

TITLE – IP-Based Telephone Systems: Voice and Data Convergence
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Are you in the market for a new telephone system? If you aren't now, chances are, you will be within the next few years. The average life of a telephone system is seven to ten years. When a telephone system has reached this age, it is sometimes no longer supported or very difficult to get parts. Also, the new telephone system technology may make it advantageous for you to replace your telephone system sooner, rather than later.

The newest technology in telephone systems are IP (Internet Protocol) based systems. However, buyers must beware, because many telephone vendors have not embraced this technology and therefore, are still selling their customers traditional PBX or dedicated key systems. Also, many vendors are selling hybrid telephone systems and telling their customers that the system is IP ready. If you are interested in a hybrid telephone system, then you will want to ask what additional equipment you will need later to make it an IP-based telephone system. The prices of the PBX and key system telephone systems have dropped dramatically. They are out of date and purchasing a traditional PBX telephone system or a dedicated key system would be like purchasing a brand new computer with a 486 MHz processor. You would be buying behind the times and backward in technology which would not be a very good investment. Implementing an IP-based telephone system takes advantage of your investment in technology.

An IP-based telephone system uses the same cabling as your existing computer network; CAT5e or CAT6. Also, routers and switches are used, similar to your computer network. The router is connected to a T1 line, traditional POTS lines, or a PRI. All of the handsets are connected through cabling to the switch. Voice and data convergence is the concept of running your voice and data over the same network utilizing IP communications. Therefore, it is very important to have your systems integrator or computer networking firm involved with the implementation of your IP-based telephone system.

Cisco is the leader in the computer hardware industry of routers and switches. Cisco has developed IP communications/telephony hardware that is open source. The approach of Cisco to IP-based telephone systems is from the data side, while most traditional PBX telephone systems manufactures are approaching IP-based telephone systems from the voice side. Your telephone calls will now travel across your network and therefore, Cisco's long history of stable network components makes them a major player in IP communications market.

It is very important to keep in mind that before the implementation of an IP-based telephone system, you should have a network assessment performed of your existing network infrastructure. Performing an analysis of the traffic of the existing data packets on your network and determining what the potential impact of the voice communications will be on the network is vital. Furthermore, take a look at your phone bills and broadband access bills as this is an excellent time to re-evaluate your carrier and make sure you are not overpaying. The telephone carrier market is very competitive right now. If you have not evaluated your bills within the past year, more than likely you will find that you could be saving money.

The administration of an IP-based telephone system is much easier and less costly than a traditional PBX telephone system or dedicated key system. Typically, all adds, moves, and changes had to be performed by your telephone vendor. With an IP-based telephone system, you can move the handsets yourself and all of the settings will travel with the handset for the user. It is similar to moving a PC for someone from one office to another. Their telephone will also move with them. You do not have to do anything special, just move the telephone handset. Essentially you will save money by not having someone perform your adds, moves, and changes. Software is included that will allow you to set up and administer users. Adding a user is like adding a user to a software program. Additionally, you can see all of the telephone calls that have been made from a particular line and also the calls that have been received on a line. The administration tools are incredible and very easy to use.

An IP-based telephone system can have unified messaging, which is the integration of your voice mail with your email. Your voice mail messages can be sent to you as an email message. A .wav file is attached to the email message so you can listen to the voice mail. These messages can be forwarded to someone else, stored in a client's folder in your in-box or on your network, and also backed up. There are many advantages to unified messaging.

If you work from home or remotely, you can send and receive calls as if you are right in the office. You do not have to have a handset to do this either. All you need is a broadband Internet connection, a PC and a soft phone. Through the Internet connection, you can connect remotely to your office and send and receive telephone calls as if you are in the office. Multiple offices can be connected through a broad band Internet connection and make calls and transfer calls as if there was one office. You will not have to pay for the telephone calls between the offices. These calls are free.

Once you realize the capabilities and benefits of the new IP based telephone systems, you will want to take full advantage of the features, not only to improve your capabilities and save you money, but also to be more competitive and provide your clients with better service. IP based telephone systems has changed the telephone industry dramatically and it is important to educate yourself regarding this new technology so that you can make better buying decisions.

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