In 2011, unified communications portfolios have begun to mature with the emergence of integrated UC suites. This represents a shift from the previous years, when broad communication portfolios were not seamlessly integrated. Leaders maintain their positions, although challengers are emerging.

What You Need to Know

The enterprise unified communications (UC) market has matured significantly during the past 12 months. The most visible changes are the appearance of full and integrated UC suites from most vendors and improved client capabilities across a range of devices. Previously, most vendors offered a UC portfolio — that is, functionality based on a range of elements drawn from their broad array of communications capabilities; in these portfolios, the interoperability of all components was not assured. The emerging generation of UC suites will be an improvement over the UC portfolios, in that interoperability within the suite should be seamless, the administration will be centralized and the deployment will be easier. Although the suites vary in functionality and maturity, they represent an attractive trend, and Gartner expects UC suites to become the dominant product paradigm during the next two years. Within these suites, messaging (e.g., email and unified messaging) tends to remain a separate decision and messaging solutions generally interoperate with most environments without difficulty.

The emerging generation of UC suites poses a conflict for enterprise decision makers and planners. Although these UC suites offer the full spectrum of UC functionality, in most cases, they do not offer best-of-breed functionality in all areas and, in some UC areas, barely offer "good enough" functionality. The conflict is that enterprises will need to choose between:

- Using multiple vendors to offer users best-of-breed functionality in all UC areas, which would also allow migration of existing investments
- Using a single vendor and sacrificing best-of-breed functionality in one or more areas, and potentially writing off some existing communication investments

Although most vendors are pushing enterprises to adopt their UC suites as sole providers, Gartner does not recommend the second single-vendor approach when it involves sacrificing best-of-breed functionality for the sake of UC consolidation. Most users want the best functionality in each area.
However, Gartner believes that acceptable functionality will be increasingly available for all UC functions from the leading vendors in the next several years, and enterprises that wish to pursue a single-vendor approach can start to evaluate which of the UC suites best matches their needs. However, final commitments should only be made once a vendor has demonstrated its capabilities with multiple references.

This research captures Gartner’s view of the general state of the UC market (see Figure 1) at the time of publication and evaluates vendors’ capabilities on a global basis. It is not intended to be specific advice for a specific company or situation; rather, it is intended to provide a general and high-level view of the vendors and their products. Companies planning to acquire new or replacement UC infrastructure should contact Gartner analysts to discuss how this generalized market model applies in their specific business environment and requirements.

**Magic Quadrant**

*Figure 1. Magic Quadrant for Unified Communications*

![Magic Quadrant Diagram]

Source: Gartner (August 2011)

**Market Overview**

The overall UC market has matured and evolved significantly in 2011. The most notable change has been the shift in emphasis from broad UC portfolios toward fuller UC suites. Other important factors influencing the market
were the convergence of cloud and on-premises UC functions, the increased role of consumer products and the continued influence of mobility.

From a competitive perspective, in the Leaders quadrant, Cisco and Microsoft maintained their strong leads.

Cisco advanced a more integrated approach with its UC 8.x release. It also successfully integrated its existing video solutions and the Tandberg acquisition, clarified the WebEx options and released its Jabber client.

Microsoft released Lync (an evolution of its OCS product) and enhanced its telephony capabilities. Microsoft now has references that use only Lync for telephony, which is an important milestone. Microsoft also made important UC as a service (UCaaS) advances with the release of Office 365, which includes Lync-Online. Microsoft’s pending acquisition of Skype is likely to lead to Skype-integrated Lync offerings.

Avaya continued to strengthen its Aura suite and added the Flare gesture-oriented user interface (UI). Siemens and Alcatel-Lucent solidified their UC suite offerings, which are now among the more mature full suites on the market. This advanced them into the Leaders quadrant. They will now need to prove that they can gain market and mind share in this competitive and converging market.

The Challengers quadrant is characterized by vendors that are challenging the leading providers in different ways. NEC released Sphericall, a UC suite that is based on a forward-looking Web services architecture. It is also advancing its marketing programs globally. IBM continues to pursue its "coexistence" strategy, using Sametime as a front end and for its collaboration solution, while partnering for telephony and video on the back end. Finally, ShoreTel has successfully challenged the incumbents in some segments and global regions with its appliance UC architecture.

Mitel Networks is the sole vendor in the Visionaries quadrant. It offers a full UC suite, strong integration and mobility options, as well as a leading approach to virtualization. The Niche Players quadrant has vendors that offer strong solutions for some areas or regions. Of particular interest is Huawei Technologies, a well-established Chinese company that is now expanding its UC capabilities globally. Interactive Intelligence is a Niche Player for enterprises with contact center and UC requirements. Aastra Technologies and Toshiba remain better-known for telephony than UC, and TeleWare offers a mobile-focused solution.

Most enterprises take a longer-term approach to UC. They start by defining their strategy and longer-term direction. They then determine the most effective way to deliver this, while retaining control over their strategic direction, controlling costs and leveraging existing investments. Often, the UC initiative focuses on a particular project, and, as some projects are completed, others are initiated. In this way, UC evolves as a process of continuous and incremental improvement. A strategy for accomplishing this is described in "Focus on UC Projects, Not on UC Technology," "Developing a Vision for Unified Communications" and "Developing an Enterprise Unified Communications Road Map." (Note: This document has been archived, and some of its content may not reflect current conditions.)

