Overview

# Models

HP VCX Connect 200 Unified Communications Primary Server HP VCX Connect 200 Unified Communications Secondary Server

JC518A JC519A

# **Key features**

- Cost-effective, enterprise-class VoIP platform
- Built-in phone, messaging, and softphone licenses
- Resiliency with optional redundant server
- Voice, video, IM, MS OCS/Lync, Exchange UM support
- Support for up to 3,000 users with six servers

## Product overview

HP VCX Connect 200 Unified Communications series delivers an enterprise-class, full-featured VoIP phone system designed to cost-effectively meet the rugged, collaborative work environments of small- to medium-sized enterprises. Utilizing an extremely resilient architecture, VCX Connect 200 delivers highly available, high-performance telephony and desktop communications. For organizations with up to 500 phone users, VCX Connect 200 offers an economical IP telephony/messaging solution that delivers Microsoft® OCS/Lync and Exchange UM interoperability. The platform's flexible, intuitive design and management help businesses replace legacy PBXs with SIP-based VoIP solutions that provide a full range of collaborative functionality—including click-to-call, presence, instant messaging, mobility, and unified voicemail/email messaging. Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR 30 series analog, ISDN, and digital gateways are available as well to complement a solution.

# Features and benefits

Resiliency and high availability

- Enhanced high availability: optional backup VCX systems, whether co-located with the primary VCX or deployed in another office on the same network, provide geographic survivability and rapid failover for mission-critical communications
- Optional RAID disk: helps ensure resiliency in the event of a component failure

### Configuration

- Media gateway support: streamlines migration to IP communications and provides PSTN connectivity with a full range of standalone VoIP gateways
- NEW Scheduled backups: System Administration Web interface provides the ability to schedule static and reoccurring full system backups

## Investment protection

• Analog phone support: leverages existing investment in analog phones while implementing a full set of PBX features

#### Ease of use

- Built-in licensing: VCX system ships with default licenses—VCX IP Telephony/IP Messaging Server license, 25 business phone licenses, 25 IP messaging seat licenses, 25 Desktop Communicator softphone licenses, 25 Convergence Client softphone licenses, and 4 analog/entry licenses
- LDAP synchronization with Microsoft Active Directory, IBM Lotus Domino, and Linux OpenLDAP: easily integrate, filter, and synchronize employee contact information, thereby simplifying administration and providing reliable connections based on the



## Overview

- most current user information
- Ease of deployment: the VCX Connect 200 platform's out-of-the-box first-time configuration provides simpler installations using a Web-based, wizard-like interface that walks you through the installation process
- Easy to use: GUI-driven central management and configuration
- NEW Replication status: System Administration Web interface displays the replication status of primary and secondary pairs

# Scalability

• Supported devices: let you pay as you grow up to 500 devices per platform and up to 3,000 devices in total via VCX global directory, which enables up to six VCX Connect 200 platforms to function as a single system

#### Additional information

- Optional mobility for telecommuters: optional HP VCX IP Telecommuting series provides remote users with the full benefit of their corporate IP telephony systems without compromising security
- Optional multimedia conference bridge: when businesses require a dense conferencing system to reduce the overhead and
  the cost of expensive third-party conferencing products, the HP VCX V7000 IP Conferencing series provides capabilities that
  include host and participant Web-based conference controls, instant and emergency conferences with automatic dial-out
  options, scheduled and meet-me restricted conferences (requires participant passcode), peer-to-peer and one-to-many
  conferences, and more
- Optional network management: uses the HP Intelligent Management Center (IMC) and Voice Services Manager (VSM) to
  configure, monitor, and enhance the performance of media servers, gateways, and endpoints; to monitor VoIP traffic; and to
  control voice network quality; enhancements for IMC VSM include MOS scoring and packet loss notification MIB changes; the
  VCX license MIBs support IMC

