

Why IP-PBX?



The convergence of data and voice communications systems is driving a new revolution in the workplace. Across the world, enterprises are gradually making a transition to solutions that allow them to leverage their existing data networks for voice communications. Network managers are increasingly transmitting Voice in their enterprises over IP networks as opposed to conventional circuit switched networks. With the advent of standardised, cost effective technology, Voice over IP is no more the preserve of large enterprises with scores of small enterprises adopting this technology.

IP based PBX equipment* is one key solution at the centre of this change.

What are the benefits that enterprises hope to realise through this change? What are the principal drivers of this revolution? And, does this make business sense for your enterprise?

We take a behind the scenes look to help you understand the key trends shaping the recent IP PBX revolution:

The ubiquitous data network

The past decade has seen an invasion of data networks into the enterprise with data connectivity becoming de rigueur for the entire workforce. Ranging from sophisticated applications such as collaborative planning and operations management to simple activities such as Web browsing and email – most offices today need to provide data connectivity to almost their entire workforce. This creates a network whose reach is unparalleled. While similar reach of voice networks (using PSTN technology) may be limited due to the high cost of deployment, use of an IP PBX in today's office can enable each and every employee to be provided a voice extension, thereby multiplying his/ her productivity.

Inefficient use of existing networks

While entry level network interfaces today are capable of supporting data transmission

speeds up to 1000 Mbps, most of this capacity remains grossly underutilised in a typical office environment. As a result, an enterprise's investment in data network cabling has a longer payback period, and results in creation of an underutilised asset within the enterprise. Most Voice over IP service providers require no more than 16 Kbps (Kilo bits per second) ensure PSTN (toll) quality transmission of voice traffic over a single channel.

As a result a strong case emerges for making data networks deliver higher returns on investment by being used for delivering voice in addition to data traffic.

Maturing technology

Voice over IP is today a mature technology. Issues regarding QOS which were so prevalent even a few years back are history through advancements in technologies such as superior codec designs, exponential increase in hardware capabilities, and data switching and routing technologies. As a result, one even finds several telecom providers having adopted Voice over IP technology to leverage it's superior capabilities.

The Open Standards advantage

A significant effort put in by industry and organisations such as the World Wide Web Consortium (W3C), Internet Engineering Task Force (IETF), etc. has ensured that most Media over IP technology has moved out of the proprietary domain into an open standards environment. This development now allows different components, from multiple vendors to 'talk' to each other using open standards such as the Session Initiation Protocol (SIP). For the organisation, this translates into significantly lower costs of deployment, operation and maintenance by freeing the organisation from the dependence on a single vendor installing proprietary technology (such as in conventional EPBX systems).

Emergence of broadband wireless data access

With the widespread deployment of Wi-Fi networks in organisations, employee and asset mobility has become easier than ever before.

* For more information on IP PBX solutions and Prologix's TelePro IPPBX, visit the TelePro IPPBX site at: www.prologixsoft.com/ippbx.htm

** 1000 Mbps = 1000 * 1000 Kilo bits per second which is approximately 17000 times the bandwidth required to listen to streaming audio files on the Internet (56 Kbps)

With the absence of restraints imposed by physical cabling, most organisations are now allowing their employees to constantly stay connected to the data network using Wi-Fi enabled laptop computers, Tablet PCs or PDAs – whether they be in meeting rooms, open spaces, or common areas such as the office cafeteria. Conventional voice networks within an enterprise however do not support this mobility, thereby hampering productivity. Use of an IP PBX allows software phones to be installed on the mobile computing device and carried with the user – thereby allowing connectivity to the Enterprise Voice network at all times. It is thus possible for enterprises now to use inexpensive, off the shelf technology to create their own, internal wireless voice network for use by their employees.

Reduced Add, Change, Move Expenses and/or Headcount

In IP telephony implementations, users have reported a 37% reduction in Move/add/change costs, a 23% reduction in toll, a 10% reduction in maintenance costs, and the ease of administration has enabled a 30% reduction in staff.

Unified Messaging increases productivity

With IP PBX solutions Unified Messaging (UM) becomes as easy as 1-2-3. Various studies have been carried out to measure the gains in productivity & efficiency of IP based solutions, quantifying the benefits to enterprises, In 2000-01 for e.g. remote workers (workers working out of mobile offices, or homes, communicating with workplace primarily over telecom links) comprised of approx. 28% of the total US workforce.. Several studies project this percentage to rise to approx. 35%-40% by the year 2004.

All studies have shown a range of productivity gains between 15 and 45% per user as a result of UM implementations. Taking an average salary of approx. \$50,000, provisioning 30% for benefits, and an average 25% in productivity improvement, enterprises thus stand to gain almost \$16,250.00 annually per user through the use of IP enabled UMS solutions¹

IP PBX systems – getting more from your dollar than ever before

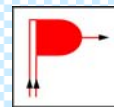
This is the golden age of IP PBX solutions. With technology having matured considerably, IP PBX systems have never been so efficient and feature rich ever before. Features such as Voice mail, Direct Inward dialling, Web based configuration and profile management, Personalised & System wide speed dialling, Personalised greetings, Customised application binding, IP conferencing, etc. are now readily available on IP PBX solutions. In conjunction with the rapidly falling cost of computer hardware, these features help enterprises in making their dollars work harder than ever before.

The TelePro IP PBX

The TelePro IP-PBX is an integrated IP based communication solution for enterprise wide networks. This open standards, robust & flexible IP based telephony solution integrates with existing legacy PSTN voice interfaces, thereby enabling next generation VoIP capability along with generic PBX functionality through a single point, easy to use interface.

To know more about the TelePro IP-PBX click [here](#)

Prologix Software Solutions



Prologix is a company, which aims to research and develop new and creative methods of voice enabling computer applications. Through an extremely focused effort, Prologix has created unique speech expertise within it's team, which it believes will have a significant role to play in engineering a multitude of computer applications for the future

During the course of work Prologix has developed strong skills in technologies like VoIP, Speech Processing, CTI, RTOS, and VoiceXML

To know more about Prologix click [here](#)

¹Figures taken from various studies are indicative of the possible benefits and may vary depending on the solution implemented.