

SIP Migration

Although many enterprises are eager to adopt SIP, they see their legacy PBX systems as a roadblock to the cost savings and enhanced applications that SIP would bring. It doesn't have to be that way though and you can effectively begin a phased migration to SIP without replacing your existing PBX equipment.

Typically the migration to SIP starts with an installed base of existing enterprise users that have been accustomed to certain quality and set of features. It is a four-step process that enables an enterprise to migrate to a SIP based multimedia communications system while leveraging the existing investment in the public switched telephone network.

This process involves these steps.

- 1. Adding a SIP Proxy to an existing PBX
- 2. Migrating users and phones to the SIP Proxy
- 3. Migrating the Gateway from the PBX PSTN to SIP based carriers
- 4. Retiring the PBX and the legacy phones.

Step 1.

This is the process that many enterprises have begun today and within the iLabs we have demonstrated several different methods you can use you can use for this. In this mode the Legacy PBX serves as the gateway to the traditional PSTN and the SIP Proxy routes the SIP based calls through it.

The diagram to the right shows us a few of these methods. Initially you'll need to establish a connection from your new SIP based call manager (or Proxy Server) to your legacy PBX based call manager. Your options vary from using a commercial standalone product, a product that may be a new option to your legacy PBX or even an Open Source solution.

SIP Proxy – The SIP Proxy provides the call routing functionality to your new phones. In this example the SIP Proxy is also functioning as a SIP Gateway to the PBX, however they are separate functions and could easily be different boxes.

SIP Gateway – A SIP Gateway allows you to use the same legacy telephones that you already have deployed and convert the calls to SIP. Many enterprises have made large investments in handsets and users tend to get attached to them, so this provides a nice transition without having to re-educate the end-users.

PSTN Internet

(PRI, T1, FXO, etc.)

SIP Proxy

Network

SIP Gateway

SIP Phone - Using a phone that is SIP

enabled gives you the most flexibility and allows you to more easily take advantage of the new services that are offered. Initially the cost of these made this prohibitive for many enterprises; however that has changed considerably in the past year.

Step 2.

In Step 2 we begin to migrate the existing users and services to SIP. For example we may first migrate all the handsets to SIP by either using SIP Gateway devices or replacing the phones with native SIP handsets.

We may then begin setting SIP application servers that can perform some of the important features that reside in the PBX such as Voice Mail and IVR functionality.

Tele-Worker **PSTN** Headquarters SIP Phone ------SIP Proxy SIP Proxy Legacy PBX (PRI, T1, FXO, etc.) Internet Legacy PBX IΡ IΡ Network Network SIP Phone **PSTN** SIP Phone Branch Office

Step 3.

In Step 3 we begin routing our calls to the outside world through our Internet connection. More and more carriers are beginning to sell SIP based long distance services and the rates are proving to be very appealing. Initially, you may choose to take a more conservative path and choose to use the Internet only for routing calls to your remote offices and your tele-workers.

Step 4.

Put the old PBX up for sale on eBay!