## Product architecture

- Multisite architecture: a highly flexible architecture eliminates the dependency on any single component for unprecedented resiliency and end-to-end survivability; uses Web-based centralized administration, global directory, and global voicemail to seamlessly link VCX systems together to scale your IP-PBX network as your business grows
- Standards-based IP-PBX: supports standard PBX and advanced telephony and messaging features based on the IETF Session Initiation Protocol (SIP) standards; supports third-party SIP-based applications and devices
- Integrated server: IP telephony and IP messaging modules run on Linux OS
- Direct SIP integration with Microsoft OCS/Lync and Exchange UM: VCX direct SIP integration with Microsoft OCS/Lync allows VCX phones/clients to call and have basic features with phones/clients connected to OCS/Lync; OCS/Lync has access to VCX IP-PBX phones, clients, and gateways; VCX supports direct SIP integration with Office Communication Server 2007, Office Communication Server 2007 R2, and Microsoft Lync Server 2010

#### Technical features

- Ad hoc conferencing: VCX Connect 200 supports up to 30 sessions of ad hoc conferencing with a maximum of six parties per conference
- Shared lines and extension status: provide single-line and multi-line phone support and bridged extensions for executives and administrators

### User productivity

- Unified communications: increases employee collaboration through the audio, video, instant messaging, file sharing, and presence capabilities within the HP Desktop Communicator; extends the Microsoft environment with HP Desktop Communicator Outlook Edition add-on to enable click-to-call/conference via Microsoft Outlook, to capture and retrieve call notes with Microsoft Journal, and to perform desktop call recording; HP VCX is fully integrated with Lotus Sametime
- Unified messaging: consolidates users' voicemail, email, and faxes into a single inbox for flexible, location-independent retrieval and management; schedules appropriate times when messages are delivered; sends voicemails to individuals or



## Overview

groups using extensive and easy-to-maintain distribution lists; sets up find me/follow me services to conveniently manage one's own access to help ensure that important calls are not missed; auto-delivers incoming fax calls to email and sends faxes from email

- Web user interface: listens to and manages voicemail messages
- Lotus Domino/Sametime 8.5 support: Sametime 8.5 introduces ability to deploy using a Sametime System Console and new
  meeting server functionality. VCX provides two packages for Sametime 8.5, Deploy on Sametime Community Server ("classic"
   pre -8.5) or Deploy on Sametime Media Manager (for 8.5) using the System Console.

### Voice functionality

- NEW Simultaneous Ring provides mobility for VCX users: Simultaneous Ring feature allows a user to configure their external phone (such as cell phone) to simultaneously ring with their desktop VCX IP phone; users can answer the call at any of the ringing endpoints; when a user at one of the ringing endpoints answers the call, the other ringing endpoint stops ringing; it allows a user to be reached at two different locations by ringing both locations at the same time
- Hot desking: users can effortlessly traverse within the VCX system, log into another handset, and have all their desktop extension settings, including voicemail, at their fingertips
- Call admission control: fine-tune and throttle media traffic to prevent VoIP over-subscription—even down to a particular extension
- PIN codes: prevent unauthorized outbound dialing and/or manage and record telephony calls via forced account codes and customer account and billing codes; PIN code portability allows users to roam the VCX system and utilize their existing data
- Hunt groups: built-in call distribution provides agent log-in functionality; supports three selectable call routing algorithms
- Automatic call distribution: provides an economical add-on call center application that includes five selectable routing algorithms, the ability to capture real-time statistics, and support for remote agents in various VCX locations

# Warranty and support

- 1-year warranty: with advance replacement and 30-calendar-day delivery (available in most countries)
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)



# Technical Specifications

HP VCX Connect 200 Unified Communications Primary Server (JC518A)

**Ports** 4 SATA hard drive bay slots

> 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

6 USB 2.0 1 Serial port

Physical characteristics **Dimensions** 27.56(d) x 17.64(w) x 1.69(h) in. (70 x 44.81 x 4.29 cm) (1U height)

> Weight 38 lb. (17.24 kg) shipping weight

Intel® Xeon® X3430 (4 core) @ 2400 MHz, 2 GB DDR3 DIMM; storage: Memory and processor **Processor** 

3.5" 250 GB SATA HDD

Mounts in EIA-standard 19 inch telco rack or equipment cabinet (hardware included) Mounting

**Environment** Operating temperature 50°F to 90°F (10°C to 32°C); at sea level with an altitude derating of 1.0°C

per every 305 m (1.8°F per every 1000 ft) above sea level

Operating relative

humidity

10% to 90% @ 82.4°F (28°C), noncondensing

Nonoperating/Storage

-22°F to 149°F (-30°C to 65°C)

temperature

Nonoperating/Storage

relative humidity

5% to 95% @ 101.7°F (38.7°C), noncondensing

Altitude up to 10,000 ft. (3 km)

