Coordinating Conferencing and Collaboration
Vital unified communications capabilities offer a solid foundation for an integrated view of the collaborative environment.

To make the most of the opportunities presented by the economy, organizations need a comprehensive, streamlined communication infrastructure. This is one that integrates all of their communication devices and software. Enter unified communications.

In the UC environment, all communication tools — from voice, data, video conferencing (VC) and instant messaging (IM) through e-mail and text messaging — are fully integrated in real time. UC allows organizations to access data on demand and collaborate with virtual teams anywhere in the world.

To improve organizational outcomes while reducing costs and encouraging environmental sustainability, UC integrates various communication applications. These include:
- Telephony
- Conferencing and collaboration
- Messaging
- Call center solutions

While all important, new software-based conferencing and collaboration solutions for audio and web conferencing, face-to-face conferencing via video and other collaboration tools are allowing organizations to report achieving measurable improvements in performance. These include increased efficiencies, total cost savings and environmental carbon footprint reductions.

Conferencing and Collaboration
Organizations of all sizes are looking for ways to cut costs, streamline processes and eliminate redundancies. Converged networks in and of themselves can deliver significant cost and operational efficiencies.

However, it’s the conferencing and collaboration applications, running on these converged networks, which are providing organizations with the most bang for their buck. The new infrastructure opens up a whole new world of productivity, particularly when it comes to audio, web and video conferencing.

Of the three conferencing technologies, audio conferencing is the most basic way of enabling workers to conduct meetings more conveniently and efficiently. It offers one of the easiest ways to communicate with three or more participants, in different locations, at the same time.

A step up from audio conferencing is web conferencing. This solution is designed to conduct presentations or meetings over the web, also known as webinars. Participants typically sit at their own computers and are connected with other participants. Web conferences can include various multimedia components, including audio, document sharing and IM connectivity.

Video conferencing provides organizations with the most powerful means of communication. Whether it’s a desktop video chat through a webcam or a high-level board meeting conducted with a dedicated telepresence system, video conferencing can help organizations improve productivity, extend reach, reduce travel expenses and enhance working relationships.
Historically, the three types of conferencing have been deployed in separate infrastructure silos. This required users to decide in advance which conferencing method (or combination of methods) to use.

The user interfaces were different and confusing for each method, and they usually required separate access IDs and passwords. Also complicating matters, separate, often specialized, equipment was needed for video conferencing. This environment restricted the use of the most appropriate format and also added significant staff and administration cost.

Unified communications has effectively eliminated this siloed approach. Depending on the needs, each of these conferencing solutions can be employed to great advantage over a UC network.

Audio Conferencing
Audio conferencing is the most widespread conferencing solution, requiring only an audio bridge to facilitate calls among three or more parties. And IP networks have greatly simplified the deployment of an audio conferencing solution.

Pros and cons — On the plus side, audio conferencing is the easiest of the conferencing solutions for IT to roll out and for end users to use. It’s convenient — everyone has access to a phone — and it works well in situations where information needs to be delivered quickly.

On the downside, the lack of a visual component — whether video or desktop presentations — makes it difficult to work with documents. It also makes for a more challenging learning environment since most people are visually oriented when it comes to retaining information.

Hosted vs. premise-based solutions — Traditionally, an organization would need to add an audio bridge and use a third-party provider to host its audio conferencing system. UC has allowed organizations to reduce their dependency on costly third-party hosted solutions. Usage will determine whether some may find that hosted solutions are a better fit for their needs.

For organizations that are moderate-to-heavy audio conferencing users, an on-premises solution is financially more attractive than a hosted solution. After the initial capital expenditure of the appropriate equipment, the system pays for itself usually within 12 to 18 months.

Organizations with an IP private branch exchange (PBX) on premises can take advantage of its built-in features. Many modern IP PBXs include audio conferencing capabilities so that the audio conference can be directed, conducted and hosted in-house.

In the case of on-premises IP PBX, a separate audio conferencing hardware attachment is connected to the IP PBX to enable the audio conference. Internally, audio conferences with members of the same exchange can be easily facilitated just by dialing them in. External participants can also be patched in assuming that the IP PBX is connected to the public switched telephone network.

Although an on-premises audio conferencing solution eliminates the ongoing operational costs associated with a hosted solution, it does require IT personnel to support it. Keep in mind, maintenance and upgrades will also be required.

Hosted solutions can be expensive, charging both per minute and per participant. Also, some hosted services require advance reservations to schedule a conference. But for organizations with occasional conferencing needs, a hosted solution can be more financially attractive than deploying and maintaining their own.
Hosted solutions also provide other options. They can include the ability to offer a single call-in number for all participants, an auto-announcement to tell the group who has just joined or left the conversation, and the ability to classify certain participants as listen only.

For organizations considering a premise-based audio conferencing solution, it’s essential to conduct a thorough network assessment, including expected usage for allocating the proper port requirements and appropriate bandwidth allocation. Both considerations will make the audio conferencing experience a positive one for the end users.

When considering a hosted solution, organizations need to make sure the vendor offers a service-level agreement (SLA). It should meet the demands of the network including uptime requirements, storage capacity (if audio conferencing sessions are being recorded) and security. If audio recordings are being stored offsite, for example, make sure the vendor offers a level of security. Be sure that it matches up with the requirements of the organization’s security policy.

Web Conferencing
Web conferencing involves presenting content over the Internet, such as PowerPoint presentations. These presentations can also include full voice and video integration.

Users can view the presentation by logging in to a web conference and communicating with the moderator either by telephone or web-based chat. During the meeting, the moderator can interact with participants, view attendee lists and manage communications.

