DISASTER RECOVERY comes with many challenges and costs

In an era when most organizations simply cannot function without access to their core IT systems, virtually all CIOs recognize the need for off-site data center protection. Yet the challenges and costs of conventional disaster recovery can be staggering. They can include:

- Provisioning and operating a remote data center
- Maintaining dedicated remote virtual infrastructure at the protection site
- Maintaining redundant OS and application licenses
- Provisioning dedicated high-speed data links to the protection site
- Architecting and managing inter-site security

Ultimately, the problem is that a single organization must bear the entire capital and operating costs of dedicated IT systems in a remote location. Worse, these systems remain unused except in cases of disaster.

THE CenturyLink / DataGardens solution

Now DataGardens SafeHaven® for CenturyLink Cloud helps change the disaster recovery paradigm. You can protect your production virtual servers that reside in your internal data centers with replica instances that reside within a secure Cloud Data Center (CDC) within the CenturyLink cloud. The costs of CenturyLink infrastructure are amortized across multiple subscribers, so organizations benefit from a much lower cost structure. More important, the replica servers in the CenturyLink cloud are only activated in the case of disaster, so operating costs are even further reduced. Finally, there is no need to provision duplicate OS and application licenses — the production licenses are activated in the cloud upon failover.

SAFEHAVEN ADVANTAGE

- Near instantaneous failover and failback — limited only by boot-up times for protected VMs
- Lossless VM migration between the customer site and the CenturyLink cloud
- Continuous data protection with up to 64 checkpoints
- Capability to perform non-disruptive failover tests as needed
- Multi-OS support for virtual servers
- Failover/rollback/failback scoping from individual servers to entire sites
- Full featured multi-tiered security of Cloud Data Center (CDC)
Figure 1. When both production and protection site are dedicated to a single enterprise, SafeHaven supports Live Process Protection (LPP). As the name suggests, LPP protects not just IT infrastructure or applications, it also protects the live IT processes that are the vital workflow of any modern business. The key is that LPP protects memory and processor state as well as disk data. Consequently, groups of coupled IT systems can be transferred back and forth between sites without any interruption in service. SafeHaven leverages LPP to offer levels of protection that are simply not possible with traditional disaster recovery solutions. Live evacuation, fail-over, and fail-back for groups of coupled IT systems can be triggered either automatically or as point-and-click operations in response to automated alerts. Recovery plans can be audited and reports on recovery times and recovery points delivered to stakeholders without impacting production workflow.

Figure 2. Traditional IT disaster recovery is frustratingly expensive because it requires a dedicated recovery site. SafeHaven changes all this. An enterprise can simply provision a virtual data center within a selected multi-tenant cloud and install SafeHaven to protect its production data center. A huge benefit is that the capital and operating costs for the recovery site are now shared across a large subscriber base. Further, SafeHaven can keep recovery resources in the cloud “parked” (i.e., powered off with no memory or CPU reserved) until or unless a disaster occurs. This further reduces costs for the enterprise. Meanwhile, it only takes a few minutes to recover IT systems in the cloud. When used for recovery of private data centers in the public cloud, SafeHaven provides automated inter-site migration, failover, fallback, rollback and live recovery testing, all with support for group consistency and scripted recovery plans.

Figure 3. While multi-tenant clouds can reduce cost and improve efficiency of IT service delivery, enterprise subscribers are sometimes unwilling to use them for business critical applications. If the public cloud becomes unavailable for any reason, the enterprise user is both without core IT services and without any direct means to restore them. SafeHaven changes this risk equation in a fundamental way. An enterprise user can provision production and protection virtual data centers and use SafeHaven to provide disaster protection between them. When used in this way, SafeHaven provides automated inter-site migration, failover, fallback, rollback and live recovery testing, all with support for group consistency and scripted recovery plans.

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