Electrical characteristics 100-240 VAC Voltage

> Power output 400 W Frequency 50/60 Hz

Notes Supports 90-264 VAC @ 47-63 Hz; maximum peak power 430 W

Safety IEC 60950-1; EN 60950-1

**Emissions** FCC part 15 Class A; CISPR 22; EN 55022; EN 55024; CNS 13438; ICES-003; EN 61000-3-2; EN

61000-3-3

Management IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; HTTPS

Integrated IP messaging voice ports; up to 120 simultaneous auto-attendant, music-on-hold, fax, or Notes

voicemail ports supported Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR-30

Series analog, ISDN, and digital gateways

3-year, parts only, global next-day advance exchange (UW162E) Services

3-year, 24x7 SW phone support, software updates (UW172E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your

local HP sales office.

**SYSTEM Features** 

> Ad hoc conferencing Paging (analog external paging system)

Centralized management Paging (group - zone)

Call detail records Paging (phone-to-phone), send beep with calling

Converged application based architecture number

**Emergency services** Paging (SIP external paging system)

End-to-end SIP signaling Phone lock/unlock

Global directory Privacy (block silect monitor/barge-in)



# Technical Specifications

Global voice mail

IP telephony

IP unified messaging

Linux operating system with additional security

SIP back-to-back user Agent Standards-based connectivity

System redundancy Web services SDK

Direct SIP integration with Microsoft Lync and

Exchange UM

### **RESILIENCY**

Redundancy, IP telephony Redundancy, IP messaging

Redundancy, IP phones and media gateways

Redundancy, optional RAID

Redundancy, optional power supply

### SYSTEM ADMINISTRATION

Add VCX licenses

Administration access control Administration secure access

Audit trails and logging enhancements

Command Line Interface

Configuration back-up and restore

CPU, memory, I/O statistics First-time configuration First-time data import

Importing data

Installed component versions
Multiple administrators
Multiple language support
Online administrator help

Password support, administrator and system access

Provisioning; bulk moves, adds, changes Remove previous software versions

Resetting a VCX server Reset to defaults

Searches

Site configuration data

Root directory access

Software upgrades and rollbacks

Switch software versions System information

User data LDAP synchronization: Lotus Domino running on IBM; Lotus Domino running on Windows® Server 2003, 2008; Microsoft Active

Directory on Windows Server 2003, 2008; OpenLDAP on Linux

VCX service licensing
View VCX licensing data

Virtual numbers

Privacy (calling number suppression) Serial calling (transfer with callback)

Silent monitor/barge-in

Simultaneous ringing allows for user mobility by

ringing desk phone and cell phone

Speed dial (personal) Speed dial (system)

Transfer to voicemail (direct)

Voicemail access

Warmline (warm ring down circuits)

ACD Agent licenses are assigned dynamically ACD Agents can be automatically logged in

### IP TELEPHONY ROUTING

Calendar bands

Call admission control

Call blocking
Daytime bands
Dialing prefixes

Direct Inward Dialing (DID)
Direct Outward Dialing (DOD)

DNIS (Dialed Number Identification Service)

E.164 numbering plan External directory access

Holidays NANP support

Network abbreviated dialing

Number translations Outdial patterns

**Patterns** 

Prioritization of trunks/routes

Private line service Requestors Routes

Route (plans and plan wizard)

Routing (alternate)
Routing (blacklist)
Routing (call coverage)
Routing (first available)
Routing (global directory)
Routing (IP to PSTN)
Routing (IP to IP)
Routing (least cost)
Routing (PSTN to IP)
Routing (source based)

Routing (VPN numbering plan)

Routing (white list) Trusted end points Weekday bands

Extensions and mailboxes can start with "0"

## IP MESSAGING ARCHITECTURAL



# Technical Specifications

Extensions and mailboxes can start with "0" Selectively delete Future Delivery messages

Scheduled VCX backups

350x IP Phone Background/Screen saver Image reset to factory defaults via web

### **QUALITY OF SERVICE**

DSCP tagging
Dynamic jitter buffer
G.711 audio codec
G.729ab audio codec

Packet-loss rate Pay-load length

QoS: 802.1p tagging (Prioritization)

