



## Frequently Asked Questions:

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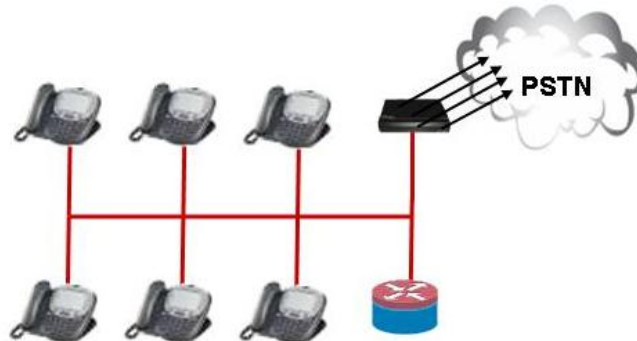


### Introduction

Avaya one-X Quick Edition offers a low-cost, server-less Peer-to-Peer telephony solution for small and medium sized businesses. By eliminating the need for traditional PBX hardware, the Avaya one-X Quick Edition System enables branch offices and small businesses to enjoy significant savings. Users simply plug the ready-to-use telephones into their local area network, and the system configures itself—all of the telephones connected to the same network segment participate in traffic routing, call handling, and other network-related processes automatically. The Avaya one-X Quick Edition System can be equipped with a G10 PSTN Gateway to enable access to traditional telephony systems.

### Installation

What does a typical configuration look like?



*The LAN switch is PoE-capable to supply power to the Avaya one-X Quick Edition System.*

A typical configuration consists of a PoE (Power over Ethernet) powered Ethernet LAN equipped with a standard IP router or switch, Ethernet cabling to each telephone, and a G10 PSTN Gateway for access to the PSTN. No central server is required. All features are in the telephone.

How do I install and configure the system?



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System hookup is easy with the Avaya one-X Quick Edition System. Simply connect each telephone and the G10 PSTN Gateway to your Ethernet LAN, connect the G10 PSTN Gateway to the telephone lines provided by your service provider, apply power, and the system configures itself automatically.

### **How is Avaya one-X Quick Edition different from other VoIP solutions?**

The Avaya one-X Quick Edition System is a Session Initiation Protocol (SIP) based, Peer-to-Peer solution which dramatically simplifies system setup and configuration. The system requires no central server, and configures itself with almost no user intervention. Because the system is so simple to set up, configure, and use, most users can install and maintain the Avaya one-X Quick Edition System themselves without placing calls to Avaya Technical Support.

### **What if my LAN is not Power over Ethernet (PoE) capable?**

Mid-span Power over Ethernet (PoE) injectors can be ordered separately from Avaya on a telephone-by-telephone basis. Another solution is to acquire a mid-span Power over Ethernet (PoE) injector that daisy chains to your switch's ports.

### **Is there a central/golden telephone somewhere?**

No, the Avaya one-X Quick Edition System does not rely on common equipment such as a central/golden telephone or IP PBX. All the software is in the telephone.

### **How long does system initialization take?**

A 16-node system can reach call-processing state within minutes after powering up.

### **When I connect the telephones and G10 PSTN Gateway to my network for the first time, do they have to be connected in a certain order?**

To obtain a contiguous extension numbering scheme, plug in the G10 PSTN Gateway last. Extension numbers will be assigned to the telephones in ascending order automatically, with the highest extension number going to the G10 PSTN Gateway. If necessary, you can change the extension of any telephone or G10 PSTN Gateway manually afterward.

## **Configuration**

### **How are IP addresses obtained?**

The telephones and G10 PSTN Gateway negotiate with each other and assign themselves IP addresses automatically. Dynamic Host Configuration Protocol (DHCP) may be used if a server is connected to the network; otherwise ZeroConf procedures are supported as well as static IP address assignment.

### **How do I get my extension number?**

Extension numbers are assigned to telephones automatically when they are connected to the network and powered on for the first time. Extension numbers are assigned (in the 200-to-299 range by default) in the order that telephones register themselves on the network. These automatically assigned extension numbers are retained by the telephones afterward, even through subsequent power cycles.

