



# Cisco Small Business Unified Communications 300 Series

## Feature Reference Guide

January 2011



## Introduction

The Cisco Small Business Unified Communications 300 Series is a cost-effective, fully featured unified communications system for small businesses that delivers more, including integrated voice and data plus additional features designed and built specifically for small businesses. This complete communications solution is simple to buy, implement, and use and is backed by Cisco, the global leader in networking and voice.

Features and capabilities are listed by:

- Hardware platform
- Capacity
- Call control features
- Voicemail and auto attendant
- Administration and serviceability
- Voice features
- Messaging and collaboration
- Networking
- Management, reporting, and troubleshooting
- Supported solution components
- Country support

This document lists and describes the Cisco Unified Communications 300 Series system features and capabilities, many of which are configured using the integrated Cisco Configuration Utility. For more information on the Cisco Unified Communications 300 Series, go to ([www.cisco.com/go/uc300](http://www.cisco.com/go/uc300)).

| Category/Feature                                                 | Description                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hardware Platform</b>                                         |                                                                                                                                                                                                                                                                                    |
| Base platform                                                    | Sleek, small desktop form factor. Can be easily wall mounted. About the size of a paperback book.                                                                                                                                                                                  |
| 1 Gigabit Ethernet WAN port                                      | WAN interface to connect to the Internet. 10/100/1000 Mbps.                                                                                                                                                                                                                        |
| 4 Gigabit Ethernet LAN ports                                     | LAN interconnects to connect phones, switches, and voice gateways (such as the Cisco SPA8800).                                                                                                                                                                                     |
| 4 FXO ports                                                      | Ports that connect to analog lines.                                                                                                                                                                                                                                                |
| 1 FXS port                                                       | A port that connects to analog phones/fax machines.                                                                                                                                                                                                                                |
| 1 Wireless-B/G/N access point with 2 WLANs (SSID)                | Wi-Fi connectivity with speeds up to 110 Mbps. Can be used with both PCs and wireless IP phones with QoS.                                                                                                                                                                          |
| 1 music on hold (MOH) audio input port                           | Enables the user to connect a CD player/MP3 player to the Cisco UC320W. This music or message will be heard when any caller is put on hold. This could possibly be a recording that talks about the business and its products or services. Connector is a 3.5mm stereo audio jack. |
| 1 paging audio output port                                       | Connects to an overhead speaker system used for paging. Connector is a 3.5mm stereo audio jack.                                                                                                                                                                                    |
| 1 Wi-Fi Protected Setup (WPS) button                             | Provides a simple, easy, and quick way to set up Wi-Fi phones to operate wirelessly.                                                                                                                                                                                               |
| 1 reset button, using small business industrial design           | Keeping this button pressed for 10 seconds will restore the Cisco UC320W to factory defaults. Pressing it one time will cause the unit to reboot.                                                                                                                                  |
| <b>Capacity</b>                                                  |                                                                                                                                                                                                                                                                                    |
| Up to 24 phones, 1 embedded FXS port (25 endpoints)              | Endpoints can be Cisco SPA phones or third-party analog phones (with SPA8800 voice gateway).                                                                                                                                                                                       |
| 12 simultaneous calls                                            | Maximum number of calls that can be made external to the system at any given time.                                                                                                                                                                                                 |
| 8 automated attendant and 4 voicemail ports (simultaneous calls) | Maximum number of calls that can be made to the auto attendant and voicemail systems simultaneously.                                                                                                                                                                               |
| 4 SIP trunk accounts (destinations)                              | Maximum number of different SIP service provider accounts/ IP addresses that can be configured.                                                                                                                                                                                    |

