

Enterprise Phone Systems Comparison Guide

Focus Research
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Internet Protocol (IP) telephony is increasingly replacing traditional PBX technologies at all types and sizes of companies. However, most businesses can't simply replace all of their incumbent telephony in one fell swoop. Instead, decision makers like you must look carefully at what's available, what you've got and what you need. Once you've surveyed the market and identified and prioritized your specific business needs, you're challenged to craft your best possible "short list" of candidates. And this Comparison Guide, designed for midsize and large enterprises, is here to help.

This document is a companion to the Focus Phone Systems Market Primer and the Focus Enterprise Phone Systems Buyer's Guide.

Our Focus Enterprise Phone Systems Comparison Guide is one of several research reports based on the Focus Research Methodology, which is designed to support your entire purchasing process.

Phone Systems Market Primer — *Want to know what an enterprise phone system is?*

Enterprise Phone Systems Buyer's Guide — *Want help defining your requirements?*


 **Enterprise Phone Systems Comparison Guide** — *Want help comparing?*

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Buyer Types

As discussed in greater detail in the Focus Buyer's Guide: Enterprise Phone Systems, the Focus research methodology identifies three basic Buyer Types for business solutions such as enterprise telephony systems – Basic, Intermediate and Advanced.

B BASIC BUYERS

Basic Buyers are those in search of simple solutions that support the most widely used traditional and IP telephony features, such as modular installation and support for the Session Initiation Protocol (SIP). Such buyers typically have limited IT resources and expertise. Many, but not all, Basic Buyers also typically work at smaller companies supporting no more than 500 users.

I INTERMEDIATE BUYERS

Intermediate Buyers are those in search of relatively more complex solutions that support greater capacities and more sophisticated features such as support for unified messaging, virtual private network (VPN) connections or enhanced security. Such buyers typically have some IT resources and expertise, and may have experience with IP telephony solutions as well. Many Intermediate Buyers also work at midsize companies supporting between 500 and 2,500 users.

A ADVANCED BUYERS

Advanced Buyers are those in search of fairly complex solutions (including support for multiple distributed sites and advanced call/contact center features) that enable increased availability, automation, optimization and integrated management. Solutions that meet the needs of Advanced Buyers can often require extensive IT resources and expertise. Many Advanced Buyers also work at larger enterprises supporting from 2,500 to 10,000 users or more.

Comparison Factors

In addition, members of every Buyer Type identified by Focus Research have three primary areas of concern when considering Enterprise Phone Systems.

These are:

- **Product considerations:** including basic, intermediate and advanced product features and delivery platforms;
- **Cost considerations:** including price, fees, hidden costs and ROI analysis; and
- **Vendor considerations:** including vendor viability, support, services and consulting.

Vendor Selection

To be considered for inclusion in this Guide, solutions and their vendors must meet the following minimum requirements.

For Basic Buyers:

- Solutions must interoperate with incumbent voice communications systems and phones.
- Vendors must offer integration and consulting services, directly or through partners.

For Intermediate Buyers:

- Solutions must support integrated or optional application integration, unified communications (UC) and unified messaging.
- Solutions must support at least limited integration with incumbent third-party hardware, including PBXes and analog phones.

For Advanced Buyers:

- Solutions must support distributed/multisite deployments (and consolidated management).
- Solutions must support customer-driven customization via application programming interfaces (APIs) and/or included software development kit (SDK).
- Vendors must have at least two years' experience supporting advanced environments.

Solutions and vendors found to meet these requirements were included in this Focus Comparison Guide based upon analysis and comparison of product, cost and vendor considerations. Those solutions and vendors were also evaluated in terms of market prominence, after interviews and discussions with industry analysts, other experts and users. Some of these were conducted via the Focus Web site. These interviews and discussions were combined with Focus research and expertise to select Focus Short List members and to craft the comparison grids in this Guide. For more information, please contact the Focus research team.