Although all UC solutions support key standards, such as Session Initiation Protocol (SIP) and H.323, that allow choice in devices and some client flexibility, all are limited in the area of intercompany federation — that is, when different vendor platforms are involved. Vendors may allow two companies with the same solution to federate;
however, "like-to-like federation," which is federation among companies that use different UC vendors, remains difficult. This is largely due to competitive market forces that have prevented effective server-to-server presence federation standards to be defined. Until these have been defined, enterprises will have limited success making dissimilar UC server federation interoperate. Most dissimilar vendor, intercompany UC federation seems to be based on client-side APIs, which are more limited.

As part of this research effort, vendors were asked to estimate the costs of a 1,000-subscriber deployment and a 10,000-subscriber deployment. They were also asked to detail what they were including in their estimates. Although the cost estimates varied widely, they provided some basic benchmarking information. Vendor pricing at the low end was $250 to $350 per subscriber, whereas vendor pricing at the high end was $350 to $500. This price does not include the cost of any telephone handsets, installation or support. However, these were estimates for a full UC suite without messaging, which means telephony (without handset), IM, presence and conferencing.

The adoption of UC by enterprises continues to increase; however, actual penetration as a percentage of market, and, in some cases, usage rates across an enterprise, remain low. This is the result of multiple technical and organizational issues, including:

- Enterprises have large investments in communication infrastructures that must be preserved; this leads to a slower evolutionary approach, rather than a faster revolutionary "rip and replace" approach.
- Many applications and products are complex to deploy and may require organizational changes.
- The business case is frequently based on a soft ROI or a strategic investment, such as productivity improvements, rather than on hard ROI, such as cost savings. As a result, in a conservative economy, deployments occur slowly, perhaps as part of broader technology renewals.

Gartner expects these barriers to be resolved slowly, and, during the next several years, UC will become an accepted part of enterprise communication road maps and investments. As UC technologies and products are deployed, the challenge will shift from technology issues to organizational and change management. (For more details on growth, see "Forecast: Enterprise Unified Communications Infrastructure, Worldwide, 2006-2015.")

Several vendors offer strong UC functionality in specific areas, but were not included in this Magic Quadrant, because the inclusion criteria require that vendors have strong on-premises solutions in all six UC technology areas. In the area of conferencing, Polycom offers strong solutions in conferencing, but does not offer solutions in other technology areas. In the area of unified messaging (UM), Applied Voice & Speech Technologies (AVST) offers a best-of-breed solution. Finally, UC service providers (e.g., AT&T, Google, Verizon and BT) were not included in this research, because they do not offer on-premises solutions. UC service solutions are described in the "Magic Quadrant for Unified Communications as a Service, North America." (Note: This document has been archived; some of its content may not reflect current conditions.)

Market Definition/Description

UC is a direct result of the convergence of communications and applications. Differing forms of communication have been developed, marketed and sold as separate individual applications. In some cases, they even had
separate networks and devices. The convergence of all communications on IP networks and open-software platforms is enabling a new paradigm for UC, and is changing how individuals, groups and organizations communicate.

Gartner defines UC products (equipment, software and services) as those that facilitate the use of multiple enterprise communication methods. This can include the control, management and integration of these methods. UC products integrate communication channels (media), networks and systems, as well as IT business applications and, in some cases, consumer applications and devices.

UC offers the ability to significantly improve how individuals, groups and companies interact and perform. These products may comprise a stand-alone suite, or they may be a portfolio of integrated applications and platforms spanning multiple vendors. In many cases, UC is deployed to extend and add functionality to established communication investments.

UC products are used by people to facilitate personal communications and by enterprises to support workgroup and collaborative communications. Some UC products may extend UC outside company boundaries to enhance communications among organizations, to support interactions among large public communities or for personal communication. UC is increasingly being integrated or offered with collaboration applications to form UC and collaboration (UCC).

It’s useful to divide UC into six broad communication product areas:

- **Voice and Telephony** — This area includes fixed, mobile and soft telephony, as well as the evolution of PBXs and IP-PBXs. It also includes live communications, such as video telephony.

- **Conferencing** — This area includes separate voice, videoconferencing and Web conferencing capabilities, as well as converged unified conferencing capabilities.

- **Messaging** — This area includes email, which has become an indispensable business tool, voice mail and UM in various forms.

- **Presence and IM** — These will play an increasingly central role in the next generation of communications. Presence services, in particular, are expanding to enable the aggregation and publication of presence and location information from and to multiple sources. This enhanced functionality is sometimes called "rich presence."

- **Clients** — Unified clients enable access to multiple communication functions from a consistent interface. These may have different forms, including thick desktop clients, thin browser clients and mobile PDA clients, as well as specialized clients embedded within business applications.

- **Communication Applications** — This broad group of applications has directly integrated communication functions. Key application areas include consolidated administration tools, collaboration applications, contact center applications and notification applications. Eventually, other applications will be communication-enabled. When business applications are integrated with communication applications, Gartner calls these communications-enabled business process (CEBP) tools.
Mobility is an element of each area. Although there can be synergy in the mobile solutions deployed for each area, there is no one mobile solution for UC; there are many mobile solutions.

