



# Messaging

By taking a unified, strategic approach to messaging, organizations can improve business processes, reduce costs and bolster customer service.

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## Executive Summary

Organizations and workers are becoming more mobile and, at the same time, more collaborative. Customers require access to information whenever and wherever they need it, and employees are demanding flexibility in applications and devices.

This creates an opportunity — and a challenge — for IT professionals to provide the tools and infrastructure to enable a variety of messaging services, including e-mail, instant messaging, mobile messaging, video conferencing, voice and presence. By creating a unified messaging platform, organizations can consolidate different interfaces in a single location, supporting users no matter where they are or what devices they are using. This capability can lead to significant changes and improvements in how companies conduct business and the ways in which they serve customer needs.

What are the risks of not taking a strategic approach to messaging? Users will seek their own solutions through a variety of products, most of which are consumer-focused and not designed for corporate deployments, compromising security and compliance, and potentially putting the company at risk in legal proceedings. This can also create a tenuous situation where IT is not able to respond quickly and efficiently to the changing needs of the business, leading to dissatisfaction with the IT department.

## Messaging Overview

Messaging is a mix of communication services that have come together in recent years as the result of the Internet and IP, converging traditional data-oriented services with voice services, particularly VoIP. Organizations have been utilizing e-mail, voicemail, instant messaging, unified messaging, video conferencing, web conferencing and presence to dramatically alter their processes and make significant improvements in how they communicate with customers and how employees communicate and work together throughout the organization.

### Understanding Messaging Terminology

Messaging terminology reflects a convergence of technologies from the worlds of voice, video, data and the Internet. The following is a guide to some of the basic terms:

- **Unified communications** is the convergence of enterprise voice, video and data services to achieve greater collaboration among individuals or groups and improve business processes. The results are reduced costs, increased productivity and improved decision-making.
- **Messaging** enables the sharing of information between individuals or devices using various communication methods, including voice, e-mail, unified messaging, instant messaging and presence. By having access to multiple communication forms, users are able to connect with others immediately.
- **Unified messaging** consolidates e-mail, voicemail and fax into one inbox, giving users a variety of ways to access their messages, via telephone, computer or mobile device.

The technology is now available to bring all of these services together within a unified communications framework. Such a framework enables organizations to operate more efficiently and cost-effectively, allowing them to move away from legacy silo applications and toward next-generation, IP-based communications and messaging for data, voice, video, presence and text-based modalities. Messaging technologies can also integrate information from CRM systems to provide a single view into customer information, which enhances customer support and service and equips customer-facing employees with valuable new tools.

By developing a strategic approach to messaging, companies can take advantage of a wide range of benefits. A messaging platform within a unified communications framework serves as the core repository for unified communications solutions.

It enables organizations to improve customer service and allows workers to be more flexible and mobile. It also creates an environment in which collaboration is encouraged, simplified and used as a strategic, competitive advantage to respond quickly and efficiently to the needs of employees, partners and customers.

Unified communications also supports presence, which can speed business processes by enabling workers to not only collaborate more effectively, but also to far more efficiently find the individuals and answers they need throughout the organization, getting vital information in real time. By enabling and encouraging collaboration, companies can change business processes. Indeed, a recent survey by research firm IDC showed that 33 percent of CIOs at companies in the U.S. said they are using collaboration today and 54 percent said they plan to use it in the future. IDC estimates the worldwide market for unified communications and collaboration will reach more than \$17 billion by the end of 2011.<sup>1</sup>

### Productivity Benefits and Improved Business Processes Fuel Growth in Usage of Universal Messaging Solutions

Despite the economic downturn, the market for universal messaging seats increased by 29 percent between 2008 and 2009, according to Frost & Sullivan. In a report titled "World Enterprise Voice and Unified Messaging Platform Markets," the research firm noted that strong growth occurred because a large number of businesses became aware of the productivity benefits of unified messaging and its ability to accelerate business processes.<sup>2</sup>

"The growing number of telecommuters and increasing mobility of the enterprise workforce drive demand for next-generation messaging solutions," according to Frost & Sullivan research analyst Alaa Saayed. "As enterprises seek new ways to enable their workforce to be more productive and efficient while performing multiple tasks (either at their desks or on-the-go), anywhere and anytime access to non-real-time messaging becomes crucial."

