Overview of Hi-Link's Hosted Voice over Internet Protocol, (VoIP) Telephone System

Introduction and Executive Summary

Founded in 1990 in Stamford, CT, Hi-Link Technology Group (Hi-Link) specializes in helping our clients in all areas of computer, voice, cloud, managed services, and data networking. In addition to years of experience as a well-respected solution provider, Hi-Link also holds many industry and vendor certifications in a wide range of technologies. Hi-Link's broad range of experience and specialized expertise uniquely qualifies Hi-Link to offer their clients a Hosted Cisco Voice Collaboration Solution.

The following describes an overview of Hi-Link's Hosted VoIP solution, including voice services, features, and datacenter information.

Hi-Link's Collaboration Solution is a Cisco Unified Communications Manager-based cloud offering from Hi-Link Technology Group.

Hi-Link's hosted private Unified Communications offering provides Cisco's comprehensive, industry-leading collaboration services to organizations as a cloud service with the flexibility and security of a dedicated Cisco premise solution. Specifically, Hi-Link's VOIP delivers voice and video communications, mobility, messaging, and presence. It can also enable web and videoconferencing across your whole company, and beyond. Contact center services are also available from Hi-Link's data center.

**Cisco Jabber
iPhone, iPad and Android
Included with Hosted Solution**

Cisco Jabber is a very important part of the Cisco Unified Solution. It makes communication from anywhere and any device possible. Cisco expressway provides VPN-less access to Cisco Jabber from anywhere.

Features:
- Answer a Jabber call without unlocking the screen

- Make a Jabber call from device native contacts
- Voicemail forwarding
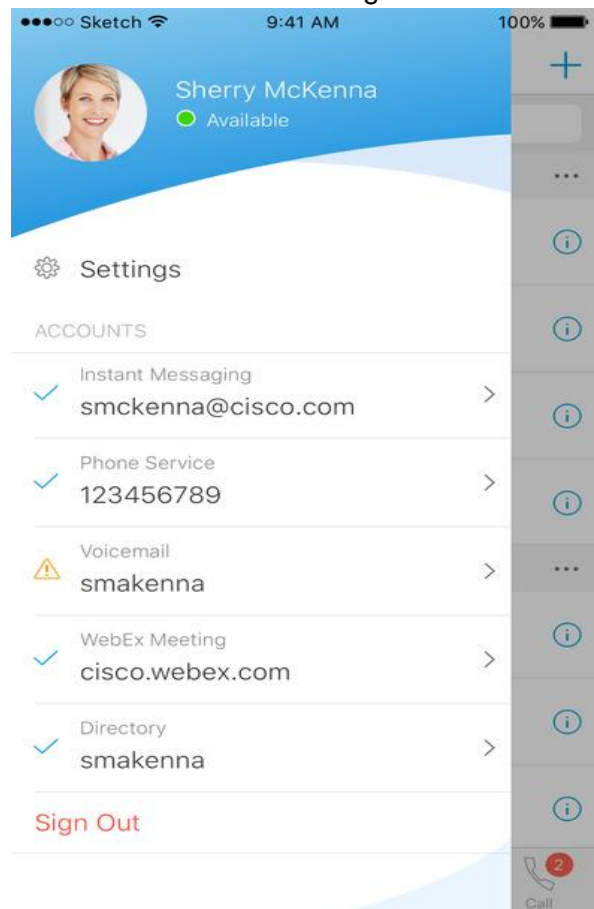
- Call forwarding
- Local calendar integration
- Access Jabber from the outside without going through your VPN
- Move call between Jabber app and desktop phone seamlessly
- Make Audio and Video either using 3G/4G network or wireless

Cisco Jabber IM & Presence

Cisco Jabber provides instant messaging and presence service seamlessly to any device. Instant messaging includes one to one chat, group chat, file share and desktop sharing. It also automatically updates the presence status (e.g. Available, Busy, Vacation, etc.)

Cisco Jabber Desktop

The Cisco Jabber desktop app can be installed on Windows and Mac, it can also act as a softphone. The Cisco Jabber desktop app also controls the desk phone. Users can dial with one click from outlook and web browsers. It also provides visual voicemail access.

Cisco Jabber Smartphone

Cisco Jabber has an app for every device, users can receive and make calls directly from their smartphone app using 3G/4G or Wi-Fi. Jabber also provides instant messaging (IM) and Visual Voice Mail.

Multiple Levels of Redundancy

If You Lose Power
In event of losing power, all the remote locations will connect to the Hi-Link Datacenter, This process takes 3 to 5 seconds.
If Your Cable Modem Does Down at a Remote Location with SRST
In the event of the primary internet going down at a remote location, SRST will takeover, the Router will established a VPN tunnel using the AT&T/Verizon 4G card. It will automatically switch back once the internet is up.
If Hi-Link's Datacenter is Down
In the event of Hi-Link datacenter going down, all the services will run as usual, as second datacenter In Richmond, VA will go active.

If the Telco is Down
In the event the telco goes down, all incoming calls will be forwarded to a backup telco at Hi-Link's datacenter which will connect with the Town's auto attendant, Outgoing calls will go out as usual from backup telco.
If the SIP Gateway Goes Down
In the event the SIP gateway has hardware failure, SIP will register from a different gateway.