You should keep in mind that this Guide is focused on solutions intended for enterprises that are typically larger and/or in need of more sophisticated features than those required by small and midsize businesses (SMBs). Many SMBs are finding their voice communications needs being well met by smaller and/or less comprehensive solutions than those featured here.

Some of the vendors featured in this Guide also offer solutions optimized for smaller companies and/or simpler deployments, as indicated by the “Offers small business alternative?” column in the “Vendor Considerations” section of the comparison grid. Those offerings are not featured here, as Focus does not consider them truly “enterprise-class” solutions. However, your company may have needs better met by the solutions discussed in this Guide, even if your company is not a large enterprise. Focus recommends that you use its Market and Buyer Guides, along with relevant Briefs and community discussion and your own resources, to identify and prioritize your business’ specific needs accurately and completely, and to best determine the candidate solutions and vendors most likely to meet those needs.

The Focus Short List

The Short List and comparison grids that follow present information about leading enterprise-class corporate telephony solutions and vendors identified by Focus, organized by Buyer Type and the key considerations outlined above. Focus believes that the solutions and vendors on the Focus Short List offer pricing, functionality and/or support features of particular interest to each associated Buyer Type.

The maturity of the telephone systems market means that there is often little differentiation among core feature sets. However, you should pay close attention to how those features are implemented and supported, and to what other functions and features are available with the solutions and vendors you consider. And as you craft your own specific short list, insist on “apples-to-apples” comparisons of features and pricing among the vendors and solutions that make that list.

		KEY POINTS		
Type Of Buyer	Best Product Bets	Product	Cost	Vendor
B BASIC BUYERS	ShoreTel IP Phone System	Highly scalable, fully integrated system; more included features than many competitors	Lower total cost of ownership (TCO) than most comparable systems, reports indicate	13 years' experience; offers support services online and via resellers
	Toshiba Strata CIX 1200 Telephone System	Strong, highly customizable core feature set; optional advanced applications server	\$350-\$500/user; varies with users, endpoints	40 years in telecommunications; parent company founded in 1875
I INTERMEDIATE BUYERS	Aastra Clearspan	Up to 100,000 users/node; runs on Linux, IBM blade servers	Starts at \$625/user for 1,500 ports; falls as capacity rises	26 years' experience
	Interactive Intelligence: Customer Interaction Center	Designed as a communications services platform; hosted option available	\$350-\$1,000/user; varies with configuration, capacity	15 years' experience
	Mitel 3300 IP Communications Platform/ Mitel Communications Director Software	Runs on proprietary Mitel or industry-standard Linux servers; runs on VMware	Average price/user approximately \$400, according to published reports	100 locations in 90 countries; 1,500 resellers/partners
A ADVANCED BUYERS	Alcatel-Lucent: OmniPCX Enterprise Communications Server	Can handle more simultaneous calls than most; built on Linux servers	Starts at \$268/user in a 250-user configuration	23 years' experience
	Avaya Aura Enterprise Edition	Comprehensive platform supporting standards-based integration with legacy systems	Starts at \$265/user; varies with capacity and features selected	Founded in 2000; 8,700 Global Services employees, 32 support centers worldwide
	Cisco Unified Communications Manager	Strong support for mobility, presence, conferencing; hosted option available	Appliance starts at \$4,000; supports up to 30,000 users per cluster	25-year networking veteran; 100,000+ UC users

