Why Secure, Reliable, Private Communications Are Essential For Competing, Operating and Collaborating in Today's Digital Business Environment

EXECUTIVE SUMMARY
The time is approaching rapidly when digital technology will touch every life everywhere in the world every day in some way, large or small. And businesses of all shapes and sizes seeking to compete in this era of “Digital Transformation” will need secure, reliable, private communications not only to thrive, but to survive.

Why? Because ...

• Everyone Will be Connected, Everyone Will be Mobile – A world where virtually all business is transacted through digital channels seems imminent and inevitable.
• Everything Will be Connected – More devices, machines, appliances, etc., than people will be communicating by digital means.
• Everyone and Everything Will be Integrated – Not only is digital tech transforming businesses, our bodies are next in line, broadening and deepening the definition and meaning of Unified Communications for the enterprise.
Digital technology is spreading unprecedented amounts of information to more people in more places than any time in human history. And businesses of all shapes and sizes seeking to operate in this digital environment will need reliable, secure, private communications not only to run an efficient enterprise, but to serve and satisfy customers.

Why? Because ...

- **Intelligent, scalable Unified Communications are enabling collaboration** between colleagues, customers and partners on a global scale that is driving what tech pundits have called the “Democratization of Data” in business. Enterprises will become profitable, productive and progressive organizations, where people can easily connect, communicate and work together – whenever they need to, from wherever they are.

As digital technology spreads around the world, more and more corporations are enabling employees to conduct business from remote locations with mobile devices. At the same time, more and more companies are moving significant aspects of their business operations to the cloud. And in the process, these firms are learning that, regardless of the type, complexity or cost of the technology involved, people play the critical role in ensuring private, reliable, secure business communications – whether they are using collaboration tools or providing them.

**CHAPTER 1**

**WHY SECURE, PRIVATE, RELIABLE BUSINESS COMMUNICATIONS ARE ESSENTIAL FOR COMPETING IN TODAY’S DIGITAL ENVIRONMENT**

The time is approaching rapidly when digital technology will touch every life everywhere in the world every day in some way, large or small. And businesses of all shapes and sizes seeking to compete in this digital environment will need secure, private and reliable communications not only to thrive, but to survive.

Not long ago, researchers for the World Economic Forum (WEF) released a first-of-its-kind study chronicling the pace of worldwide digital transformation. They asked more than 800 executives and experts from the global information and communications technology sector for their views on “tipping points” for technological shifts in society.

The WEF report revealed many trends, but three seemed most telling to us as developers and providers of business conferencing and collaboration tools:

- **Everyone Will be Connected, Everyone Will be Mobile** – Nearly 80 percent of survey respondents expect nine of every 10 people on earth will have regular internet access by 2024, and more than 80 percent predict nine out of every 10 people will use smartphones by 2023. Couple these stats with the finding that these same experts believe four of five people will have some form of digital presence online, and a world where virtually all business is transacted through digital channels seems imminent and inevitable.

- **Everything Will be Connected** – Nearly 90 percent of the participants in the WEF study believe there will be one trillion sensors connected to the internet by 2022. In short, more devices,
machines, appliances, etc., than people will be communicating by digital means. Not only will businesses need resilient networks to carry this traffic, but they will need deep storage capacity for the vast amounts of content — textual, audio, video, — generated by the people using those devices, machines, appliances, etc., to interact with each other at any time from any place.

• **Everyone and Everything Will be Integrated** — More than 90 percent of experts polled predict that, in a little more than five years, one of every 10 people will wear clothes that are connected to the internet. In addition, more than 86 percent anticipate one of every 10 sets of reading glasses will be connected to the internet, too. Not long afterward, respondents imagine the first mobile phones will be implanted into humans. So, not only is digital tech transforming businesses, our bodies are next in line, broadening and deepening the definition and meaning of **Unified Communications (UC)** for the enterprise.