### **Can I change the extension of a telephone?**

An extension number can be changed manually at any time. The extension number associated with a telephone is stored on the telephone, which communicates any changes to its extension number to all other telephones connected to the same network segment. The change is also communicated to the system-wide Auto Attendant, and to system users through the Corporate directory.

### **Are four digit extensions supported?**

No, extension numbers are limited to three digits.



### **How many telephones and G10 PSTN Gateways are supported?**

Avaya one-X Quick Edition supports a maximum of 20 telephones and a maximum of 10 G10 PSTN Gateways.

### **What is the proper way to remove a telephone or G10 PSTN Gateway from the system?**

When a device is connected to the network and operating properly, you can remove the device from the system using the steps outlined below. The following steps ensure that all other telephones and any G10 PSTN Gateways connected to the network are updated accordingly.

**Removing a telephone:** Using the telephone that you want to remove, select Freshstart on the System Options menu under Set Management. The Freshstart feature resets a telephone to factory settings and removes the telephone's extension number from the Corporate directory. When the operation starts, a "Freshstart in progress, please wait..." message is displayed. The operation completes with a "Freshstart Done" message. The telephone can be unplugged from the network afterward.

**Removing a G10 PSTN Gateway from a system that has one PSTN Gateway:** First, look up the extension of the G10 PSTN Gateway (select Gateways on the System Options menu). Next, disconnect the G10 PSTN Gateway from the network. If the G10 PSTN Gateway is not powered by Power over Ethernet, unplug the G10 PSTN Gateway from its power source last. Using any telephone connected to the network, access the Set Management menu under System Options, and then select Remove Extension. Enter the extension number of the G10 PSTN Gateway, and then press the Next softkey. Confirm removal of the G10 PSTN Gateway by pressing the Yes softkey.

**Removing a PSTN Gateway from a system that has more than one PSTN Gateway:** First, record the MAC address of the G10 PSTN Gateway (see the label on the underside of the G10 PSTN Gateway). Next, using any telephone connected to the network, access the Gateways menu under System Options. One at a time, select the Line/Feature button beside each gateway entry, and then select Details to view the associated MAC addresses. When you locate the gateway that matches the MAC address, note its extension number. Finally, follow the procedure given for a single gateway above to remove the G10 PSTN Gateway from the system.

### **How do I remove a telephone that can no longer communicate with other Peer-to-Peer phones?**

To restart a telephone, unplug it from the network and then plug it back in again. If the telephone will not restart, unplug it from the network and remove its extension from the Corporate directory as follows. Using any telephone connected to the network, access the Set Management menu under System Options, and then select Remove Extension. Either enter the extension number of the telephone, or choose the extension number from the Corporate directory. Note that all the user provisioning, voice mail (greetings, and mail), calls logs associated with the extension will be lost.

### **Do I need a G10 PSTN Gateway to make calls?**

A G10 PSTN Gateway is required to make calls to external PSTN lines. Extension-to-extension calling among all telephones connected to the same network segment is supported without the need for a G10 PSTN Gateway.

### **How can I learn the extension number of a G10 PSTN Gateway?**

Every G10 PSTN Gateway has an extension number; however, the number is not displayed in the Corporate directory and cannot be called. Using any telephone connected to the network, access the Gateways menu under System Options. The extension numbers of all connected G10 PSTN Gateways are displayed. When multiple G10 PSTN Gateways are connected, you can identify the extension number of a G10 PSTN Gateway by looking up the MAC address of the G10 PSTN Gateway (on the Gateways menu, select the Line/Feature button beside each gateway entry, and then select Details to view the associated MAC addresses—the MAC address of a G10 PSTN Gateway is printed on a label on the underside of the G10 PSTN Gateway).



## Equipment

### What telephones are supported?

Avaya one-X Quick Edition is available on Avaya 4610SW IP Telephones and 4621SW IP Telephones.

### Are analog devices such as fax machines, standard POTS telephones, and conference bridges supported?

Analog terminal adaptors, which convert analog-device access to IP, are not currently supported. However, analog devices may be connected by a separate line to the Avaya one-X Quick Edition system, or bridged onto the lines as a shared user.

### Are wireless devices supported?

Not at the present time.

