

MITvoip Community Forum Q&A
November, 26 2007

Q: What will be covered in the cost to the DLCs as part of the transition to MITvoip?

A: The cost of transitioning to MITvoip will be covered by the Telephone Network Service Center (TNSC). Proxy based funding for the TNSC began in FY2008. After a Department, Lab, or Center (DLC) has transitioned to MITvoip, the DLC will be responsible for the cost of installing a new VoIP phone, installing a new network jack, or activating an existing network jack. This is similar to the existing model for installing a new ISDN or analog phone, network jack, etc. Note that there is no cost to move an existing phone from one employee to another (e.g., new employee to replace an employee who has left), even if a new telephone number is assigned.

Q: Will you still be billed to the same accounts?

A: The DLCs will continue to specify which account to charge for one-time charges.

Each DLC will also specify which account to charge for the Proxy Rate charges. The Proxy Rate bundles all existing recurring charges (i.e., IP addresses, ISDN/analog phones, local/long distance and international calling, etc.)

Q: How will IS&T mitigate the complex security issues?

A: IS&T takes the issue of security on VoIP extremely seriously. VoIP phones must be protected so that their SIP passwords are not compromised (phone configuration), and that the signaling (calling and called telephone numbers, time of day, etc.) and media (the actual voice conversation) are not compromised.

IS&T has implemented a number of mechanism to protect against these threats for MITvoip. They include: 1) encrypting the phone configuration, 2) creating secure tunnels for the signaling information (TLS or Transport Layer Security), 3) encrypting the media (Secure Real Time Protocol, or SRTP), and 4) using virtual local area networks (VLANs) where supported by existing network equipment.

Due to the many components for providing security for VoIP, IS&T is currently preparing a white paper that discusses security for MITvoip.

Q: Will conference room phones be included in the MITvoip transition?

A: If a DLC has an existing phone (analog, ISDN, or analog conference phone) in a conference room, it will be replaced by a VoIP conference room phone as part of the transition process.

Q: If the network goes down, will the VoIP phone work?

A: If the IP network "goes down", a VoIP phone will not work. The effects of many "network down" conditions can be localized by changing the portion of a network switch that a voip phone is connected to so that physically contiguous devices are not connected to contiguous switch segments.

Q: If the power goes down, will the VoIP phone work? Is power backed up?

A: If power goes down, a VoIP phone will not work. This is similar to ISDN phones today, which are also locally powered. Some, but not all switches are on backup power. Most switches do not have battery backups.

Emergency (elevator, public "blue light", Defibrillator, etc.) phones will remain as analog phones with backup and battery power.

Q: Are you reducing reliability with the VoIP phone?

A: Reliability is an extremely complex subject. For some fault scenarios, the reliability of traditional voice services is greater than that for VoIP. In other scenarios, VoIP is significantly more reliable than traditional telephony. IS&T believes that the overall benefit to MIT, including scenarios for disaster recovery, are enhanced rather than diminished for VoIP.

Q: Will switches be dual powered?

A: IS&T began using dual powered network switches several years ago and that is the current standard. Generally, MITvoip is being deployed within academic and administration buildings which are current with their MITnet network infrastructure; therefore they have the advantage of dual powered switches and POE (power over Ethernet).

Q: Please explain the situation around 911 and 100 emergency calls?

A: Calls to "100" go to the MIT Police. The MIT Police have an application that provides the building number for a "100" call based on either the IP address that the phone was registered to the night before, or the building number and room number in Employee Self Service (ESS) (provided that the building number in ESS agrees with registration IP address). You should always remember to update your address in ESS when moving office locations.

For more information to: edial.mit.edu

Calls to 911 (to the Cambridge Public Service Access Point), for VoIP or traditional telephony, do not currently provide location information.