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# VoIP-Enabled Contact Center Continuity

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**VoIP has opened the door to a world of possibilities for affordable, effective disaster-recovery solutions.**

System crashes, network outages, floods and fires are infrequent events. Yet every business needs to mitigate the risk of a debilitating disruption to their operations. Given the potential for lost revenue, loss of customer goodwill, lost data and service degredation, why are effective, up-to-date business continuity/disaster recovery (BC/DR) plans such a low priority? Why doesn't everyone "just do it"?

Traditional technology infrastructures for BC/DR were expensive. Tie lines to alternate sites, redundant hardware and software, and network backup services come at a high cost for such a remote chance of engagement. The complexity and cost of backup facilities, staffing and other resources add to the cost and fortify the inertia. What is the value of mitigating the risk of an event that may not even happen?

Voice over Internet protocol (VoIP) has rewritten the economic equation. It makes BC/DR affordable — especially when it rides the coattails of a VoIP-based enterprise and call center telephony plan, delivering value in normal operations, not just disasters. Moreover, VoIP offers a high degree of flexibility in implementation. An effective BC/DR strategy contemplates different levels of resiliency and the technology options available to support them.

## The Importance of Common BC/DR Definitions

The telecommunications and contact center industries have more than their fair share of acronyms, buzzwords and labels. BC/DR is no exception. Before you gather your operations staff, information technology (IT) team and vendors around the planning table, make sure that you have a mutual understanding of BC/DR jargon. Common terms and phrases include resiliency, continuity, recovery and redundancy. The sidebar on the facing page provides definitions to break through the language barrier and enhance your ability to plan for, and recover from, business disruptions. Figure 1 reveals the drivers of your BC/DR plan.

## VoIP-enabled BC/DR Options

In the pre-VoIP world, the data network and telephony infrastructure limited redundancy options. Virtualized, multisite environments with robust BC/DR plans were rare due to the expense and complexity of set up and administration. While satellite offices could support BC/DR, they were cost-prohibitive for most businesses when configured to standalone and support added capacity in a disaster scenario. Fortunately, most telephony systems delivered five-nines (99.999% up time) reliability, so BC/DR plans could focus on natural disaster recovery. Such plans included alternate facilities with duplicate technology and staff and/or DR service providers — expensive!

VoIP has altered the hardware footprint of telephony systems. Server-based telephony software supplants the traditional "refrigerator" PBXs. These VoIP-based solutions drive two key changes to the BC/DR infrastructure planning: 1) servers can be cen-

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tralized in "hubs" for your entire operation, and 2) those centralized hubs can be located anywhere, including hardened data centers instead of office buildings. With VoIP, a large, multisite contact center requires only one hardware/software hub for the telephony infrastructure and contact center applications. This construct assumes that the applications — interactive voice response (IVR), workforce management (WFM), quality monitoring (QM), etc. — integrate with the VoIP system. By adding redundancy using a second hub with the capability to go live if the first hub crashes, you have the technology infrastructure to support BC/DR.

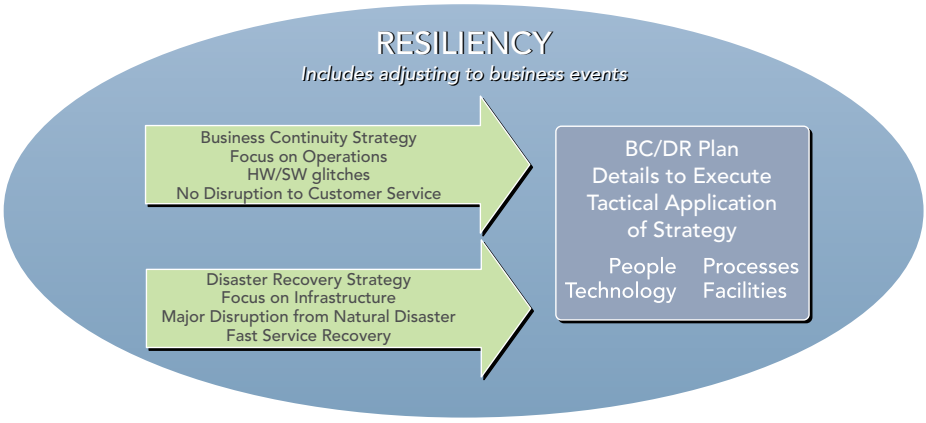
There are many variations within the "two-hub" concept. You can duplicate all VoIP infrastructure and applications, or eliminate some non-essential applications on the second hub. For example, some businesses might suspend QM in the disaster scenario, thereby saving cost and administrative overhead. In addition, some applications, such as IVR, may be decentralized to take advantage of previous investments or to provide for local control. Recovery planning for these systems will add complexity to the overall plan.

For large and small centers, VoIP solves one of the most difficult aspects of BC/DR planning: duplicate facilities and staffing in an alternate location. Alternate staff can take calls from any location as long as the desktop software and license are available. Staff can test disaster recovery using a satellite or home office to ensure that processes are in place to support recovery mode.

The advent of hosted solutions for telephony infrastructure and contact center applications has intrinsic implications for a BC/DR plan. Centers have a broader range of hosted solutions available and more companies are taking advantage of a hosted application — especially small to medium centers. Many hosted providers locate their servers in redundant, hardened sites as this is one of their core business values. They deliver a highly reliable solution, and their BC/DR plan becomes yours — which may be very valuable to a single-site operation.

