Infrascale Launches Cloud Failover Appliance with Complete DRaaS Functionality

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Disaster Recovery as a Service (DRaaS) solves some important problems that administrators at small and medium-sized organizations face. When done correctly, it can provide a turnkey service that eliminates the need for managing a secondary recovery site and automate the process of bringing key applications back online. The problem is DRaaS' popularity has led to a flood of solutions entering the market. Many traditional and cloud backup companies are now claiming some form of DRaaS. As Storage Switzerland discussed in its recent article "What to look for in a DRaaS Solution" understanding the differences between the various offerings is critical to successfully surviving a disaster.

Infrascale is announcing the launch of the Cloud Failover Appliance, which includes a cloud-edge appliance coupled with DRaaS functionality that will tick most of the checkmarks that IT administrators want. The cloud edge appliance is a lightweight server designed to be the initial target for backups, that are later replicated to the cloud. Infrascale has added to the capabilities of this appliance significantly as part of their DRaaS strategy.

The Infrascale Architecture

Infrascale's Cloud Failover Appliance delivers a complete recovery, backup and archiving cloud architecture that is compatible with both virtualized and physical servers, while also able to provide online backup to a variety of mission critical applications. The appliance is installed on-premises, meaning that backups are sent to the device first, and then that data is replicated to the cloud. Infrascale employs cloud spillover technology that intelligently "spills over" data to the cloud from the appliance based on age and value of the data in compliance with policies set by the administrator.

The spill over technique is ideal for small to medium-sized customers that don't want to have a data center full of backup storage. Spillover works by initially protecting data on both the appliance and in the cloud. Based on retention policies set by the administrator, the data on the device is removed to keep its capacity requirements level. Archives are stored indefinitely in the cloud. Intelligent management of on-site data helps companies scale backup and DR without adding additional hardware. It also allows the data center to keep a virtually unlimited amount of data archived in the cloud.

The key to the architecture is plug and play simplicity. Within minutes of installing the appliance, the first backups can be underway, and disaster preparedness happens automatically.

Adding DRaaS

Solving Complex Recovery Scenarios with Push-Button Ease
With the Cloud Failover Appliance, Infrascale has added the ability to boot a virtual server either on the appliance or in the cloud. The software provides a simple interface to drive this process, including the eventual failback to production. Most importantly, it fully leverages this Infrascale architecture so that recovery can happen as quickly as possible.

Easy, push-button recovery of multiple servers is a core differentiator for Infrascale over much of their competition. Other DRaaS providers require that the customer send the provider an email or even call them on the phone prior to a recovery happening. The manual nature of the recovery process is typical because these providers lack complete DRaaS integration and have to manually provision resources in their cloud.

How DRaaS Works

The first step in the application boot process is for the administrator to click on a backed up virtual machine. The Infrascale solution then clones the VM's VMDK file from its cloud copy. Then it prepares the VM for booting in the cloud by rehydrating the VMDK and enabling a remote desktop protocol service. Depending on what computer the VM originated from, the VM may have drivers injected into it so it can run in the cloud. Finally, the VM boots up and is assigned an IP address. The administrator then logs in and prepares the VM for user access. Infrascale also provides the ability to concurrently boot multiple VMs (up to 200), which allows IT planners to recover multiple applications simultaneously.

Five Keys to DRaaS Success

As providers race to offer DRaaS to their customers, some are using broad brush strokes to paint their DRaaS picture. The client is well advised to dig deeper and make sure they know what capabilities the provider has when considering a DRaaS solution.

1 - Recovery Times and Process

The first key to a DRaaS solution that meets the needs of the organization is to make sure that the solution can meet the recovery times that the organization needs. IT professionals also need to ensure that the recovery process is not complicated. A disaster is a stressful time; complex processes tend to break in times of stress.

As mentioned before, the push-button is a good example of the ease and speed at which the Infrascale solution can recover. It is also a sign of tight integration between the application and the cloud provider's infrastructure.

The lack of being able to start virtual machines concurrently is another time sink that may go unnoticed until it is too late. Considering that many applications consist of multiple servers, sequentially starting each VM that an application requires can significantly delay bringing an application online. The Infrascale solution allows for concurrent starting of virtual servers so that sophisticated applications can be brought online quickly.

2 - Flexible Recovery

Recovery should also be flexible and not always require the cloud. Disasters caused by application code and server/storage system failures are far more common than a disaster that will wipe out an entire data center. Failing over to the on-site appliance is far more

efficient than triggering a cloud recovery, but many providers don't allow for that. Of course when the data center is involved in a site-wide or regional disaster, DRaaS, as long as it meets these requirements is wholly appropriate. Look for a solution that can recover from both the on-site appliance and in the cloud provider's facility.

3 - Simple Fail Back Strategy

In the case of a failure, returning the application to its original host should also be automated. Flexible recovery helps here too. If recovery can be made on the appliance then there is no need to deal with cloud latency issue. But in the case of a data center failure the cloud is used, so guiding the administrator through that process is also critical. The DRaaS solution should provide multiple options to bring the on-site storage system back in sync. Including a fast sync with the appliance, if it survived the disaster, as well as the ability to ship data via USB hard drives. Infrascale also makes this kind of bulk shipment of data easy.

4 - Performance Impact

The next key is the performance impact. It is critical that the IT planner understands what are the compute capabilities of the provider. The providers potential compute capacity is important because during a declaration their role changes from backup provider to compute provider. Assuming a regional disaster they may be required to support hundreds of customers for a prolonged period of time.

Infrascale is an example of a provider with plenty of internal compute capacity. They are also flexible in which provider's cloud is used. The IT planner has the option of selecting a regional service provider, the Infrascale infrastructure or a public cloud provider like Amazon. Each of these destinations will have different compute capabilities, but the flexibility is ideal for a customer that is concerned about the performance of applications during the actual disaster.

5 - Costs

Obviously costs are also a concern. Organizations look at DRaaS solutions because they can defray the cost of building a secondary site and equipping it with enough hardware and IT personnel to survive a disaster. The problem is that some DRaaS pricing contracts are as confusing to read as cell phone bills. Infrascale provides a straight forward pricing model based simply on the collective storage size of the systems. The all-inclusive price includes cloud storage, local system recovery, cloud recovery and an ample number of disaster tests and recovery events for one flat rate per terabyte.

Conclusion

The race is on. Providers are scrambling to offer DRaaS solutions to their customers. But these DRaaS solutions have to meet a certain bar of requirements. "Almost" isn't good enough during a disaster. Infrascale is a company that has thought through the issues and is delivering a simple to use solution that meets the failover needs of the modern company.