The report indicates that the market will continue to grow, receiving a boost from an increasing focus on application integration as well as growing adoption of unified communications solutions. Also driving growth, according to Frost & Sullivan, will be the replacement of legacy messaging systems and telephony platforms with next-generation IP communications solutions. Among the challenges cited by Frost & Sullivan are legal and compliance issues related to e-discovery, security, privacy and confidentiality of messaging access, and identity management.

<sup>1</sup> Maximizing Your Collaboration Investment By Choosing the Right Services Approach, June 2010

<sup>2</sup> World Enterprise Voice and Unified Messaging Platform Markets, Frost and Sullivan, January 2010

## Getting Started

A big question is how to get started: Which systems should companies begin to integrate — e-mail, voice, instant messaging? One important point is that organizations do not necessarily have to do everything at once. Another is whether the infrastructure, such as storage networks and servers, is in place to support the myriad of messaging platforms. If users have corporate mailboxes with a capacity of 100MB or 200MB and they can get 3GB from a commercial service provider, they are going to expect IT to rationalize the dramatic difference.

As with any new IT initiative or upgrade, it's best to start with an assessment of the technology in place, how the organization is using that technology and how it will need to be used in the future. With messaging, the starting point is often based on the organization's current infrastructure and workflow. In doing an assessment, it is important to understand how an organization's employees communicate and collaborate with one another and with customers, partners and suppliers.

If an organization tends to be e-mail-centric — where e-mail is the preferred and most-often used form of communication and collaboration — its unified communications strategy should be an outgrowth of its e-mail system. Conversely, if the organization is voice-centric — where employees and customers are accustomed to doing business on the phone and with voicemail — then the voice infrastructure should be the foundation of its unified communications solution.

Starting with a basic understanding of the organization's core assets and its way of doing business is necessary when choosing vendors because, when it comes to delivering on unified messaging solutions, most of the leading vendors tend to approach their solutions as an outgrowth of their core strengths. Messaging, and its related group of technology solutions, characterized as unified communications and collaboration (UCC), have turned out to be a common ground where the leaders from the worlds of telecommunications, data networking, desktop computing and corporate computing have converged to build competitive solutions based on their strengths as well as the needs of their customers.

Each vendor's solution is slightly different, and the language they use to describe it can vary. It is also important to note that the way these vendors position the messaging about their solution is often skewed toward their own strengths. For this reason and others, consider bringing on an expert

partner in the early stages of the process to help sift through the choices and build a plan that takes into account all of the challenges organizations face, including:

- Building out the infrastructure
- Assessing user and customer requirements
- Addressing compliance, regulatory and security issues
- Dealing with an increasingly mobile workforce
- Supporting a growing and diverse range of endpoint devices
- Making sure users are trained to take advantage of the features and capabilities of the messaging solution

When it comes time to select vendors and solutions, there will be many choices. Some vendors provide a one-stop shop for unified communications and messaging, but there are also opportunities to select state-of-the-art solutions from different vendors based on open standards. An expert partner will be an important part of figuring out which set of solutions will be best for the organization — and how to implement those solutions.

## Messaging Solutions

Most organizations approach unified messaging with some of the pieces in place. The question is how, when and why to integrate the different technologies or whether it makes sense to migrate to a whole new messaging platform. When considering messaging solutions, the basic building blocks are:

**E-mail:** For many organizations, the e-mail platform is the starting point and backbone for creating a unified messaging strategy. Most e-mail vendors have an IM solution, and many are starting to incorporate voice as well. Most vendors are designing their latest releases with advanced features to integrate seamlessly into unified communications strategies. However, companies need to be aware of any migration issues if moving to a new platform and make sure they migrate the message data as well as all of the underlying infrastructure components. They should also consider migrating archived data to the new platform so they don't lose it and have it readily available for possible e-discovery requirements.