Inclusion And Exclusion Criteria

To be included in this Magic Quadrant, solution providers must show all of the following capabilities:

■ Offer solutions in all six core communication areas defined in Gartner’s UC model (described previously).
■ Integrate the UC functionality in each area into a complete solution — nonintegrated functionality is not considered part of a unified solution.
■ Have a significant market presence in three or more of the six core communication areas defined in Gartner’s UC model — market presence can be demonstrated by significant market share or differentiating innovation.
■ Demonstrate sufficient sales, revenue and operational presence to support market objectives — this research focuses on the large and very large enterprise market (vendors focused primarily on small or midsize businesses [SMBs] are not included).
■ Demonstrate references for enterprise on-premises UC portfolio/products — these references should involve the complete portfolio; references for portions of the UC portfolio will be considered, but will not carry as much weight as references with complete solutions.
■ Demonstrate the ability to generate significant interest by leading client market segments.

Added

Two very different companies — Huawei Technologies and Digium — were added this year. Both had significant accomplishments in their respective areas. Huawei, a very large company with a well-established presence in China, is now expanding globally and has created an enterprise-focused division that includes the UC area. Digium, the provider of the open-source Asterisk telephony platform, has seen increased market interest and uptake of its Switchvox UC product.

Dropped

SAP was dropped from this year’s report. SAP no longer positions its Business Communications Management (BCM) solution as a UC product, and the solution does not meet Gartner’s inclusion criteria.

Evaluation Criteria

Ability to Execute

Gartner analysts evaluate UC product providers based on the quality, efficacy and overall maturity of the products, systems, tools and procedures that enhance individual, group and enterprise communications. Ultimately, UC providers are judged on their ability and success in capitalizing on their vision (see Table 1).
Table 1. Ability to Execute Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/Service</td>
<td>high</td>
</tr>
<tr>
<td>Overall Viability (Business Unit, Financial, Strategy, Organization)</td>
<td>high</td>
</tr>
<tr>
<td>Sales Execution/Pricing</td>
<td>standard</td>
</tr>
<tr>
<td>Market Responsiveness and Track Record</td>
<td>standard</td>
</tr>
<tr>
<td>Marketing Execution</td>
<td>standard</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>standard</td>
</tr>
<tr>
<td>Operations</td>
<td>standard</td>
</tr>
</tbody>
</table>

Source: Gartner (August 2011)

Completeness of Vision

Gartner analysts evaluate UC product providers on their ability to convincingly articulate logical statements about current and future market directions, innovations, customer needs and competitive forces, and how well these map to Gartner’s overall evaluation of the market. Ultimately, UC product providers are rated on their understanding of how market forces can be exploited to create opportunities for providers and their clients (see Table 2).
Table 2. Completeness of Vision Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Understanding</td>
<td>high</td>
</tr>
<tr>
<td>Marketing Strategy</td>
<td>standard</td>
</tr>
<tr>
<td>Sales Strategy</td>
<td>standard</td>
</tr>
<tr>
<td>Offering (Product) Strategy</td>
<td>high</td>
</tr>
<tr>
<td>Business Model</td>
<td>standard</td>
</tr>
<tr>
<td>Vertical/Industry Strategy</td>
<td>standard</td>
</tr>
<tr>
<td>Innovation</td>
<td>standard</td>
</tr>
<tr>
<td>Geographic Strategy</td>
<td>standard</td>
</tr>
</tbody>
</table>

Source: Gartner (August 2011)

Leaders

The Leaders quadrant contains vendors selling comprehensive UC suites that are coupled with broad communications and collaboration portfolios and strong technology partnerships. These vendors, and their channel partners, have experience delivering UC to a broad range of enterprise types and into most geographic regions. These vendors are using their solution sets to enter new clients into their client rosters and to expand their footprints in their client bases in new functional areas.

Challengers

Vendors in the Challengers quadrant offer solutions and capabilities with the potential to move into a leadership position, but lack critical elements in their suites or don’t have sufficient maturity in the broader market. Often, these solutions are not being successfully delivered outside their installed base.

Visionaries

Vendors in the Visionaries quadrant demonstrate a clear understanding of the UC market and offer a strong and differentiating approach to one or more core areas. However, these vendors have limited ability to execute across the entire set of requirements and markets, or have marketing and distribution limits to their ability to challenge the leading providers.
Niche Players

Vendors in the Niche Players quadrant offer solutions that are particularly strong in several UC areas, but do not have a comprehensive product; or they have a solution that has limited market reach. Although these solutions often perform specific functions well, they do not represent a complete solution for the broader UC market.

Vendor Strengths and Cautions

Aastra Technologies

The Aastra UC portfolio is made up of MX-ONE call manager, the Aastra Mobile Client (AMC), the Attendant Console, the CMG conferencing function, Solidus eCare for contact centers, the InTouch client for IM and presence, and OneBox for UM. Aastra has other products in its portfolio, which has grown through acquisition. The company continues to converge its solutions via SIP, virtualization and centralized administration. It is in the process of rebranding and extending portions of its UC portfolio under the BluStar, InAttend and InReach names.

Consider the Aastra suite if you are primarily focused on lower-cost telephony functionality.

Strengths

- Aastra has a global footprint, with particular strength in the European telephony market. It is known generally in this market for providing cost-effective voice solutions.
- Aastra plans to consolidate and integrate its UC portfolio and to include Microsoft Lync integration.

Cautions

- Although Aastra is adding new channel partners, the market share of its UC product, in markets such as North America, remains limited.
- Much of the Aastra portfolio is not integrated as a UC suite and remains stand-alone telephony functionality.