**What Makes Digital Transformation a Competitive Advantage.**

Any business leader hearing the WEF statistics as a “wake-up call” to go digital may have overslept. At least in terms of communications solutions, most companies heard the bells heralding the opportunities in digitizing long ago. Indeed, our own recent research shows most businesses already have embraced UC technology in some respect. Overall, more than two thirds of the organizations we surveyed have UC tools beyond basic email and voice solutions.

Yet, our study also found many offices still fail to integrate the two — despite nearly 60 percent of respondents claiming their “primary motivation” for investing in UC tech is “to increase productivity.”

The crux of this contradiction may be budget. Half of the companies we polled with annual technology budgets between $25,000 and $100,000 have implemented UC tools beyond the basics. But when available funding increased, so did organizational commitment to digital communications. About nine in 10 companies we sampled with annual tech budgets greater than $5 million provide staff with a suite of UC solutions beyond just email and voice.

Our study provides clues to other UC adoption issues, too. The ascendance of **video as a corporate communications medium** is one stressor, as almost a third of the IT managers we queried tagged video as the “most difficult technology to maintain.” And the spread of social platforms is another point of angst, as nearly half of respondents expressed similar maintenance concerns about social collaboration tools.

In sum, our findings suggest many organizations may be hindered by tactical myopia, seeing conferencing and collaboration technologies as purely solutions for creating efficiencies that reduce costs, such as travel expenses. And while operational efficiency remains an important value proposition for UC solutions, the WEF findings should elevate enterprise executives to a higher perspective: Digital transformation is a global phenomenon, opening international business opportunities.

Analysts from the consultancy firm **Ovum** report that the global conferencing market for audio conferencing alone hit $5.5 billion in 2015, an increase of half a billion over five years prior. Ovum predicts multiple emerging markets in Asia, the Middle East and Africa, and Central and South America will rise at a minimum compound annual growth rate (CAGR) of 4 percent, while certain regions will post growth rates as high as 8 percent.

Some of this growth will come from organic domestic usage. But, if WEF figures are any indication, an accelerating proportion of this growth will come from multinational corporations — and hundreds of smaller organizations with similar aspirations — extending their reach into new and existing theaters of operation around the world because they can.

As an engine of digital transformation, collaboration technology is enabling businesses to transcend physical borders with virtual solutions. And in the process, solutions once defined as tactical tools are evolving into strategic instruments. When the IT
advisory firm Gartner asked 400 senior business leaders from organizations generating $1 billion in annual revenue worldwide about their “top five strategic” priorities, 54 percent answered “growth” as #1 and 31 percent tagged the “customer” as #2.

From an executive vantage point, business growth and customer relationships are competitive issues first and operational concerns second. In this way, the pivotal question in collaboration, as in any form of digital transformation, becomes not just “how do we do it” but “how do we do it faster and better than our competitors.” Hence, direction and engagement must come directly from the top.

“The CEOs now understand that digital business is substantial enough to warrant them leading it personally,” said Mark Raskino, vice president and Gartner fellow, in an interview with CIO.com.

And in digital business on a global scale, this type of personal engagement is implemented largely through conferencing and collaboration solutions.

How Secure, Private, Reliable Business Communications Deliver Competitive Advantage.

Executives engaged in digital business on a global scale want three assurances from their business communications solutions in terms of competitive advantage.

1. Secure Communications – They want conferencing and collaboration within their organization to be free of competitive intrusion. While their operations team may be concerned primarily with events such as fraud, malware and network breaches disrupting communications, executives want to work with the assurance that, during any given business interaction, only those invited to participate are involved. Of course, this value applies beyond the ranks of senior management. But it’s at the highest levels that lapses in secure communications can do the most strategic damage. How many deals could be soured if competitors were able to attend monthly conference calls with the sales team? And how would stock prices gyrate if competitors could intercept financial reports before earnings calls? The range of risks is difficult to fathom – and to anticipate.

2. Private Communications – They want to conduct proprietary and confidential interactions with staff, customers and partners at appropriate levels at their own discretion. Every member of an organization need not have access to all of the available business content all of the time. And executives should have exacting control over this flow of information to manage corporate culture. The value of transparency in communications has limits – e.g., personnel files. Pragmatism plays a role, too. Some conversations relevant and useful to the accounting department may just waste the time of the R&D team. In this way, privacy in conferencing and collaboration becomes a question of agility, a means of communicating more efficiently and effectively than competitors.