B Basic Buyers **I** Intermediate Buyers **A** Advanced Buyers

Source: Focus, March 2010

The Focus Comparison Grids

PRODUCT CONSIDERATIONS: BASIC FEATURES

Vendor: Product Solution	Buyer Types	1 Hosted or on-premise delivery?	2 Industry-optimized solutions available?	3 Software-based IP PBX?	4 Web-based management tool?
3Com: VCX V7000 platform	I A	On-premise	Information not provided by vendor	No; rack-mountable unit	Yes
Aastra Technologies: Clearspan	I A	On-premise	Yes	Yes	Yes
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	On-premise	Yes	Yes	Yes
Avaya: Aura	I A	On-premise	Yes	Yes	Yes
Cisco: Unified Communications Manager	A	Both	Yes	Yes; rack mounting optional	Yes
Interactive Intelligence: Customer Interaction Center	I A	Both	No	Yes	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	On-premise	No	No; rack-mountable unit	Yes
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	On-premise	No	Yes	No
NEC: UNIVERGE SV8500	A	On-premise	Yes	No; rack-mountable unit	Yes
ShoreTel: IP Phone System	B I A	On-premise	Yes	No	Yes
Siemens: OpenScape Unified Communications Server	A	On-premise	No	Yes	Yes
Taridium: ipbx v2	B I	On-premise	No	Yes; rack or wall mounting optional.	Yes
Toshiba: Strata CIX 1200 Telephone System	B I	On-premise	Yes	No; self-contained base cabinet	Yes

continue

B Basic Buyers **I** Intermediate Buyers **A** Advanced Buyers

* Small = 1-100, midsize = 101-500, small enterprise = 501-2,500, enterprise = 501-10,000+
 Note: Nortel was purchased and 3Com is being acquired by HP; plans for Nortel and 3Com phone systems are in flux.

PRODUCT CONSIDERATIONS: BASIC FEATURES (CONTINUED)

Vendor: Product Solution	Buyer Types	5 Number of calls per hour?	6 Number of simultaneous calls?	7 Number of integrated telephony services? ‡	8 System capacity?	9 Voice conferencing?
3Com: VCX V7000 platform	I A	Information not provided by vendor	Information not provided by vendor	Information not provided by vendor	2 - 50,000 devices	Yes
Aastra Technologies: Clearspan	I A	167,823 busy hour call attempts (BHCA's)	47 calls/second	200	1 - 100,000 users per node	Yes
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	120,000 BHCCs	120,000 BHCCs	700	15,000 users per server	Yes
Avaya: Aura	I A	500,000	30,000	Information not provided by vendor	"36,000 stations/ 18,000 SIP endpoints/server"	Yes
Cisco: Unified Communications Manager	A	48,000	Unlimited	500	60,000 users	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	252,000 BHCA's	15,000	175	100 - 15,000 users	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	14,400	250	500	10 - 65,000 users	Yes
NEC: UNIVERGE SpheriCall IP-PBX with Web Services	I A	12,000 BHCA's	Unlimited	Hundreds	1 - 30,000 ports	Yes
NEC: UNIVERGE SV8500	A	48,000	Unlimited	800	16,000 endpoints	Yes
ShoreTel: IP Phone System	B I A	50,000 BHCCs	5,000	150	1 - 10,000 users	Yes
Siemens: OpenScape Unified Communications Server	A	252,000 BHCA's	15,000	300	100,000 users	Yes
Taridium: ipbx v2	B I	14,400	250	167	15 - 1,000 users per server	Yes
Toshiba: Strata CIX 1200 Telephone System	B I	12,000 BHCA's	Unlimited	300	1 - 1,000 users per system	Yes

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‡ services that link telephones and call management features to telephony-enabled computing applications on a common enterprise network; key elements of computer-telephony integration (CTI)

PRODUCT CONSIDERATIONS: ADVANCED FEATURES

Vendor: Product Solution	Buyer Types	10 API/SDK included?	11 Built-in security?	12 CRM integration?	13 Soft phone client?
3Com: VCX V7000 platform	I A	Yes	Yes	Information not provided by vendor	Yes
Aastra Technologies: Clearspan	I A	Yes	Yes	Yes	Yes
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	Yes	Yes	Yes
Avaya: Aura	I A	Application and SIP "enablement services"	Yes	No. Available as an add-on	Yes
Cisco: Unified Communications Manager	A	Yes	Yes	Yes	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	Yes	Yes	Yes	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Available through Mitel Solutions Alliance (MSA)	Yes (via Mitel Communications Director)	No. Available as an add-on	No. Available as an add-on
NEC: UNIVERGE Spherical IP-PBX with Web Services	I A	Yes	Yes	No	Yes
NEC: UNIVERGE SV8500	A	Yes	Yes	Yes	Yes
ShoreTel: IP Phone System	B I A	Yes	Yes	Yes	Yes
Siemens: OpenScape Unified Communications Server	A	Yes	Yes	Yes	No. Available as an add-on
Taridium: ipbx v2	B I	Yes, for CRM	Yes	No. Available as an add-on	No. Available as an add-on
Toshiba: Strata CIX 1200 Telephone System	B I	Yes	Yes	Yes	Yes