Alcatel-Lucent

The OpenTouch Communication Suite is a fully unified and integrated UC suite. In addition, elements of the UC portfolio are offered separately as stand-alone solutions. These include the OmniPCX Enterprise (OXE) for analog, digital and SIP-based telephony functions, as well as a range of conferencing, video and IM/presence functionality, which is available as part of the My Instant Communicator suite. The suite operates on virtualized servers and supports a range of hard, soft and SIP-based clients, whose functionality is also available on a range of mobile devices. Centralized administration is available via the Alcatel-Lucent OmniVista 8770 Unified Management Suite. The Genesys capabilities associated with contact centers can now be leveraged into broader enterprise functions for integration and workflow functions.
Evaluate the OpenTouch Communications Suite if you are looking for a complete software UC suite that can be extended with the broader portfolio offered by a major global telecommunications provider. You should also consider the solution if you have investments and commitments with Alcatel-Lucent.

**Strengths**

- OpenTouch offers a full multiparty, multidevice and multimedia UC suite, which can be integrated with the broader Alcatel-Lucent communications portfolio. In addition to the OpenTouch suite functions — which include telephony, mobility, videoconferencing, audioconferencing and Web conferencing, UM, IM and presence — Alcatel-Lucent has extensive experience with business process integration, contact centers and communications infrastructure, which can be used to create enterprisewide work distribution with the Genesys Intelligent Workload Distributor (iWD).

- The OpenTouch concept of “conversations,” and the related Conversation Manager, enables Alcatel-Lucent to address issues related to communication and collaboration events that take place across media, time, customers and tasks.

- The Alcatel-Lucent enterprise products can span carrier and enterprise environments, which may prove useful for hybrid offerings. The Genesys contact center brand is well-represented in most regions of the globe, and has the ability to offer contact center solutions in all global regions.

**Cautions**

- Although the Alcatel-Lucent Enterprise Division has some strong North American references, it has not yet gained the market visibility and traction that it needs to succeed. The Genesys and Lucent brands are recognized in the contact center and telco infrastructure spaces, respectively, and Alcatel-Lucent has established some market alliances; however, they have not yet translated into the uplift in sales overall, nor visibility in the broader North American enterprise UC buying audience. As a result, Alcatel-Lucent remains better-known as a European telephony vendor, and is not yet recognized in other areas of UC, such as conferencing, messaging, IM or collaboration.

- The reorganization of the enterprise business unit to consolidate product development of both enterprise and carrier business offers the potential for useful hybrid models, but competing interests by the large carrier divisions may hinder the progress of their enterprise-focused products, ultimately leading to a reduced commitment.

- Alcatel-Lucent's channel partners include telecom operators, some of whom are increasingly focused on competitor products for solutions for customers. This may limit Alcatel-Lucent’s growth in enterprise markets. If Alcatel-Lucent developed a stronger direct-touch operation to strengthen the brand, the cost of sales might force increases in product costs.

**Avaya**

In December 2009, Avaya completed its acquisition of the Nortel Enterprise Solutions (NES) business. Since then, it has defined the normalized product direction and made multiple senior management changes. The new products are centered on the Avaya Aura, Avaya Flare Experience, one-X and ACE brands, with key components
including Session Manager, Conferencing, Messaging, web.alive and presence services. In June 2011, Avaya filed with the Securities and Exchange Commission (SEC) to raise up to $1 billion in an initial public offering (IPO).

Consider Avaya Aura if you need to bring together heterogeneous environments, require a contact center, need mobility and business application integration, or have significant investments in Nortel or Avaya telephony that you wish to migrate toward a next-generation UC solution.

**Strengths**

- Avaya has a large installed base of telephony and contact center customers and is a recognized market leader in these areas. It has the brand awareness and industry presence to receive frequent consideration in large UC bids.
- The Avaya Flare Experience is a positive addition to managing multiple communications, collaboration and context in real time on gesture-oriented devices. The opportunity to extend this capability to third-party devices is promising for awareness and utilization.
- The Avaya Aura 6.x release offers an integrated UC suite, which is coupled with migration plans for its installed base and with the broader Avaya UC portfolio of products.

**Cautions**

- Elements of the Avaya Aura UC suite are new to the market and have seen limited deployment; Avaya remains primarily known for its core voice services. For example, Web conferencing, full IM and presence, and Flair-based desktop clients are new.
- The consolidation of the partner network, when combined with the significant changes in the product and support portfolios, has resulted in confusion and uncertainty for some customers.
- Avaya's implementation of an industry-standard support model across all products has increased support costs for channel partners of the CS1000 and legacy Nortel brands, creating channel concerns and the possibility that costs may be passed on to customers. Customers have reported frustrations with their support, as well as with upgrade costs and complexity. This has resulted in dissatisfaction in the customer base and some defection to competitors.

**Cisco**

Cisco UC 8.5 offers a full UC suite, as well as a broad range of additional communication functions. Key parts of the UC suite include Cisco Unified Communications Manager; Cisco Jabber, which includes the desktop client; Cisco Unity Connection; Cisco Unified Presence; Cisco Unified Videoconferencing; Cisco Client Services Framework; and a broad range of client and device options. Cisco offers significant portions of its software on VMware, which can now operate under the Cisco UCS servers and other qualified servers. Cisco also offers additional communication and collaboration functionality, notably its contact center products, its Quad collaboration portal and the Cius tablet. Cisco partners offer CEBP applications.

