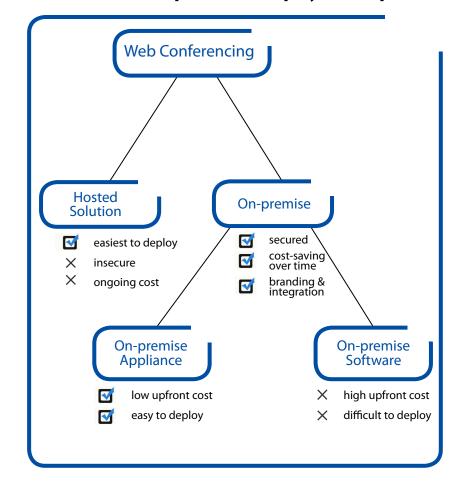
Web Conferencing Deployment Options: Hosted, Software and Appliance

Which one is right for you?

White Paper, Consumer Direct Research[™] 2012

Organizations today require a comprehensive, easy-to-use, secure communication solution with location-neutral functionality. After decades of evolution, three primary web conferencing options venture to meet these needs—hosted service, on-premise software and on-premise appliance. Each solution offers distinct advantages and disadvantages.

All three web conferencing deployment solutions enhance virtual meetings, allow for intra- and inter-organization communication and simplify data sharing, but differ with regard to implementation location. Hosted web conferencing services are significantly internetbased, providing an off-premise web conferencing solution. Organizations simply subscribe to a hosted service and access the application online. On-premise software and on-premise **appliance** systems offer greater security, operating behind clientcompany firewalls for an added barrier of protection and support implementations. Private Clouds are significantly more secure than Public Clouds, deploying over an organization's servers and within its infrastructure, rather than over the internet.



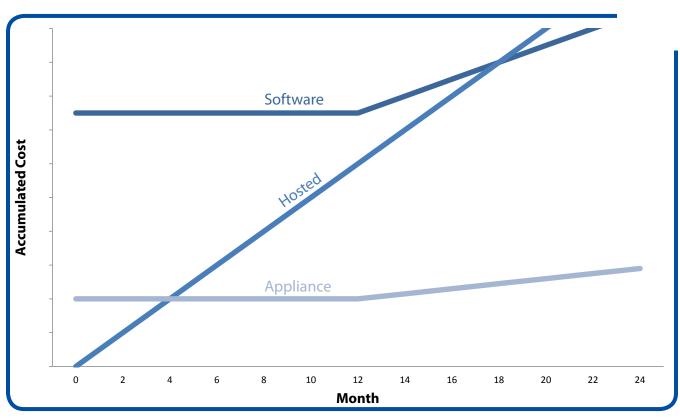
Comparison of Deployment Options

A web conferencing solution's implementation location and deployment method define its advantages and disadvantages. Off-premise and on-premise systems have varying upfront and long-term costs, levels of deployment and adoption ease, security measures, customization features, branding possibilities and integration options. In conjunction with functionality, these factors are of fundamental importance when choosing the most effective web conferencing solution to meet your organization's requirements:

- Cost Over Time
- Ease of Use
- Security
- Customization
- Branding
- Integration

Factors in Effective Web Conferencing Solutions

Cost over time may be of concern to certain organizations, which must weigh between the consequences of upfront costs and long-term service charges. Start-up companies may not have the initial capital to invest in on-premise solutions, wishing to pay a smaller monthly service fee; however, in the long run, on-premise solutions prove to be more cost effective and yield a lower total cost of ownership (TCO).



Comparison of Accumulated Cost

Ease of use should be another consideration. A web conferencing system that is difficult to use, and burdens users with an excessively steep learning curve, will likely decrease productivity for an extended period of time. According to a 2010 study by *The Work Design Collaborative*, there is typically a learning curve for new work distribution programs requiring technological implementations, and most organizations begin to see productivity improvements only after 15-18 months of use. An easy-to-use system can significantly reduce such a learning curve, as well as any related temporal or financial consequences. Web conferencing solutions that are easy-to-use will increase efficiency upon installation, allowing users to immediately participate in and benefit from built-in productivity tools.

