



Introduction

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Introduction

Integration Description

Cisco\ Unity Connection supports PIMG integrations with the following phone systems.

Table 1: Supported Phone Systems for PIMG Integrations

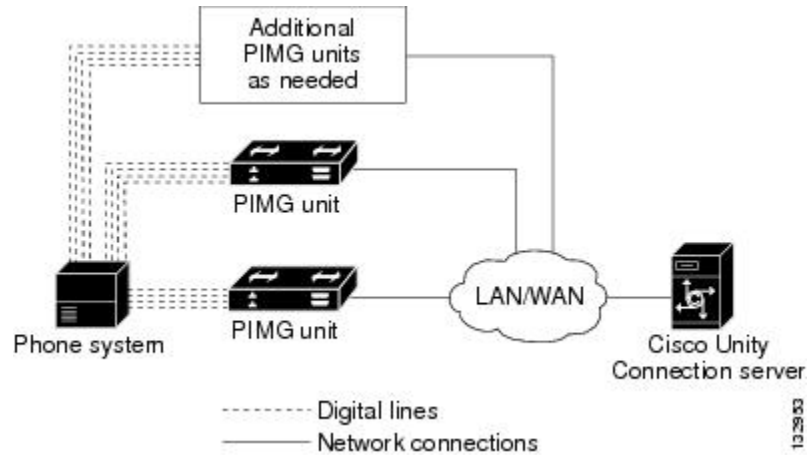
Phone System	Integration Type	Supported PIMG Units
Alcatel 4400	DTMF (analog)	Analog PIMG units (PIMG80LS or DMG1008LS)
Any phone system that provides a serial data link (SMDI, MCI, or MD-110 protocol) to the master PIMG unit	Serial (SMDI, MCI, or MD-110)	Analog PIMG units (PIMG80LS or DMG1008LS)
Avaya Definity G3	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Avaya Definity ProLogix	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Avaya S8300, Avaya S8500, and Avaya S8700	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Mitel SX-200	Digital	Digital Mitel PIMG units (PIMG80MTLPBXDNI or DMG1008MTLDNI)

Phone System	Integration Type	Supported PIMG Units
Mitel SX-2000	Digital	Digital Mitel PIMG units (PIMG80MTLPBXDNI or DMG1008MTLDNI)
NEC NEAX 2400	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Nortel Meridian 1 (includes Succession and SL 1)	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Rolm 9751 9005	Digital	Digital Rolm PIMG units (PIMB80RLMPBXDNI or DMG1008RLMDNI)
Rolm 9751 9006	Digital	Digital Rolm PIMG units (PIMB80RLMPBXDNI or DMG1008RLMDNI)
Siemens Hicom 150	DTMF (analog)	Analog PIMG units (PIMG80LS or DMG1008LS)
Siemens Hicom 300 E (European)	DTMF (analog)	Analog PIMG unit (PIMG80LS or DMG1008LS)
Siemens Hicom 300-series E (North American)	Digital	Digital PIMG units (PIMG80PBXDNI or DMG1008DNI)
Siemens Hipath 3550	DTMF (analog)	Analog PIMG units (PIMG80LS or DMG1008LS)
Siemens Hipath 4000	DTMF (analog)	Analog PIMG units (PIMG80LS or DMG1008LS)

Digital Integration with Digital PIMG Units

The phone system sends call information, MWI requests, and voice connections through the digital lines, which connect the phone system to the PIMG units (media gateways). The PIMG units communicate with the Unity Connection server through the LAN or WAN using Session Initiation Protocol (SIP). Figure 1-1 shows the required connections for a digital integration using digital PIMG units.

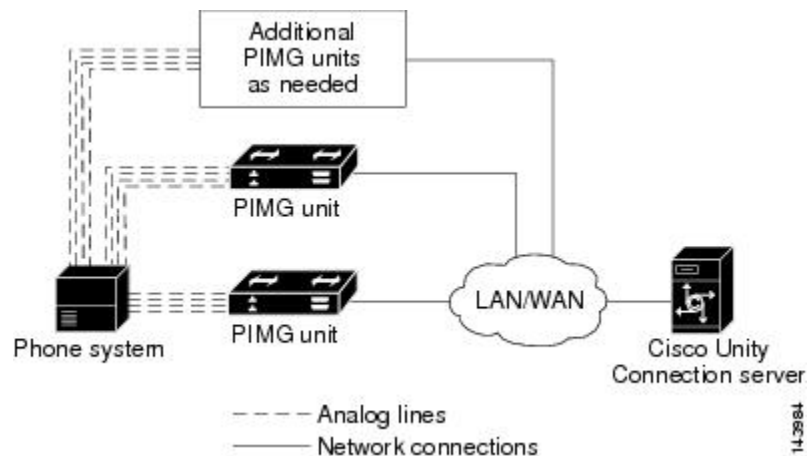
Figure 1: Figure 1-1 Connections for a Digital Integration by Using Digital PIMG Units



DTMF Integration with Analog PIMG Units

The phone system sends call information, MWI requests, and voice connections through the analog lines, which connect the phone system to the PIMG units (media gateways). The PIMG units communicate with the Unity Connection server through the LAN or WAN using Session Initiation Protocol (SIP). Figure 1-2 shows the required connections for a DTMF integration using analog PIMG units.