Evaluate Cisco UC solutions when you have or plan to acquire Cisco for key voice and conferencing functions. However, ensure that any expected interoperability with other vendor products, as well as among your existing or
planned Cisco products, is available. Users should also ensure that their system integrator (SI) has experience with similar UC deployments.

Strengths

- The Cisco 8.5 release provides a fully integrated UC suite. Although the number of full suites deployed is limited, Gartner expects the number of enterprises deploying the full UC suite to increase.

- Major enhancements during the last year include the completion of the Tandberg acquisition and improved integration across video portfolio, the release of the Jabber client and related IM and presence services, expanded mobile UC functionality for a broad range of devices, and a clarification of on-premises and WebEx service-based conferencing offerings.

- Cisco's telephony and data infrastructure client base, along with its strong global channel, services and SI partners, position it well within enterprise UC buying and decision-making groups, including many IT and operations departments.

- Cisco's UC solution for service providers, known as Hosted Collaboration Suite (HCS), is based on the same software as its UC 8.5 offering. This provides R&D synergy, as well as potential opportunities for hybrid, on-premises and service-based offerings.

Cautions

- Although Cisco has made progress on simplifying, consolidating and unifying its massive communications portfolio, elements of its portfolio remain that are complex to understand and manage. In addition, users should not assume that separate components will operate as part of a unified solution without an upgrade. One effect of the complexity is that obtaining accurate configuration and price quotes can be difficult. As a result, final configurations and pricing may vary from initial quote.

- Enterprises should be aware that there are some limitations to the integration of Cisco’s UC solution with Microsoft Lync. As a result, planners should consult with knowledgeable SIs before committing to a specific integration option.

- Cisco's Unified Workspace Licensing (CUWL) is a useful package to profile user requirements and offers attractive discounting, compared with buying UC components separately; however, it's important to size the requirement accurately, based on user need. Unless you have a clear road map for CUWL as your primary UC solution, we advise against the five-year Cisco Unified Communications Software Subscription (CUCSS) term. The three-year term better fits planning and upgrade cycles.

Digium

The Digium solution is based on the Switchvox tool, which is built on the open-source Asterisk telephony platform, developed and maintained by Digium, which has gained acceptance in the open-source community and market share in the telephony market. Switchvox is a specific configuration, sold and supported by Digium, that enhances the Asterisk solution with telephony and UC functions. The solution is geared for the SMB market and offers telephony and audioconferencing, video calling, IM via integrated open-source Jabber, voice mail and several UM options, as well as a range of hard, soft and mobile SIP device options that include no-cost native iPhone and Android clients. The Web and videoconferencing are offered via partnerships, some of which are
open source. The Switchvox solution is geared for smaller deployments (fewer than 500 subscribers), though it can be configured for larger installations.

Consider the Digium Switchvox solution if you are an SMB (fewer than 500 subscribers) looking for a cost-effective UC solution that's easy to use, but may not have all the UC functionality of the market leaders.

**Strengths**

- Digium has a broad range of satisfied users in the SMB market. Users appreciate the ability to add custom extensions and integrations with the open-source Asterisk, while drawing from the Switchvox UC capabilities.
- The Switchvox solution is easy to install and use, and is generally known as a cost-effective solution that offers good support and maintenance.

**Cautions**

- Digium is primarily known for the telephony functions offered by Asterisk geared for the small enterprise and custom application markets. The Switchvox UC solution has not yet gained broad market acceptance and does not scale in a single server beyond approximately 500 users, although several servers can be combined to increase the effective subscriber base.
- The Switchvox solution does not offer a full UC suite (e.g., video functionality). In these cases, integrations with open-source and other partners would be needed for the full suite. In addition, Switchvox lacks integration with market-leading collaboration vendors' solutions.
- Switchvox is primarily known in the North American market and has limited support for European and Asian languages.

**Huawei Technologies**

Headquartered in China, Huawei offers a broad portfolio of UCC functionality. The UC application functionality is located in the SoftCo family of hardware and software platforms. The solution offers telephony (IP-PBX) functionality, conferencing, PC client and UM, as well as contact center functionality and integration options with Microsoft, IBM and others.

Consider the Huawei UCC solution in regions where its carrier and large-enterprise business resources are significant enough to provide capable support — primarily China and some countries in the Asia/Pacific (APAC) region, Africa and South America.

**Strengths**

- Huawei had $21.8 billion revenue in 2010, with a large base of clients. Its solutions span the carrier and very large enterprise markets, to SMBs across the globe.
- Huawei offers a full-portfolio UC solution that includes services, software and applications; communications infrastructure hardware; network infrastructure; and a broad range of devices.
Huawei has recently established an enterprise-focused division that includes enterprise UCC functionality. This should improve the company’s ability to develop and deliver solutions globally.

Cautions

- Huawei is better known and established in China and parts of the APAC region, Africa and South America than it is in the European and North American markets. As a result, its ability to compete and offer effective solutions varies greatly by region, and its ability to offer solutions to global companies is limited.
- Huawei operates many technology areas. The capabilities of its communications portfolio alone can be challenging to understand. Users should not assume that Huawei’s UC components will seamlessly interoperate.