### Which CODECs are supported?

The G.729A (Annex B) and G711 CODECs are supported. CODEC negotiation is supported.

### You have no central server—is system information backed up?

All telephones connected to the network back up each other. When a telephone is disconnected from the network (for example, while a telephone is being moved), the other telephones on the network handle voicemail for the missing telephone. When the telephone is returned to the network, it obtains a copy of the voicemail associated with its extension from the network. All voicemail is password-protected by default.

### Do the telephones support Power over Ethernet (PoE)?

Yes, Avaya 4610SW IP Telephones and 4621SW IP Telephones support IEEE 802.3af PoE.

### Does the G10 PSTN Gateway support Power over Ethernet?

Yes, the G10 PSTN Gateway supports IEEE 802.3af PoE.

### Can a LAN connection be shared between a telephone and a PC?

Yes, the telephone supports dual 10/100-Mbps switched Ethernet ports. You connect the LAN to the LAN port on the telephone, and then connect the PC to the PC port on the telephone. Power over Ethernet is not provided on the PC port.

## Interconnection

### How do I connect to the PSTN?

The Avaya one-X Quick Edition System may include a G10 PSTN Gateway, which provides access to four Plain Old Telephone Service (POTS) lines or Foreign Exchange Office (FXO) lines.

### Can I make and receive calls if the LAN goes down?

If the LAN goes down (for example, during a power failure), the G10 PSTN Gateway provides an emergency bypass capability. Line 1 (L1) on the G10 PSTN Gateway is automatically bridged to a standard, user-provided POTS telephone.

### Does Avaya one-X Quick Edition support T1/E1 or ISDN external access?

Avaya is assessing the market demand for additional gateway types.

### How do I connect the G10 PSTN Gateway to my LAN?

The G10 PSTN Gateway is equipped with a LAN Fast Ethernet port. The LAN port is used to connect the G10 PSTN Gateway to the LAN.



## Features

### Which features are available?

The following features are currently supported.

Telephony	Voicemail	AutoAttendant	Admin
Dynamic IP Assignment	Voice Mail – Backup	Call Detection	System Clock CLID
Peer Discovery	Prompts & Greetings	Greetings & Prompts	Set S/W Upgrade
Back-up Manager	Msg. Waiting Indicator	Fixed Menu Support	Replace DN
Security Manager	Escape to # (DN, ext.)	Touchtone Digit Support	Dialing Restrictions
Multiple Call Appearances	Telephone User Interface.	Rotary & Pulse Support	LAN Indicator
Simultaneous Alert	Visual Voice Mail	Escape to Attendant	Peer Indicator
Call Forward – All	Monitor Message	Transfer by Extension	Set Admin
Call Forward – No Answer	Rescue	Transfer by Name	Voice Mail
Call Log	Message Sorting	Administration	Auto Attendant
Last Number Redial	Callback from Message		G10 PSTN Gateway Admin
Call Return	Administration		
Missed Call Indicator			
Call Transfer – Consulting			
Call Transfer – Blind			
Call Transfer – Trunk-Trunk			
Caller Name & ID			
Conference – 3-way			
Conference – Party Drop			
Do-Not-Disturb			
Call Hold			
Hold Alerts			
Page – Internal			
Page – External			
Mute			
Corporate Directory - DNs			
Personal Directory			
Directory Search by Typing			
Call Waiting			
Speed Dial			
Information-on-Hold			
Headset Support			
Direct Inward Line			
User Selectable Audio Path			

### How do I get feature updates and upgrades?

You can obtain maintenance and performance updates from Avaya. The software upgrade package can be downloaded and installed on any PC that is connected to the telephone network. The package includes a software installation wizard that guides you through the software upgrade process.

### How many users can participate in a conference call?

Each telephone is capable of establishing three-way calls. Conference-chaining of up to two conference groups for a total of five lines is supported.

**Can I have different dialing plans, restrictions, and/or rules?**

Yes. Dialing restrictions can be established for telephone call groups.

**How is Music On Hold supported?**

The G10 PSTN Gateway provides an input jack for audio input (marked Music On Hold on the G10 PSTN Gateway). Simply connect a music source like a CD player to the Music On Hold port, and then enable the Music On Hold feature.