QoS: 802.1Q tagging (VLAN)

Video codec Video resolution

Wide-band audio codec

#### **SECURITY**

Network security policies Operating system security

Secure access

Security: Locking MAC addresses to switches

User authentication methods

#### SYSTEM MANAGEMENT

Alarm notification

Audio performance reporting (local)

Auto discovery and management of IP devices Intelligent Management Center Voice Service

Manager: centralized management

Maintenance, graceful shutdown of services

Operating system updates

Quality of service end of call reporting

SNMP MIB access

SNMP traps

SNMP v1, v3

System back-ups

Scheduled VCX backups

QoS MIB and license MIB enhancements for IMC

**VSM** 

## **REPORTING**

Call detail records (reporting)
Call detail records (structure)

### IP TELEPHONY CALLING

Anonymous all Anonymous next Anonymous call reject Automatic call distribution (ACD) G.711

G.729

Global voice mail central server Redundancy (intelligent mirroring)

#### **IP MESSAGING**

Message annotation

Message append

Message auto-delivery

Message auto playback

Message broadcast

Message delete

Message delete retrieval

Message delivery report

Message delivery to non-subscribers

Message deposit

Message deposit treatment options

Message folders

Message forward

Message notification

Message notification options

Message priority

Message record options

Message reply

Message retrieval

Message review

Message review options

Message review playback controls

Message save

Message schedule delivery

Message send

Message send treatment options

Mailbox login

### **GREETING**

Default system greeting

Personal busy greeting

Personal extended absence greeting

Personal normal greeting

Personal scheduled greetings

## **DISTRIBUTION LIST**

Administrator distribution lists Personal distribution lists System distribution lists

### **DIRECTORY**

Directory search

Directory search (dial-by-name)

## **USER PRODUCTIVITY**

Auto attendants



# Technical Specifications

ACD groups (call coverage)

ACD groups (calling groups)

ACD groups (CDR reporting)

ACD groups (circular)

ACD groups (feature interactions)

ACD groups (least-call count)

ACD groups (linear)

ACD groups (login/logout)

ACD groups (malicious call trace)

ACD groups (message-waiting indication)

ACD groups (most idle agent)

ACD groups (multisite)

ACD groups (real-time statistics)

ACD groups (view ACD group status)

Automatic line selection (Multiple system

appearance)

Bridged line appearance

Bridge line appearance (MWI)

Bridge line appearance (shared hold)

Busy lamp field

Call conference (drop)

Call conference (six-way calling)

Call conference (three-way calling)

Call coverage

Call drop

Call duration display

Call forward all (universal)

Call forward busy

Call forward no answer

Call forward out-of-coverage

Call forward programmable

Call forward reminder

Call forward remote

Call history (missed/answered/placed logs)

Call history display sort

Call hold

Call hold reminder

Call park/retrieve

Call park (button mapping)

Call park (fallback)

Call pick-up (directed)

Call pick-up (group)

Call restrictions (black list)

Call restrictions (blocking inbound)

Call restrictions (blocking outbound)

Call restrictions (call screening)

Call restrictions (forward to trunk)

Call restrictions (toll screening)

Call restrictions (transfer to trunk)

Call restrictions (white list)

Call return

Call transfer (attended)

Bulletin board

Call back

Call monitor

Family mailbox

Force password change

Listen and manage voicemail messages from Web

user interface

Mailbox alias

Mailbox auto login

Mailbox full alert

Mailboxes for announcements

Mailboxes for forms (Q&A)

Mailboxes for information

Mailboxes for surveys

Mailboxes for system bulletins/broadcasts

Message-waiting indication

Music-on-hold

Outline help

Personal address book

Personal auto-attendant

Privacy

Prompt bypass

Set-up assistant tutorial

Shortcut keys

User password change

User provisioning through TUI

User provisioning through Web

Virtual calling card

Zero out

### FIND ME/FOLLOW ME

Find me/follow me

Find me/follow me call intercept

### **FAX MAIL**

Electronic fax sending

Fax auto-delivery to email

Fax auto-delivery to fax machine

Fax delivery to fax machine

Fax message deposit

Fax message retrieval

i ax message remeva

Never-busy fax

### **EMAIL INTEGRATION**

Client integration

Email auto delivery

Email integration

Email synchronization

Fax attachment in email (.tif or .pdf formats)

