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CONTACT CENTER PIPELINE
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SIMPLIFYING REMOTE ACCESS

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Contact Center Pipeline

SIMPLIFYING REMOTE ACCESS

Technology enables increasingly diverse site options.

BY Brian Hinton & Matt Morey, Strategic Contact

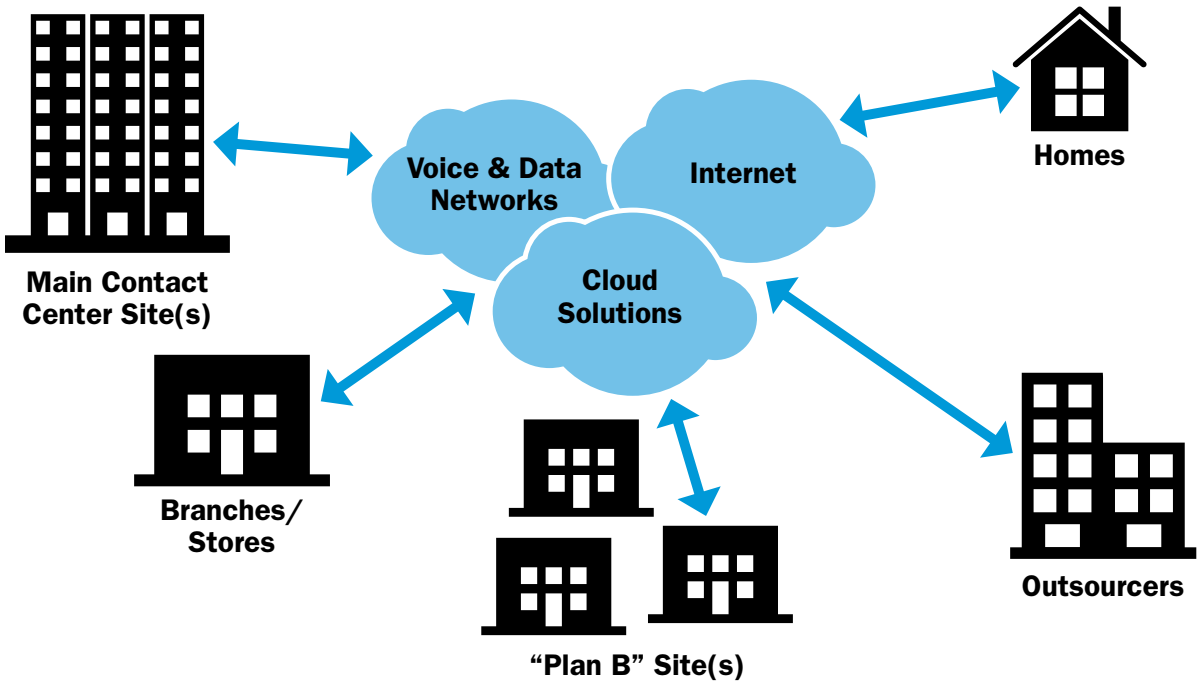
The need for remote access to core contact center infrastructure continues to grow. Whether implementing a home-agent program, accommodating "on the go" leaders, establishing connectivity to outsourcers, ensuring business continuity or tying into branches and retail outlets, businesses need effective communication between the contact center and a variety of locations. Technology options today enable great flexibility for leaders and agents alike.

Making Remote Access Simpler

Enhancements in core technology and network connectivity, along with the proliferation of cloud systems, create a simplified approach to remote access to contact center systems. (SEE FIGURE 1.) For most VoIP contact center solutions, agents can specify the phone number to use at login. Calls can be delivered to a cell phone, home analog line or any extension on an existing PBX. Virtual private networks (VPN) and virtual desktop infrastructure (VDI) (e.g., Citrix) offer the ability to securely log into the required systems remotely with limited reliance on the remote computer's operating speed and capacity.

VPN access to back-office systems provides a higher level of security than Internet access, although either provides some security through sign-on and password access to the

FIGURE 1: Many Choices for "Contact Center Sites"



BC/DR Considerations for WebRTC

There are two perspectives for BC/DR implications of WebRTC: BC/DR options when using WebRTC as a primary contact channel, and using WebRTC as part of your BC/DR plan.