As you explore BC/DR technology, it's important to ask a few questions, as every VoIP vendor approaches resiliency a little differently. Most solutions offer redundancy of core infrastructure servers. Solutions differ in the functionality that is duplicated, the distance between redundant servers, the time it takes to shift end-point control and contact management to the redundant server and the impact on the live and in-queue contacts. Most vendors offer options for enterprise recovery, site recovery and application recovery. At each recovery level, vendors require different levels of duplicate investment. For full enterprise recovery with no business disruption, some vendors require full duplication of all licenses (including agent licenses). The cost of the duplicate licenses is a target for negotiation. You should see a much larger discount on those licenses.

*Figure 1: BC/DR Plan Derived from Continuity and Recovery Strategies within Corporate Resiliency*




## Operational Considerations for a BC/DR Strategy

To determine your goals for continuity and recovery, operations must assess the impact of a disruption on the business. We tend to think in terms of disruption to the business processes, but the bottom line is: How does the disruption to the business impact the customer (and therefore your company's relationship with them)? Customers won't wait to place their order until you can answer the phone. Customers won't evaluate your service differently (as they make decisions on defecting to your competitor) because you were suffering a disruption. Your BC/DR strategy should be driven by the services offered in your contact center, your customers' expectations about those services and the contact center's role in revenue protection or generation.

Customer focus doesn't mean that every company should invest indiscriminately to ensure that there is never a disruption in a contact center application or service. You'll need to find a balance between:

- Cost of recovery vs. the cost of disruption
- Power of your brand and customer loyalty vs. the ease of defection
- 100% recovery vs. partial recovery
- Customer-facing functions vs. back-office functions
- Providing full service vs. taking the call to explain the disruption (even with no access to applications to provide service) vs. providing messages or self service only

Compare the cost of any continuity/recovery solution to the benefit of avoiding disruption. Weigh the cost of a disruption against the likelihood that it will happen. And, of course, you need to quantify the cost of a disruption. Do your customer contacts directly impact revenue (e.g., order taking)? If so, any missed contact has a direct and quantifiable revenue-reducing impact. Is your contact center a product support center? If so, the cost of a missed support call depends on service contract provisions (service level agreements), your market position in the industry, the availability of options, the ease of defection, etc.

The cost-benefit analysis usually supports investment in partial recovery capabilities

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at a minimum. Partial recovery has many elements including time to recover, functions to recover, and level of performance while in recovery. Solutions can deliver three-second cutover with no lost calls. Solutions can deliver manual cutover with all calls being handled and in queue lost. You might be satisfied with answering all calls so an agent can explain the situation to mitigate the risk of defection, even if they are unable to perform the service due to the lack of access to applications. Understanding your business operations and your customers' expectations will help you to define and evaluate the options.

## Synergize the Plan with Your Strategy

In the VoIP world, you can recover from a major disaster or a minor hardware/software glitch with little to no disruption in your operation. BC/DR still requires an investment, but it is substantially less than 10 years ago, and can leverage infrastructure that delivers value during normal operations, as well.

*Figure 2: Strategic Alignment of Business and Service Strategies with the BC/DR Plan*


Balance costs and benefits to arrive at the right solution for your business and contact center. With so many options, develop requirements based on your service strategy and business strategy (see Figure 2). Start with your service goals (including customer expectations) to determine an acceptable level of disruption. Present this strategy to your vendor and let the negotiations begin! With VoIP, you can be confident that you will arrive at an affordable, effective solution.

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## BC/DR Definitions

- **Resiliency** — an all encompassing strategy/philosophy referring to the ability to proactively and reactively identify, take corrective action on and recover from (or plan ahead for) any type of business disruption. Resiliency is also expressed as an organization's agility, flexibility or speed of response.
- **Business Continuity (BC)** — limiting or avoiding business disruption when a hardware/software failure occurs. Continuity is classified by recovery at the enterprise, site, operational unit (such as the contact center) or specific technology level. For the contact center, continuity refers to the ability to continue receiving and handling contacts with appropriate agent and supervisor applications at limited or full capacity. Defining your BC strategy includes identifying scenarios (specific operational situations) and specifying goals for recovery time, whether calls being handled and in queue will be lost or not during disruption and recovery, availability of applications (e.g., routing) and reporting.
- **Disaster Recovery (DR)** — ability to continue or "recover" operations after a major business disruption. Major disruptions include natural disasters impacting entire facilities or the data/telephony infrastructure supporting those facilities. The DR strategy includes the technology, organizational, facilities, process and staffing aspects of recovery.
- **BC/DR Plan** — The BC/DR plan translates the BC and DR strategies into tactical application. The BC/DR plan includes tasks that enable every aspect of recovery — technology, organizational, facilities, processes and staffing.
- **Redundancy** — the duplication and/or replication of key hardware and software components that support operations including data networks, telephony infrastructure and contact center applications. These components provide recovery upon failure of an identical component either immediately (automatically) without disruption or very quickly through a manual procedure. Redundancy should be included in all resiliency, continuity and recovery strategies and plans.

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***Contact Center Pipeline*** is a monthly instructional journal focused on driving business success through effective contact center direction and decisions. Each issue contains informative articles, case studies, best practices, research and coverage of trends that impact the customer experience. Our writers and contributors are well-known industry experts with a unique understanding of how to optimize resources and maximize the value the organization provides to its customers.

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