**How is external paging supported?**

The G10 PSTN Gateway provides an output jack (marked External Paging on the G10 PSTN Gateway) for broadcasting announcements through the Paging feature.

**Is a Web interface available?**

Yes. User Options and System Options can be viewed and updated through the web-based interface. Users can review and update their user configurations through the User Options interface, and administrators can set system-wide operating parameters through the System Options interface. To use the web-based interface, your PC must be connected to the telephone network. The web browser on the computer provides access to the web-based interface.

**Is group ringing or simultaneous alert supported?**

Yes. You can establish telephone groups, assign extensions to those groups, and configure calls to forward to members of that group.

**Is call transfer trunk-to-trunk supported?**

Yes.

**Voicemail****Where is Voicemail stored?**

Voicemail for a particular user is stored on a telephone at a particular extension. There is no central voicemail server. If an individual's telephone is not connected to the network, the other telephones on the network will provide backup services and record any new voicemail that would otherwise be delivered to the offline telephone. When the telephone is reconnected, it automatically checks for and retrieves any voicemail that is associated with its extension.

**Can I have my own greeting for voicemail?**

Yes, you can replace the default voicemail greeting with your own personalized version.

**How much voicemail can be saved per user?**

Each telephone can save up to 20 minutes of voicemail.

**What happens when my voicemail storage area becomes full?**

When a voicemail inbox is full, callers hear a message indicating that voicemail storage has been filled and no more messages can be saved. To avoid this situation, you are encouraged to delete voicemail messages on a regular basis.

**Can I program an 'escape to' number into my voicemail?**

Yes, this feature is called Zero Redirect. In a personalized greeting, you can invite callers to leave voicemail or press zero to be transferred either to another extension, or to an external number (for example, a mobile telephone). You specify the number through Voicemail options.



### **Can I collect my voicemail when I am off-site or at another extension?**

Yes. Simply call your telephone extension, and when the Voicemail system answers the call, press the \* key on the dialpad during the greeting. User Options are password-protected by default.

## **Auto Attendant**

### **How are PSTN calls handled?**

PSTN lines connected to the G10 PSTN Gateway may be designated either 'AutoAttended' or 'Private Line'. Calls arriving on Auto Attended lines are directed to the Auto Attendant function. Calls arriving on Private Line lines are routed directly to the extension associated with that line.

### **How does the system-wide Auto Attendant work?**

The Auto Attendant answers incoming calls, plays a greeting, and prompts callers to direct their calls. Callers can dial a known extension, spell the name of a person (using keys on the dialpad), or press 0 on the dialpad to redirect the call to the designated operator, which by default, is extension 200.

### **Can I have my own company greeting for the Auto Attendant?**

Yes. The default system-wide Auto Attendant greeting can be personalized. You can record two custom greetings and play one during the day and the other one at night.

### **Can I have calls directed directly to a user without going to the Auto Attendant?**

Yes, this feature is called Private Line, or Direct Inward Line.

## **Paging**

### **Can I page all telephones on the network?**

Yes, paging is implemented through paging zones. The General Page zone broadcasts an announcement to all of the extensions in the Corporate directory.

### **Can I set up paging zones?**

Yes, you can specify which extensions to include in up to seven paging zones. Paging zones are configured through the web-based administration interface.



## Security

### What about security?

Besides the security provided by your IP network firewall/router, several additional levels of security are in place:

- Voicemail password (12345)
- User Options password (12345)
- System Options password (54321)
- Voice packet encryption
- Signaling channel encryption

## System Capacities

The following limits are currently in place.

<b>Phones</b>	Avaya recommends a maximum system size of 20 phones.
<b>Speed Dial List</b>	9
<b>Directory Entries</b> <b>Personal</b>	100
<b>Call List</b> <b>Redial (Outgoing)</b> <b>Incoming</b>	100 100
<b>Voicemail</b> <b>Messages</b> <b>Amount</b>	Unlimited 20 minutes total
<b>Groups</b>	9, with a maximum of 10 extensions per group
<b>Paging Zones</b>	7, in addition to the General Page zone
<b>G10 PSTN Gateways</b>	10