

## Technology News Letter

Summer 2007

### What is Voice over Internet Protocol (VoIP) & IP TELEPHONY?

**Voice over Internet Protocol**, commonly referred to as **VoIP** or **IP Telephony** for short, is the routing or transfer of voice conversations over the internet or any IP based computer network. While VoIP has just recently been commercially available, the technology has been around since 1973 when the Department of Defense created an experimental Network Voice Protocol (which eventually evolved into VoIP) to use on their ARPANET (precursor to the Internet). Even though this technology has been in use for quite a long time by certain governmental agencies, it is very new to the public sector. As a result, the technology has a long way to go to be as reliable as the more traditional TDM technology used in standard PBX's for the last 20 years.

### VoIP for Today's Business

Today VoIP has become a good tool for the responsible installation companies looking to provide their multi-site customers a cost effective solution to private line circuits. It has also become a priceless way to allow work-at-home employees remain connected to their employers while increasing productivity and eliminating lengthy commutes. Due to rising gas prices, VoIP will become increasingly popular among business owners of outbound call centers looking to accommodate their staff and help them save on these rising transportation expenses.

Some businesses opt for using their under utilized network capacity to combine both voice and data on a single platform. The theory is that managing a single, unified network is easier, less expensive, and requires fewer resources. At AIRDIS we differ from this philosophy and do not recommend relying on VoIP for you business platform. Even though routers offer Quality of Service (QOS), which means that voice streams take priority over the transfer of data to ensure a better voice call, in our opinion making VoIP YOUR businesses communications foundation is a mistake. Here are a few reasons why: 1. VoIP is only as reliable as your data network. 2. Call quality can be compared to a cellular call when QOS is not enough to preserve the calls integrity. 3. Because of this you can experience dropped calls and bad connections when speaking to your customers or vendors

VoIP as a foundation is best suited for residential end-users where reliability is not mission critical. This News Letter is meant to inform and educate to allow, in this case, VoIP candidates make a good decision on whether this is right for their business or not. VoIP is not terrible thing, it's quite the contrary, however the bottom line point is this; VoIP is not a technology that you can just throw into your business without very careful consideration and comprehensive investigations. Otherwise you could be disappointed and lighter in the pocket book.

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For More Info Call (630) 925-4446

*Our Mission is to use our wisdom and integrity to manifest solutions that result in a successful more profitable operation for our customers.*

## VoIP Platforms:

VoIP is used on three platforms today and it can be confusing for the public so we are going to attempt to clear things up. Here are the three most common deployed platforms for VoIP today:

1. **VoIP PBXs.** Using a VoIP system in place of your traditional PBX. You own the equipment as it resides at your business location and the systems in-house traffic is shared with your traditional local area network resources.
2. **VoIP Voice Circuits.** Using VoIP to transmit your call traffic from you business to the rest of the world. This is the way most phone companies today are using VoIP to considerably reduce their transmission costs. This method is the most reliable of any VoIP option because the entire network is load balanced and designed for the sole purpose of successfully delivering this traffic with quality. Unlike the other two options where integrated resources are shared.
3. **Hosted VoIP Systems.** Using VoIP in place of your traditional PBX but, you do not own the equipment and it does not reside at your location. With this option you share both local & wide area network resources with voice & data applications and you pay per phone installed (per seat) on a monthly basis and this charge never goes away. You are also completely dependent on the hosting company when you need to make changes or to troubleshoot issues. Features like paging, music on-hold, analog ports, multi-line appearances, etc are pitfalls of this option. For this reason it is not a recommended option.

## Top IP Telephony Myths:

### Myth 1: Installing VoIP hardware will save you money

Some of today's carriers and providers have represented that VoIP hardware installations will save you substantially on your traditional voice services. Commercials on TV allude to this and it has almost become an expected fact. However, the fact is that if you perform a cost analysis you will find that you will be paying much, much more for that slick phone than providers will admit. While it seems that you will need less VoIP hardware for an installation, the VoIP phones tend to cost twice as much as the traditional sets and as a result the hardware expenditure comes in around the same cost or more. Some will argue that having both voice and data on the same platform is easier and therefore cheaper in the long run. You'll have to run an awful long time to recover the cost of aggravation caused by the consistent networking issues that go along with managing an IP based voice system. Furthermore, changing a simple network setting on your router can result in your phones not working. Diversity is always the best option. Making the decision to go 100% VoIP should not be contemplated by the part-time technology novice. Make sure to include a telecom partner you can trust when making your decision. That partner should layout all the pros and cons for you to make an informed decision.

### Myth 2: Using VoIP will eliminate my phone bills

Whether you deploy a VoIP or a traditional solution you will pay for your outbound calls to terminate on the PSTN (Public Switched Telephone Network). The only VoIP calls that remain free are when a call originates and terminates on your carriers VoIP network (for example a Vonage customer who calls another Vonage customer). In the business realm where reliability is paramount this is not a viable solution worth any savings not to mention that the odds are slim that your VoIP carrier will also be the carrier for all your vendors and customers. Yes, some VoIP phone companies have unlimited usage plans, but you can get similar plans without committing to a VoIP platform.

In closing remember; consult a professional you can trust to guide you to make the right decision for your business and be cautious when buzz and hype surround a technology term. VoIP is an awesome technology and it is the future of voice, but that doesn't mean you are ready for it now. Good luck!

**To find out more contact Airdis Telecom at: (630) 925-4446**

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