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PRODUCT CONSIDERATIONS: ADVANCED FEATURES (CONTINUED)

Vendor: Product Solution	Buyer Types	14 Supports third-party IP phones?	15 Supports multiple office sites?	16 Unified messaging included?	17 Unified Communications suite included?
3Com: VCX V7000 platform	I A	Yes	Yes	Yes	Yes
Aastra Technologies: Clearspan	I A	Yes	Yes	No. Available as an add-on	No. Available as an add-on
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	Yes	No. Available as an add-on	No. Available as an add-on
Avaya: Aura	I A	Limited to SIP phones	Yes	Yes	No. Available as an add-on
Cisco: Unified Communications Manager	A	Yes	Yes	Yes	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	Yes	Yes	Yes (optional)	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Yes, through Mitel Solutions Alliance (MSA)	Yes	Yes	Yes
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	Yes	Yes	Yes	Yes
NEC: UNIVERGE SV8500	A	Yes	Yes	No. Available as an add-on	No. Available as an add-on
ShoreTel: IP Phone System	B I A	Yes	Yes	Yes	Yes
Siemens: OpenScape Unified Communications Server	A	Yes	Yes	Yes	Yes
Taridium: ipbx v2	B I	Yes	Yes	Yes	No
Toshiba: Strata CIX 1200 Telephone System	B I	Limited to SIP phones	Yes, via networked systems	Yes	Yes

continue

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PRODUCT CONSIDERATIONS: ADVANCED FEATURES (CONTINUED)

Vendor: Product Solution	Buyer Types	18 VPN?	19 Video conferencing?	20 Web conferencing?
3Com: VCX V7000 platform	I A	Information not provided by vendor	Yes	Yes
Aastra Technologies: Clearspan	I A	Yes	No. Available as an add-on	No. Available as an add-on
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on
Avaya: Aura	I A	Yes	No. Available as an add-on	No. Available as an add-on
Cisco: Unified Communications Manager	A	Yes	No. Available as an add-on	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	Yes	No. Available as third-party add-on	No
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	No. Available as an add-on	No. Available as an add-on	Yes
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	Yes	No. Available as an add-on	No. Available as an add-on
NEC: UNIVERGE SV8500	A	Yes	No. Available as an add-on	No. Available as an add-on
ShoreTel: IP Phone System	B I A	Yes	Yes	Yes
Siemens: OpenScape Unified Communications Server	A	No	No. Available as an add-on	No. Available as an add-on
Taridium: ipbx v2	B I	Yes	Limited	No
Toshiba: Strata CIX 1200 Telephone System	B I	Yes	Yes	Yes