| Category/Feature                                                                                       | Description                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Up to 12 FXO ports                                                                                     | With two Cisco SPA8800 voice gateways.                                                                                                                                                                                                                                                                        |
| Up to 9 FXS ports                                                                                      | With two Cisco SPA8800 voice gateways, plus 1 embedded FXS port.                                                                                                                                                                                                                                              |
| Up to 6 Wi-Fi phones                                                                                   | Maximum number of Cisco SPA525G/SPA525G2 IP phones that can be deployed wirelessly.                                                                                                                                                                                                                           |
| Mediatix 4400 digital gateways                                                                         | Mediatix 4400 digital gateways are for interfacing with ISDN Basic Rate Interface (BRI) circuits.                                                                                                                                                                                                             |
| <b>Call Control Features</b>                                                                           |                                                                                                                                                                                                                                                                                                               |
| Key system mode: Shared FXO analog lines assigned to phone keys/buttons.                               | In this mode the Cisco UC320W will emulate a squared key system (for example, direct access to trunk, line status, intercom, etc.).                                                                                                                                                                           |
| PBX mode: Steering digits                                                                              | Enterprise PBX capabilities (for example, extension-to-extension dialing, voicemail, etc.).                                                                                                                                                                                                                   |
| Auto registration and discovery for phones and gateways                                                | "Plug-and-play" for phones, analog lines for internal and external dialing.                                                                                                                                                                                                                                   |
| SIP trunking                                                                                           | SIP trunking with up to 8 calls per account. Up to 4 accounts total. SIP trunking enables businesses to route calls over the Internet, saving on phone costs.                                                                                                                                                 |
| Hunt groups: Sequential, last answered, random, and blast.                                             | Incoming calls are sent to several phones in a customizable fashion (for example, with a sequential group, phone 1 rings and then phone 2 and then phone 3). Also called ring groups.                                                                                                                         |
| Day/night ringing mode. Modes can be time based or mapped to a phone key and changed with key presses. | Incoming calls are routed to different destinations, depending on the time. (For example, calls go to reception during the day and voicemail during the night.) Day time and night time can be set either with a preset schedule or could be changed from day to night and night to day by using a key press. |
| Call forward (all, busy, no answer)                                                                    | Forward calls to a cell phone, voicemail, or home phone when employees are not available.                                                                                                                                                                                                                     |
| Call transfer (attended, blind)                                                                        | Ability to transfer calls from one phone to another, either internally or externally.                                                                                                                                                                                                                         |
| Conference (3 party)                                                                                   | Ability to conference 3 people into the same call.                                                                                                                                                                                                                                                            |
| Hold/resume                                                                                            | Ability to put a Caller on hold with a Phone button and then Resume the call when needed.                                                                                                                                                                                                                     |
| Music on hold (internal and external source)                                                           | Music played when a caller is put on hold. Music source could be a built-in file in the Cisco UC320W or an external music player with a stereo out jack.                                                                                                                                                      |
| Do not disturb (DND)                                                                                   | When in DND mode, any incoming calls will be forwarded immediately to voicemail or the set call forward destination.                                                                                                                                                                                          |
| Call pickup (directed and group)                                                                       | A call ringing on someone else's phone can be picked up. Group pickup help to identify the ringing phone.                                                                                                                                                                                                     |
| Call park and unpark, mapped to phone line keys                                                        | A call can be parked in a slot temporarily and someone else can pick it up on another phone.                                                                                                                                                                                                                  |
| Intercom                                                                                               | Provides the ability to make instant two way voice communications between two users in the system.                                                                                                                                                                                                            |
| Paging (5 paging groups, external)                                                                     | Internal paging: Provides the ability to make an announcement that is heard on several phones through the speaker on the phones.<br>External paging: Provides the ability to make announcements heard over an overhead speaker system.                                                                        |
| Shared extensions                                                                                      | Same extension on multiple phones.                                                                                                                                                                                                                                                                            |
| Busy Lamp field (BLF) with call pickup and speed dial support, mapped to phone line keys               | Provides the ability to see if another person is on the phone. Pickup support: Provides the ability to pick up a call that is ringing on the target phone. Speed dial: Provides the ability to one-touch dial the target phone.                                                                               |
| Speed dial, mapped to phone line keys                                                                  | One-touch dialing for a specified destination.                                                                                                                                                                                                                                                                |
| Direct inward dial numbers                                                                             | Provides the ability to reach an extension directly from outside.                                                                                                                                                                                                                                             |
| Backup route to public switched telephone network (PSTN)                                               | Redundancy between SIP calls and analog lines. When one fails, the other routes the call.                                                                                                                                                                                                                     |
| Corporate directory                                                                                    | Directory/contacts on phones. Includes local phones and up to 100 external entries.                                                                                                                                                                                                                           |
| Call waiting                                                                                           | Call waiting notification on phone when user is on another call.                                                                                                                                                                                                                                              |
| Support for ISDN BRI                                                                                   | Support for BRI through Mediatix 4400 series gateway.                                                                                                                                                                                                                                                         |
| Additional extensions                                                                                  | Phone users can have more than one extension.                                                                                                                                                                                                                                                                 |
| Caller ID block                                                                                        | Ability to block outbound caller ID.                                                                                                                                                                                                                                                                          |
| Direct Dial to Voicemail                                                                               | Ability to dial a prefix digit to an extension to reach voicemail directly.                                                                                                                                                                                                                                   |
| Dial plan for SIP trunk or FXO                                                                         | Choose dial plan based on country/locale.                                                                                                                                                                                                                                                                     |
| Alternate routing between SIP/FXO                                                                      | Calls are routed through FXO on SIP trunk failure or vice versa.                                                                                                                                                                                                                                              |

