 7.0</i>
General routing and dial plan procedures	<i>Cisco BTS 10200 Softswitch Routing and Dial Plan Guide, Release 7.0</i>

## Industry Standards

Standards	Title
ITU-T Recommendation H.323	<i>Packet-based multimedia communications systems, Draft v4 (11/2000)</i>