Unified inbox for Domino on Windows

Voicemail POP3/IMAP4 client integration

Integration with Microsoft Exchange Unified



# Technical Specifications

Call transfer (fallback on transfer failure)

Call transfer (unattended)
Call transfer (restrictions)

Call waiting

Caller ID (called party)

Caller ID (calling party number)
Caller ID (calling party name)

Caller ID (privacy)

Camp on busy (automatic call back)

Class of service override

Customer account and billing codes

Delayed or no ringing Directory (local user) Directory (global user)

Distinctive ringing, ring patterns (different call types)

Distinctive ringing, selective ringing (ident-a-call)

Do not disturb
DTMF dialing
Feature codes
Feature access codes

Forced account codes Forward to mail

Hands-free support

Hotline (hot ring down circuits)

Hunt groups

Hunt groups (call coverage) Hunt groups (calling group) Hunt groups (circular)

Hunt groups (feature interactions)

Hunt groups (linear)
Hunt groups (login/logout)
Hunt groups (malicious call trace)

Hunt groups (message-waiting indication)

Hunt groups (multisite)

Hunt groups (view hunt group status)

Last number redial Malicious call trace

Message-waiting indication (MWI), audio Message-waiting indication (MWI), visual

Missed call indicator

Mobility (multisite hot desking) Mobility (single-region hot desking)

Music on hold

Messaging

#### IP MESSAGING ADMINISTRATION

Administration of all parameters through X-terminal

interface

Class of service administration Company/division administration

Export mailbox/COS Import mailbox/COS IMAP SSLv3 support IP messaging Web portal Mailbox administration Mailbox on-the-fly Mailbox un-login Multiple administration

Multiple language support Multiple permission levels

Pager templates

Send-user groups

Support for multi-language voicemail Telephone user interface (native) Telephone user interface (traditional)

Time zones

Upload audio files via Web interface

**VPIM** support

#### IP MESSAGING MANAGEMENT

System alarms System backup System restoration System status

Selective deletion of messages via web Voice mail full return receipt support

### LANGUAGE SUPPORT

Chinese (Mandarin), Dutch, English (Australian, UK and US), French (Canadian and Parisian), German, Italian, Korean, Portuguese (Brazilian), Russian and Spanish (Castilian and LAT)



# Technical Specifications

HP VCX Connect 200 Unified Communications Secondary Server (JC519A)

Ports 4 SATA hard drive bay slots

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6 USB 2.0 1 Serial port

Physical characteristics Dimensions  $27.56(d) \times 17.64(w) \times 1.69(h)$  in.  $(70 \times 44.81 \times 4.29 \text{ cm}) (10 \text{ height})$ 

Weight 38 lb. (17.24 kg) shipping weight

Memory and processor Processor Intel® Xeon® X3430 (4 core) @ 2400 MHz; storage: 3.5" 250 GB SATA

HDD; 2 GB DDR3 1066 MHz ECC UDIMM; packet buffer size: 1 KB

Mounting Mounts in EIA-standard 19 inch telco rack or equipment cabinet (hardware included)

Environment Operating temperature 50°F to 90°F (10°C to 32°C); at sea level with an altitude derating of 1.0°C

per every 305 m (1.8°F per every 1000 ft) above sea level

Operating relative

humidity

10% to 90% @ 82.4°F (28°C), noncondensing

Nonoperating/Storage

temperature

-22°F to 149°F (-30°C to 65°C)

Nonoperating/Storage

relative humidity

5% to 95% @ 101.7°F (38.7°C), noncondensing

Altitude up to 10,000 ft. (3 km)

Electrical characteristics Voltage 100-240 VAC

Power output 400 W Frequency 50/60 Hz

Notes Supports 90-264 VAC @ 47-63 Hz; maximum peak power 430 W

**Safety** IEC 60950-1; EN 60950-1

Emissions FCC part 15 Class A; CISPR 22; EN 55022; EN 55024; CNS 13438; ICES-003; EN 61000-3-2; EN

61000-3-3

Management IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; HTTPS

Notes Integrated IP messaging voice ports; up to 120 simultaneous auto-attendant, music-on-hold, fax, or

voicemail ports supported Support for standalone VCX V7111, VCX V7122, MSR 20-xx, and MSR-30

Series analog, ISDN, and digital gateways

Services 3-year, parts only, global next-day advance exchange (UW162E)

3-year, 24x7 SW phone support, software updates (UW172E)

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your

local HP sales office.