3. Reliable Communications – They want conferencing and collaboration capabilities available and accessible to them anywhere at any time from any place in any and all modes – voice, visual and virtual. As research by the World Economic Forum, Ovum, Gartner and ourselves illustrates, digital transformation is accelerating the globalization of business by dissolving traditional limits such as time zones and borders. So, executives reasonably expect their organization’s communications to be liberated from these conventional restrictions, too. Every minute of network downtime, each instance of static on a call, and even a few seconds of buffering in a video are delays, distractions and disruptions that could add up to disadvantages in the race against competitors.

Where to Next

As the World Economic Forum’s study demonstrates, the march of digital transformation in everyday life and, as a consequence, in everyday business is not only inexorable but quickening, broadening and escalating. Where is the limit? A large portion of the tech visionaries polled by the WEF expect digital solutions will reach all the way to the top in the business realm. Nearly half (45 percent) of those surveyed anticipate the first Artificial Intelligence (AI) machine will serve as a director on a corporate board by 2026.
These provocative findings are controversial in the least. And as developers and providers of solutions for conferencing and collaboration, we believe it’s important to keep the human element not only in the debate but central to the discussion.

Business is about people. Competition in business is about people vying to provide products and services to other people. And Unified Communications is about making it easier for all those people to connect and work together – whenever they need to, from wherever they are.

CHAPTER 2
WHY RELIABLE, SECURE, PRIVATE BUSINESS COMMUNICATIONS ARE CRUCIAL TO OPERATING IN TODAY’S DEMOCRACY OF INFORMATION

Digital technology is spreading unprecedented amounts of information to more people in more places than any time in human history. And businesses of all shapes and sizes seeking to operate in this digital environment will need reliable, secure, private communications not only to run an efficient enterprise, but to serve and satisfy customers.

Not long ago, researchers for the World Economic Forum (WEF) released a first-of-its-kind study chronicling the pace of worldwide digital transformation. They asked more than 800 executives and experts from the global information and communications technology sector for their views on “tipping points” for technological shifts in society.

The WEF study revealed many provocative trends. And as an organization delivering Unified Communications (UC) to enterprises large and small, we found the analysis compelling.

“Inventions previously seen only in science fiction… will enable us to connect and invent in ways we never have before,” wrote Victoria Espinel in the report’s preface. Espinel is CEO of a technology firm and the WEF’s chairperson, and she believes digital innovations will “transform our daily routines.”

We agree – and can add ample evidence that this transformation is well underway in business.

Our own recent research demonstrates most businesses already have embraced UC technology in some respect. Overall, more than two thirds of the organizations we surveyed have UC tools beyond basic email and voice solutions. Here are details:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>79%</td>
<td>of companies polled have audio conferencing solutions</td>
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<td>76%</td>
<td>have web conferencing tools</td>
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<tr>
<td>73%</td>
<td>have an Instant Messaging (IM)/presence platform</td>
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<tr>
<td>68%</td>
<td>have implemented some level of video conferencing</td>
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<td>67%</td>
<td>have screen-sharing capabilities</td>
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<tr>
<td>43%</td>
<td>have adopted some form of social collaboration</td>
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So, not only is UC an intelligent, scalable way to deliver integrated communications services to organizations in diverse industries around the world, but the collaboration UC enables is driving what tech pundits have called the “democratization of data” in business.

What Drives the “Democratization” of Business Information

The digital transformation of business has diffused the concentration of information – and power. Brent Dykes, a contributor to Forbes magazine, explained the evolution of this tipping point and its ongoing impact.
“For the greater part of the last 50 years, data has been primarily entrusted to only two privileged groups within most business organizations,” Dykes elaborated in one of his columns. “An executive who required data to effectively manage the business; or a data specialist—a business analyst, statistician, economist, or accountant—who gathered, analyzed, and reported the numbers for management. For everyone else, exposure to data has often been limited, delayed, indirect, or intermittent.”

