



Innovative Computing Systems



BUYER'S GUIDE

Unified Communications Buyer's Guide

ASKING THE RIGHT QUESTIONS UP-FRONT
IS ESSENTIAL FOR ORGANIZATIONS TO SELECT
THE RIGHT SOLUTION FOR THEIR NEEDS



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Keep pace with the workforce revolution

The way people work is changing fast—and competitive companies need to keep up. On site and remote employees alike rely on conferencing, multimedia, and instant messaging to get their jobs done. Managing all these services from a single environment is essential for maintaining profitability. With comprehensive Unified Communications solutions, businesses can ensure:

- *Increased productivity—UC solutions allow users to quickly locate contact information, place calls, share documents, and access training material.*
- *Better collaboration—UC solutions enable true employee collaboration by providing a single platform for voice, email, and multimedia use and access.*
- *Cost savings—UC solutions can provide significant total cost of ownership (TCO) savings and quicker time-to-value by consolidating assets and avoiding the need to purchase additional servers and other equipment.*
- *Enhanced mobility capabilities—UC solutions provide employees the tools they need to work anywhere, with any device, at any time.*

1. What is Unified Communications?

Unified Communications (UC) brings together multiple real-time and offline communication modes (such as telephony, email, fax, and instant messaging) plus a range of additional capabilities (including presence detection and click-to-call) into a single, integrated solution. With UC solutions, users can access and manage all of their communications tools from a single environment, regardless of their location.

Typically, UC solutions capitalize on Internet Protocol (IP) technology to transmit voice, video, and data across a single network. By eliminating the need for multiple, disparate networks, UC solutions can reduce costs and simplify administration.

2. How can UC help my company?

UC solutions can deliver several key benefits for organizations:

IP telephony—a key component of any UC solution—provides a cost-effective alternative to expensive toll call services. UC solutions also can help organizations cut additional costs by converging multiple communication modes over a single, shared IT network. Organizations can reduce capital expenditures and minimize operating expenses by eliminating the need to buy and manage multiple, independent systems for telephony, collaboration, and more.

UC solutions help boost business productivity by improving the efficiency of communications and collaboration. With a UC solution, a salesperson can locate contact information for a potential customer, place a call, and share documents with that customer all through a few mouse clicks. A geographically distributed team can use conferencing and document collaboration capabilities to work together to complete a project rapidly. An organization can use the same capabilities to provide multimedia training inexpensively to workers in regional offices. Call center agents can use presence detection capabilities to find subject-matter experts fast and then use instant messaging to confer with those experts, all while assisting customers in real time.

With UC solutions, employees gain the tools they need to work anywhere, with any device, at any time. The mobility offered by UC solutions enables organizations to extend the work environment beyond the traditional office and desktop. Remote workers can log in to a UC system on the road and have at their fingertips all the same capabilities that they have on site. This includes seeing co-workers' presence online, as well as having access to instant messaging, conferencing, and collaboration capabilities.



3. What size businesses can benefit from UC solutions?

UC solutions can help organizations of all sizes, from small businesses to large-scale global enterprises. Small companies can eliminate the costs of owning and operating a traditional phone system while accessing enterprise-class tools that help improve competitiveness. Despite having limited IT resources, small businesses can more easily manage internal and external communications systems with UC. Large organizations can enhance the efficiency of business processes, improve collaboration among geographically distributed teams, and generate telephony cost savings commensurate with the scale of their communications infrastructure. And by consolidating the infrastructure required for multiple modes of communication, UC can help organizations of all sizes access a broad range of tools while streamlining IT administration.

4. Is my company ready for UC?

Assess your company's readiness for UC so you can select the right solution and enhance the efficiency of deployment planning. Define how you will use the solution and evaluate whether your IT infrastructure will need a refresh to support a new solution.

Before you embark on finding an appropriate UC solution, determine your business needs. Some organizations will want to focus on enhancing the productivity of individuals by implementing new capabilities such as instant messaging, presence detection, or click-to-call. Other organizations need ways to eliminate bottlenecks, such as business workflows. In many cases, organizations benefit from first concentrating on individual productivity and then later identifying opportunities for business process optimization.

Successful deployment of a UC solution depends on careful evaluation of your technical preparedness. For example, is your network ready? The infrastructure must be capable of delivering sufficient throughput and meeting latency, jitter, and packet-loss requirements. Ask potential vendors whether they offer network assessment tools and services, which can help determine whether your network is prepared to support IP telephony and other real-time UC applications.



The UC simplicity checklist

When it comes to simplicity in deployment and scaling, some vendors have it and others simply do not. To keep TCO low, avoid complexity by looking for solutions that provide:

- One headquarters server (less hardware to buy)
- One converged conferencing appliance (easy to manage)
- All UC applications on a single network
- Low energy consumption
- Single end-to-end support agreement
- Easy deployment and use right out of the box
- Clear migration path with simple remote upgrades

Comprehensive UC solutions can pay for themselves quickly—as long as they are easy to use.