**IM and presence:** Instant messaging and presence go together. Presence provides awareness to instantly communicate — by voice, video, IM or web conferencing — with individuals throughout and, in some cases, outside the organization. IM is the simplest form of text communication. It is often used to start a conversation, which can then be escalated to other modalities. In the context of a unified communications environment, IM is a relatively simple modality, and there is generally

a minimum amount of data to migrate from one platform to the next. Often, the initial deployment for IM is for internal use only. Once the usage of IM is established internally, the next logical step is to open it up for communications with other organizations. IM is typically integrated with a unified communications client who provides users with a single efficient console for accessing instant messaging, e-mail, telephony, conferencing, contacts and calendar information. Presence can accelerate workflows and processes by enabling anyone in the system — employee or customer — to identify the individual who can solve a specific problem or answer a specific question. If a user is actively using e-mail, instant messaging or video conferencing, for example, other users can see that individual's status and availability.

**Voicemail and unified messaging:** Voice communication has been part of business processes and collaboration for more than a century, but the rules of the game have changed with the widespread adoption and integration of VoIP. Organizations can now integrate their voice and data messaging services and provide a variety of features that enable quicker decision-making for customers and increased collaboration for workers. Employees can access their voicemail from any device, and with features such as simultaneous ring between mobile and desk phones, they can work anywhere and during any hours without losing productivity. Voicemail also can take on a new role within a unified messaging environment, whereby a single voice mailbox can be accessible from any number of devices. These mailboxes can also contain messages other than voice, including e-mail and text. Today's voicemail systems can enable organizations to cut costs while improving commu-

nications and customer service. By integrating voicemail into a unified communications solution, organizations can more easily manage messages based on priority, time received or other user-defined factors. For organizations that are more voice-centric, a changeover in the PBX or voice platform system might be an ideal starting point to move to a unified communications solution. For the most part, IP telephony that can integrate easily into a unified communications environment will be replacing traditional PBX telephone systems over the next few years.

**Application data integration:** In addition to the applications described above, the messaging solution can be used as a repository for data generated by emerging collaboration tools such as IM conversation history, SMS messaging, fax, social networking data, RSS feeds and line-of-business data. By having their data consolidated into one box, users can access messages through any device they choose — a mobile phone, computer, telephone or PDA. In some cases, such as a conversation history or a voicemail, the data may reside in the user's box. In other cases, the system provides integrated links to other data repositories — for example, a user can click on an e-mail and link to a transaction history in a CRM system.

In examining messaging solutions, there are certain factors to consider. In a rapidly changing market, it is important to know whether the vendor provides solutions based on open standards. An organization may also want a system that enables it to extend the lifecycle of its current technology and infrastructure, reducing the costs of hardware, software, maintenance and training.

**Table 1. The Collaboration Effect: The More Unified Applications You Use, the Greater the Overall Productivity Benefit**

<b>Clients, IM, Presence</b>	<ul style="list-style-type: none"> <li>• Research workers on first try — 40% of users save up to 20 minutes daily</li> <li>• Escalate IM into phone conversations or Web conferences — more than 50% report saving up to 20 minutes daily</li> </ul>
<b>Mobile UC</b>	<ul style="list-style-type: none"> <li>• Enhanced productivity and reachability — almost 50% of users save 11–30 minutes daily with single-number reach/voicemail and 33% save 11–20 minutes daily with mobile UC clients</li> </ul>
<b>Conferencing &amp; Collaboration</b>	<ul style="list-style-type: none"> <li>• Reduce travel costs — 42% of users reduce travel by as much as 11–25%</li> <li>• Improve productivity — 76% report increased productivity across geographies</li> </ul>
<b>Unified Messaging</b>	<ul style="list-style-type: none"> <li>• Manage e-mail, fax and voice messages efficiently — 50% of users save up to 20 minutes daily</li> </ul>
<b>Contact Center</b>	<ul style="list-style-type: none"> <li>• Improve first-call resolution — 41% of users report a 6–10% increase</li> <li>• Reduce response rates — 33% report a 11–25% reduction</li> </ul>

Source: Chadwick Martin Bailey, 2008

## Benefits of Unified Communications and Messaging

While companies have traditionally managed their different messaging platforms in silos, this approach will no longer be effective in the future, according to experts. “Business users typically treat the UCC components — voice, messaging, conferencing, instant messaging, presence, applications, clients, social networks and collaboration tools — in silos,” says Jeff Mann, research vice president at Gartner, speaking at the Gartner Symposium/ITxpo 2009.<sup>3</sup> “They can no longer work this way, as UCC represents a fusion of different communications cultures and work styles. The artificial separation they are used to will become a thing of the past.”