| Category/Feature                                                      | Description                                                                                                                                                                                                         |
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| <b>Voicemail and Auto Attendant</b>                                   |                                                                                                                                                                                                                     |
| Auto attendant submenu/multilevel (2x9)                               | Auto attendant helps greet callers to your business and then takes caller input to route calls automatically to the correct destination.                                                                            |
| Time-based auto attendant: Customizable                               | Auto attendant behavior is different depending on the time of day. Prompts and behavior are customizable per business requirements.                                                                                 |
| Voicemail                                                             | 25 individual voice mailboxes with customization of unavailability message, and message waiting notifications.                                                                                                      |
| Virtual mailboxes/group mailboxes: Hunt groups and shared extensions  | 15 virtual/group voice mailboxes with message waiting notifications.                                                                                                                                                |
| Customizable auto attendant menu                                      | Ability to record customer auto attendant prompts.                                                                                                                                                                  |
| <b>Administration and Serviceability</b>                              |                                                                                                                                                                                                                     |
| Intuitive, easy-to-use Configuration Utility (GUI)                    | State of the art interface makes configuration easy and intuitive.                                                                                                                                                  |
| Configuration through external comma-separated value (CSV) file       | Ability to do bulk provisioning selectively by importing CSV files for configuring users, holidays, etc.                                                                                                            |
| Remote administrator access (HTTPS)                                   | Highly secure access to the Cisco Simple Configuration Utility admin webpage from the Internet for remote administration.                                                                                           |
| Configuration of SIP trunk parameters                                 | Partners could change parameters on SIP trunk to ensure interoperability with various SIP trunk providers.                                                                                                          |
| Support for a save/restore of the system configuration                | Ability to backup and restore configuration.                                                                                                                                                                        |
| Syslog/debug traces                                                   | Ability to collect traces/debugs that will help Support troubleshoot.                                                                                                                                               |
| Feedback tool                                                         | Ability to send feedback automatically to Cisco.                                                                                                                                                                    |
| Automatic update notification                                         | When firmware updates are available, administrator is prompted to upgrade automatically.                                                                                                                            |
| <b>Voice Features</b>                                                 |                                                                                                                                                                                                                     |
| G.711 $\mu$ -law/A-law                                                | Regular telephony codec.                                                                                                                                                                                            |
| G.729a                                                                | Compressed codec for voice over Internet.                                                                                                                                                                           |
| Echo cancellation (G.165/G.168)                                       | Echo cancelling algorithm cancels any residual echo on calls.                                                                                                                                                       |
| Dual-tone multi-frequency (DTMF) digits in-band                       | Tone/DTMF carried in the voice stream.                                                                                                                                                                              |
| DTMF Session Initiation Protocol (SIP) info                           | Tone/DTMF carried in SIP signaling.                                                                                                                                                                                 |
| DTMF Real-Time Transport Protocol (RTP) events                        | Tone/DTMF for compressed codecs.                                                                                                                                                                                    |
| G.711 pass-through: fax                                               | Fax support over G.711 codec.                                                                                                                                                                                       |
| T.38 support                                                          | Fax over IP standard.                                                                                                                                                                                               |
| <b>Messaging and Collaboration</b>                                    |                                                                                                                                                                                                                     |
| Voicemail: Individual and group mailboxes                             | Voice mail functionality is available for individual as well and for groups.                                                                                                                                        |
| Voice-to-email notification with attachment                           | The UC320W has the ability to send voicemails to phone users email addresses as attachments.                                                                                                                        |
| Corporate directory (internal and external)                           | Directory of users with phone numbers that can be accessed from any phone screen.                                                                                                                                   |
| <b>Networking Features</b>                                            |                                                                                                                                                                                                                     |
| LAN switching with VLAN support for voice and data                    | Switch built into the Cisco UC320W supports separate VLANs for voice and data.                                                                                                                                      |
| Dynamic Host Configuration Protocol (DHCP) server                     | Server that serves IP addresses to devices.                                                                                                                                                                         |
| VLAN discovery using Cisco Discovery Protocol                         | Phones are able to automatically discover voice and data VLANs when plugged into the Cisco UC320 and thus are able to separate voice from data.                                                                     |
| Wireless LAN, dual Service Set Identifiers (SSIDs) for voice and data | Two wireless networks, one for voice and one for data.                                                                                                                                                              |
| Layer 2 and Layer 3 QoS packet marking on WAN                         | Quality of service enables voice to be transmitted across a well-designed network without loss in quality.                                                                                                          |
| Support for deployment with Microsoft Small Business Server (SBS)     | Cisco UC320W can be configured to coexist with a Microsoft SBS server that is configured as a DHCP server.                                                                                                          |
| QoS bandwidth setting (uplink) with rate limiting                     | Helps maintain voice quality over the Internet. When the correct uplink bandwidth is entered, the Cisco UC320 will perform bandwidth shaping and policing to ensure that voice is given priority over data traffic. |