5. What criteria should we use for evaluating vendors and solutions?

As you evaluate available UC solutions, consider each solution's level of complexity, ease of use, TCO, reliability/availability, and customer satisfaction. Confirm the vendor's financial viability and make sure the vendor can offer the terms and conditions that you need. Finding answers to key questions could help ensure that you select the right solution for your business and avoid issues later.

Assess the solution's level of complexity by evaluating processes for deploying and scaling it. Examine the relative complexity of the overall architectural design to gain a more complete understanding of the potential difficulty of managing the solution.

Deployment complexity

- How many servers are required?
- How many cards must be installed, configured, and maintained within each server?
- Are UC applications such as conferencing and instant messaging integrated or deployed separately?

Scalability

- Will you need to add servers as you scale?
- Is there a clear migration path as you add capacity, or will you need to completely rip and replace the solution when you reach a certain capacity limit?

Architecture

- How complex is the overall infrastructure architecture of the solution?
- Will it be difficult to connect and configure a variety of seemingly disparate components?
- Are you required to overlay the UC solution on an existing TDM (time-division multiplexing) system?

Regardless of whether your company is a small business or large enterprise, select a solution that end users and IT administrators can learn quickly and easily. Make sure that managing the solution does not require excessive experience, expertise, or training.



Ease of learning

- How many distinct applications must end users learn?
- Are end-user interfaces intuitive or will employees need to spend time poring over manuals?

Ease of administration

- How many training courses are required for administrators? How long will they take?
- How much do those training courses cost?
- How many management interfaces must administrators navigate?
- Are those interfaces intuitive or will they require excessive reading of manuals?
- How easy (or complex) is it to complete essential management tasks, such as provisioning new services or setting up a new user account?

Before investing in a UC solution, be sure to calculate all solution costs—not just up-front costs but also the costs of management, upgrades, support, and energy consumption.

Up-front costs

- How much will the telephony system cost?
- Will you need to replace existing hardware or upgrade your network?
- How many servers, routers, and switches will you need to purchase?
- What will it cost to deploy the solution?
- Will you need to hire the vendor's service group or engage a third-party solution provider for deployment?
- How much administrative training is required and what will it cost?
- Is any end-user training required?

Management costs

- How will the deployment of multiple servers and switches affect management costs?
- Will you be required to hire additional staff for management or divert resources away from other responsibilities?
- How long does it take to perform a typical move/add/change?
- How costly might downtime be, in terms of administration and potential business losses?
- Will the solution require recurring training?



Ensure 99.999 percent uptime

High reliability and availability is essential for effective UC use. Only ShoreTel can provide 99.999 percent uptime. Competing UC solutions based on multiple servers cannot make this claim.

ShoreTel's UC solution drastically reduces the odds of downtime with fewer points of failure—thanks in large part to a distributed architecture, as well as solid-state switches with flash memory instead of multiple servers. And in the unlikely event of a component failure, the ShoreTel solution's n+1 redundancy feature enables another component to instantly take over to avoid downtime.

Upgrades

- Does the vendor charge for upgrades?
- How simple (or complex) is it to upgrade solution components?
- Are upgrade cycles and upgrade processes coordinated throughout the solution, or will the solution require continuous upgrades of disparate components?
- Can upgrades be performed remotely, or must administrators upgrade each server and router on site and in person?

Support costs

- Do hardware and software components require separate support contracts that are time-consuming to track?
- Is there a single, end-to-end support agreement for the solution?
- Overall, how do the support costs compare with those of other solutions?

Energy consumption

- If numerous servers and switches are required, how will energy costs be impacted?

Additional ongoing costs

- What are the costs for the wide-area network (WAN), voice trunk (analog, tie-line, E1/T1, SIP trunks), and long distance calls?

Guarantee

- Will the vendor guarantee that its solution will deliver a low (or the lowest) TCO?

Unexpected downtime of a UC solution can be costly to businesses of all sizes. It can negatively affect customer relationships, sap employee productivity, and incur administrative expenses. As you evaluate UC solutions, make sure you understand what the vendor is promising, how the solution's architecture could affect availability, and how the solution attempts to prevent downtime.

Availability promises

What does it mean when a vendor promises three, four, or five "nines" of availability? Three-nines means that a solution (or a component) should be operational 99.9 percent of the time. In other words, it might experience nine hours of downtime per year. Many WAN networks achieve this level of availability. Servers often achieve four-nines (99.99 percent) availability—meaning that they experience one hour of downtime per year. But by including sufficient provisions for redundancy, a total solution should be able to achieve even better availability—at least five-nines (99.999 percent), with only five minutes of possible downtime per year.



Servers vs. switches

The more servers required for the solution, the greater opportunity there is for a server failure. In particular, servers' spinning hard disk drives, data connectors between multiple internal cards, and fans can—and do—fail. By selecting a solution with fewer servers, you reduce the opportunities for server component failures that can result in hours of costly downtime.

Solid-state switches that incorporate flash memory and run on operating systems such as VxWorks provide a more reliable alternative to servers. VxWorks is used for systems that have no tolerance for failure, such as commercial aircraft produced by Airbus and Boeing, motor vehicles by BMW, and spacecraft by NASA.