When using WebRTC in the contact center as a primary contact channel, set up multiple browsers (e.g., Chrome and Firefox). If an issue arises with one browser, open and use the backup browser to quickly recover and handle interactions. Work with IT to have redundant and backup paths to the Internet to support interaction handling from a voice/call path perspective and from an application perspective (e.g., cloud-based core contact center technology [routing, reporting], CRM, Ticketing system, etc.).

Work with IT on capacity planning to make sure that you have enough server capacity to establish the peer-to-peer communications connections. Maintain backup workstations or PCs in case an agent's workstation/PC crashes, or have a set of tablets on hand or issued that people can use in emergencies.

Consider using Web RTC as part of your BC/DR plan. Agents can access communication capabilities in the event of a PBX/ACD hard-phone or softphone failure, or a LAN failure. Agents can use their browser to handle the calls. Part of the BC/DR plan can be to send agents to an alternate or home office and use the WebRTC enabled browser for the call path.

applications. Remote Internet access with sufficient capacity and speed is more readily available for greater ease of connectivity to some of the staples of a remote workforce (e.g., calendars, video, instant messaging, screen sharing, recording/quality monitoring, overall performance visibility).

VDI is a virtualization approach in which the operating system and applications are managed in a data center. The desktop image is delivered over a network to an endpoint device, which allows the user to interact with the operating system and its applications as if they were running locally. The endpoint is flexible. Because little actual computing takes place at the endpoint, the range of acceptable devices is broad—older PCs or laptop devices will work, as will newer, more mobile devices. Because all data lives in the data center, not on the endpoint, there are significant security benefits of VDI. There is no data on the machine so no opportunity for it to be compromised. With VDI, IT only manages the roles-based images rather than a home PC for each person. IT can more easily support remote and mobile workers in this environment.

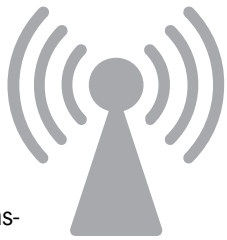
The proliferation of cloud solutions and applications also simplifies remote access. More corporate systems that remote workers need to access are cloud-based, such as CRM or core routing and reporting (across channels). Access is neutral to agent location and agent connectivity approach. Cloud solutions treat positions at the main site the same way they treat a remote worker (or remote office, or outsourcer, or…). A remote worker just needs Internet access and a login, a browser and a voice path, if handling voice interactions. Again, cloud options enable a variety of device options—PCs, laptops, tablets, even low-cost devices, such as Chromebooks.

Any of these options (or combinations thereof) aids in simplicity. No more locking down desktops to avoid personal applications or providing the corporate "box" that the remote agent plugs the computer into. Simplified remote access adds flexibility that companies need these days—whether for ramping staff up or down, providing business continuity and disaster recovery (SEE SIDEBAR), supporting changes in the use of outsourcing partners, or tapping idle resources at branches or other remote sites. Depending on security concerns, a VPN to internal corporate systems may not be required. The reality is that most centers use multiple systems, some premise-based and some cloud. So the use of a large capacity, high-speed home Internet with VPN and VDI is a likely and successful combination.

Newer Technology Further Simplifies Access

Two other specific technology options that simplify remote access are worth a deeper look. WebRTC and improved home networks work alongside the cloud, VPN and VDI as powerful enablers of scattered operations.

WEB REAL-TIME COMMUNICATION (WEBRTC)



WebRTC allows users, from within a browser, to send real-time media without the need for installing plugins. Users can contact another party simply by browsing to a relevant web page for real-time audio and video calls, web conferencing, and direct data transfers. WebRTC provides a secure, encrypted, peer-to-peer connection with no server in the middle. Contact centers can take advantage of WebRTC to replace the VoIP browser client ("softphone" for the voice path) or the physical desk phone for flexibility and reduced cost. Using WebRTC within contact center applications can simplify processes by enabling functions such as audio or video calling from within a CRM application. Agents can work anywhere with Internet access and a WebRTC-compatible computer. Contact centers can add sites (even globally) with limited time and reduced technology, cost and risk.