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PRODUCT CONSIDERATIONS: BUILT-IN IP TELEPHONY FEATURES

Vendor: Product Solution	Buyer Types	21 Advanced business communications services?	22 Hotel communications services?	23 Auto-attendant services?	24 Contact/call center services?
3Com: VCX V7000 platform	I A	Yes	Information not provided by vendor	Yes	Information not provided by vendor
Aastra Technologies: Clearspan	I A	Yes	No. Available as an add-on	Yes	No. Available as an add-on
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	Yes	Yes	Yes
Avaya: Aura	I A	Yes	No. Available as a third-party add-on	Yes	Yes
Cisco: Unified Communications Manager	A	Yes	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	Yes	No	Yes	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Limited. Additional features available	No. Available as an add-on	Yes	No. Available as an add-on
NEC: UNIVERGE Spherical IP-PBX with Web Services	I A	Yes	No. Available as an add-on	Yes	Limited. Full functionality available as an add on
NEC: UNIVERGE SV8500	A	Yes	Yes	Yes	Yes
ShoreTel: IP Phone System	B I A	Limited. Additional features available	No	Yes	Yes
Siemens: OpenScape Unified Communications Server	A	Yes	No. Available as an add-on	Yes	Yes
Taridium: ipbx v2	B I	No	No. Available as a third-party add-on	Yes	Yes
Toshiba: Strata CIX 1200 Telephone System	B I	Yes	No. Available as an add-on	Yes	No. Available as an add-on

continue

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PRODUCT CONSIDERATIONS: BUILT-IN IP TELEPHONY FEATURES (CONTINUED)

Vendor: Product Solution	Buyer Types	25 Emergency services?	26 Call recording and reporting?	27 Fax server?	28 Mobile communications?
3Com: VCX V7000 platform	I A	Yes	Yes	Yes	Information not provided by vendor
Aastra Technologies: Clearspan	I A	Yes	Yes	Yes	Yes
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	Yes	No. Available as an add-on	Yes
Avaya: Aura	I A	Yes	No. Available as a third-party add-on	Yes	Yes
Cisco: Unified Communications Manager	A	No. Available as an add-on	Yes	Yes	Yes
Interactive Intelligence: Customer Interaction Center	I A	Yes	Yes	Yes	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	No. Available as an add-on	Limited. Full functionality available as an add-on	No. Available as an add-on	Yes
NEC: UNIVERGE Spherical IP-PBX with Web Services	I A	Yes	Yes	No. Available as an add-on	Limited. Full functionality available as an add-on
NEC: UNIVERGE SV8500	A	Yes	No. Available as a third-party add-on	No. Available as an add-on	No. Available as an add-on
ShoreTel: IP Phone System	B I A	Yes	No. Available as a third-party add-on	No. Available as a third-party add-on	Yes
Siemens: OpenScope Unified Communications Server	A	Yes	Yes	Yes	Yes
Taridium: ipbx v2	B I	No. Available as an add-on	Yes	Limited; fax-to-email only	Yes
Toshiba: Strata CIX 1200 Telephone System	B I	Yes	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on

continue

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PRODUCT CONSIDERATIONS: BUILT-IN IP TELEPHONY FEATURES (CONTINUED)

Vendor: Product Solution	Buyer Types	29 Multiple language support?	30 Text-to-speech?	31 Operator console?	32 Voice mail?
3Com: VCX V7000 platform	I A	Yes	Yes	Yes	Yes
Aastra Technologies: Clearspan	I A	Yes	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	No. Available as an add-on	Yes	Yes
Avaya: Aura	I A	Yes	Yes	Yes	Yes
Cisco: Unified Communications Manager	A	Yes	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on
Interactive Intelligence: Customer Interaction Center	I A	Yes	Yes	Yes	Yes
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Limited	No. Available as an add-on	Yes	Yes
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	Yes	No. Add-on in development	Yes	Yes
NEC: UNIVERGE SV8500	A	Yes	No. Available as an add-on	No. Available as an add-on	No. Available as an add-on
ShoreTel: IP Phone System	B I A	Yes	No. Available as a third-party add-on	Yes	Yes
Siemens: OpenScape Unified Communications Server	A	Yes	Yes	Yes	Yes
Taridium: ipbx v2	B I	Limited	No. Available as an add-on	No. Available as a third-party add-on	Yes
Toshiba: Strata CIX 1200 Telephone System	B I	Limited	Yes	No. Available as an add-on	No. Available as an add-on

B Basic Buyers **I** Intermediate Buyers **A** Advanced Buyers

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PRODUCT CONSIDERATIONS: PLATFORM