IBM

IBM’s Unified Communications and Collaboration (UC2) portfolio is based on Sametime collaboration products, Lotus Notes/Domino messaging and the Eclipse client framework. Sametime's primary capabilities include IM, presence, and Web conferencing. Other capabilities include telephony and video, which are offered though partnerships. Sametime also offers both IBM and partner collaboration options.

Enterprises should consider UC2 if they have investments in IBM Lotus functions, can leverage the collaboration strengths of the product, or want to operate a multivendor telephony environment.

Strengths

- IBM has a clear partner strategy based on coexistence on the back end and consolidation on the front end. On the back end, IBM offers its own key server functions in some areas, while supporting multiple-partner communication servers and business applications. On the front end, IBM encourages consolidation through the use of the Sametime client, or, alternatively, it enables services to be integrated via middleware and a common Eclipse client framework and Web services.
- IBM has a strong brand, partner network and professional services organization, all of which assist Sametime in obtaining account visibility and marketing presence. In addition, IBM has now removed the Lotus brand and is calling the product IBM Sametime, which is likely to strengthen the product’s appeal in non-Lotus Notes email environments.

Cautions

- Sametime has not established itself in the UC market. UC deployments, especially those involving telephony, remain limited. The plan to integrate on-premises Sametime with cloud-based LotusLive has also not established itself.
- Although Sametime’s PBX-neutral strategy has good points, the leading UC suites in the market all now incorporate fully integrated functionality. This will leave IBM at a disadvantage with enterprises that want to consider single-vendor solutions for the entire suite. In addition, most of IBM’s Sametime telephony partners now offer competing full UC suites.
Interactive Intelligence

Interactive Intelligence's Customer Interaction Center (CIC) is an all-in-one software solution. It includes telephony, audioconferencing, UM, rich presence with IM, business process automation, and a range of client and device options. The solution also integrates with leading third-party UC and video solutions. The UC function is often used in conjunction with the CIC contact center solution.

Enterprises should evaluate the CIC solution when seeking a tightly coupled, all-in-one solution or when seeking to integrate UC with contact center functionality.

Strengths

- Interactive Intelligence has shown strong and consistent financial growth during the past 10 years and has an established record for delivering successful products in the UC market.
- The CIC solution is particularly attractive when combined with its contact center functionality or with elements of the Microsoft Lync product.
- The flexible interface and architecture enable customization for vertical applications, while the all-in-one approach enables simpler administration and operation. Additionally, the solution seamlessly blends on-premises, on-demand and hybrid, which can be changed without disruption to operations.

Cautions

- The UC product has limited market visibility in a market that is increasingly dominated by larger vendors.
- The solution lacks Web conferencing and videoconferencing functionality, although these are available through partners.

Microsoft

Lync 2010 offers a full suite of UC functionality. Although the real-time functions in Lync — including voice, telephony, video and related conferencing — are not as mature as other functions (such as IM/P and Web conferencing, email and UM), they have improved significantly over the previous version, which was known as Office Communications Server 2007 R2. Microsoft has developed a strong set of technology and service partners that offer a growing ecosystem.

Microsoft offers a visionary approach for addressing enterprise communication and collaboration requirements. Enterprises looking into UC should consider the Microsoft solution and, at a minimum, understand the vision and how solutions of this type might change their business processes. Enterprises considering deploying Lync telephony and video should understand its limitations and infrastructure requirements.

Strengths

- Microsoft has had an impressive and growing list of Lync and Exchange UM deployments, from small (fewer than 300) to midsize to very large (more than 10,000) enterprises, in both centralized and distributed
configurations. Although a few of the deployments report that they have completely eliminated their PBXs, most current deployments use Lync for some employees, while other employees and functions remain on the PBX.

- Microsoft’s pending Skype acquisition offer, along with the Lync Online and the Office365 cloud service offerings, suggest that Lync will mature as a comprehensive and hybrid UC product.

- Companies report that, once deployed, Lync functions can be integrated into business processes and applications, providing new, different and effective ways to perform tasks. In some cases, these new functions are achieved by deploying Lync enhancements from a growing list of ecosystem partners.

- Microsoft has better positioned Lync to compete in telephony markets by adding several partner telephone handsets, by bundling of basic Lync functions in the Core client access license (CAL) and by offering a specific Lync Voice CAL.

**Cautions**

- Enterprise planners should understand that Lync’s telephony and video functionality is new and has seen fewer deployments than traditional PBX vendors. As a result, in many cases, a phased or trial deployment approach may be an effective way to ensure that the system and the underlying network provide the needed functionality, quality and performance.

- Most enterprises that integrate Lync with existing PBXs have done so via direct SIP trunking. Gartner research indicates that there are few reports of successful deployments based on a tight client-side or server-side integration. The difficulty is likely to result from the newness of the solution and the competitiveness of the UC market.

- Although the bundling associated with Lync 2010 is positive for addressing basic users, Microsoft needs to support more integrations with front-office capabilities, such as contact center and switchboard functionality, to develop this product as an overall replacement for legacy communications infrastructures.

**Mitel Networks**

The Mitel UC solution is based on the Mitel Application Suite (MAS). Most of the UC services and client functionality are located in the MAS, which provides UM, audioconferencing and Web conferencing, customer service, analytics, border gateway functions and support for a range of client options. The client functions are delivered across a range of PCs, laptops, tablets and mobile devices. The Mitel Communications Director (MCD) provides call control and voice services. All three of the services can operate in a VMware environment. The MCD can also operate on the Mitel 3300 hardware platform. Mitel also offers an integrated video solution as part of MAS and a strong suite of mobile client options.