“Companies have never had as much data as they do now,” Dykes asserted. “It has become the lifeblood of many digital businesses… As more organizations seek to decentralize decision-making and increase responsiveness, they are seeking to empower more workers by putting meaningful data at their fingertips—essentially democratize the data.”

While technology may enable senior leadership to create a democracy of information, this cultural evolution in most organizations is inspired by human factors. According to a recent study by the IT research firm Gartner called “2016 CEO Survey: The Year of Digital Tenacity,” people issues are motivating the C-suite. When Gartner asked more than 400 senior executives from $1 billion, multinational companies about their “top five strategic priorities,” most listed the “customer” and the “workforce” among their top three.

CEOs support digital transformation like the democratization of data “because they can see how it helps with product innovations that matter to customers,” Mark Raskino, vice president and Gartner fellow, argued in an interview with CIO.com. They also realize unifying the organization with a healthy flow of information from top to bottom and from the core to the front lines helps deliver satisfying customer experiences – digital or otherwise.

Along both dimensions – developing competitive products and services, and delivering them to customers – the key is operational efficiency, especially in today’s digital environment when the scope and scale of operations can range from around the corner to around the world. As dozens of case studies have illustrated, hasty selection, haphazard implementation and loose management of all manner of business technology can increase expenses and hamper productivity instead of lowering costs and reducing complexity.

Conferencing and collaboration solutions are no exception. The difference between success and failure is understanding that people use the systems to serve other people. And what matters most to those people is what is most important about the technology.

How Reliable, Secure, Private Business Communications Support a Democracy of Information

Gartner’s Raskino said CEOs committed to democratizing information in their organizations typically share responsibility for digital transformation with their CIOs. The role of these technology executives is not only coordinating technical resources in the IT and telecommunications groups, but aligning functional areas such as sales, legal and human resources – as well as regional leadership – with appropriate processes and practices.

UC supports these management initiatives by providing three crucial bricks to the foundation of a democracy of information:

1. **Reliable Communications** – A reliable communications system enables every member of an enterprise to reach any internal or external audience anywhere at any time from any place using conferencing and collaboration solutions that unify all modes – voice, visual and virtual. A managed, all-IP infrastructure is required, with a geographically dispersed network of load-balanced servers operating according to the highest international standards of business continuity and disaster recovery. A provider must ensure service through state-of-the-art facilities, with protective physical features, such as an uninterrupted power supply, a temperature-controlled environment and sensors for detecting fires, floods and other calamities. Redundant technical systems are just as important, such as constant monitoring, consistent maintenance and persistent back-up routines – on- and off-site. The sum of all these elements is a business communications system that is highly available and highly accessible to any member of the team at any level of the organization.

2. **Secure Communications** – A reliable enterprise communications system is secure along three dimensions:
   - **Secure Infrastructure** is highly resistant to intrusion, malware and cybercrime. In basic terms, the network and applications operating within it should be what IT pros call “hardened,” which means a mix of measures, such as firewalls, anti-virus
packages and other detection and filtering software, applied at multiple levels in the system. An important part of securing infrastructure is practicing secure software design, deployment and maintenance, as every new application, regular update and/or patch rolled out via the network represents a potential vulnerability to the whole system and all its users.

• **Secure Access** means only authorized individuals and their appointed guests – whether inside or outside the company – have access to the communications network and its applications. Securing access involves a mix of authentication techniques – i.e., logins, PINs and passwords – monitoring tools and session controls. The most robust systems have multiple authentication layers and assign responsibility for managing sessions to moderators who are either members of the organization or trained professionals supplied by the communications provider.

• **Secure Content** – whether audio, visual or textual data – is what a secure infrastructure carries and secure access endeavors to guarantee. A system's users should be in position to choose what content – regardless of format – is shared outside the network and what it is not. And users should be free to exercise this discretion with confidence, assured that any content held within the confines of the network – streaming or saved – is secure from theft and/or misuse. The same applies to a system's archive and back-up routines.