Vendor: Product Solution	Buyer Types	33 Distributed architecture?	34 Operating system?	35 Supports SOA?	36 Server?
3Com: VCX V7000 platform	I A	Yes	Security-hardened Linux	No	IBM X-Series
Aastra Technologies: Clearspan	I A	Yes	Linux	Yes	IBM HS21 Blade servers
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	Yes	Red Hat Linux	Yes	Industry-standard Linux platforms
Avaya: Aura	I A	Yes	Red Hat Enterprise Linux	Yes	Avaya S800 series
Cisco: Unified Communications Manager	A	Yes	Linux and Microsoft Windows	No	Cisco MCS 7800 Series Media Convergence Servers, B-series Unified Computing blade servers
Interactive Intelligence: Customer Interaction Center	I A	Yes	Microsoft Windows Server 2003	Yes	Industry-standard WinTel server
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Yes	Mitel Standard Linux	Yes	Mitel 3300 Controllers; HP, IBM, Sun servers
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	Yes	Microsoft Windows Server 2003	Yes	Industry-standard Intel Pentium servers
NEC: UNIVERGE SV8500	A	Yes	Linux	Yes	Proprietary server with redundant CPU, power
ShoreTel: IP Phone System	B I A	Yes	Information not provided by vendor	Yes	Information not provided by vendor
Siemens: OpenScape Unified Communications Server	A	No	Linux	Yes	Industry-standard 64-bit systems
Taridium: ipbx v2	B I	Yes	Red Hat Linux	No	Industry-standard Intel Pentium servers
Toshiba: Strata CIX 1200 Telephone System	B I	Yes	Proprietary embedded OS	No	Self-contained base cabinet

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COST CONSIDERATIONS

Vendor: Product Solution	Buyer Types	1 Base price?	2 Integrates with incumbent PBX?	3 Supports incumbent third-party hardware?	4 Supports incumbent analog phones?	5 Payment model options
3Com: VCX V7000 platform	I A	Information not provided by vendor	Yes	Yes	Yes	License
Aastra Technologies: Clearspan	I A	\$625/user at 1,500 ports; falls as capacity increases to \$425/user	Yes	Yes	Yes	License
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	\$268/user in a 250-user configuration	Information not provided by vendor	Information not provided by vendor	Information not provided by vendor	License
Avaya: Aura	I A	\$265-\$320/user depending on features and capacity	Yes (at least Nortel)	Yes (at least Nortel)	Yes	License
Cisco: Unified Communications Manager	A	Appliance starts at \$4,000	Yes	Yes	Yes	License, hosted
Interactive Intelligence: Customer Interaction Center	I A	\$350 - \$1,000/user	Yes	Yes	Yes	License
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	Information not provided by vendor	Yes, through SIP and Mitel Solutions Alliance (MSA)	Yes, through SIP and Mitel Solutions Alliance (MSA)	Yes, through Mitel Solutions Alliance (MSA)	License
NEC: UNIVERGE SphericaII IP-PBX with Web Services	I A	Starts at \$101/user each year	Yes	Yes	Yes	License
NEC: UNIVERGE SV8500	A	\$166.44/user for 500 users; \$140.20/user for 1,000 users	Yes	Yes	Yes	License
ShoreTel: IP Phone System	B I A	Information not provided by vendor	Yes	Limited	Yes	License
Siemens: OpenScape Unified Communications Server	A	Starts at \$5,000 (for UC Server alone)	Yes	Yes	Yes	License
Taridium: ipbx v2	B I	\$499/single-server unlimited-user license; \$25-\$129 each for additional feature modules (via online store)	Yes	Yes	Yes	License
Toshiba: Strata CIX 1200 Telephone System	B I	\$350 to \$500/user; varies with endpoint device	Yes	Yes	Yes	License

