STAR Watch

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VOICE SOLUTIONS

VoIP (voice over IP - that is, voice delivered using the Internet Protocol) is a term used to describe a set of facilities for delivering voice information using the Internet. The term "VoIP" is derived from the VoIP Forum, an effort by major Reductions in the cost of telephone service moves, adds and changes (MACs).

• Lower costs for the combined Internet and telephone bandwidth.

the VoIP Forum, an effort b equipment providers, including Cisco, VocalTec, 3Com and Netspeak, to promote the use of a specific standard for sending voice (audio) and video using IP on the public Internet and/or within an intranet. From a cost standpoint, VoIP avoids the tolls charged by ordinary telephone service and saves organizations a great deal of money.

Beyond the cost savings,

VoIP has another advantage. Since VoIP marries an organization's telephone network with its data network, a whole new set of capabilities emerge that would be physically impossible or cost prohibitive without this convergence of two seemingly disparate technologies.

Cost savings

VoIP cost savings occur in 3 major areas:

• Simplified network structure.

Instead of wiring each office with a connection to the telephone system and another connection to the data network, only a data network connection is needed. While the cost savings for this is relatively small, the resulting simplification of the networks also reduces ongoing maintenance costs.

As the size of an

organization increases, the number of moves, adds and changes of telephone service increase dramatically. In large

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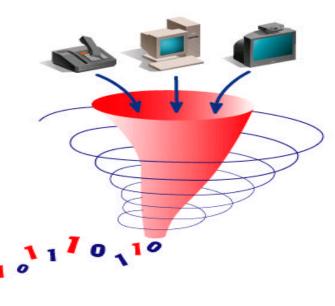


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organizations, there may be as many as 7 telephone service MACs for every 8 employees—per year. According to one study, it costs between \$35 and \$300 per MAC with a traditional telephone system (if work is done by in-house staff, the cost is \$35-\$90; if done by outside contractors, the cost is \$55-\$300). In an office where all staff has IP telephones, the cost of the most common service change, staff office changes, is almost

zero. When an employee changes offices. the telephone is simply unplugged from the wall lack and carried to the new office and plugged back in. There is no need to have highlypaid technicians reprogramming the telephone



What can VoIP do?

Plenty. Because these new systems integrate the voice and data worlds, you get the best of both.

<u>Ease of control</u>. To control personal smart phone features, users call up the user interface program on their computer whether they are in the office or connected to the Internet from a remote location. It is

> much easier than using the unwieldy menu system on the telephone.

Nice bells and whistles to have. Most VoIPs offer the following services as part of the basic package price: Caller ID with name, Caller ID block, 3-way calling, and call return (*69).

system with the new extension numbers and office locations.

When separate, the bandwidth of the telephone network and the data network must each have sufficient capacity to carry their separate loads. In studies of telephone usage, many times it is the case that a significant amount of the telephone network capacity is unused (and unneeded) for long periods in the business day.

<u>Call Forwarding</u>. Most smart phone systems allow users to forward calls to any number or series of numbers in the US or Canada. Along with the forwarding of the call, users can control how long call forwarding will ring a given number before moving on to the next number. If the call is not picked up, users control which voicemail box should receive the unanswered call.

<u>Call Waiting</u>. If you are already on the phone and another call for you is received,

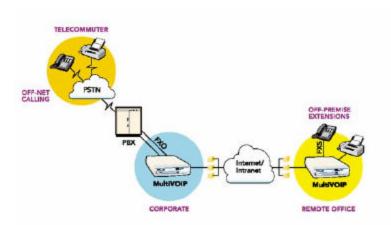
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these new systems can be set up to ring another telephone line of your choice. The line that is rung could be another line connected to your telephone, or it could be another person in a completely different geographic location. You can control the order in which the incoming call is routed to other locations.

<u>Simultaneous ringing</u>. If you really want to be available, you can set up the smart phone system to not only ring the phone on your desk, but also simultaneously the user's computer. Most smart phone systems allow the end-user to control this feature.

<u>Virtual phone numbers</u>. For a small monthly charge of \$5-\$10 each, VoIP users can have local telephone numbers in other cities, area codes and/or states. This allows people who live in other areas to make local toll-free calls to your organization. Depending on circumstances, this might be a lower-cost alternative to an 800 series telephone number.

ring another telephone anywhere in the US or Canada. It is similar to call forwarding, except both ring at the same time.



Backup. In the event that the Internet connection to the telephone system fails, many systems will automatically transfer calls to a predefined set of telephone numbers. If the telephone

Call transfer.

