

Get Hosted (not Toasted)

Hosted IP Telephony is an excellent option for businesses that needs to upgrade their communications network. Businesses have realized reduced costs and improved operational efficiency with this proven service offering. However; Hosted IP telephony that is implemented incorrectly may cause as many problems as it solves. Therefore, it is important to understand exactly what services your potential vendor is capable offering and what your responsibilities are in managing the new system.

The following are important issues that businesses should consider before choosing a Hosted IP Telephony vendor.

CLEC

A CLEC is a competitive local exchange carrier that is officially recognized by the government and the major local telecommunications provides. A CLEC is state regulated and has agreed to abide by a set of rules that protect business and consumers. In addition, CLEC's have certain direct rights and privileges in regard to number portability and network access.



SOFTSWITCH

A Softswitch is the brains of a Hosted IP Telephony network. It controls the telephones at your locations, provides call control, determines the type of features you can access and manages your telephones connections to the outside world. The softswitch provides the functions that the premise based PBX and Key Systems perform in a traditional telecommunications system. The type of Softswitch used by the Hosted IP Telephony provider determines the features, reliability and long term viability of the system. Therefore, it is important to know some basic information about the Softswitch.

A business should know the answers to some of the following questions:

1. Is the Hosted IP Telephony provider a CLEC?
2. Is the manufacturer of the Softswitch stable and with the resources to support it?
3. Does the Hosted IP Telephony provider own the Softswitch or are they leasing space from another provider?
4. Does the Hosted IP Telephony Provider have the engineering staff to properly support their Softswitch?
5. What features does the softswitch provide and can they be customized to meet a client's specific needs?

PREMISE EQUIPMENT

Hosted IP telephony requires the use of telephones, a router and data switches at the business premise. The type of IP phone is based upon the requirements of the users. The data switch connects the phones to the network, enabling them to make and receive calls, while the router connects the business to the remote Softswitch and the Internet.

The data switch is the heart of the network. The quality of the data switch is extremely important to IP telephony implementations. All phone calls and data transmissions originate and terminate on the data switch. A data switch failure can take your entire system down and an underpowered switch can cause quality problems. Therefore, it is essential that a business install a reliable switch with all of the features necessary for a quality Hosted IP Telephony installation.

The router is also extremely important. The router handles all of a business external data including web browsing, email, and file transfers. In addition, all inbound and outbound phone calls flow through the router. Therefore, the router must be reliable and have all of the features necessary to support a quality implementation.

The choice of router and switch infrastructure is also impacted by evolving network security requirements and integration of future technology enhancements. The use of inappropriate switches and routers can cause an implementation disaster.



NETWORK MANAGEMENT AND MAINTENANCE

Network management is essential to maintaining a reliable Hosted IP Telephony Network. There are critical components that work together to provide reliable and quality service. It is important that the health of these components is monitored so that problems can be quickly resolved or addressed before they become a major crisis.

The most critical components in a Hosted IP Telephony network are the data switch, the router, the T1 and the Softswitch. Failure of any one of these components can bring down the entire network. Therefore, it is important that each of these components be monitored and recorded.



It is important for a client to understand their responsibilities in managing the network. Some Hosted IP Telephony providers only manage the Softswitch, others manage the Softswitch, T1 and router, and a very few manage every critical component in the network. Hosted IP Telephony providers that do not provide a complete network management package rely upon the client to diagnose the problem and determine the appropriate vendor to call. For example, a failure occurs and the client cannot make or receive calls. The client must determine if

the problem is with the data switch, the router, the T1 or the Softswitch. If the client cannot determine the problem, then the client must coordinate between multiple vendors. This places the burden of problem resolution on the client and can result in finger pointing between the equipment vendor and Hosted IP Telephony provider.

A Hosted IP Telephony provider that manages the entire network is responsible for diagnosing and repairing the problem. Therefore, the client only needs to make one call and relies on the provider to diagnose the problem. The Hosted IP Telephony vendor is responsible for the entire network. In addition, the Hosted IP Telephony provider should have a complete history of network alarms and messages that make it easier to diagnose and resolve the problem. A vendor who provides complete system management can reduce downtime, reduce client's effort in managing their system, and reduce the total cost of ownership – thus leading to faster return on investment.

NETWORK SECURITY

Internet worms, e-mail virus', Trojan horses, hackers; the list of threats goes on. In a converged network, voice is just as susceptible as data to these threats. The IP based voice network may service a conduit into the data network if not designed properly. Therefore, it is essential that a business install a highly secure network with all of the features necessary for voice quality of service (QoS).

The converged voice and data networks share the same physical infrastructure to reduce initial capital costs and long term operational costs. However, voice and data should not share the same logical network.

The Hosted IP Telephony provider should deliver services such that:

1. Voice network is on a separate VLAN from the data network.
2. Changes in the customer security policies and practices to not effect the voice network.



SUMMARY

Hosted IP Telephony is an outstanding option for businesses that wish to upgrade their traditional digital phones to an IP Communications infrastructure. Utilizing a provider that integrates proven technology with excellent technical and system management skills will insure that a business receives the maximum benefit from its new Hosted IP Telephony system. Please review the criteria that are discussed in this White Paper to make sure that you understand exactly what your potential vendor is proposing. This will avoid future disappointment and make sure that you get Hosted not Toasted.

FOR MORE INFORMATION

To find our more about Equivoice, Inc., please visit www.equivoice.com or call us at 847-429-1700. Equivoice is an FCC regulated C-LEC, a Cisco SMB Select Partner, and certified with Cisco IP Communications Specialization.