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IP Contact Center Buyer's Guide: Considerations for Contact Centers Considering VoIP

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Abstract

Contact centers considering the move to voice over IP (VoIP) face a dizzying array of choices. This document presents a reasoned approach and a set of hard questions to ask vendors of IP contact center solutions.

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Overview

Contact center managers face a myriad of challenges and choices when it comes to adopting voice over IP (VoIP). There are many vendors of such solutions – large and small, public and private, local and international, simple and complex. Some offer solutions based on industry standards such as session initiation protocol (SIP). Others rely on older and sometimes even proprietary protocols. This guide offers a set of questions and considerations that can help you as you begin your selection process.

Questions for Vendors

1. **Is your solution designed from the ground up for VoIP or is IP support kluged onto an existing architecture?** It's important to determine whether a solution is fully VoIP-enabled or whether VoIP support has been tacked on as an afterthought. Some key questions to ask are:
 - a. Is the same VoIP standard used for connectivity between the call server and the gateway as between the call server and the IP phones? Ideally the same protocol should be used throughout.
 - b. How long have you been shipping VoIP-enabled products? The best vendors have four or more years of experience in this complex area.
 - c. Do you have a graphical soft phone that allows agents to work from anywhere they can get an Internet connection?
2. **How completely do you embrace the international SIP standard?** Session Initiation Protocol (SIP) has become the de facto standard for VoIP. SIP support now ships as part of all Microsoft operating systems. Insist on full SIP support. Be wary of vendors whose VoIP support consists of older protocols such as H.323, MGCP, and "Skinny". Full SIP support means that you can choose from a variety of devices including phones, gateways, proxy servers, etc. that follow the SIP standard instead of being forced to purchase such components from the vendor. Some additional questions to ask are:
 - a. Can I use IP phones from major vendors such as Polycom and Cisco?
 - b. Do you support the coming wave of Windows CE-equipped SIP phones?
 - c. Do you support a variety of SIP gateways?
 - d. Do you have your own SIP stack?
 - e. Do you have your own SIP proxy server for scalability and remote survivability?
3. **Do you offer a complete range of contact center applications (inbound/outbound, quality monitoring, e-mail routing, Web collaboration, speech-enabled IVR, screen recording, workforce management, etc.)?** The best IP contact center solutions offer a wide range of functionality and provide everything you need in order to run a world class contact center operation. Make sure that whatever vendor you choose offers not only automatic call distribution (ACD), but other functionality that you might want down the road. Some important questions to ask are:
 - a. Can I use the same ACD engine to route phone calls, e-mails, faxes, Web text chats, and other types of interactions?
 - b. Does your solution provide built-in IVR support, including the ability to build speech-enabled applications without resorting to complex programming tools?

- c. Do you provide integrated call recording that allows me to record all calls or calls matching certain rules? Do you compress and archive the recordings and make it easy for me to find them? Do you have integrated facilities for scoring recordings? Can I record agent desktop activity as well as telephone calls?
 - d. Do you have modules that allow me to forecast staffing needs, schedule agents, and report on real-time adherence?
 - e. Do you have outbound capabilities for power, preview, and predictive dialing that integrate smoothly with your inbound side?
 - f. How easy do you make it to perform screen pops?
4. **Do any of your products or applications come from a third party?** It's important to dig past the marketing literature and learn whether all the applications the vendor wants to sell you come from that vendor or from a collection of third parties. Third party applications introduce extra complexity and maintenance which increase the total cost of ownership. The best IP contact center vendors offer a comprehensive suite of products which they own and market.
5. **Were all of your products and applications developed internally or picked up via acquisitions?** Some vendors assemble a wide product line by acquiring other companies instead of developing products themselves. It often takes them years to digest such acquisitions and fully integrate the acquired products. In the interim, acquired products frequently require separate administration, training, and overhead. Dealing with a patchwork quilt of separate applications is a far greater hassle than operating a tightly integrated IP contact center suite designed and developed by a single engineering team.
6. **Can your entire contact center suite run on a single server for small and mid-sized contact centers?** If not, how many servers are required? Each server required by a vendor's solution drives up your operating cost and increases the complexity of your environment, creating more points of failure. The best solutions can run entirely on a single server for basic contact center operations and leverage your existing database and e-mail servers. It's reasonable for special functions such as speech recognition and recording compression to run on separate servers, but the total number of servers should be kept as low as possible.
7. **How open is your solution?** There is a huge difference between proprietary and open contact center solutions. Open solutions run on industry standard Intel-based servers using Microsoft operating systems. This gives you a wide range of low cost choices for backup, monitoring, remote supervision, virus scanning, etc. Closed solutions lock you into the vendor and subject you to exorbitantly high prices even for simple components such as RAM and disk drives. Key questions to ask include:
- a. Does your solution run on servers using Intel CPUs and Microsoft operating systems?
 - b. Can I choose off-the-shelf products for disk backup, virus scanning, and other server maintenance functions?
 - c. Can I make simple modifications such as adding my own RAM without voiding your warranty?
8. **What's your approach to security?** VoIP opens up new concerns regarding security and different vendors approach the issue different ways. Look for adherence to emerging standards including TLS (transport layer security) and