Security concerns can be paramount when choosing a web conferencing system. Organizations that must transmit and share sensitive information and maintain a high level of protection will prefer a solution with added security measures. Anticipating economic, technological and legal issues before they become critical is vital in choosing the ideal web conferencing solution for any organization, especially for those governed by industryspecific data transmission standards. Specific industries and organizations requiring specialized security measures often include government, financial, health care and medical instrumentation, as well as parts distributors, IT and telephone service providers, technology consultants and agencies with high-profile clients.

Customization, **branding** and **integration** are other factors to consider when choosing a web conferencing solution. Some systems offer application integration, company-specific landing pages and other features, contributing to overall company branding efforts as well as ease of deployment at the organizational level.

Hosted

Hosted web conferencing services are advantageous for smaller organizations with few access-requiring employees, underdeveloped IT departments or without any access to IT services. Hosted systems have a low upfront cost and are easily deployed, although not all are easy-touse. Organizations can access the service at any time, in any location without requiring any internal IT resources. The low upfront cost and ease of deployment makes hosted web conferencing services attractive to many organizations. However, there are important disadvantages to consider. Hosted web conferencing solutions are expensive in the long-run; companies accrue ongoing monthly costs, depending on the service's licensing scheme. Hosted services only license named users, with no floating license option (system resources can be accessed by any authorized user on a first come/first serve basis), which makes it prohibitively costly to deploy the service to every employee within an organization.

Weaker security is another disadvantage associated with hosted web conferencing services. With any internet application, transmission security and access security work in tandem to ensure cohesive protection.

Transmission security protects data from wire-tapping during data transmission and access security protects applications

On-Premise

from unauthorized access. Access security is hosted web conferencing's weak point meeting IDs and passwords are usually emailed to attendees before scheduled meetings, which makes sensitive meeting information susceptible to

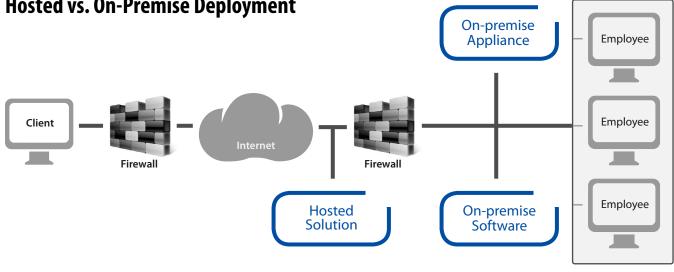
interception by hackers and risks meeting infiltration by uninvited users. For companies in industries with strict dataprotection and transmission rules, this solution is not ideal.

On-premise web conferencing advantages include long-term cost savings, wider employee coverage and additional security measures. On-premise systems require upfront payment, but are less likely to require high ongoing fees once the software or appliance is paid for in full. These systems are typically **licensed on a** concurrent basis (floating **licenses)**, a pricing model especially appealing to larger organizations. Licensing is established by the maximum

number of concurrent users at any given time, rather than requiring license purchase for every individual. For most, the one-time license fee is valid indefinitely. Therefore, on-premise web conferencing solutions can be cost-effective and easily deployed to every employee in an organization via a lightweight directory access protocol (LDAP) and optional floating license integration.

Security is another major advantage associated with on-premise web conferencing solutions. On-premise web conferencing provides the same protection as the hosted option, with an added security barrier via the organization's firewall.

Organizations can designate where to install software or appliances according to security requirements: behind the firewall for internal meetings only, within the DMZ (demilitarized zone) for both internal and external meetings, or outside firewall for



Hosted vs. On-Premise Deployment

Corporate Network

external meetings only. DMZ is a secure and viable option for organizations with dataprivacy concerns, but still wanting to use hosted web conferencing to virtually meet with clients or users outside the company network and firewall. Organizations have total control over which firewall ports to open, and online meeting archives stay behind the organization's firewall organizations remain in total control over security policies before, during and after web conferences take place.

On-premise web conferencing solutions enable integration with multiple applications.

In order to streamline the user authentication process, organizations can integrate their CRM or LDAP servers with their on-premise web conferencing solution, thereby providing efficient management via a single system. The CRM/LDAP-web conferencing integration process can be as simple as setting up a web server adapter or filling out a form. Neither is it difficult to integrate onpremise solutions with unique, organization-specific audio conferencing bridges; with some on-premise solutions, this process may simply require inputting a call number to the web conferencing system. Moreover, on-premise solutions allow organizations to easily publish scheduled meetings on websites to attract visitors to sales or training seminars.

