Smart Business Communications System Feature Configuration Guide

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Introduction

Cisco Configuration Assistant (CCA) simplifies the task of configuring, deploying and administering the Cisco Smart Business Communications System (SBCS) -- a complete system of advanced voice, data, security, and wireless networking products designed specifically for small and medium-sized businesses. Cisco Configuration Assistant improves network security and performance and substantially reduces deployment and configuration time. This PC-based application features a simple graphical user interface (GUI) and provides everything required to quickly set up a small office network.

Cisco Configuration Assistant provides:

- Configuration, deployment, and ongoing network management support for the Cisco Smart Business Communications System
- Multiple network views
- Simplified network reporting
- Drag and drop software updates
- Troubleshooting

This document provides guidance to partners on the features that are supported within CCA Release 1.5 and what to use instead for features that are unsupported in CCA, for example Command Line Interface (CLI) or the Cisco Unity Express (CUE) GUI. The information is categorized by Voice, Switching, Wireless and Security.

Download Cisco Configuration Assistant at no charge at www.cisco.com/go/configassist by selecting the "LAN Network Management" option.

CCA Voice Feature Support

The following table lists the voice features that are supported by CCA 1.5 and those that require the use of other interfaces.

Table 1

CCA Voice Feature Support					
Category	**Feature**	**v 1.0**	**v 1.1**	**v 1.5**	**Description**
Basic Network Config					
	WAN IP Address	✓	✓	✓	
	DHCP	✓	✓	✓	
	Time Zone	✓	✓	✓	
	Data & Voice VLANs	✓	✓	✓	IP Address on pre-existing data VLAN (VLAN 1) cannot be changed via CCA. Use CCA to create a new VLAN if required
	Routing	✓	✓	✓	Only Static Routing supported
Voice Deployment Scenarios					
	Key System / Square Mode	✓	✓	✓	Supported for FXO and T1/E1 CAS
	PBX Mode	✓	✓	✓	Support for DID and DOD
	Hybrid Mode (Key System with AA)			✓	Adds AA support to Key System mode
	Remote Teleworker	✓	✓	✓	
	Multi-site SBCS deployment				Supported via CLI only
Key System Deployment					
	Trunk Monitor	✓	✓	✓	Supported for pure Key System (w/o AA)
	Paging Groups	✓	✓	✓	
	Intercom	✓	✓	✓	Multiple intercom is CLI. Only supported on button #2
	Speed Dials			✓	System Speed Dials supported via CCA. All others must be configured via CLI
	CO Trunk (FXO)	✓	✓	✓	Trunk line appearances on IP Phones
	Analog DID			✓	Only supported on the expansion VIC slot
	BRI	✓	✓	✓	Not supported on BRI SKU (unless VIC slot has FXO/T1/E1 module)
	T1 (PRI) including fractional		✓	✓	
	E1(PRI) including fractional		✓	✓	
	T1 (CAS) including fractional			✓	E&M (Wink Start & Immediate Start signaling types supported). For FXS/FXO, loop start and ground start signaling types supported.

	E1(CAS) including fractional			✓	E&M (Wink Start & Immediate Start signaling types supported). For FXS/FXO, loop start and ground start signaling types supported.
	Auto Attendant			✓	Only supported in Hybrid of Key System & PBX. Incoming call handed off to AA.
	E1 - R2				Supported via CLI only
	FXO Hook Flash				Supported via CLI only
	Busy Lamp Field (BLF)				Supported via CLI only
	Line Monitoring				Supported via CLI only

Dial Plan (PBX Mode)

Inbound Call Handling	✓	✓	✓	Call handling for FXO, BRI/T1/E1 incoming call handling mechanism
Outbound Call Handling	✓	✓	✓	Ability to specify multiple emergency numbers, customized call blocking capability
PSTN Number Mapping (DID)			✓	Ability to 1-to-1 and 1-to-many DID to internal extension mapping.
Call Forward Busy	✓	✓	✓	Not supported for non-primary dn - requires CLI
Call Forward No Answer	✓	✓	✓	Not supported for non-primary dn - requires CLI
Inbound Caller ID Support	✓	✓	✓	Supported onFXO, BRI, PRI, SIP
Outbound Caller ID Support	✓	✓	✓	Supported on BRI, PRI, SIP. If DID range is non-contiguous, outbound caller ID is AA number.
Caller ID blocking	✓	✓	✓	
Call Blocking	✓	✓	✓	Added ability to customize upto 5 call block numbers or ranges
Outbound Dialing Restrictions (COR)	✓	✓	✓	Based on outgoing dial-plans. Only North American dial plans supported. Limited support for outside US. Customization for outside US requires CLI.
After Hours Dialing Restrictions				Supported via CLI only