sRTP (secure real time protocol) in order to encrypt actual voice traffic. Also make sure that the IP connection between desktop application components and the call server can be encrypted as well. Avoid proprietary security schemes since these can lock you into a particular vendor's equipment.

9. **Can we add seats and functionality just by turning on license keys, or is a more burdensome upgrade necessary?** The best-designed IP contact center suites provide everything your organization could possibly need in one tightly integrated suite and allow you to turn on just what you choose. You can obtain additional functionality or add seats at any time without having to upgrade the software, install CDs. Leading vendors allow you to purchase additional licenses and simply download a new license key in order to start using the new functionality or additional seats.
10. **Do you have a built-in customization tool that makes it easy to modify functionality but also simple to migrate customizations from version to version?** Less sophisticated contact center solutions offer very limited opportunities for customization. It's important for you to weigh the extent to which your contact center has needs that might not be met by out-of-the-box products. This is especially important for contact center outsourcers and other advanced organizations that need highly specialized capabilities. The best contact center suites offer graphical tools that allow you to quickly and easily alter call flows, tailor queue overflow patterns, create customer surveys, add speech support, and otherwise customize the system to meet your organization's needs.
11. **How many different applications do I need to use in order to administer your entire IP contact center suite?** One of the major cost considerations when evaluating IP contact center suites is the total cost of ownership over a period of three or more years. Some products may come with a lower up-front cost, but entail significantly greater expense for ongoing management. The best suites can be entirely administered from a single graphical application. They allow you to add users, configure ACD queues, alter the dial plan, define call recording rules, set up outbound campaigns, and so on all from a single screen. Just remember that the number of administrative front-ends gives you a rough idea of the complexity of owning and maintaining your new solution.
12. **Does your contact center solution function as an IP PBX for our business users or do we have to purchase a separate system?** The most advanced IP contact center suites are capable of providing IP PBX services for your business (non call center) users, allowing you to avoid having to purchase a separate system. This can not only save you money and decrease the complexity of your environment, but also allow the business users in your organization to work more effectively with the contact center. On a personal level, this may make your efforts more visible to the rest of the organization.
13. **Do components that run on users' desktops update themselves automatically or do we have to manually apply patches and new versions?** Some contact center suites solve the problem of deployment to end users by being entirely Web-based. That is, end users access all contact center functionality by means of a Web browser such as Internet Explorer and don't need to have software components installed locally. Unfortunately, such Web-based interfaces are primitive and slow when compared to "smart client" applications such as Microsoft Outlook. The best IP contact center suites give you a choice of Web-based interfaces or smart client applications based on Microsoft's .NET Framework. If the vendor requires that components be installed on end-user desktops, make sure that the solution includes a facility for automatic

distribution and update of such components so that you can avoid the nightmare of having to go to each user's computer to apply patches and updates.