3. **Private Communications** – A reliable system secure along all three dimensions – infrastructure, access and content – provides an enterprise with private communications – i.e., a digital environment where team members and their guests may collaborate using public, proprietary or confidential business information. In a private system, the owners have the authority to set policy but also the obligation to authorize users and manage conduct. In turn, users have the obligation to adhere to policy and conduct interactions responsibly. In this way, a democracy of information resembles democratic governance.

**Where to Next**
The World Economic Forum's study paints a picture of a not-so-distant time when everyone and everything will be connected, everyone will be mobile, and this whole digital society will be integrated, including our devices with our bodies. At first glance, it can be an overwhelming, intimidating prophecy.

But as specialists in Unified Communications we are optimistic about this vision of the future. By developing and providing conferencing and collaboration tools for business we are helping create that future. In fact, our research into how companies use our solutions not only lends a preview of that future, it shows us that future is promising, a time when organizations and the people within them are profitable, productive and progressive. We see that the promise and potential of a democracy of information is real, a place where people can easily connect, communicate and work together – whenever they need to, from wherever they are.

**CHAPTER 3**
**WHY PEOPLE, NOT TECHNOLOGY TOOLS, ENSURE PRIVATE, RELIABLE, SECURE BUSINESS COMMUNICATIONS**
As digital technology spreads around the globe, more and more corporations are enabling employees to conduct business from remote locations with mobile devices. At the same time, more and more companies are moving significant aspects of their business operations to the cloud. And in the process, these firms are learning that, regardless of the type, complexity or cost of the technology involved, people play the critical role in ensuring private, reliable, secure business communications – whether they are using collaboration tools or providing them.

For the last several years, Mary Meeker, a partner in a prominent Silicon Valley venture capital firm, has presented an annual "Internet Trends" report. Meeker's report has become famous for its scope and scale, steeped in a plentitude of data compiled by her colleagues (the 2016 version of Meeker's presentation features more than 200 slides with dozens of charts and hundreds of statistics) about the evolution of the world's digital economy.

Businesses of all shapes and sizes across the full spectrum of industries can glean all manner of insights from the exhaustive study. From our perspective as developers and providers of business conferencing and collaboration solutions, we see three telling trends:
• **Internet Adoption and Smartphone Sales Losing Momentum** – Global internet adoption has begun to lag. The year-over-year growth of online users remained flat at nine percent. Why? Because boosting the number of new internet users is difficult with highly developed markets like the United States so highly penetrated, according to Meeker’s team. The same principle holds for smartphone sales; few large markets remain for heavy growth.

• **Computing Interfaces Evolving from Text-Based to Voice-Driven** – In a world where everyone is mobile and everything is connected, voice commands should become the “most efficient form of computing input” according to the researchers. Why? Because, on average, humans can speak 150 words per minute while most people can type only 40 words in the same time span. In addition to being faster, delivering instructions by voice frees the hands from a digital device, promoting the mobility, productivity and safety of users as they conduct concurrent activities such as driving. Plus, as the Internet of Things (IoT) expands, eliminating the need for a keyboard will decrease the cost of hardware while increasing the variety of connected devices.

• **Social Platforms Enabling Greater Use and Sophistication of Images and Video** – Users are increasingly watching progressively more sophisticated imagery on the internet rather than scrolling and reading pages of text. How do researchers know? Because more than 95 million photos and videos are shared each day on the social networking service Instagram alone. And this statistic doesn’t address tens of thousands of infographics and slideshows published and shared each day, especially in the business context. Meanwhile, according to a recent Visual Networking Index produced by our partner Cisco, video already represents 64 percent of all internet traffic, a proportion that will swell to 80 percent by 2019.

Taken together, we see these three trends as more evidence of the escalating significance of worldwide digital business transformation – but not in the way some may expect.

**What Makes People the Critical Element of Private, Reliable, Secure Unified Communications**

As noted in one of our earlier sections (“Why Secure, Private, Reliable Business Communications Are Essential for Competing in Today’s Digital Environment”) a large portion of the tech visionaries polled by the World Economic Forum (WEF) expect digital solutions will reach all the way to the top in the business realm. Nearly half (45 percent) of those surveyed anticipate the first Artificial Intelligence (AI) machine will serve as a director on a corporate board by 2026.