Organizations looking for a fully integrated UC approach at an attractive price, and those evaluating telephony communication functionality to go with Microsoft, should evaluate Mitel’s UC solution.
Strengths

- Mitel offers a mature and comprehensive UC software suite. It can be distributed or centralized in a data center system, with solutions running on industry-standard servers and be certified on VMware virtualized environments. The desktop applications can run with Sun Ray desktop virtualization.

- The Mitel UC suite can be integrated with IBM Sametime, as well as Microsoft Lync, including a Lync remote call control (RCC) integration option. It also offers several strong options for messaging and mobility. In addition to interoperating with third-party conferencing offerings, Mitel has released its own video, audio and Web conferencing offerings.

- The solution also offers a comprehensive single-point administration and clients.

Cautions

- Mitel is now a public company; however, its product and channel partners lack visibility with many UC buyers and segments. Although it has developed a strong product, it is taking time to develop the brand awareness against stronger competition in the large-business segment. In addition, some of the channel may not have the experience and skills needed for working with data center architectures and buyers.

- Although Mitel has announced a reorganization focusing on channel partners and midmarket offerings, as well as a global initiative to coordinate support though channel partners across 100 countries for large multinational companies, its ability to support larger enterprise segments remains limited.

NEC

The NEC Univerge Spherecall software offers a fully integrated, complete UC suite that includes centralized administration. The suite functionality encompasses telephony, video, all forms of conferencing, presence, IM and messaging. It includes multiple client options, such as hardphones, softphones and SIP phones, as well as native mobile capabilities for the iPhone, Android and several tablets. The broader NEC portfolio includes integrated support for contact centers and for business application integration via the Spherecall software development kit (SDK), as well as the ability to integrate legacy NEC telephony platforms. The Spherecall suite operates on VMware Server and ESXi, and Microsoft Hyper-V virtualization software is also supported.

Consider the NEC Spherecall solution if you want a complete software UC suite based on a service-oriented architecture (SOA) that can be extended with the broader portfolio offered by a major global telecommunications provider.

Strengths

- NEC is a financially strong, global firm with an established presence in all regions and a strong sales and support channel in many regions.

- NEC has developed a forward-looking UCC architecture based on its Spherecall software platform. Spherecall includes all UC functions in standards-based and SOA environments, backed by a broad communications portfolio. The platform’s virtualization capabilities and software architecture makes it a good fit for data center environments, and the API and SDKs make it suitable for integration with business applications.
NEC’s reorganization of its global marketing and product development organizations has created a global approach, while maintaining focus with regional competency centers.

Cautions

- Although NEC products are well-known globally, the Sphericall UCC suite remains new to NEC’s channel — its more traditional customer base, where it will now need to establish itself. In addition, to succeed globally, NEC must generally advance its market share and presence in the North American and European markets.
- Some NEC sales and support partners are telephony-focused and are still trying to acquire the skills to address the challenges of selling, installing and supporting broad UCC software products. Buyers interested in UCC software products should contact NEC to ensure that they are aligned with a partner that has the needed competencies.
- Legacy NEC telephony customers considering their options on migrating should seek the assistance of NEC or partners for assistance on a clear path. They should expect to migrate to Sphericall to achieve a UC solution.

**ShoreTel**

The ShoreTel 12 product offers a full UC portfolio in an appliance architecture that is particularly well-suited to distributed organizations. The solution offers simple, centralized administration. Survivability is provided via the ShoreTel’s N+1 switch failover capability, for which a switch can fail over to another switch anywhere in the network. All switches operate independently, but are configured from a single ShoreTel Director Web application. ShoreTel supports its own phones, as well as SIP phones and SIP trunking. It offers a full set of mobile options, which include those from the recent Agito acquisition. ShoreTel offers basic and advanced contact center functionality, as well as Google Gmail and Microsoft Exchange UM integrations.

Consider the ShoreTel product if your company is a geographically distributed organization that wants a full set of UC functions, with an emphasis on telephony and mobility.

**Strengths**

- ShoreTel offers a full UC suite in an appliance architecture.
- The company continues to experience impressive and consistent market growth. Although primarily known in North America, the company is now experiencing strong international sales as well.
- ShoreTel has successfully challenged leaders in the midrange market, and could continue to move into the larger enterprise markets.
- Users report satisfaction that the solution is easy to use, has intuitive user and management interfaces, and has simple, transparent pricing and licensing structures.

**Cautions**

- Although ShoreTel is experiencing strong growth, it is a relatively small vendor (less than $200 million) in a market increasingly dominated by the behemoths.
ShoreTel products are primarily sold through distributors, many of which are new and may not have experience with users' requirements in the broader UC market, nor with large enterprises.

ShoreTel does not have enterprise visibility outside the telecommunications area. This will make it difficult for it to gain acceptance in midsize and large enterprises as a full UC and collaboration provider.

Siemens Enterprise Communications

Siemens’ OpenScape UC application is a full and integrated suite of UC functionality. The application is offered in a range of configurations, including OpenScape Office for SMBs, OpenScape UC ServerXpress for the midmarket, OpenScape UC Server Enterprise for a scalable enterprise UC suite and OpenScape Cloud Services for software as a service (SaaS) UC deployments. The solution includes presence management, IM, one-number service, audioconferencing, videoconferencing, Web conferencing, UM, and a range of hard, soft and SIP-based clients, whose functionality is available on a range of mobile devices, including dual-mode handsets.