PSTN Trunks(PBX Mode)				
CO Trunk (FXO)	✓	✓	✓	Call handling per FXO port can be customized to redirect to AA/operator/hunt group/shared line, etc
Analog DID			✓	Only supported on the expansion VIC slot
BRI	✓	✓	✓	
T1 (PRI) including fractional		✓	✓	
E1(PRI) including fractional		✓	✓	
T1 (CAS) including fractional			✓	E&M (Wink Start & Immediate Start signaling types supported). For FXS/FXO, loop start and ground start signaling types supported.
E1(CAS) including fractional			✓	E&M (Wink Start & Immediate Start signaling types supported). For FXS/FXO, loop start and ground start signaling types supported.
E1 - R2				Supported via CLI only
Analog Station Ports (Integrated FXS)	✓	✓	✓	Outbound Caller ID supported via CLI only
SIP Trunks	✓	✓	✓	Added support for AT&T in CCA 1.5. Other providers may require CLI configuration.

Voice System Features(PBX Mode)				
Call Pickup	✓	✓	✓	
Call Park	✓	✓	✓	
Hunt Groups	✓	✓	✓	Final destination parameter unsupported
Paging Groups	✓	✓	✓	
Intercom	✓	✓	✓	Multiple intercom is CLI. Only supported on button #2
Adhoc Conferencing			✓	For 8/16 user system, max number of conferences is 4. For 32/48 user system, this limit is at 8.
MeetMe Conferencing				Supported via CLI only
Basic Automatic Call Distribution				Supported via CLI only
Night Service				Supported via CLI only
URL Provision				Supported via CLI only
FAX support				Supported via CLI only
CDR Integration				Supported via CLI only

Users/phones/extensions(PBX Mode)				
Multiple extensions per phone			✓	
Shared line			✓	Cannot share primary DN

	2 calls per line	✓	✓	✓	
	Overlay DN			✓	Cannot overlay primary DN. Use CLI for Call Waiting Overlay
	Busy Line Monitoring			✓	
	PSTN Line Appearance	✓	✓	✓	
	Speed Dials			✓	System Speed Dials supported via CCA. All others must be configured via CLI
	SIP Phone support			✓	Cisco 39xx only
	Soft Key Templates				Supported via CLI only
	Extension Mobility				Supported via CLI only
	Distinctive Ring/Silent Ring				Supported via CLI only
Voice Mail (PBX Mode and Key System Mode)					
	Mailbox	✓	✓	✓	
	Voice View Xpress	✓	✓	✓	Automatically configured by CCA
	IMAP	✓	✓	✓	Automatically configured by CCA. IMAP client must be configured manually.
	Greeting				Administered by Telephony UI
	Message Notification (Email/page)				Supported via CUE GUI only
Auto Attendant (PBX Mode and Hybrid Mode)					
	AA_transfer script customization			✓	
	AA_SBCS_v01 script support				Supported via CUE GUI and CLI
	Custom Script creation				Requires CUE Script Editor ver 2.3.4
	Prompt mgmt				Supported via CUE GUI and CLI
	Holiday/Business Hrs				Requires CUE GUI + script modification
UC-520 Administration (All Deployment Modes)					
	Backup/Restore of Config/Data	✓	✓	✓	Both UC-520 and vmail data backed up. Vmail only works with CUE 2.3.x (CUE 3.0 not supported)
	Reset to factory default			✓	
	IOS Upgrade	✓	✓	✓	drag-n-drop
	CME/CUE localization	✓	✓	✓	
	Phone loads	✓	✓	✓	Phone loads should be in the phone load folder in CCA
	Music on Hold (MOH)	✓	✓	✓	.au & .wav files can be drag-n-dropped
	CUE upgrade				Supported via CLI only
	Ring tones	NA	NA	NA	Included in 4.2.5 s/w bundle

	Background Images	NA	NA	NA	Included in 4.2.5 s/w bundle
Remote Teleworker Deployment					
	Video Support via VT Advantage	NA	NA	NA	Point-to-Point supported via UC-500 default config
	Soft phone (CIPC)	✓	✓	✓	
	871W	✓	✓	✓	EzVPN Client on 871W
	Codec Config				Supported via CLI only
	Firewall/NAT Traversal(MTP)				Supported via CLI only
	Transcoding				Supported via CLI only
Multi-site SBCS Deployment					
	H.323 and SIP VoIP parameters				Supported via CLI only
	Call admission control (CAC)				Supported via CLI only
	Vmail Networking (VPIM)				Supported via CUE GUI only
	Broadcast lists				Supported via CUE GUI only
	Distribution list				Supported via CUE GUI only

CCA Switching Feature Support

The following table lists the switching features that are supported by CCA 1.5 and those that require the use of other interfaces.