In the past, provocative findings of this kind have caused some pundits to charge that technology is automating people out of the business world. In light of the recent Meeker presentation and other trends, we argue the opposite. We believe the spread of digital technology around the globe is making the human element more critical to business than ever before.

Here’s how we connect the dots:

• **Connecting and Acquiring is Shifting to Applying and Optimizing** – While the overall internet adoption among consumers is slowing, the pace of cloud adoption by businesses is gaining speed. Earlier this year, technology market research firm IDC predicted annual spending on public cloud services will increase more than 100% by 2019. Meanwhile, as smartphone sales shrink, the number of companies offering bring-your-own-device (BYOD) programs to employees – especially remote workers – is growing. We believe these counterbalancing trends mean organizations are turning their attention from acquiring and connecting to technology, to applying it to business processes and optimizing them.

• **Devices are Becoming Less Like Machines and More Like Us** – In 2015, the IT advisory firm Gartner predicted that in a few years “digital assistants” conducting multi-channel facial and voice recognition will be able to “mimic human conversations,
with listening and speaking, a sense of history, in-the-moment context, timing and tone…” In short, soon we will be able to talk to devices as we talk to other people and vice versa. We believe the transition from text to voice commands described in Meeker’s report is a harbinger of this impending future.

• Communicating is Evolving from Exchanging Information to Telling Stories – Susan Weinschenk, who pens the “Brain Wise” column for Psychology Today, once shared these observations regarding the rise of video conferencing in business:

“Everyone likes stories. We like to listen to stories, read stories, watch stories (movies, TV, theatre) and tell stories. In fact, stories are our normal mode of information processing. Stories are so normal to us that we don’t even stop to think about why that is.”

Following Weinschenk’s reasoning, increasing use of digital technology – particularly for communication – is not automating humanity out of business operations – it’s making these processes more human than ever. We believe the statistics from Meeker’s slides about the proliferation of sharing imagery and video supports our conclusion.

As Meeker’s latest “Internet Trends” report illustrates, the advance of digital transformation in everyday life and, as a consequence, in everyday business is not only inexorable but quickening, broadening and escalating. But this march of technology is not eclipsing the human role in business, it’s empowering it by helping people and the organizations they create become more profitable, productive and progressive.

How to Practice Effective Private, Reliable, Secure Communications

As experts in conferencing and collaboration solutions, we maintain the fundamental definition of business remains people working with other people – irrespective of today’s pervasive digital technology, proliferation of devices and the torrents of data both generate. And we continue to view the purpose of Unified Communications (UC) as straightforward – regardless of the type, complexity or cost of the technology involved. The mission of UC for business is to make it easier for people to connect and collaborate – whenever they need to, from wherever they are.

But we do not consider this mission our responsibility alone.

Effective UC requires a collaborative partnership between solution providers and the people using the tools they create. Both sides of this relationship share an obligation to develop and implement best practices in their respective areas of operation. And people on each side play interdependent roles in ensuring business communications are private, reliable and secure.

The Provider’s Role in Private, Reliable, Secure Communications Infrastructure

Best-in-class UC solutions are a combination of private, reliable, secure networks and facilities:

• **Data Centers** support a distributed network architecture of multiple geographically dispersed, load-balanced servers or managing content, sharing applications and controlling codes. Top-tier service providers that are ISO 17799 certified or SAS 70 Type II audited host the data centers using redundant systems – such as multiple fiber trunks from multiple sources, multiple power sources on premises and multiple backup generators.

• **Hosting Facilities** feature around-the-clock physical security with guards, cameras, motion sensors and other industry standards. Environmental measures include seismically-braced server racks (where applicable), raised floors, water detection systems, temperature controls, smoke detectors and fire suppression systems. Supervision of data center operations is 24/7/365, handled by on-site technical personnel trained in internet technology, networking and overall systems management.