Features SYSTEM Mute

Ad hoc conferencing Paging (analog external paging system)

Centralized management Paging (group - zone)

Call detail records Paging (phone-to-phone), send beep with calling

Converged application based architecture number

Emergency services Paging (SIP external paging system)

End-to-end SIP signaling Phone lock/unlock

Global directory

Global voice mail

Privacy (block silect monitor/barge-in)

Privacy (calling number suppression)



# Technical Specifications

IP telephony

IP unified messaging

Linux operating system with additional security

SIP back-to-back user Agent Standards-based connectivity

System redundancy Web services SDK

Direct SIP integration with Microsoft Lync and

Exchange UM

## **RESILIENCY**

Redundancy, IP telephony Redundancy, IP messaging

Redundancy, IP phones and media gateways

Redundancy, optional RAID

Redundancy, optional power supply

## SYSTEM ADMINISTRATION

Add VCX licenses

Administration access control Administration secure access

Audit trails and logging enhancements

Command Line Interface

Configuration back-up and restore

CPU, memory, I/O statistics First-time configuration First-time data import

Importing data

Installed component versions Multiple administrators Multiple language support

Online administrator help

Password support, administrator and system access

Provisioning; bulk moves, adds, changes

Remove previous software versions

Resetting a VCX server Reset to defaults Root directory access

Searches

Site configuration data

Software upgrades and rollbacks

Switch software versions System information

User data LDAP synchronization: Lotus Domino running on IBM; Lotus Domino running on Windows® Server 2003, 2008; Microsoft Active

Directory on Windows Server 2003, 2008;

OpenLDAP on Linux VCX service licensing View VCX licensing data

Virtual numbers

Extensions and mailboxes can start with "O"

Serial calling (transfer with callback)

Silent monitor/barge-in

Simultaneous ringing allows for user mobility by

ringing desk phone and cell phone

Speed dial (personal) Speed dial (system)

Transfer to voicemail (direct)

Voicemail access

Warmline (warm ring down circuits)

ACD Agent licenses are assigned dynamically ACD Agents can be automatically logged in

### IP TELEPHONY ROUTING

Calendar bands

Call admission control

Call blocking Daytime bands Dialing prefixes

Direct Inward Dialing (DID)
Direct Outward Dialing (DOD)

DNIS (Dialed Number Identification Service)

E.164 numbering plan External directory access

Holidays NANP support

Network abbreviated dialing

Number translations
Outdial patterns

**Patterns** 

Prioritization of trunks/routes

Private line service

Requestors Routes

Route (plans and plan wizard)

Routing (alternate)
Routing (blacklist)
Routing (call coverage)
Routing (first available)
Routing (global directory)
Routing (IP to PSTN)
Routing (IP to IP)
Routing (least cost)

Routing (PSTN to IP)
Routing (source based)

Routing (VPN numbering plan)

Routing (white list) Trusted end points Weekday bands

Extensions and mailboxes can start with "0"

## IP MESSAGING ARCHITECTURAL

G.711



# Technical Specifications

Selectively delete Future Delivery messages

Scheduled VCX backups

350x IP Phone Background/Screen saver Image reset to factory defaults via web

### **QUALITY OF SERVICE**

DSCP tagging

Dynamic jitter buffer

G.711 audio codec

G.729ab audio codec

Packet-loss rate

Pay-load length

QoS: 802.1p tagging (Prioritization)

QoS: 802.1Q tagging (VLAN)

Video codec

Video resolution

Wide-band audio codec

### **SECURITY**

Network security policies

Operating system security

Secure access

Security: Locking MAC addresses to switches

User authentication methods

#### SYSTEM MANAGEMENT

Alarm notification

Audio performance reporting (local)

Auto discovery and management of IP devices

Intelligent Management Center Voice Service

Manager: centralized management

Maintenance, graceful shutdown of services

Operating system updates

Quality of service end of call reporting

SNMP MIB access

SNMP traps

SNMP v1, v3

System back-ups

Scheduled VCX backups

QoS MIB and license MIB enhancements for IMC

**VSM** 

### **REPORTING**

Call detail records (reporting)