Join a meeting Meeting ID Meeting Password: lealthcare Differently. Your Name: Host a Meeting Email Address: Password Host Meeting Download TurboMeeting if your browser fails **CLOEREN** The Performance Standard in Extrusior. Meeting Center Welcome to the Cloeren Meeting Center. First-time users: Review the following steps to avoid any difficulties attending Cloeren meetings Already registered with Cloeren meetings: Click on the "Turbo" (2) icon located on your desktop. Icon not on desktop: Follow the steps below. Check 🐑 Join Locate

Branding and customization

features enable organizations to customize the web conferencing experience for employees and clients alike. Users start or join web conferences from an internal homepage unique to each organization. Organizations can customize the look and feel of online meeting rooms, incorporating organizational logos and color schemes to enhance branding and further facilitate user experience. Further, organizations can direct attendees to a personalized promotional page upon meeting conclusion.

In addition, on-premise solutions easily fit into a **Private Cloud** application stack, taking advantage of both Cloudbased computing and those of on-premise deployment. Operating and archiving web conference data on internal organization servers simplifies corresponding storage, extraction and movement. Further, Public Cloud computing is commerciallyused and discretionary, which is undesirable as an organizational solution. Organizations with Private Cloud operations enjoy greater security and overall control.

Samples of Branding and Customization

On-Premise Software vs. On-Premise Appliance

There are two on-premise delivery options: software and appliance. On-premise software can be expensive and difficult to deploy. Upfront expenses may include software license fees, hardware costs and internal IT administration fees for ongoing management and support. Often, these systems require purchasing organizations to optin on other software besides that necessary to web conferencing. On-premise software is best suited to companies with large budgets, seeking a suite of applications as a unified communication solution. Onpremise appliances, on the other hand, are easily deployed and require no IT maintenance; this option is instantly valuable and increases productivity upon installation. The on-premise appliance is often less expensive than both hosted and software options, offering a cohesive web conferencing solution for companies of all sizes. In addition, with vendor managed updates, the on-premise appliance will require no IT support going forward.

Summary

Organizations of all sizes can implement web conferencing solutions through a delivery option of their choice: hosted, on-premise software or onpremise appliance. Each delivery option has distinct advantages and disadvantages, varying by price, ease of deployment and functionality. The hosted option is easy to deploy and has little upfront cost, but its ongoing monthly service fees and weaker security should cause certain organizations to consider on-premise systems. On-premise software is difficult to deploy and initially expensive, but provides extra security measures compared to the hosted option. Finally, on-premise appliances are easy to deploy, require little upfront capital investment, offer greater security than hosted services and are easier to implement than software packages. Onpremise ideally fits Private Cloud implementations. Regardless of which web conferencing solution an organization ultimately selects, each option virtually recreates the in-person communication experience to meet today's business communication needs.

Appendix

Leading web conferencing vendors by deployment method:

Deployment	Vendor	URLs
Hosted	Cisco WebEx	www.webex.com
	Citrix GotoMeeting	www.gotomeeting.com
	Adobe Connect	www.adobe.com/products/adobeconnect.html
	Microsoft Office Live Meeting	www.livemeetingplace.com
Software	IBM LotusLive Meeting	www.lotuslive.com
	Microsoft Lync	www.lync.microsoft.com
	Oracle Beehive	www.oracle.com/us/products/middleware/beehive/index.html
Appliance	RHUB Communications	www.rhubcom.com



Implement a web conferencing solution to:

- Give sales presentations
- Demo products or services
- Support remote computers
- Host webinars

- Provide online training
- Interactively collaborate over the internet in real time
- Facilitate eLearning

Basic functions to look for when choosing a web conferencing solution:

- Desktop sharing
- Application sharing
- Remote control
- Audio conferencing (VoIP and PSTN/ landline)
- Video conferencing
- Recording
- Polling

- Chat
- File transfer
- Annotation
- Meeting scheduling
- Integration with Outlook
- Cross-platform support
- International language support