E9-1-1 Location Reporting – When any extension in the system dials 911, the accurate location identification of the location from which the call is initiated shall be displayed at the appropriate Public Safety Answering Point (PSAP).

Additional Hi-Link Qualifications:
- Cisco Certified Premier Partner with Specializations in Voice Collaboration, Data Center UCS, and Express Foundation,
- HP Silver Partner HPE Storage Specialization,
- VMWare Enterprise Partner,
- Microsoft Silver Certified Partner, (Infrastructure Competency)
- Veeam Silver Partner,
- Citrix Silver Partner,
- Ruckus Big Dog Partner,
- Palo Alto Gold Partner.
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Engineers on staff with Cisco CCNA, CCVP, CCNA, CCIE written, HP Storage Certification, Microsoft MCSE, MCP, and MS Cloud solution specialist, VMware Enterprise Partner VCP and VSP, Palo Alto ACE, and PSE.

Tier One Managed Services Redundant Data Center Overview

CyrusOne secure cabinets located in Norwalk, CT. Data center space with 36" raised floor
- 16 MW from the utilities to support high power density configurations
- 3 separate power feeds from two separate utility providers
- UPS systems configured in N+1 and 2N redundant configurations
- 8 generator sets of 2MW with N+1 redundancy
- 3000 Tons of cooling capacity
- Carrier neutral with at least 8 different Tier 1 and Tier 2 carriers

- Fortress-like physical security controls and procedures keep clients' mission-critical applications up and running around the clock. Each location offers multiple levels of protection and are secured 24X365 by fulltime onsite staff and dedicated security personnel through the use of proximity card readers, biometric sensors and video surveillance systems.

- CyrusOne' high-availability, world-class data centers are HIPAA, SSAE 16 and PCI compliant as well as Safe Harbor Certified annually, offering the highest levels of security, protection, and reliability

- All equipment, systems and data is replicated to a C7 redundant data center in Salt Lake City, UT that is completely comparable to the Norwalk, CT datacenter and also features HIPAA, SSAE 16 and PCI compliant as well as Safe Harbor Certified annually, offering the highest levels of security,

protection, and reliability. This dual datacenter architecture creates redundancy, security, business continuity, and disaster recovery. Norwalk, CT and Salt Lake City, UT are in different time zones, separated by more than 2200 miles, on different power grids, on different fault lines, and in different climates, making these two locations perfect for redundancy.

Infrastructure

- Hi-Link uses top of the line Cisco Blade Servers, Cisco Call Manager, HP Storage, and redundant Palo Alto Firewalls to ensure optimal performance.   This data center is replicated to a C7 data center in Salt Lake City, UT providing full redundancy.

A Few of the Many Phone Options

Cisco 7821

Capacity: Cisco IP Phone 7821 supporting two lines (available in charcoal and white).
Display: High-resolution 3.5" (396x162) grayscale display.
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.
One-button access: Hold, Transfer, Conference, Mute, Speaker (Full Duplex), Directory, and Voicemail.

Cisco 8811 Phone

Capacity: Cisco IP Phone 8811 supporting 5 lines (available in charcoal and white).
Display: The 5-in., 800 × 480 resolutions, grayscale display provides scrollable access to calling features and text-based XML applications.
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.

Cisco 7841 Phone

Capacity: Cisco IP Phone 7841 supporting four lines (available in charcoal and white).
Display: High-resolution 3.5" (396x162) grayscale display.
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.

Cisco 8841 Phone

Capacity: Cisco IP Phone 8841 supporting five lines (available in charcoal and white).
Display: 800 × 480, 24-bit color, 5-in. WVGA display
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.

Cisco 8845 Phone with Camera

720p HD Desktop Video Phone

Bluetooth: Bluetooth 4.1 LE, Enhanced Data Rate (EDR) Class 1 technology (up to 66-ft [20m] range) is supported.
Capacity: Cisco IP Phone 8845 supporting five lines (available in charcoal and white).
Display: 5-inch widescreen VGA (800x480 pixel), 24-bit color.
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.

Cisco 7861 Phone

Capacity: Cisco IP Phone 7861 supporting sixteen lines (available in charcoal and white).
Display: High-resolution 3.5" (396x162) grayscale display.
Applications: Supports Cisco Jabber Desktop Integration, Text-based XML Applications.
Headset: The analog headset jack is a standard wideband-capable RJ-9 audio port.

Cisco 8800 Key Expansion Module

Capacity: 18 keys on each page, total 2 pages, for a total of 36 key per module.
Display: 4.3-inch graphical (TFT) color display provides 16-bit color depth and 480 x 272 effective pixel resolution, with backlight.
Status: Line Available, Line in use, Line in use by Shared line and Line Ringing. A Maximum of 3 can be attached to one phone.

Wireless IP Phones

Cisco 8821 Phone

Capacity: Cisco IP Phone 8821 supporting six lines.
Display: 2.4-inch (6 cm) color (240 x 320 pixels) display.
Battery: 13 hours of voice calling; up to 240 hours standby, Lithium smart battery.
Applications: Supports Cisco and/or third-party XML applications such as push-to-talk.
Headset: Bluetooth
One-button access: Mute, Speakerphone, Power button, Volume up/down, Application button.