Call detail records (structure)

### IP TELEPHONY CALLING

Anonymous all

Anonymous next

Anonymous call reject

Automatic call distribution (ACD)

ACD groups (call coverage)

G.729

Global voice mail central server

Redundancy (intelligent mirroring)

#### IP MESSAGING

Message annotation

Message append

Message auto-delivery

Message auto playback

Message broadcast

Message delete

Message delete retrieval

Message delivery report

Message delivery to non-subscribers

Message deposit

Message deposit treatment options

Message folders

Message forward

Message notification

Message notification options

Message priority

Message record options

Message reply

Message retrieval

Message review

Message review options

Message review playback controls

Message save

Message schedule delivery

Message send

Message send treatment options

Mailbox login

### **GREETING**

Default system greeting

Personal busy greeting

Personal extended absence greeting

Personal normal greeting

Personal scheduled greetings

### **DISTRIBUTION LIST**

Administrator distribution lists

Personal distribution lists

System distribution lists

### **DIRECTORY**

Directory search

Directory search (dial-by-name)

## **USER PRODUCTIVITY**

Auto attendants

Bulletin board



# Technical Specifications

ACD groups (calling groups)

ACD groups (CDR reporting)

ACD groups (circular)

ACD groups (feature interactions)

ACD groups (least-call count)

ACD groups (linear)

ACD groups (login/logout)

ACD groups (malicious call trace)

ACD groups (message-waiting indication)

ACD groups (most idle agent)

ACD groups (multisite)

ACD groups (real-time statistics)

ACD groups (view ACD group status)

Automatic line selection (Multiple system

appearance)

Bridged line appearance

Bridge line appearance (MWI)

Bridge line appearance (shared hold)

Busy lamp field

Call conference (drop)

Call conference (six-way calling)

Call conference (three-way calling)

Call coverage

Call drop

Call duration display

Call forward all (universal)

Call forward busy

Call forward no answer

Call forward out-of-coverage

Call forward programmable

Call forward reminder

Call forward remote

Call history (missed/answered/placed logs)

Call history display sort

Call hold

Call hold reminder

Call park/retrieve

Call park (button mapping)

Call park (fallback)

Call pick-up (directed)

Call pick-up (group)

Call restrictions (black list)

Call restrictions (blocking inbound)

Call restrictions (blocking outbound)

Call restrictions (call screening)

Call restrictions (forward to trunk)

Call restrictions (toll screening)

Call restrictions (transfer to trunk)

Call restrictions (white list)

Call return

Call transfer (attended)

Call transfer (fallback on transfer failure)

Call back

Call monitor

Family mailbox

Force password change

Listen and manage voicemail messages from Web

user interface

Mailbox alias

Mailbox auto login

Mailbox full alert

Mailboxes for announcements

Mailboxes for forms (Q&A)

Mailboxes for information

Mailboxes for surveys

Mailboxes for system bulletins/broadcasts

Message-waiting indication

Music-on-hold

Outline help

Personal address book

Personal auto-attendant

Privacy

Prompt bypass

Set-up assistant tutorial

Shortcut keys

User password change

User provisioning through TUI

User provisioning through Web

Virtual calling card

Zero out

#### FIND ME/FOLLOW ME

Find me/follow me

Find me/follow me call intercept

### **FAX MAIL**

Electronic fax sending

Fax auto-delivery to email

Fax auto-delivery to fax machine

Fax delivery to fax machine

Fax message deposit

Fax message retrieval

Never-busy fax

## **EMAIL INTEGRATION**

Client integration

Email auto delivery

**Email integration** 

Email synchronization

Fax attachment in email (.tif or .pdf formats)

Unified inbox for Domino on Windows

Voicemail POP3/IMAP4 client integration

Integration with Microsoft Exchange Unified

Messaging



# Technical Specifications

Call transfer (unattended)
Call transfer (restrictions)

Call waiting

Caller ID (called party)

Caller ID (calling party number)
Caller ID (calling party name)

Caller ID (privacy)

Camp on busy (automatic call back)

Class of service override

Customer account and billing codes

Delayed or no ringing Directory (local user) Directory (global user)

Distinctive ringing, ring patterns (different call types)