B Basic Buyers I Intermediate Buyers A Advanced Buyers

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VENDOR CONSIDERATIONS

Vendor: Product Solution	Buyer Types	1 Length of time in business	2 Offers small business alternative?	3 How purchased?	4 Support services available?
3Com: VCX V7000 platform	I A	30 years (before HP acquisition)	Yes	Resellers	Directly and through channel partners
Aastra Technologies: Clearspan	I A	26 years	Yes	Direct and indirect channel partners, dealers, resellers, telephone companies (US only)	From "services partners" BSL Telephony Services, Datatrend and Static Power
Alcatel-Lucent: OmniPCX Enterprise Communications Server	A	23 years	Yes	2,100 "business partner" resellers	Through 2,100 "business partners"
Avaya: Aura	I A	9 years	Yes	Avaya (and trained/certified Nortel) resellers	Directly and through integrators and service providers
Cisco: Unified Communications Manager	A	25 years	No	Directly (for companies with Direct Purchasing Agreements) and through channel partners	Directly and through certified channel partners
Interactive Intelligence: Customer Interaction Center	I A	15 years	Yes	Directly (hosted version) and through resellers (premise-based version)	Packaged professional and support services offered directly
Mitel: 3300 IP Communications Platform/Mitel Communications Director software	B I A	36 years	Yes	Resellers	Directly and through channel partners
NEC: UNIVERGE Spherical IP-PBX with Web Services	I A	15 years	No	Direct sales offices and authorized dealers	Systems integration and development services via NEC Unified Solutions in North America
NEC: UNIVERGE SV8500	A	15 years	No	Direct sales offices and authorized dealers	Systems integration and development services via NEC Unified Solutions in North America
ShoreTel: IP Phone System	B I A	13 years	Yes	Resellers	Online services directly and in-person services via resellers and consultants
Siemens: OpenScape Unified Communications Server	A	162 years	Yes	Resellers	Online training and support offered to users and channel partners directly; other services offered through resellers
Taridium: ipbx v2	B I	2 years	Yes	Directly via online store; also through resellers and consultants	One year of email support & maintenance included with product; additional one-year packages available @ \$250; other services offered by Taridium Professional Services and partners
Toshiba: Strata CIX 1200 Telephone System	B I	70 years	Yes	Resellers	Through resellers

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Vendor Profiles

Aastra Technologies	Alcatel-Lucent	Avaya	Cisco	Interactive Intelligence	Mitel
<ul style="list-style-type: none"> Offers both IP-based and traditional business and residential telephony solutions Also offers a range of SIP-compliant telephones For more information: www.aastra.com 	<ul style="list-style-type: none"> Incorporated and headquartered in France; operates in 130 countries Bell Labs unit holds more than 26,000 patents, more than 2,700 obtained in 2008 For more information: www.alcatel-lucent.com 	<ul style="list-style-type: none"> Acquired Nortel Networks' enterprise solutions business in December 2009 Aura to link legacy, VoIP solutions and infrastructure elements to services For more information: www.avaya.com 	<ul style="list-style-type: none"> Originators of the multi-protocol network router in the 1980s Invests more than \$5 billion annually in research and development (R&D) For more information: www.cisco.com 	<ul style="list-style-type: none"> Solutions focused on integrated communications and relationship management Also offers solutions for contact centers and business process automation For more information: www.inin.com 	<ul style="list-style-type: none"> Partnering with VMware to offer virtualized voice services Also offers voice/data network design, traffic provisioning, application development services For more information: www.mitel.com