14. **Does your solution scale down (for small sites) as well as up (for large sites) with exactly the same software?** Be sure to avoid the "fork-lift upgrade" problem in which growing past a certain point forces you to have to move to a different higher-end system. The best IP contact center suites use software techniques that allow the same solution to work for 5 users in a small branch office or 500 users at a large central contact center site. The only difference lies in the size of the server used to run the software. This approach allows you to manage a distributed organization with several sites of varying sizes with the same solution, thereby reducing your costs for training and administration.
15. **Does your solution handle multiple sites and allow them to work effectively together?** If your organization has or might someday have multiple sites, it's important to go with an IP contact center suite designed for multi-site operation. The best such suites allow you to easily overflow calls from one site to another for load-balancing and disaster recovery. Such suites offer presence management that allows you to see in real time the status of calls, queues, and agents at any site, regardless of your location.
16. **[If appropriate] How well does your solution work for outsourced contact centers and do you have many large ones as customers?** Contact center outsourcers have special needs since they must compete with each other to offer cost-effective and frequently customized services. For them, an IP contact center suite must provide excellent facilities for service creation and deployment. It must also allow them to offer a mix of services including inbound, outbound, e-mail routing, call recording etc. The best solutions become a competitive advantage and selling point for contact center outsourcers. For example, some suites allow an outsourcer's manager as well as the outsourcing company to listen in real-time to a current agent/customer call and to discuss the call without being heard by the agent or the customer. It's important to press the vendor for examples of large outsourcing contact center customers in order to assess their commitment to this difficult market segment.
17. **Do you provide an optional disaster recovery service?** Nearly every contact center must deal with the issue of disaster recovery. The best vendors use their own products hosted in secure data centers to offer IP-based disaster recovery, providing the peace of mind that your organization could be up and running in minutes even if its facility were rendered unusable for an extended period of time.
18. **Are you publicly traded so that we can be confident about your financial health?** Although small, private companies can sometimes come to market with attractive solutions, it's impossible to verify their financial status. A vendor's status as a publicly traded company provides you with a far greater visibility into its financial performance, management team, future plans, and overall viability.
19. **Do you have a history of innovation demonstrated by patents, industry awards, and historic firsts?** The best vendors can point to an extensive list of patents and awards they've won as a result of their technical innovation. In addition to demonstrating their engineering prowess, patents provide protection for both you and the vendor.
20. **Does your company have an extensive track record as evidenced by at least five years worth of existence and at least one thousand existing customers?** Be wary of younger companies. The leading contact center suite

vendors have been around for many years and have the track record and customer base to prove it. Statistics show that younger companies are far more likely to be bought or disappear, leaving you with a strategic system with no support.

21. **Do you have opportunities such as user groups and on-line forums for us to interact directly with other users of your products?** Often the users of an IP contact center suite represent an incredibly valuable source of information and know-how. They can help you avoid expensive mistakes and show you how to get the most out of your purchase. The best vendors have national and regional user groups that meet periodically to share tips and ideas. Such vendors may also have on-line communities that you can turn to at any hour of the day or night for useful information.
22. **What opportunities do we have to interact directly with your senior developers, product managers, and executive management team in order to express concerns, influence product direction, and submit ideas?** You will find that you have a far greater opportunity to interact with some vendors than others. The best vendors allow customers to talk directly with senior management and even their developers in order to quickly resolve problems or submit enhancement requests. Consider to what extent your organization will wish to influence future product development and take the ability to do so into consideration when making your vendor selection.
23. **Do you offer extensive classroom as well as on-line training?** The leading IP contact center suite vendors offer both hands-on classroom education as well as on-line training. Both are important and each is suited to different situations. Take advantage of classroom education to gain deeper understanding of voice over IP in order to enhance your own career as well as to increase your value to your organization.

Questions for the Contact Center and its Parent Organization

1. **Is our network ready for VoIP?** Before purchasing an IP contact center suite, take stock of your organization's network. Is it fully switched with 100 mbps Ethernet to the desktop? Is quality of service (QoS) turned on in every switch, router, hub, and other network device so that voice can be prioritized above all other traffic? Find a product or service that can assess your network and make sure you're ready before you take the plunge into VoIP.
2. **Would we like to customize our contact center solution ourselves or have such customizations performed and maintained by a value-added reseller?** Both these choices are reasonable, but decide before you buy. Make sure your vendor supports your choice. If you choose to do the customization and perhaps maintenance yourself, identify the person or people who will be responsible and make sure they have the necessary skills. Invest in training so that they can be successful.
3. **What is our strategy for assessing and improving the quality of our interactions with our customers?** Articulate your long-term strategy for improving the quality of what you do. Do you intend to record and score calls? If so, how do you plan to use the results to improve agent productivity and quality? What sort of on-going training do you intend to provide your agents? Make sure your IP contact center vendor has the products and features to support your choices.