• **Firewalls** prevent unauthorized access and use of communications networks in the virtual world. Transmissions entering or leaving networks are screened according to established criteria, such as secure socket layer (SSL) encryption. Variations and deviations from safe standards are blocked.

• **Virus Protection** routines prevent infection of communications networks through a multi-tiered defense automatically updated with the latest software.
• **Business Continuity and Disaster Recovery** programs anticipate various disruptions through random testing and simulation of detection, alert and response procedures on a quarterly basis. Backups are performed daily, with data encrypted and archived across the distributed network infrastructure in the short and long terms. This replaces the conventional method of creating magnetic tapes that are stored on premises and off-site.

**The Provider’s Role in Private, Reliable, Secure Communications Infrastructure**

Best-in-class UC solutions are a combination of private, reliable, secure networks and facilities:

• **Proprietary Servers** based on security standards for web technology are the foundation of conferencing and collaboration applications. From start to completion, each step of the design process follows established software development best practices.

• **Testing and Validation** of user input fields and data processing occurs comprehensively and completely before any application goes live.

• **Life Cycle Management** takes place at every stage of development with event logs archived and changes tracked before new versions of any product are released.

**Private, Reliable, and Secure Communications Access**

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<tr>
<th>THE PROVIDER’S ROLE</th>
<th>THE PARTICIPANT’S ROLE</th>
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<tbody>
<tr>
<td>Best-in-class control and management features enable private, reliable, secure UC sessions:</td>
<td>Judicious management of UC resources by participants fosters private, reliable, secure UC sessions:</td>
</tr>
<tr>
<td><strong>Configurable Security</strong> with tiered password policies (strong to weak) and confidential personal identification numbers (PINs) is available for session leaders and participants.</td>
<td><strong>Complex Codes</strong> for identifiers, passwords and PINs used by leaders and participants complement privacy, reliability and security measures on the part of providers. Here are tips for setting appropriate codes:</td>
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<tr>
<td><strong>Moderator Powers</strong> such as “dial out,” “lock the door” and “dismissal” functions lend basic but firm control to session leaders.</td>
<td>• For session identifiers, use a minimum of 10 digits</td>
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<tr>
<td><strong>Timeouts and Automatic Dismissals</strong> prevent inactivity from rendering sessions vulnerable to intrusion.</td>
<td>• For passwords and PINs, use a minimum of four digits</td>
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<td><strong>Alerts and Announcements</strong> such as tones and audio blurbs identifying participants by name when they enter or exit sessions ensure full awareness of who attends a session.</td>
<td>• Never make all digits the same (e.g., 1111111111, 7777777777) or use leading zeros (e.g., 00121, 00111)</td>
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<tr>
<td><strong>Operator Assistance and Monitoring</strong> offers support to leaders and participants alike during large, lengthy and/or sensitive sessions.</td>
<td>• Avoid logical sequences (e.g., 12345, 775577, 1113333, and 50505050) and running more than three sequential digits in a row (e.g., 1234)</td>
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<td>• Never use PINs inside passwords or vice versa</td>
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<td>• Never use a public phone number or your own phone number as an identifier, password or PIN</td>
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<tr>
<td>• Sharing and/or Publishing individual credentials of any kind increases the risks of breaches to privacy and security and should be avoided. By the same principle, credentials that can be altered should be changed on a regular basis. In general, only colleagues, customers and partners should be issued credentials for proprietary communications networks and be encouraged to keep them confidential.</td>
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<td>• Choosing Private, Secure Locations for conducting sessions not only reduces the risk of intrusion, but typical enhances the quality of interactions when collaborating. Simple steps such as closing doors and/or using handsets instead of speakerphones contribute to this cause.</td>
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Judicious management of UC resources by participants fosters private, reliable, secure UC sessions:
Private, Reliable, and Secure Communications Conduct