Table 2

CCA Switch Feature Support					
Category	**Feature**	**v 1.0**	**v 1.1**	**v 1.5**	**Description**
Layer 2 Switching					
	Spanning Tree Protocol	✓	✓	✓	• Fast convergence using 802.1w, enabled by default • Portfast: supported on "Desktop," "Phone + Desktop," "Printer," and "Server" Smartports roles
	MAC addresses	✓	✓	✓	8000 MAC addresses
	Virtual LANs (VLANs)	✓	✓	✓	Up to 32 VLANs (1000 range) and support for 802.1Q trunking using Cisco Smartports
	Number and type of queues	✓	✓	✓	• 4 queues per port • Shaped Round Robin (SRR) queuing • Support for differentiated services code point (DSCP) and class of service (CoS) using Cisco Smartports
	Port grouping	✓	✓	✓	• Support for Cisco EtherChannel® and IEEE 802.3ad • Up to 6 groups • Up to 8 ports per group
Smartports (Preset Cisco Recommended Network Enhancements, QoS, and Security)					
	Desktop	✓	✓	✓	• Optimized for desktop connectivity • Configurable VLAN setting • Port security enabled to limit unauthorized access to the network
	IP Phone + Desktop	✓	✓	✓	• Optimized QoS for IP phone + desktop configurations • Voice traffic is placed on "Cisco-Voice" VLAN • Configurable data VLAN • QoS level assures voice-over-IP (VoIP) traffic takes precedence • Port security enabled to limit unauthorized access to the network
	Router	✓	✓	✓	Configured for optimal connection to a router or firewall for WAN connectivity
	Switch	✓	✓	✓	• Configured as an uplink port to a backbone switch for fast convergence • Enables 802.1Q trunking
	Access Point	✓	✓	✓	• Configured for optimal connection to a wireless access point • Configurable VLAN
	Server	✓	✓	✓	Can be classified as trusted, critical, business, or standard server: • Trusted: for use with Cisco CallManager Express, same QoS setting as voice (VoIP traffic is prioritized) • Critical: for critical servers with QoS set higher than default • Business: default setting; QoS higher than desktop Internet traffic • Standard: for servers set to same level as regular desktop Internet traffic Configurable VLAN port security enabled to limit unauthorized access to the network

	Printer	✓	✓	✓	• QoS settings for "Printer" are the same as "Desktop," "Access Point," and "Standard Server"
					• Configurable VLAN
					• Port security enabled to limit unauthorized access to the network
	Guest	✓	✓	✓	• Guests are allowed access to the Internet, but not to the company network
					• All guest ports are placed on the "Cisco-Guest" VLAN
					• Port security enabled to limit unauthorized access to the network
	Other	✓	✓	✓	• "Other" Smartports role allows for flexible connectivity of nonspecified devices
					• Configurable VLAN
					• No security
					• No QoS policy
	Diagnostic	✓	✓	✓	Customers can connect diagnostics devices to monitor traffic on other switches (configurable using Cisco Configuration Assistant only)
Security					
	SSL	✓	✓	✓	SSL support: encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
	Security policy slider	✓	✓	✓	Three security levels: low, medium, and high (configurable using Cisco Configuration Assistant only): • Low: for business environments where there is limited guest access; limited number of devices are allowed per port • Medium: for business environments where security is important; only authorized devices (by MAC address) are allowed on the company network • High: for business environments where security is critical; only authorized devices (by MAC address) and authenticated users (using IEEE 802.1x) are allowed on the company network
	Multicast	✓	✓	✓	• High-bandwidth video traffic is optimized so that it does not affect other applications on the network. • Internet Group Management Protocol (IGMP) (v1, v2, and v3) snooping: IGMP snooping constrains multicast traffic at Layer 2 by configuring Layer 2 LAN ports dynamically to forward multicast traffic only to those ports that want to receive it.

CCA Wireless Feature Support

The following table lists the wireless features that are supported by CCA 1.5 and those that require the use of other interfaces.

