

# **To IP or Not To IP**... That is the question

As an end user you have many choices with regard to telecommunication including provisioning with PBX's converged PBX's or Key Hybrid systems or pure IP Telephony. To understand the benefits of converged or IP telephony complete the following analysis of your business to find out which solution is best for you:

# What do you have in place?

Do an inventory of what you have, and share this with your pre-sales consultant. You may be able to save money by incorporating old technology into the new system.

# Look forward-- how long will the system be in place?

Are you looking for a three, four or five-year system? Factor this into ROI calculations and the selection of an appropriate vendor / partner combination.

# Hybrid or pure IP solution?

You have three choices. Upgrade your existing legacy PBX to IP; buy a hybrid PBX that is part TDM and IP; or buy a pure IP PBX. There are cost, risk and cash flow issues to consider in addition to the technical requirements.

#### New integration with other systems

As you move to UC, connecting to systems like Microsoft's Exchange or your CRM will bring real productivity gains. Determine these integrations, and make sure your UC platform supports the integration. Samsung is this leading vendor already has great out of the box software to connect the IP telephony system to everyday applications.

# Which components are the best fit for your business?

The Samsung UC menu is long. VoIP and IP telephony is absolutely required. It is important here to distinguish between VoIP, which is a service, and IP Telephony, which is the hardware and software that make use of that service. But back to UC, which of the following functions are to be included and delivered?

- Voice and audio conferencing
- Telepresence
- Video conferencing
- Web conferencing
- Instant messaging (IM)
- Mobility
- Call center
- Application integration (Word, Outlook, CRM)



# IT issues that drive procurement

Now that UC will be part of IT, other factors will come into consideration. There are significant cost advantages, because now you can consolidate your IT and telephony providers into the one easy to manage relationship.

# Lastly, you need to consider the endpoints and connections that will be used:

# Legacy analog and digital phone

Can any of these be used in the new system?

# Non-phone devices

There will still be non-phone connections. There will be fax machines, security devices, TDD and alarms that need to be supported. It is essential that you choose the correct BRI, FXO/FXS connections for your infrastructure.

# What level of IP phone?

There are basic, business and executive level IP phones that must be selected. There is a great range of Samsung IP phones for SMB's on a budget, see our list of IP phones you can

# Mobile workers and soft phones

How far do you want to deploy soft phones? Samsung IP communicator makes working from home easy with a soft phone that replicates the features of that user's IP phone as if they were at their desk.

#### **Fixed Wire Mobile Convergence**

Do your employees need to be mobile and travel with connectivity to home base?

# **Dial plan**

Saving money on dial-plans is one of the big ROI benefits of UC. Identify the high cost areas of your telephone account and ask one of our pre-sales consultants how to reduce it.

#### What is an IP-PBX?

An IP-PBX is a customer premises business phone system that manages telephones throughout the enterprise and acts as a gateway to both voice and data networks. An IP-PBX allows you to place calls using a network instead of standard telephone infrastructure. Telephones can be connected to the IP-PBX via the network and calls can be routed via the network instead of the standard public switched telephone network.

# IP PBX (Internet Protocol Private Branch Exchange) Overview

#### What is IP telephony?

IP Telephony or Internet Protocol Telephony is the transmission of voice signals over the Internet, wide area network (WAN), or local area network (LAN). IP Telephony uses voice-over-IP to break down voice transmissions into packets of data and transmitting them across a network.



# **IP Business Phone Systems Overview**

#### What is Voice-over-IP?

Voice-over-Internet-Protocol or Voice-over-IP or VoIP allows one to send a voice transmission via a network instead of the standard telephone infrastructure. Calls can be routed via the Internet, wide area network (WAN), or local area network (LAN).

# What are the advantages of an IP-PBX system?

#### **Multiple Branch Offices**

With VoIP, expanding your business phone system to multiple branch office sites is easy. Integrated IP Gateways allow you to traffic calls between offices over the Internet and save on long distance charges. Dialing branch offices is as easy as calling an extension down the hall. Make certain that your IP-PBX has an administration tool that simplifies the process of configuring IP gateways between remote systems.

#### **Toll Bypass**

IP-PBXs enable businesses to reduce the cost of long distance calling by routing calls inexpensively over IP networks. If you have overseas facilities, using an IP-PBX could reduce your business's costs significantly.