| Category/Feature                                                                              | Description                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network Address Translation                                                                   | Use one public IP address for use with multiple devices.                                                                                                     |
| Support for basic firewall                                                                    | Basic firewall provides support for port forwarding and inbound firewall.                                                                                    |
| <b>Management, Reporting, and Troubleshooting</b>                                             |                                                                                                                                                              |
| Embedded web-based configuration utility for installation, configuration, and maintenance     | The Cisco Configuration Utility allows the Cisco UC320W to be configured and maintained easily.                                                              |
| Debug and syslog tool                                                                         | Ability to collect traces/debugs that help Support troubleshoot.                                                                                             |
| Call detail records (CDR)                                                                     | A record of all external calls made through the system, along with details regarding the call, including duration of call, caller number, and called number. |
| CDR reporting tool                                                                            | A tool that helps filter CDRs to obtain information that helps verify bills, etc.                                                                            |
| <b>Supported Solution Components</b>                                                          |                                                                                                                                                              |
| Cisco SPA300 and SPA500 IP phones                                                             | Cisco small business IP phones.                                                                                                                              |
| Support for SPA500S Expansion Module                                                          | Side car allows additional buttons to be added to an existing SPA phone. Up to 64 buttons available via 2 SPA500S expansion modules.                         |
| Cisco SPA8800 PSTN gateway (4 FXS plus 4 FXO): maximum of 2                                   | SPA 8800 allows the addition of 4 FXO / Analog lines and 4 FXS / Analog phones to an existing UC320. Up to 2 SPA 8800s can be added to UC320.                |
| Mediatix 4400 ISDN digital gateway (1, 2, or 4 BRI ports): maximum of 1                       | Mediatix gateways allow the addition of ISDN BRI interface to the UC320.                                                                                     |
| Cisco ESW 500 and Cisco SF/SG300 Series switches                                              | Cisco recommends ESW 500 series switches for deployment with UC300. SF 300 / SG 300 series switches require additional configuration.                        |
| Cisco SRP 500 Series Services Ready Platforms for access interface if different from Ethernet | SRP 500 series for Advanced Routing Capabilities                                                                                                             |
| Cisco SA 500 Security Appliances for advanced Internet security                               | SA500 series for Advanced Security                                                                                                                           |
| Cisco SPA525G2 phone in wireless mode                                                         | SPA525G2 phone is a high end small business phone with color displays, Bluetooth functionality, MP3 playback, etc.                                           |
| <b>Country Support</b>                                                                        |                                                                                                                                                              |
| USA                                                                                           | English                                                                                                                                                      |
| Canada                                                                                        | English and French                                                                                                                                           |
| United Kingdom                                                                                | English                                                                                                                                                      |
| Australia                                                                                     | English                                                                                                                                                      |
| New Zealand                                                                                   | English                                                                                                                                                      |
| Hong Kong                                                                                     | English                                                                                                                                                      |



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