Making DRaaS Work for You

DRaaS: The Evolution
Disaster recovery (DR) planning has a reputation for being difficult and time consuming. Setting up alternate processing sites, procuring hardware, establishing data replication, and failover testing have been incredibly expensive undertakings. To top it all off, the need for 24.7.365 business application availability threatens to make disaster recovery planning an exercise in futility.

Disaster Recovery as a Service, or DRaaS, is turning the DR business on its head. The responsibility for all of the gritty details one used to have to juggle in order to ensure that every system, file, database record, and network element was duplicated at an alternate processing site can now be passed onto a trusted service provider. A face — not just an interface.

DRaaS is bringing true DR capabilities to an entirely new pool of organizations — folks who previously considered DR to be out of their reach. Today, DRaaS makes setting up DR almost as easy as setting up a new smart phone — seriously. People who set up DR using DRaaS are amazed at how much knowledge they aren’t required to have. This makes DRaaS available and attractive to larger audiences.

Taking a Closer Look
In its essence, DRaaS is a cloud-based service that makes it easy for organizations to set up alternate processing sites for disaster recovery purposes. Like other “as a service” offerings, advanced software enables DRaaS to simplify the entire process for organizations of any size as well as the service providers that offer this service.

DRaaS is important because it represents an innovative and less costly way to back up critical data and quickly recover critical systems after a disaster. DRaaS does this by leveraging cloud-based resources that provide infrastructure that is far less expensive than on-premise systems due to the ability to scale and share cloud resources.
To meet the growing demand for software resilience, DRaaS has brought simplification and reduced costs to organizations that are serious about implementing DR. With DRaaS, an organization can implement a high-performing DR solution for its critical systems but without any of the complexities. Like other “as a service” providers, DRaaS providers take care of the back-end complexity for their customers and provide a simple user interface for setting up and managing a DR solution.

**DRaaS and Virtualization**

Virtualization — the technology that permits multiple operating system instances to run on each physical server — has freed up IT infrastructure and facilitated the revolution that is the mass migration of applications to the cloud. Individual operating systems (which reside within virtual machines) reside in “images”, which are large flat files that can be copied to a DR site for rapid recovery of servers. The power of virtualization and virtual machine management have contributed significantly to the power of DRaaS.

Some DRaaS solutions have the ability to provide advanced, imaged-based virtual machine (VM) replication, which can be used to send VM images to a cloud service provider. Service providers can provide virtual cloud hosts; recovering your server is as easy as booting those hosts from the images sent from your primary site.

Better DRaaS solutions include agentless components — meaning there is no software present within individual virtual machines. Instead, you install a module in the virtual environment, which intercepts local disk traffic and sends it to your cloud service provider, where another module receives the traffic and keeps your server VM’s and databases up to date, usually within minutes.

**DRaaS Benefits**

DRaaS represents the next generation of rapid system data recovery and always-on availability, helping organizations avoid downtime and business disruption without the high costs associated with traditional hot sites.

The low cost and simplicity of DRaaS makes it available to an entirely new class of organizations. The ability to recover applications
in the cloud, if and when needed, slashes the cost and complexity of recovery capabilities. Organizations that were on the sidelines, longing for DR capabilities, can now enjoy capabilities that were once reserved for large organizations.

Building A Successful DR Plan
Surviving a disaster is rarely an accident: Rather, a successful DR plan is required if your organization is going to be operating after a disaster. There are a lot of things that an organization needs, including:

• **Executive support and involvement.** A DR project is not one of those activities that can take place in isolation. Instead, DR needs support from executive management, because it takes time to build a proper DR plan, and the people who best know how to do it are probably busy with other matters like day-to-day operations. Unless management mandates the DR project and its success, it’s going to be difficult for participants to stay involved.

• **The best minds.** The people in the organization who have the deepest knowledge of company operations and IT systems are the ones who need to staff the DR team. It’s no good putting the newest, greenest employees on the team; the newbies don’t know enough about the details to know how critical systems can be replicated and used.

• **Defined scope.** In all but the smallest organizations, the scope of the project needs to clearly define which business units or departments are in scope and which are not. Otherwise, the organization is liable to bite off more than it can chew, putting the entire DR project at risk since it will be very difficult to complete it if too many systems are in scope. The best bet is to start small, get some wins, and expand the scope later once everyone is more familiar with how DR planning and execution work.
In life, as they say, the only certainties are death and taxes.

In IT, the only certainties are bugs and outages. Disasters may be a distant third, but the impact of disasters is profound: They threaten the reputation and the very survival of the organization. Without a proven DR plan, there may be little hope of surviving a disaster.

**Top 3 Benefits**

**Availability**
Extending your existing data center to the cloud will significantly improve the availability of your critical applications. Improving availability is the main reason organizations adopt DRaaS solutions in the first place.

**Cost Reduction**
Prior to DRaaS, DR capabilities were in fact a lot of disorganized pieces made to work at greater cost and effort, and required uncommon expertise to manage. Feature for feature, implementing DRaaS costs way less than traditional means, and require no capital expenditure. There are no hardware costs — you just pay as you go.

**Simplicity**
A DRaaS solution brings together all of the elements of DR site planning, architecture, and capabilities into a single set of tools. Before DRaaS, doing the same thing required a lot of different tools and systems that weren’t designed to work together.

This extends to your personnel: the ultra-high skills required to build and maintain more complex data replication and server failover mechanisms are not needed with today’s DRaaS solutions.