#### **Remote Office**

Even if your business has a single remote office, an IP-PBX can give you the flexibility to pick an affordable solution. Purchasing a solution that allows for a small or large number of IP trunks might be right for you.

#### **Work From Home**

Vertical's sophisticated IP-PBX software extends easily and seamlessly to your telecommuters, contractors, and consultants and makes them part of the corporate phone system.

#### How do IP-PBXs work with other applications, including legacy applications?

The Vertical platform can host both custom and third-party applications, managed locally or remotely. Vertical also provides a simple, script-based development environment for custom applications to address specific customer needs. The Vertical solution can also be tightly integrated into backend applications and databases enabling companies the ability to provide new customer-facing applications like inventory look-up. Other vendors require additional servers (dedicated for some applications), again adding to the cost of the solution.

#### What makes an IP-PBX an applications platform?

The platform should be fully application-ready, with the processing power and memory to support thirdparty applications. The system should be standards-based and use standard application programming interfaces like Voice XML and TAPI.



# Can I use an IP-PBX system if I want to keep my existing analog and digital handsets?

Support of legacy and analog and digital handsets should be a top requirement for most IP-PBX installations. Why throw away your existing phones and wiring, when the right IP-PBX solution can work with legacy handsets as well as IP?

# What if I want to adopt IP at our own pace instead of radically redoing our entire infrastructure?

The emergence of voice-over-IP networks presents today's business manager with a tough choice when making a long-term phone system purchase decision. Maybe you're not ready to standardize on a one-wire network requiring an expensive network upgrade. Perhaps you have no need for multiple branch communications, but want to plan for your future expansion. How do you leave your options open? The right IP-PBX should offer a practical solution, providing the flexibility to use your phone system as a traditional PBX, IP-PBX, or a combination of both - the choice (and timing) should be completely up to you.

# VoIP has come of age

Perhaps the biggest benefit is the ability to take advantage of the call-cost savings associated with VoIP. With the right network and QoS (quality of service) in place, VoIP technology is now at a stage where it is impossible to distinguish a call made from it and its traditional fixed line competitor. The difference? You will save anywhere from 25% - 60% off your current phone bill.

In combination with a private network (for businesses with more than one office location), the savings and benefits cannot be ignored. See below for a typical network diagram of a converged network running voice, video and data between three offices and the rest of the world.

Balance of Page Intentionally Blank



### Up to 50% reduction in current call costs

Converging the voice and data networks allows businesses to tap into the economics of VoIP. When North Sydney IT sits down with our clients to discuss costs, we invariably find that the upfront equipment costs are paid off with call cost savings through VoIP within 6-12 months. Below is an actual use case performed with a client that demonstrates the call cost savings of VoIP.

Current Bill Breakdown			
Type of Call	Number of	Spend	Call Cost (Av)
Local	2,290	\$366.40	\$0.16
Interstate	150	\$67.50	\$0.45
Calls to Mobiles	3,000	\$1,566.00	\$0.58
Call Fwd to Mobiles	450	\$85.50	\$0.19
Total	5,606	\$2,085.40	
Traditional PBX Telephony B Breakdown (Monthly) - 4 Vo			oIP Cost
Type of Call	Number of	Spend	Call Cost (Av)
Local	2290	\$251.24	\$0.11
Interstate	150	\$16.06	\$0.45
Calls to Mobiles	3000	\$621.00	\$0.58
Call Fwd to Mobiles	450	\$71.40	\$0.19
Total	5890	\$959.70	
	SIP Trunk Rental: \$20.00		

# **Benefits of a Converged Network**

- Work from home or on the road as if you were at your desk with a remote connection to your entire network, including your desk phone.
- The answer lies in both the current cost and productivity benefits of the technology, and that the converged model of telephony will be the platform of the future. The benefit of adopting early is that rather than wait for the inevitable and going with the majority of SME's late in the game, there is currently a competitive advantage to be gained.
- Consolidation of IT and telephony providers, meaning one bill, one point of contact and the reduction of complexity means reduced outsourced IT and telephony support costs.
- Toll-bypass between offices, large reduction in line rental costs and cheaper calling rates with VoIP can save up to 50% off telephony costs.
- Productivity and customer service enhancements with new communications integration with other systems, such as MS Exchange and most CRM's.

# For a Free Consultation Call: 877.892.2452