Evaluate the OpenScape Suite if you are looking for a complete and cost-effective software UC suite that can, as needed, be extended via integrations with third-party solutions.

Strengths

- OpenScape is a mature, fully functional, all-software, all-SIP UC solution. It is being certified to work as a virtual VMware environment. Although the suite is complete, elements of the portfolio are offered as stand-alone solutions. The suite can also be integrated with leading collaboration applications and third-party UC solutions, such as those from IBM and Microsoft. The suite can be integrated on any standard SIP product.

- As an early entrant into the all-software UC suite market, the OpenScape product has been proved effective as a complete and scalable software-based solution for several years.

- The acquisition of FastViewer has enabled Siemens Enterprise Communications to provide an integrated Web and desktop videoconferencing capability, as well as the scope to develop it without the risks associated with relying on partnerships, which are often damaged by external influences, acquisition by a competitor, etc.

Cautions

- Siemens still lacks an effective go-to-market approach in North America, which has resulted in slow adoption and acceptance of the OpenScape portfolio in that segment.

- SEN remains better-known in the telephony arena than in the broader UC market. As a result, the OpenScape UC suite struggles for visibility and acceptance in the broader UC market, which involves different buying audiences, different competitors and new distribution methods.

TeleWare

The TeleWare solution is focused primarily on mobile-focused capabilities integrated with UC functions. Although it offers a UC suite, the company is increasingly finding that clients want to integrate the Intelligent Connect and Intelligent Mobile products with the Microsoft Lync or with network-based UC functions. TeleWare is also adding
communications as a service and becoming a registered mobile operator in the U.K. It has targeted other global regions as well. This combined ability enables enterprises to tightly integrate mobile phones with Lync, so that all calls to or from the mobile device are handled via enterprise control. This supports such functions as recording of all fixed and mobile calls, regardless of where they are initiated.

Consider the TeleWare solution if you are a large enterprise, in a region supported by TeleWare (such as the U.K.), that wishes to incorporate advanced mobile capabilities into your UC solution.

**Strengths**

- TeleWare’s mobile licenses in the U.K. and Australia enable it to provide mobile voice and data solutions for distributed enterprise networks. Its own range of subscriber identity modules (SIMs) can provide deeper call control and message management than enterprise mobile communication solutions from premises-based providers.
- The platform can be provided as a hosted service, or as a premises-based solution, and is capable of being customized to meet specific enterprise requirements.

**Cautions**

- Although TeleWare’s mobile solutions are advanced, other portions of the UC portfolio (such as the IM, presence and conferencing functions) are limited.
- TeleWare has some key global accounts and is developing a presence in the Middle East and Australia; however, it has a limited market and technical presence outside the U.K.

**Toshiba**

Toshiba’s UC solution is based on the Strata CIX family of Internet Protocol (IP) business telephone systems. In addition to telephony, Toshiba has leveraged technology partners to create a bundled UC functionality that includes several variations of UM: audioconferencing, Web collaboration and videoconferencing (up to eight parties), telephony-focused presence and IM, contact center functionality, CRM integration, and a range of client options, including Web and SIP. In June 2011, Toshiba announced its IPedge solution, which offers the same functionality as the Strata CIX, except some UC applications (Call Manager CRM and UM) are built into the IPedge server, instead of running on the Media Application Server (MAS) connected to the system. The MAS runs contact center applications for either IPedge or Strata CIX systems. IPedge runs on standard Linux servers and operates in virtual environments.

SMBs looking for a cost-effective, telephony-centric UC solution should consider the Toshiba UC solution. New customers should consider the IPedge over the Strata CIX if they want a pure IP single-network solution, as opposed to a converged solution that accommodates both IP and digital telephones.

**Strengths**

- Toshiba has an established reputation for cost-effective and reliable IP telephony solutions. Although the Toshiba UC solution scales up to 1,000 users, it does particularly well with small businesses of fewer than 100 users, partly because the vendor is especially price-effective in this range.
The IPedgeStrata CIX systems are simple for users to understand and operate.

Cautions

- The UC functionality requires the IPedge or Strata CIX telephony environment, and this provides less UC functionality than many competitors. For example, conferencing functions and presence do not integrate with third-party solutions, so separate investments are needed if larger or more-extensive capabilities are required.
- Most of Toshiba’s sales efforts are concentrated in North America, and the references were primarily focused on using the basic telephony functions, not the fuller UC suite.

Vendors Added or Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

Evaluation Criteria Definitions

Ability to Execute

- **Product/Service:** Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills, etc., whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

- **Overall Viability (Business Unit, Financial, Strategy, Organization):** Viability includes an assessment of the overall organization’s financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the state of the art within the organization’s portfolio of products.

- **Sales Execution/Pricing:** The vendor’s capabilities in all pre-sales activities and the structure that supports them. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.
Market Responsiveness and Track Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor’s history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message in order to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements, etc.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling product that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor’s approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements.

Business Model: The soundness and logic of the vendor’s underlying business proposition.

Vertical/Industry Strategy: The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals.
**Innovation:** Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

**Geographic Strategy:** The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.