Infonetics Research recently noted that the “focus of unified communications is transitioning to mobility, multimedia and collaboration.” Respondents to this survey of IT decision-makers said they are looking to integrate cell phones, IM, video and conferencing.<sup>4</sup> (See *Table 1 on page 4.*)

By taking a unified approach to messaging, organizations can improve business processes, reduce enterprise costs and improve workforce effectiveness. For the IT department, it provides increased control and the ability to manage resources and applications from a single point. For employees and customers, there are tremendous gains in productivity and access to information, including:

- **Employees:** For employees, unified messaging provides the tools to collaborate and be mobile at the same time. For organizations that provide customer support and help desks, it streamlines operations and offers the ability to respond to customers in the most appropriate format and most immediate time frame. It provides a mechanism to improve sales and support by answering customer questions quickly and accurately. Unified messaging can greatly reduce travel costs for an organization by enabling individuals to collaborate with other employees, partners and suppliers by using a wide mix of technology solutions. In some ways, solutions that incorporate web conferencing, video chats and online meetings can be even more effective than face-to-face meetings because they can involve a larger number of people and be conducted at times when all of the necessary participants are available. Indeed, IDC notes that for many companies, meeting over video is transitioning from an option of last resort to an alternative that is preferred over traveling.

- **Customers:** For customers, suppliers and partners, unified messaging provides the ability to get to the right person quickly and efficiently and get answers to questions in real time. Consumers are conducting more and more of their business activities online, and the ability to get answers and place orders 24 hours a day, seven days a week has become standard operating procedure for many companies. The other important consideration for customers is the growing use of social networking tools for business activities and communications. By offering IM, video chat and other messaging tools, businesses can deliver services in the formats and media that customers prefer, providing significant competitive advantage.

### What About Social Networking?

As organizations address their messaging requirements, one of the factors they have to consider is the growing importance of social networking services for both employees and customers. Gartner predicts that within five years, social networking services will replace e-mail as the primary vehicle for interpersonal communications for 20 percent of business users.<sup>5</sup>

“The rigid distinction between e-mail and social networks will erode. E-mail will take on many social attributes, such as contact brokering, while social networks will develop richer e-mail capabilities,” says Matt Cain, research vice president at Gartner. “While e-mail is already almost fully penetrated in the corporate space, we expect to see steep growth rates for sales of premises- and cloud-based social networking services.”

Gartner recommends that companies develop a long-term strategy for provisioning and consuming a rich set of collaboration and social software services, and develop policies governing the use of consumer services for business purposes. The research firm also notes that enterprises will need to develop entirely new skill sets around designing and delivering social media solutions.

### Mitigating Risks

In moving forward with a messaging strategy, it is important to understand and mitigate the risks involved. For example, many companies have retention policies for instant messages and voicemails for both compliance and e-discovery requirements. And, they may have content in their systems that could expose them to liability — which they may not even know exists. Even if the organization does not have unified messaging, policies should be in place for e-mail lifecycle management and compliance.

<sup>3</sup> Gartner Symposium/ITxpo 2009, Nov. 2–5, 2009, Cannes, France

<sup>4</sup> United Communication Deployment Strategies and Vendor Ratings, North American Enterprise Survey, Infonetics Research, January 2010

<sup>5</sup> Gartner Reveals Five Social Software Predictions for 2010 and Beyond, Feb. 2, 2010

Some companies have liability concerns with instant messaging and voicemail and what that might mean in terms of producing evidence in a legal proceeding. A common misconception is that if data is stored in the messaging system, the organization's liability for producing data is increased. In reality, an organization's responsibility for producing data is not dependent on the location of the data. Before proceeding with a unified messaging solution, it is advisable to consult with legal counsel to be sure of the implications based on local and state laws and regulations specific to the organization's industry.

Security is also an issue that should be addressed in mitigating the risks involved in messaging. With VoIP, for example, there could be risks of eavesdropping. There is also the risk of information leakage, particularly when individuals are allowed to install their own commercial IM software. In many organizations, distinctions between business usage and personal usage are not always clear, making it a challenge for IT to enforce policies as users take advantage of new devices, such as the Apple iPad, as well as new social networking services.