Distinctive ringing, selective ringing (ident-a-call)

Do not disturb
DTMF dialing
Feature codes
Feature access codes
Forced account codes

Forward to mail Hands-free support

Hotline (hot ring down circuits)

Hunt groups

Hunt groups (call coverage) Hunt groups (calling group) Hunt groups (circular)

Hunt groups (feature interactions)

Hunt groups (linear) Hunt groups (login/logout) Hunt groups (malicious call trace)

Hunt groups (message-waiting indication)

Hunt groups (multisite)

Hunt groups (view hunt group status)

Last number redial Malicious call trace

 $Message-waiting\ indication\ (MWI),\ audio$ 

Message-waiting indication (MWI), visual

Missed call indicator

Mobility (multisite hot desking) Mobility (single-region hot desking)

Music on hold

### IP MESSAGING ADMINISTRATION

Administration of all parameters through X-terminal

interface

Class of service administration Company/division administration

Export mailbox/COS Import mailbox/COS IMAP SSLv3 support IP messaging Web portal Mailbox administration Mailbox on-the-fly Mailbox un-login Multiple administration Multiple language support

Multiple permission levels

Pager templates Send-user groups

Support for multi-language voicemail Telephone user interface (native) Telephone user interface (traditional)

Time zones

Upload audio files via Web interface

VPIM support

### IP MESSAGING MANAGEMENT

System alarms System backup System restoration System status

Selective deletion of messages via web Voice mail full return receipt support

### LANGUAGE SUPPORT

Chinese (Mandarin), Dutch, English (Australian, UK and US), French (Canadian and Parisian), German, Italian, Korean, Portuguese (Brazilian), Russian and Spanish (Castilian and LAT)



## Accessories

HP VCX Connect 200
Unified Communications
Series accessories
HP VCX V7005/VCX Connect 200 DL120 G6 250G 3.5" Spare RAID Disk
License
HP VCX Business IP Phone License E-LTU
HP VCX Basic IP Phone License E-LTU
HP VCX Third Party IP Phone License E-LTU
HP VCX Rusiness IP Phone License E-LTU

HP VCX Business IP Phone License E-LTU	JE427BAE
HP VCX Basic IP Phone License E-LTU	JE426BAE
HP VCX Third Party IP Phone License E-LTU	JE444BAE
HP VCX Business IP Phone License 50 Bundle E-LTU	JE332BAE
HP VCX Basic IP Phone License 50 Bundle E-LTU	JE329BAE
HP VCX Business IP Phone License 250 Bundle E-LTU	JE331BAE
HP VCX Basic IP Phone License 250 Bundle E-LTU	JE328BAE
HP VCX Business IP Phone License 1000 Bundle E-LTU	JE330BAE
HP VCX Basic IP Phone License 1000 Bundle E-LTU	JE327BAE
HP VCX Entry/Analog Phone License E-LTU	JE425BAE
HP VCX IP Messaging Seat License E-LTU	JE301BAE
HP VCX IP Messaging Seat License 50 Bundle E-LTU	JC515BAE
HP VCX IP Messaging Seat License 250 Bundle E-LTU	JC514BAE
HP VCX IP Messaging Seat License 1000 Bundle E-LTU	JC513BAE
HP VCX Desktop Communicator Standalone Soft Phone License E-LTU	JE435BAE
HP VCX Desktop Communicator Outlook Edition Standalone Soft Phone License E-LTU	JE436BAE
HP VCX Desktop Communicator to Outlook Edition Upgrade Soft Phone License E- LTU	JE437BAE
HP VCX Desktop Communicator Soft Phone License 50 Bundle E-LTU	JE334BAE
HP VCX Desktop Communicator Outlook Edition Soft Phone License 50 Bundle E-LTU	JE336BAE
HP VCX Desktop Communicator Soft Phone License 250 Bundle E-LTU	JE333BAE
HP VCX Desktop Communicator Outlook Edition Soft Phone License 250 Bundle E- LTU	JE335BAE
HP VCX Convergence Center Client Standalone License E-LTU	JE434BAE
HP VCX ACD Agent License E-LTU	JE422BAE
HP VCX ACD 5 Agent License E-LTU	JE424BAE
HP VCX ACD 10 Agent License E-LTU	JE423BAE

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