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<th>THE PROVIDER’S ROLE</th>
<th>THE PARTICIPANT’S ROLE</th>
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<tr>
<td>Conscientious policies by provider organizations support private, reliable, secure UC interactions:</td>
<td>Conscientious behavior by participants contributes to private, reliable, secure UC interactions:</td>
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<tr>
<td>• Privacy and Confidentiality Policies governing the conduct of the provider’s service team when interacting with customers and partners via internet, email or other channels involved in UC should be kept up-to-date and available for review.</td>
<td>• Prepare for collaboration by…</td>
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<td>• Reports and Notices of Compliance with Sarbanes Oxley or other relevant regulations promoting mature, transparent financial practices should be kept up-to-date and made available for review by the UC provider when appropriate.</td>
<td>• Notifying participants of dates and times of appointments in a timely fashion when hosting and confirming attendance in advance when joining as a guest</td>
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<td>• Sending agendas and/or background materials to participants in a timely fashion when hosting and submitting agenda items background materials in advance when joining as a guest</td>
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<td>• Silencing alerts by smartphones, tablets and laptops before initiating or joining a session</td>
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<td>• Exercise courtesy in collaboration by…</td>
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<td>• Finding a private, secure location to host or join a session</td>
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<td>• Arriving early or on time for a session</td>
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<td>• Conducting a roll call of participants and reviewing the agenda when hosting a session</td>
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<td>• Introducing yourself when speaking in a session and encouraging others to do the same</td>
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<td>• Refraining from using muting or hold features frequently unless necessary, as turning them on and off can delay the flow of interaction</td>
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<td>• Facilitate quality of collaboration by…</td>
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<td>• Dealing promptly with any noise or distractions on your connection or in your location</td>
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<td></td>
<td>• Involving as many participants as reasonable in discussion when hosting and volunteering information and observations when joining as a guest</td>
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<td>• Requesting feedback from participants frequently when hosting and offering feedback often when joining as a guest</td>
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<td>• Agreeing to table topics and discussions not relevant to the agenda for later sessions</td>
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<td>• Summarizing issues covered in a session when hosting and providing availability for follow-up sessions when joining as a guest</td>
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</tbody>
</table>

The Provider’s Role in Private, Reliable, Secure Communications Content

Best-in-Class UC providers guarantee private, reliable, secure content management:

• Recordings of Customer Content in any media format created, copied and/or shared during UC sessions are stored for specified time periods online and then offline and available for purchase and/or playback according to service-level agreements. Archives are subject to purging policies within specified time periods and only recordings and metadata about the files are stored – without any proprietary customer information, such as account numbers.

• Access to Recordings is Controlled and Monitored according to service-level agreements and the provider’s internal privacy and confidentiality policies.

• Multiple Levels of Security should be available to UC customers that can be configured according to the individual requirements of an organization. Standard practices for online security such as logins, passwords and encryption should be applied to accessing content as they are applied to accessing sessions.

Where to Next

The scale and speed of digital transformation in today’s business world can feel overwhelming and exhausting to those of us trying to keep pace. At times, rolling waves of new technology washing over our organizations can seem to detach and isolate us from our colleagues, customers and partners.

So, as developers and providers of unified communications solutions, we adopt a deliberately simple mission from this perspective. We keep in mind that “unified” is the leading word in the term. And we strive to put technology in the background as the catalyst to productivity rather than an inhibitor. As long as the services help people work with people, connecting them whenever needed, from wherever they may be, we’re optimistic about the next phase of digital transformation, and the many more to come.
Who is West Unified Communications Services?

At West, we're dedicated to a single proposition—making communication easy. Whether it's coworkers across the office or partner firms around the globe, enabling that connectivity is the hallmark of our work. Our mantra? We Connect. We Deliver.

Every person on the West team is focused on providing solutions and services that make better connections and deliver real results—not just for our customers, but for our customers' customers. When it comes down to it, if you can't talk and share information internally or with people outside your company, your business isn't going anywhere.

West is dedicated to shedding the jargon around unified communications and providing specific, concrete uses to those who benefit most. What's that mean for you? We handle the complex stuff so you don't have to. That's why West dedicates so much time, energy and investment in the unified communications space.

Unified communications has a lot of pieces and West covers them all.

For more information on our services, give us a call. 855.544.0455