Indeed, a recent survey by Cisco Systems Inc., in conjunction with research firm InsightExpress, found that many employees feel their ability to collaborate is limited by corporate policies. In the survey, employees complained about frustrations with devices and applications at work. Among the issues cited were restrictions set by IT managers on the type of collaboration technologies that could be used in the workplace, a lack of integration among applications, noncompatible formats and a limited number of collaboration tools. Half of these users admitted to accessing prohibited applications once a week, and more than 25 percent said they have changed the settings on their devices.<sup>6</sup>

There are inherent security risks with employees taking matters into their own hands. When users leave a company, they take their commercial IM account and contacts with them. This is not the case, however, if the IM solution is provided and managed by the corporate IT department. Commercial IM usage also raises threats of viruses, malware and spam as well as the potential to leak information. This could be an important issue as collaboration expands and the use of social networking services grows. The Cisco survey noted that 77 percent of IT decision-makers plan to increase their spending on collaboration tools this year.

To help mitigate risks for all types of messaging, usage and retention policies should be in place. Given the potential risks in areas such as security, compliance and e-discovery, it is that more important to be working with a partner that has the knowledge and broad range of experience to handle these issues.

<sup>6</sup> Collaboration Nations, March 2010

<sup>7</sup> Unified Communications: Improve Customer Satisfaction and Workforce Productivity, May 2010, Aberdeen Group

## Best Practices

What are some of the critical common characteristics among companies that are doing the best job in implementing unified communications and messaging solutions? Research company Aberdeen Group concluded the following in a recently released report<sup>7</sup> analyzing the driving forces in the market:

The business pressures that have been the biggest driving factors are:

- The need to be more responsive to customer needs
- Competing in markets that demand real-time decision-making

The following technologies have enabled these leading companies to successfully provide more timely services to customers as well as increase workforce collaboration and improve the quality of communications:

- Voicemail/e-mail unified box
- Company-hosted instant messaging
- Unified number for mobile and desk phones
- Presence
- Random-access voicemail or visual voicemail
- PC-based video conferencing
- Mobile phone/desk phone simultaneous ring
- "Find me, follow me" automatic call routing to mobile or office phones

Among the other approaches most commonly used by leading companies are:

- Policies for centralized management of UC solutions
- Secure authentication for end users
- Ability to identify and map business process workflow
- Staff in place to support end users
- Staff in place to manage the UC systems
- Communications system training for end users
- Team-based collaborative tools, including instant messaging, mobile wikis and microblogging
- Interactive help function

A final point from the Aberdeen study: "Although companies often think of unified communications as a technical solution, the success of unified communications deployments depends on cultural acceptance and the ease of use that employees associate with the development."

## CDW Services and Approach

To develop a strategic approach to messaging and mitigate the inherent risks, it is important to work with an expert partner that has knowledge and experience in developing unified communications and messaging technologies. CDW provides a single point of contact for all of an organization's messaging solutions throughout the project lifecycle, starting with an assessment of the organization's current environment, needs and goals.

In the world of unified communications and messaging, IT decision-makers are often dealing with multivendor solutions, so it makes sense to work with an IT partner that takes a multi-vendor approach. CDW can provide a variety of options and is not tied to a specific vendor. Plus, it has the expertise to integrate all aspects of an IT solution, including hardware, software, networks and service.

The CDW approach includes:

- An initial discovery session to understand goals, requirements and budget
- Detailed vendor evaluations and recommendations
- An assessment of the existing environment, future environment design and proof of concept
- Procurement, configuration and deployment of the final solution

## About CDW

CDW is a leading provider of technology solutions for business, government, healthcare and education. Ranked No. 41 on *Forbes'* list of America's Largest Private Companies, CDW features dedicated account managers who help customers choose the right technology products and services to meet their needs. The company's technology specialists offer expertise in designing customized solutions, while its technology engineers and solution architects can assist customers with the implementation and long-term management of those solutions. Areas of focus include notebooks, desktops, printers, servers and storage, unified communications, security, wireless, power and cooling, networking, software licensing and mobility solutions.

CDW was founded in 1984 and as of March 31, 2010, employed approximately 6,150 coworkers. In the 12 months trailing March 31, 2010, the company generated sales of \$7.6 billion. Intently focused on responding to customers' technology needs with a sense of urgency, CDW helps customers achieve their goals by providing the right technology products and services they need — when they need them.