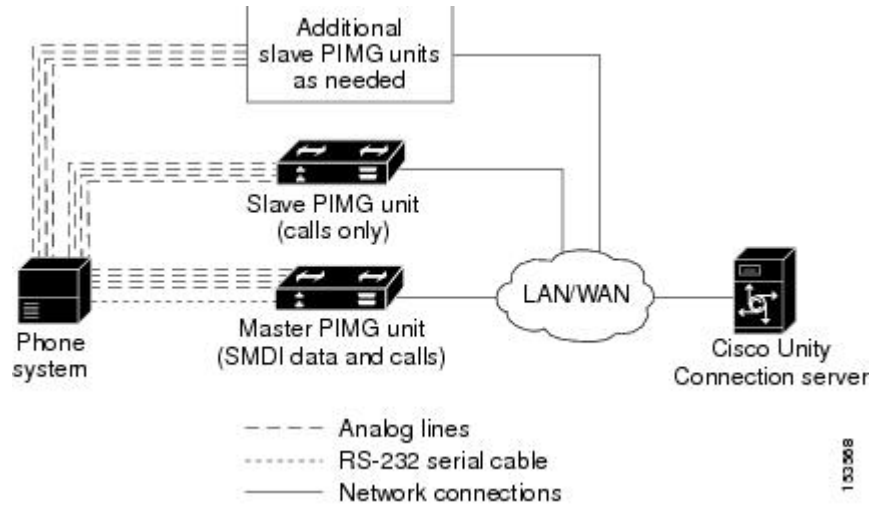
Figure 2: Figure 1-2 Connections for a DTMF Integration by Using Analog PIMG Units



Serial (SMDI, MCI, or MD-110) Integration with Analog PIMG Units

The phone system sends call information and MWI requests through the data link, which is an RS-232 serial cable that connects the phone system and the master PIMG unit (media gateway). Voice connections are sent through the analog lines between the phone system and the PIMG units. The PIMG units communicate with the Unity Connection server through the LAN or WAN using Session Initialization Protocol (SIP). Figure 1-3 shows the required connections for a serial integration using analog PIMG units.

Figure 3: Figure 1-3 Connections for a Serial (SMDI, MCI, or MD-110) Integration by Using Analog PIMG Units



Call Information

The phone system sends the following information with forwarded calls:

- The extension of the called party
- The extension of the calling party (for internal calls) or the phone number of the calling party (if it is an external call and the system uses caller ID)
- The reason for the forward (the extension is busy, does not answer, or is set to forward all calls)

Unity Connection uses this information to answer the call appropriately. For example, a call forwarded to Unity Connection is answered with the personal greeting of the user. If the phone system routes the call without this information, Unity Connection answers with the opening greeting.



Note Serial integrations send requests to turn on and turn off MWIs through the data link.

Integration Functionality

The PIMG integration provides the following integration features:

- Call forward to personal greeting
- Call forward to busy greeting
- Caller ID
- Easy message access (a user can retrieve messages without entering an ID because Unity Connection identifies the user based on the extension from which the call originated; a password may be required)
- Identified user messaging (Unity Connection identifies the user who leaves a message during a forwarded internal call, based on the extension from which the call originated)

- Message waiting indication (MWI)

Integrations with Multiple Phone Systems

Unity Connection can be integrated with two or more phone systems at one time. For information on the maximum supported combinations and instructions for integrating Unity Connection with multiple phone systems, see the *Multiple Phone System Integration Guide for Cisco Unity Connection Release 12.x* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/integration/guide/multiple_integration/b_cuc12xintmultiple.html.

Centralized Voice Messaging

Unity Connection supports centralized voice messaging through the phone system, which supports various inter-phone system networking protocols including proprietary protocols such as Avaya DCS, Nortel MCDN, or Siemens CorNet, and standards-based protocols such as QSIG or DPNSS. Note that centralized voice messaging is a function of the phone system and its inter-phone system networking, not voicemail. Unity Connection supports centralized voice messaging as long as the phone system and its inter-phone system networking are properly configured. For details, see the “[Centralized Voice Messaging](#)” section in the “Integrating Cisco Unity Connection with the Phone System” chapter of the *Design Guide for Cisco Unity Connection Release 12.x* at https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/12x/design/guide/b_12xcucdg.html.