Architectural implications

How might the solution's architecture affect reliability and availability? A distributed architecture also can help avoid downtime. For telephony functions, many multisite solutions use a central server that relies heavily on the WAN. A distributed call control model—in which each switch provides call control for a limited number of phones at each site—helps limit potential problems by using smaller units, with fewer components.

Redundancy

How is redundancy implemented? Redundancy helps ensure that communication continues even in the event of a component failure. Some solutions do not offer any redundancy capabilities. Others require the purchase of a complete duplicate system that sits idle until the primary system fails.

N+1 redundancy can provide a more robust and cost-effective means of delivering redundancy. With an *n*+1 architecture, only one additional component is needed to provide redundancy for the entire system. If a single component fails in a multicomponent system, the load of the failed component is automatically distributed to the backup component.

How do the vendor's customers rate their satisfaction with the solution? It's an important question that demands a quantitative answer.



Tips for getting the most out of your UC vendor

Once you've decided to upgrade your business communications system, choosing the right vendor is crucial. Make sure the vendor is committed to supporting the solution long after the purchase is made. Here's how:

- *Assess the vendor's customer satisfaction. Ask for testimonials, case studies, or exit surveys. There's a good chance that if the vendor's other customers are not satisfied, you might not be either.*
- *Insist on a demo. Any vendor unwilling to set up a quick and simple demo of its system at your location may be hiding something—perhaps the fact that its system is neither quick nor simple.*
- *Research the vendor's history. Select a vendor that has a strong track record in its area of expertise. A history of successful alliances and endorsements from third-party analysts will set your mind at ease.*

The manner in which customer satisfaction is measured should factor into your decision making. Is customer satisfaction measured frequently and regularly? Who measures it, the vendor or an independent firm? How detailed is the information collected?

Talk to other customers. Ask them if they would buy the system again, what the costs are really like, and if the system is easy to manage.

Is the vendor financially stable and likely to be around for support in the years to come? Regardless of whether you are considering a large vendor or a small one, check the balance sheet to make sure the company is financially stable.

6. What should I look for in a demo?

In addition to using online demos, scheduling an in-person demo can provide an excellent opportunity for evaluating a UC solution. Be wary of vendors that do not offer in-person demos. Before investing in a UC solution, make sure you have a sufficient, hands-on test-drive.

The location of the demo can provide important information: Is the solution simple enough that it can be quickly set up and configured at your own site? Or does the vendor need to take you to a specially prepared lab?

A demo should allow you to dig deep into features or capabilities, but first impressions also count. Would a potential end user find the interface intuitive? Will an end user be able to start using the solution without excessive training? Would an IT administrator find the solution complex to configure or manage?

By the end of the demo, you should have the answers you need for key questions such as: Does the solution provide the functionality you need? Is it relatively easy to deploy, manage, and use?



7. ShoreTel UC

The ShoreTel UC system provides a comprehensive, integrated offering that meets all the key criteria for a UC solution. Built on a simple architecture that avoids the complexity of other solutions, the ShoreTel UC system is quickly deployed, easy to learn and use, and straightforward to manage. The ShoreTel system also delivers the reliability and availability required for UC. With cost-effective, $n+1$ redundancy, the ShoreTel UC system delivers five-nines availability for mission-critical business communications.

Because the ShoreTel UC system requires only one headquarters server and one converged conferencing appliance, organizations have less hardware to buy and operate. Consequently, the ShoreTel UC system can deliver a significantly lower TCO than other solutions. In fact, ShoreTel guarantees that result. If the ShoreTel TCO tool or independent data determines that the ShoreTel TCO is higher than a competing solution, ShoreTel will lower its price to beat the competition.

Given the ease of use, simple management, and low TCO of the ShoreTel UC systems, it is not surprising that customers have consistently rated it highly. ShoreTel measures every customer for satisfaction, engaging a third-party organization to administer a detailed survey that rates the customer experience. For more than five years, ShoreTel has earned a quarterly customer satisfaction rating of 90 or higher.

8. Summary

UC solutions offer organizations of all sizes a tremendous opportunity to reduce communication costs, enhance productivity, and increase employee mobility. But at the same time, UC solutions are significant, long-term investments that should be considered carefully. Asking the right questions is essential for selecting the solution that can best meet your business goals and IT requirements.

Once you have defined your needs, contact ShoreTel to schedule an in-person demo. See for yourself what makes the ShoreTel UC system a compelling alternative to other solutions.



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About ShoreTel

ShoreTel is the provider of brilliantly simple Unified Communication (UC) solutions based on its award-winning IP business phone system. We offer organizations of all sizes integrated, voice, video, data, and mobile communications on an open, distributed IP architecture that helps significantly reduce the complexity and costs typically associated with other solutions. The feature-rich ShoreTel UC system offers the lowest total cost of ownership (TCO) and the highest customer satisfaction in the industry, in part because it is easy to deploy, manage, scale and use. Increasingly, companies around the world are finding a competitive edge by replacing business-as-usual with new thinking, and choosing ShoreTel to handle their integrated business communication. ShoreTel is based in Sunnyvale, California, and has regional offices and partners worldwide. For more information, visit shoretel.com.

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