After you

answer a call,

you may have your call transferred to your cell phone, to another land line or to any US or Canadian phone number of your choosing. Your calls are transferred immediately.

<u>Voicemail to email</u>. Users do not have to use their telephones to check their voicemail. Most smart phones can be configured to attach voicemails to email messages that can be sent to the user. When users check their email, they automatically could get their voicemails, as well. Instead of receiving a message containing text, the attached sound file (containing the voicemail) is played on service at the main office fails, calls could be re-routed to the receptionist at a branch office, or staff could have calls re-routed to their personal cell phones.

Most VoIP vendors do not charge extra for these services.

How does VoIP work?

Most people have a vague idea of how a traditional telephone system works, but little of that information is required to initiate a telephone call. It is not necessary to understand all of the

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technology that routes a user's voice from their handset to the person that they are calling. The same applies to the use of a VoIP telephone. The telephone equipment on the user's desk looks almost like any other telephone. The person called does not need any special equipment to receive calls coming from VoIP telephone systems. The big difference is how it is physically connected to the world outside of the office. With a traditional telephone system, each telephone line consists of a pair of copper wires that can be traced all the way from the user's office to the telephone switching station. In a VoIP system, instead of phone lines exiting the user's premises as copper wire, each phone line is connected to a device called an Analog Telephone Adaptor (ATA). The ATA's are connected to the user's data network which provides the pathway to/from the Internet.

How much does it cost?

There are many different pricing schemes, depending on the complexity of the equipment, services and level of support to be provided by the VoIP vendor. There are a range of products and services available that could meet the needs of organizations ranging in size from one-person operations all the way up to multinational corporations.

The first step in the process of acquiring

and installing a VoIP system involves an in-depth analysis of the capabilities, usage patterns, and costs associated with the current telephone system. It is impossible to make choices about new equipment and services without fully understanding what is needed versus what is merely desired. It is also vital to know what the current telephone costs are.

Regardless of the size and complexity of an organization's needs for telephone

service, there is one certainty: VoIP depends on a state-of-the-art switched network within the organization. Many experts recommend that switching to VoIP during an overhaul of an existing data network, since its cost savings can help offset the expense of new gear for data applications only.

Should I switch to VoIP right now?

VoIP can be a cost-effective way to improve an organization's telephone system. With more and more VoIP vendors entering the marketplace, users are able to demand quality service and profit margins are being squeezed down to reasonable levels. It can only get better. If an organization is currently looking to upgrade its telephone or data network infrastructure, now is the time to look at VoIP. If the cost and performance of the current telephone and data network are satisfactory, it might be best to wait.



Windows 98/98SE/Me Rise from the Dead!

On January 16, 2004, Microsoft was scheduled to declare Windows 95/98/98SE/Me, four of their most commonly used operating systems, obsolete. On that exact date, Microsoft reversed its decision and declared that,

except for Windows 95, all products would get a new lease on life. Officially, Microsoft's stated reason for this change is "...continual evaluation of the Support Lifecycle policy revealed that customers in the smaller and the emerging markets needed additional time to upgrade their product".

So why did Microsoft change their "upgrade or die" policy? Is it possible that, as several Microsoft functionaries stated, word of the imminent demise of these products never made it to several emerging nations? Is there a new, kinder and gentler Microsoft?

While there is plenty of room for conjecture, most analysts agree that at least twenty percent of all computers running a Windows operating system still use Windows 95, 98, or Me. That is a large number of computers for Microsoft to abandon. What if the users of those computers turned to Linux as a replacement operating system? Once switched to Linux, how many users would be eager to return to Microsoft?

> The good news... Even though Microsoft is back in the business of supporting these products, significant restrictions have been placed on the level of support provided. Users of these three products may request security fixes until June 30, 2006. Downloads for security fixes will be available until June 30, 2006. All online self-help support will be available until June 30, 2007.

And now, the bad news...

If you want Microsoft to help you with a problem

that you are having with these products, you will need to get out your credit card. No-charge incident support and extended hotfix support is not available. You will be able to pay for support on a per-incident basis until June 30, 2006.

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WNYLC Web Statistics For February 2004

Total Hits
Total User Sessions
Average Hits/Day
(Monday—Friday) 12,156
Average User Sessions/Weekday 1,639
Number of Pages Viewed 79,443
Average Number Of Pages
Viewed Per Day 2,942
Number of Documents Viewed 56,728

Accessed Using Internet Explorer 89%
Accessed Using Netscape 6.9%
Operating Systems Used:
Windows 98
Windows 2000
Windows XP
Windows 95
Windows ME
Windows NT
Macintosh



WHO WE ARE

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