

EXECUTIVE SUMMARY

Internet protocol telephony (IPT) provides the foundation for what, without question, will become a major driver for enterprise productivity improvement – Unified Communications (UC). The basic premise of UC is that if a means of communication is available to two or more parties, then they should be able use it intuitively.

This list illustrates the concept:

1. **Video:** Children use video intuitively to communicate with each other. Yet expensive, enterprise-class phone systems either ignore this technology or make it so cumbersome to use that nobody bothers. With UC, users can switch to video at the click of a button.
2. **Presence:** Who is available right now to help me get the answer my customer needs?
3. **Instant Messaging (IM):** I rang John, but he's in a meeting. Is there any way to get real-time answers from him? By switching to IM, I receive the answers without interrupting his meeting.
4. **Video Again:** We need to quickly evaluate the extent of damage caused by a recent storm. Our agent switches the call to video, so we can all see what she sees, in real time.
5. **Productivity:** I want to know when members of the key account sales team come out of their meeting, so I can debrief them and send the customer information she has requested, without waiting until everyone returns to their offices.

And that's just a fraction of what unified communication is expected to deliver. Every organization will find new ways to leverage a single, coherent communication system for their own needs.

However, there is a catch: It is true that some of the systems on the market today were designed from the ground up to deliver the productivity gains we expect, which makes things considerably easier to put in place. However, other approaches have appeared through vendor acquisition. These require a lot more work to deliver a meaningful benefit to end users.

This means that evaluating the different architectures on offer, making a selection and then successfully delivering on the promise of UC requires a basic understanding of at least five technologies:

1. Voice/telephony systems and services
2. Data communication networks
3. IT systems
4. Mobile telephony
5. Video conferencing technology

ShoreTel recognizes the challenges of defining a communication strategy that spans multiple domains and this guide is intended to help you with this task. Following the introduction is a review of the typical components and features of an enterprise telephony system. Then, an introduction to voice over IP (VoIP), the underlying network infrastructure, and various issues take must be taken into account when designing the network to carry voice. Next is a description of advanced applications such as collaboration, presence, customer relationship management, unified messaging, Fixed Mobile Convergence and Video. The conclusion compares these VoIP

solutions to traditional centralized private branch exchange (PBX), and provides examples of what you can expect from a well-designed UC implementation