An IP Phone Primer

The Situation

Are you thinking about making the move to an IP Phone system but are not sure what to do next? If so, this document might help shed some light on which options you have, what to look for and what to look out for. The common reasons that people consider an IP Phone system are:

1. They are moving their office and are thinking of installing a new phone system
2. Their current phone system is aging or running out of capacity
3. They have heard of the great cost savings using VOIP (Voice Over Internet Protocol – IE: IP Phones)
4. They have heard of the great features that an IP Phone system can provide, or
5. In many cases, all of the above.

The Primer

The world is moving toward IP phones since the technology is very flexible and is based upon standard computer networking technologies. The basic premise is to have one network for phones and computers rather than two separate networks (one for computers and one for phones). For larger or complex environments, an IP phone setup can save a lot of money compared to the traditional PBX setup, along with providing a host of additional features.

For clients who ask us about moving to IP phones, we do a simple ROI and needs assessment to flush out all of the costs involved and benefits to help make an informed decision. Many times this leads to keeping their current non-IP phone system since the economics do not align with the business need. Other times it makes sense, especially if the company has multiple offices and wants inter-office extension calling. For single office smaller environments, IP phones can be more expensive to buy and maintain than the old standard phone systems, especially if you do not need to make changes often and if you have a current working PBX in place.

Why toss my PBX

I never tell anyone to throw away their current phone system and replace it with an IP phone system unless the need is justified. In general, I would recommend changing from your PBX system if:

- the system is failing or is out of capacity (buying new cards or hardware to increase capacity can get expensive),
- vendor management is too expensive (IP phones are becoming the norm so it can be difficult finding a firm to support your old phone system),
- there is a business need for some of the IP phone features, or
- there is a need to tie together multiple offices

Hosting vs. purchasing your IP system:

Most smaller organizations contemplating IP phones will go the hosted route so the only onsite equipment needed is the phones themselves and some networking equipment. Hosting allows for a smaller up front capital expenditure, reducing the need for supporting a phone system, while providing an enterprise class phone system with all of the corporate bells and whistles.

The upside to hosting is that the provider maintains the phone system and phone lines and there is a reduced capital expenditure. The downside is that your Internet connection is the life source for your phones and if that ever fails, you have no phones (but the good thing is that callers still get your voicemail so they can leave a message). Hosting also has a huge advantage if there is ever a Disaster event.

Common Myth's

- *My phone calls are all over the internet, and therefore, are free* – Not exactly. If you use something like Skype then that may be true to a degree, but using a corporate IP Phone system, you still need phone lines and will be paying for long distance and local calls (unless you are doing an inter office call which would be free).
- *IP Phones are cheaper to buy and install* – It is true that IP Phones are becoming more and more prevalent, so there are a greater number of less expensive models on the market to choose from compared to traditional PBX system, but if you are looking at an enterprise IP or PBX system the costs are about on par with each other.
- *IP Phone systems have a lot more features than the old PBX systems* – For the most part, the features have more to do with the system manufacturer rather than the technology itself. IP phone systems do have an advantage since it is easier, and in some cases, less expensive to implement features.

Some benefits for IP phones are:

- Flexibility – you can move a phone and plug it in to another network jack and it is still the same phone. In the old PBX world, the "phone" is associated with the physical jack it is plugged in to so moving a phone is a big deal comparatively speaking.
- Feature – built-in (or as an option to most IP phone systems) is the ability to receive your voicemails and faxes within your email inbox.
- Interoffice Calls – interoffice communications become easy and free for making calls. In the PBX world, this is fairly complex and expensive to achieve so you pay per minute to make calls to your other offices.
- Find me/follow me - Most IP phone systems have the ability to set up a find me or follow me feature that allows a user to program a set of numbers to try before sending the caller to voicemail (IE: call my desk first, then try my cell, then try my home, and send back to my voicemail if no answer).
- Upgrades – advanced features as they become available are just a software update.
- Hosting – with IP phones you can have someone else maintain the phone equipment and you rent the service rather than buy equipment and maintain it.
- Cost – You may be able to save money on your telecommunications costs using an IP phone system depending on your needs.
- Future – IP phones are the future so at some point, this will be the main and primary phone technology.
- Support – you may find it difficult finding support for an aging PBX system.
- One network – no need to wire and maintain multiple disparate networks to create a phone and a data network when IP phones can leverage the existing data infrastructure.
- Softphone – for most IP phone systems, you can install a software version of a phone to use on a laptop for traveling or at your home office. A simple computer USB headset allows for very good and fully functional phone usage just like you were at the office (same caller ID, same extension, etc.)

Doing a forklift upgrade to install an IP phone system is not always the best option for many organizations, but it could make a lot of sense for many others. To make it easy, start doing the math to see if the economics align with the business goal. From there you can find a technology partner to help guide you through the process and implement the best technology for your business. I wish there was a simple answer that fits all situations, but with technology, there rarely is an easy answer.