WebRTC is immediately updated by loading an HTML page when the agent logs on through their browser, simplifying

installations and updates for remote workers. The result: Fewer vendors to deal with, less software to manage and maintain, and remote locations can scale much more easily. There are browser limitations, but WebRTC is currently supported in Chrome and Firefox. Microsoft has announced support in Edge, and there are rumors about Apple support in Safari.

With WebRTC, vendors are trying to make it so you don't have to think about what to use as a phone, or whether you need a SIP client on the desktop. Vendors such as Serenova and ZenDesk use Twilio's WebRTC-based client to deliver CRM plus Call Center for simplified integration, functionality, and reporting. Because WebRTC is open source, it's not something you have to go and buy. Many people are writing applications for it. There are some security concerns due to the open source nature; however, it's more secure than you might think. It is not a plugin; there is no installation for any components, limiting malware or virus risks.

WebRTC requires explicit permission for a camera or microphone to be used. Hackers cannot arbitrarily gain access or operate a camera or microphone. When in use, WebRTC expressly shows the user that their microphone/camera are in use with icons on the browser tabs in clear view of the user. WebRTC requires encrypted communication. Because WebRTC is designed for security, it is typically regarded as one of the more secure VoIP solutions available; security and encryption are not optional.

WebRTC enables agents to operate on low-cost devices (e.g., tablets, Chromebooks); they don't need a robust desktop. It is ideal for centers with remote staff that pitch in when needed—including for business continuity (SEE SIDEBAR). It is also great for centers with seasonal peaks that don't want to invest in lots of desktop infrastructure that is not routinely used. For remote connectivity, WebRTC helps by eliminating the need for a direct dial line and a hard phone, and removes the burden of configuring and maintaining voice paths for these scenarios.

IMPROVED HOME NETWORKS

Home networks, historically a challenge for remote connectivity, have improved in ways that simplify the IT burden and improve operational characteristics. Encryption is becoming more standard and is easy for the user to check on and upgrade, if required. Network vendors provide routers that require a password and are encrypted. However, there are levels of encryption (WPA2, WPA, WEP). WPA2 is the strongest and is becoming more standard. If WPA2 isn't an option, remote workers may need to update the router or the router firmware. The key to network safety is proper settings and prudence. They need to: (1) Create a strong network password; (2) change the default IP address and the default login password; and (3) keep the router firmware up to date.

Home network bandwidth has expanded, whether through cable, DSL, fiber or satellite. Home (wireless) connections are so good that agent positions don't need to be hard wired, making it easier to set up shop anywhere in the home. Older wireless routers can reduce the expanded home network bandwidth (speed and capacity) options, so remote workers should ensure the wireless router has capacity and speed that is equivalent to or better than the capacity and speed of the Internet service.

Expanded home networks work hand in hand with WebRTC to create a simplified, flexible and robust remote-worker environment.

Don't Forget the Performance Tools

Performance optimization is a critical success factor for remote workers. Good contact centers employ a quality monitoring process across media (calls, email, chat, etc.) and should apply it to remote agents, as well. Vendors offer the ability to record voice and capture screens for remote agents (including those using WebRTC, VDI, etc.).

Employee engagement is another critical success factor for a remote-agent program. Gamification and other tools, such as coaching support and performance dashboards, are more readily available through vendor WFO suites (recently renamed by Gartner to Workforce Engagement Management [WEM] in their inaugural Magic Quadrant), and expanded networks help with access. Supervisors also have access to their critical tools wherever they may go. Performance dashboards on a tablet or mobile device let them tune in to performance whether onsite, in a meeting or at lunch. And easy access to tools like instant messaging provide the "always on" lifeline for agents—whether tapping their peers, supervisors, team leads or subject-matter experts. Performance optimization tools can be cloud-based, further simplifying remote access.

Exploit Your Options

If you have been wringing your hands over how to retain agents, protect against disasters, grow without enough building space, gain agility in your capacity or otherwise expand your options for where people sit, it's time to take a new look at remote-agent strategies. With the new developments in technology, implementation and management is far easier than you imagined, regardless of where people sit and if you need them every day or only as circumstances arise.

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