NEC	ShoreTel	Siemens	Taridium	3Com	Toshiba
<ul style="list-style-type: none"> UNIVERGE IP architecture specifically designed to unify multimedia networks Now expanded to support incorporation of CRM and other key business applications For more information: www.nec.com 	<ul style="list-style-type: none"> Focused exclusively on IP telephony and unified communications (UC) solutions Named by Synergy Research as market-leading provider of SMB/mid-market UC solutions For more information: www.shoretel.com 	<ul style="list-style-type: none"> Enterprise Communications group claims to be leading provider in global telephony market Also offers extensively customizable, widget-based IP telephony solutions for SMBs For more information: www.siemens.com 	<ul style="list-style-type: none"> Offers IP PBXes, managed VoIP services, unified voice mail and mobile IP PBX access Consulting team claims more than 30 years' combined VoIP experience For more information: www.taridium.com 	<ul style="list-style-type: none"> The VCX V7000 runs on "security-hardened" Linux and IBM System x servers HP announced plans to acquire 3Com in November 2009, but made no mention of 3Com's IP telephony solutions For more information: www.3com.com 	<ul style="list-style-type: none"> Telecommunication Systems Division offers range of IP telephony solutions (8-1,200 ports) Offers industry's only seven-year manufacturer's extended warranty For more information: www.telecom.toshiba.com

Others Worth Watching

Digium	Google	M5 Networks
<ul style="list-style-type: none"> ▪ This company is the commercial force behind Asterisk, the most widely used comprehensive open source platform for IP telephony in the world. Digium offers Switchvox IP PBX solutions that support up to 400 users and 75 concurrent calls, with free trial editions available. The company also offers Asterisk software and Digium hardware components with which users and/or integrators can build customized solutions for IP telephony and other applications. ▪ Focus believes Digium and Asterisk solutions can offer significant economy and other advantages to users able and willing to “roll their own” solutions. However, those users must assess their needs and “thresholds for pain” carefully, to determine if the potential advantages are worth the extra work required. Some of that work may involve the services of paid consultants and/or integrators, which may shift cost/benefit calculations considerably. ▪ For more information: www.digium.com 	<ul style="list-style-type: none"> ▪ The company best known for online search and targeted advertising already offers a suite of services known as Google Voice. The company also acquired VoIP startup Gizmo 5 in November 2009, and offers an expanding suite of collaboration services under the Google Docs and Google Apps banners. Google has also launched a self-branded wireless handset based on the Android operating system already at the heart of wireless smartphones from multiple manufacturers and carriers. ▪ Focus believes that Google may have no plans to offer full-blown IP telephony services to businesses. However, Focus also believes that Google is taking voice services seriously, and that its initiatives could result in offerings that create new support and integration challenges to business decision makers. ▪ For more information: www.google.com 	<ul style="list-style-type: none"> ▪ This company specializes in what it calls “voice as a service.” The M5 delivery model combines hosted PBX services (largely powered by Cisco technologies) with point-to-point, redundant connections between host and customer facilities (Verizon T-1 links with DSL backup). This approach provides high levels of reliability and redundancy, according to the company. ▪ In addition, M5 offers integration with CRM applications using a Web services adapter, rather than the Microsoft Telephony Application Programming Interface (TAPI) used by many other vendors. The M5 approach makes the CRM integration effectively cloud-based, avoiding the support problems that can accompany the client-based TAPI approach, according to M5. ▪ For more information: www.m5net.com

Focus believes that effective voice-CRM integration can reduce call durations and customer wait times and increase customer satisfaction. Users pursuing or considering integration of IP-based voice services with CRM or other applications should watch M5’s progress, and question other candidate vendors about their approaches to integration and strategic voice services.

Several other vendors, notably Altigen, AT&T, Fonality, Qwest and Verizon Business, have relevant offerings in this market. However, despite repeated requests from Focus, these vendors were unable to supply sufficient, timely information to make meaningful comparisons or analysis possible. Focus will try to include these vendors and their offerings in future updates to this Comparison Guide.

Each year U.S. businesses spend more than \$75 trillion* on goods and services. And yet there has not been a definitive source of trustworthy and easily accessible information to support business buyers and decisions makers — especially those in small and midsize businesses. Filling this gap is the mission of Focus Research.

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Our goal is not only to provide independent and high-quality research but also to deliver a new research model that serves all businesses.

Open: We believe information must be set free. The data, advice and research on Focus are widely distributed and available to everyone

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* Source: Visa, Inc. Commercial Consumption Expenditure Index fact sheet.