Table 3

CCA Wireless Feature Support					
Category	**Feature**	**v 1.0**	**v 1.1**	**v 1.5**	**Description**
Basic Device Config					
	Host Name	✓	✓	✓	
	System Time	✓	✓	✓	
	Day-Light Saving Time	✓	✓	✓	AAP521 only
	Time Zone	✓	✓	✓	
	NTP	✓	✓	✓	
	HTTP Authentication	✓	✓	✓	AAP521 only
	Enable Password	✓	✓	✓	AAP521 only
	Local User Name & Password	✓	✓	✓	
	Telnet & Console Passwords	✓	✓	✓	AAP521 only
	VLAN	✓	✓	✓	For AAP521, VLAN is created as part of WLANs
	Data, Voice and Guest VLANs Usability			✓	WLC526 only
	Save Configuration	✓	✓	✓	
WLAN Deployment Scenarios					
	WLAN	✓	✓	✓	
	Data WLAN Usability			✓	WLC526 only with version 4.2.x.x
	Voice WLAN Usability			✓	WLC526 only with version 4.2.x.x
	Guest VLAN Usability			✓	WLC526 only with version 4.2.x.x
	Secure Authentication	✓	✓	✓	WEP, EAP, WPA, WPA-PSK, WPA2, WPA2-PSK, MAC, MAC+EAP
	Web Authentication			✓	WLC526 only with version 4.2.x.x
	Fast Roaming (CCKM)			✓	WLC526 only with version 4.2.x.x
	Voice CAC			✓	WLC526 only with version 4.2.x.x
WLAN Users					
	Guest User			✓	WLC526 only with version 4.2.x.x
	non-Guest User			✓	WLC526 only with version 4.2.x.x
	Web Login Page			✓	WLC526 only with version 4.2.x.x; both internal & customized web login page
Convert To LAP					
	Convert AAP to LAP			✓	AAP521 only

Reports					
	Inventory	✓	✓	✓	LAP521s are displayed under their respective WLC526
	Wireless Radios	✓	✓	✓	WLC526 only
	Wireless Clients	✓	✓	✓	WLC526 only
Views					
	Topology	✓	✓	✓	
	Front Panel View			✓	WLC526 only
Monitor					
	Events	✓	✓	✓	Includes acknowledgements
	System Messages	✓	✓	✓	
Maintenance					
	Software Upgrade	✓	✓	✓	
	Configuration Archive	✓	✓	✓	Includes RMA setup
	Restart (i.e. reboot)	✓	✓	✓	
	Reset to Factory Default			✓	
	Upload Troubleshooting Log			✓	
Out-0f-box Setup					
	Device Setup Wizard			✓	WLC526 only with version 4.2.x.x
Online Help					
	All Features	✓	✓	✓	Per device type context
	Wireless Client Setup			✓	
	7921 Mobile IP Phone Setup			✓	

CCA Security Feature Support

The following table lists the security features that are supported by CCA 1.5 and those that require the use of other interfaces.

Table 4

CCA Security Feature Support					
Category	**Feature**	**v 1.0**	**v 1.1**	**v 1.5**	**Description**
Firewall					
	Application firewall	✓	✓	✓	• Provides high, medium, and low security levels for firewall policy settings to enable accelerated and easy deployment • Low-For business environments that do not need to track P2P and IM applications on the network or check for protocol conformance • Medium-For business environments where security is important and there is a need to track the use of IM and P2P applications and check for HTTP and e-mail protocol conformance • High-For business environments where security is critical, and there is a need for protocol anomaly detection services to drop non conformant HTTP and e-mail traffic and prevent use of P2P and IM applications
VPN					
	Cisco Easy VPN Remote	✓	✓	✓	Scalable, easy-to-manage, secure remote access for teleworkers or small offices on hub routers or branch office access routers
	Cisco Easy VPN Server	✓	✓	✓	Offers wizard-based configuration of remote-access VPN server configuration for UC-500
	Split Tunneling	✓	✓	✓	
Other					
	SSL- and SSHv2-based Secure Remote Access	✓	✓	✓	• Provides for secure management between PC and UC-500 • Automatically uses SSHv2 for all encrypted communication between CCA and UC-500
	Network Address Translation (NAT)	✓	✓	✓	1-to-1 static port mapping for TCP and UDP ports
	DMZ	✓	✓	✓	A DMZ network enables Internet users to access a company's public servers, including Web and File Transfer Protocol (FTP) servers, while maintaining security for the company's private LAN.
	Security Audit	✓	✓	✓	• Assesses vulnerability of existing UC-500 • Provides quick compliance to best-practices (Cisco TAC, ICSA recommendations) security policies for UC-500