



Voice over Internet Protocol

Advanced communications through VoIP

Voice over Internet Protocol, or *VoIP*, is a relatively new technology that enables voice communications to occur over the Internet. Historically, phone calls were made with **analog** signals across a voice, or telephone, network. VoIP service, on the other hand, uses a **digital** connection across the Internet.

When first introduced, the quality and reliability of VoIP services, like most technologies in their infancy, were not consistent. Since that time, network providers have made significant improvements to the quality of voice. Research has shown that VoIP is increasingly becoming the dominant telephone technology used by business. This service is being embraced as a means to reduce cost and to enhance workplace productivity.

Reduce Cost

For many organizations, the potential to reduce capital and operational costs is a key driver for switching to VoIP. Specifically, savings may be achieved by

- reducing or eliminating traditional long-distance charges,
- avoiding costs associated with replacement and upgrades of telephone systems,
- eliminating ongoing maintenance contracts, and
- reducing expenses related to system management.

Because VoIP uses the same network as other data resources, potential savings exist in consolidating resources to eliminate duplicative networks and staff.

Enhance Workplace Productivity

Some of the standard features of analog phone systems include caller ID, call forwarding, and call waiting. By integrating its phone system with its digital computing environment, an organization can gain flexibility through a broad array of enhanced features and functionality, including

- the integration of phone calls, email, voicemail, video, web conferences, and faxes for enhanced productivity through Unified Communications,
- the ability for users to route calls to a select location, enabling mobility and telecommuting,
- the ability to record, transcribe, and archive phone calls,
- the ability to easily conduct virtual meetings and conference calls,
- the portability of rerouting calls during natural disasters, and
- the ability to receive other types of communications, such as text, photo, and video messages.

Further Considerations

As with all technology migrations, moving from a traditional telephone environment to a VoIP service, has its challenges. Some of these considerations include

- maintaining security within the network,
- ensuring wiring in older facilities meets VoIP standards, and
- planning for initial equipment costs.

Although managing these challenges is a non-trivial matter, thousands of public and private organizations have determined that

the combination of cost reductions and workplace productivity enhancements enabled through VoIP services are worth the switch.

Capitol Complex

The Texas Department of Information Resources is evaluating the use of VoIP technology to replace the current Capitol Complex Telephone System. DIR is seeking to provide enhance technology options including Unified Communications, advanced call center functionality, and mobility and telework features, which allow the “in-the-office” look and feel from anywhere in the world. DIR intends to implement a system that will meet the following goals:

- Provide comprehensive disaster recovery,
- Provide improved business collaboration capabilities,
- Provide more efficient management and administration,
- Reduce operational and service costs,
- Provide choice of physical phone sets, as well as soft phones, and
- Provide a quality solution which is scalable and reliable.

Once a solution is selected, DIR expects to begin migrating agencies that have expressed an interest in implementing VoIP services.