Through document and presentation sharing and editing, participants can collaborate in real time. Done in a secure environment, this offers the potential for increased productivity and cost savings—regardless of location.

Pros and cons — The real-time information sharing component of web conferencing is its major advantage over audio conferencing. With a virtual whiteboard, for example, the moderator can illustrate ideas to conference attendees.

In addition to interactive tutorials, web conferencing is used within organizations for live, on-demand, interactive meetings. Here documents can be shared and edited in real time among multiple participants.

Participants are able to visualize, contribute to and document topics that are being discussed. Additionally, moderators have the ability to interact with their audiences, which can easily be recorded — a handy feature for users who may not be able to attend the conference in real time.

Web conferences are similar to personal meetings. They are ideal for large groups, training programs, product demonstrations and much more. Additionally, conference leaders can plan their presentations far more effectively because of this kind of call.

But that extra planning is also a disadvantage of conducting a web conference. For tutorial-type sessions, rehearsal time is critical for the moderator. Otherwise, participants will quickly lose interest and, worse, won’t come away with the necessary information.

In group meetings, all participants need to be well trained in the use of the web conferencing system. Also, in order for web conferences to work effectively, microphones and external applications must be used and integrated into a cohesive communication tool.
Hosted vs. premises-based solutions — As with audio conferencing, organizations have a choice between hosted and premises-based web conferencing solutions. The criteria for determining which is right are similar, although in some cases the arguments for choosing a hosted solution may be slightly more compelling.

Like audio conferencing, an on-premises web conferencing solution delivers a lower cost for heavy users. Additionally, organizations maintain more control over their own solution, including customization options.

With a premises-based solution, organizations can develop branded portals for individual departments, enabling users to customize the interface and settings to fit their needs. It also allows for integrating web conferencing with other applications, such as e-mail, IM and productivity applications.

In addition, vertical markets required to follow strict privacy or data security regulations — such as large financial services, healthcare and public sector organizations — may be required to implement an entirely premise-based solution.

Because a premises-based solution resides behind the corporate firewall, IT managers have better control over security policies. It also allows remote users to access the system securely as if they were onsite.

On the downside, a premise-based solution requires internal IT support. And unlike audio conferencing, maintaining a web conferencing solution grows more complex as more functionality is added, such as integration with organizational applications.

That increased complexity is why a hosted web conferencing solution is attractive for many organizations. With a hosted service, an organization can get all the functionality it needs while avoiding the upfront capital outlay and internal IT support.

But hosted solutions may not provide the security and flexibility some require. And depending on usage and the host’s pricing structure, a hosted solution can become expensive.

As with audio conferencing, implementing a premises-based web conferencing solution requires an assessment of the network’s capabilities and the organization’s expected usage. Furthermore, users need to be well trained in the different tools that web conferencing offers.

Rather than dialing an 800 number or a toll access number to join a conference, for example, users should always join a conference via the web and have the conference bridge dial out to them. This method offers significant cost savings compared with directly dialing in.

Video Conferencing
Although video conferencing technology has existed for decades, it is only now becoming a viable business solution as IP convergence has made the technology more affordable and reliable. Additionally, the economic downturn has put organizations under increased pressure to cut travel costs for their meetings or reviews.

But video conferencing isn’t a one-size-fits-all solution. In fact, organizations have a choice of three types of video conferencing solutions:

- Desktop video (or peer-to-peer)
- Multisite meeting rooms (enhanced displays, cameras and microphones)
- Immersive telepresence
Many may find it appropriate to use a combination of the three.

Desktop video conferencing is the most basic level. With no more than a computer equipped with a webcam and the appropriate software, users can conduct low-cost, face-to-face meetings directly from their desks.

Desktop video conferencing is commonly used in telecommuting. Other UC tools, such as Voice over Internet Protocol (VoIP) and web conferencing, can easily be used in conjunction with desktop video conferencing.

Desktop video conferencing has also become familiar in the user realm. This is as webcams become a standard feature on notebook PCs and with all the popular IM applications offering video chat features.

Multisite video conferencing enables participants from various geographic locations to conduct meetings in rooms equipped with cameras, high-definition monitors and microphones. This technology has been widely adopted by organizations to discuss, market, and sell their products and services.

Organizations utilize multisite video conferencing to conduct seminars, research studies and group teaching. Because it brings together geographically dispersed groups, multisite video conferencing helps reduce travel expenditures.

At the high end of the spectrum are immersive telepresence solutions. Telepresence systems typically feature three large high-definition video screens (and often an additional screen for shared content) that deliver a more lifelike experience — a major advantage for high-level, multiple-hour conferences.

Video conferencing participants often appear life-size. Further enhancing the realistic experience, telepresence hides many of the elements involved in traditional video conferencing (cameras, microphones, self-view images on the monitor).

**Conferencing and Collaboration Bonus**

In an increasingly global, fast-paced and knowledge-based economy, organizations must react to change by processing information and arriving at decisions as quickly as possible. At the same time, they must reduce the costs as the global slowdown continues to stifle growth.

Organizations that use conferencing and collaboration tools report achieving measurable improvements in their performance. This includes increased efficiencies, total cost savings and environmental advantages via reduced travel.

By integrating conferencing and collaboration tools into a unified communications system — via web, audio and video technologies — organizations can achieve instant access to people, documents and resources, regardless of location. It also allows staffers to manage these interactions in real time — as if they were in all places at once.

To see how we can help you find the right UC conferencing solution, contact your account manager at 800.800.4239.