Introduction

Due to the complexity of protecting ever-changing infrastructures and the perception by some that disaster recovery planning and testing is "optional," IT departments in companies of all sizes tend to be in a constant state of struggle. Key challenges include:

- Justifying and funding the proper disaster recovery infrastructure
- Getting their DR infrastructure updated and tested
- Finding time to investigate and understand the dizzying array of new disaster recovery solutions.

But, these challenges are not insurmountable. Thanks to advancements in cloud computing and disaster recovery software, there are more choices than ever before for more simplified, cost effective datacenter protection.

Welcome DRaaS

Disaster Recovery as a Service (DRaaS) is an option that is rapidly gaining popularity among enterprises and is being offered by increasing numbers of service providers. Let's define.

DRaaS in its most generic form is when a third-party Managed Service Provider (MSP) provides you some type of remotely-hosted disaster recovery services to protect your data and applications. The range of DR services offered can vary greatly from provider to provider, however most are offered under a plan where DR software is hosted by the provider and licensed to users on a subscription basis.

The level of recovery capability can vary as well, protecting just data files, one or more critical applications, an entire single server or every server in the datacenter. But, for any level of recovery to be possible. replication to the MSP's disaster recovery site is always required.

Most MSPs provide options that include both replication services, for data protection, and the ability to recover your most critical servers, should those servers fail. How the data or servers are recovered, and especially how quickly they can be recovered, varies by the kind of service being contracted. Some solutions, in addition to replicating the server and application data in real-time, must be able to take over processing immediately in order to provide a lower recovery time objective (RTO). This requires technology that ensures that the server's program and Operating System (OS) settings are also replicated continuously and that the applications on an existing cloud-hosted VM can be activated immediately. For example, the solution may automatically provision an entirely new recovered, configured and activated VM within a few minutes.

5 Reasons to Consider DRaaS

DRaaS offers:

1. **Reduced Disaster Recovery Costs** – if you currently have a disaster recovery site in place, you are already familiar with the high costs associated with such an infrastructure. Beyond the unavoidable investments in replication software and the required software licenses for servers, storage and security, there are a number of significant additional costs involved. Most of these additional costs are effectively eliminated by using DRaaS through a service provider:

   - Owning your own building or leasing space for your secondary datacenter
   - Alternatively, leasing a cabinet or cage at a datacenter provider
   - Monthly costs associated with power, cooling and Internet bandwidth at the secondary site
   - Purchase or lease of servers, storage and network equipment at the secondary site
   - Travel to and from datacenters or on-site staff at the secondary datacenter

2. **Reduced Complexity** – as the list above shows, building and maintaining a secondary DR site can be both costly and complex. If all of that infrastructure could be eliminated then the administration, upgrade requirements, maintenance contracts and more could be eliminated as well.

3. **Achieve Interoperability** – so many DR solutions are based on replication/synchronization to/from only one specific hypervisor, or may be restricted to use with one model physical server. Some solutions are even application specific. In contrast, DRaaS solutions are available that are hardware, hypervisor and application independent, so you can protect servers across different hypervisors, replicate data between dissimilar storage systems, etc.

4. **Save Time** – by reducing complexity and simplifying the disaster recovery solution with a single provider, IT groups will save a tremendous amount of time as compared to managing their own disaster recovery site. Additionally, if you have yet to deploy your own DR site, you'll be able to deploy DRaaS within hours or days (depending on your number of servers) as compared to the weeks or months it can take to deploy your own site.

5. **Provide a Comprehensive DR Solution** – in many cases companies who implement their own DR site have to do it in phases and only protect the most critical servers first (In many cases, never even being able to protect all servers). Because DRaaS is so much easier and more affordable, many companies are able to protect all of their servers (physical and virtual), providing a complete DR solution.

Typical Challenges in Adopting Public Infrastructure Cloud Services

Many companies are excited about public infrastructure cloud services. But they also have concerns about the challenges they will face when adopting this new model for protecting their business. Those concerns include:

- Privacy and security of their data
- Loss of control and lack of self-service
- Availability, reliability and performance
- Migration to and from physical to cloud, virtual to cloud and cloud to cloud

These are all valid concerns and are topics that you should discuss with any cloud providers you consider. These concerns are addressed by the provider's infrastructure, policies, service level agreement (SLA) and the DRaaS solution that they employ.

Best Practices in Selecting a DRaaS Solution

When evaluating DRaaS solutions yourself, how will you select from the numerous options available today? Here are six must-have features and capabilities to look for when selecting a DRaaS provider:

1. **Multi-platform support** – make sure that all of your physical, virtual and cloud-hosted production servers can be protected. Yes, you will have production in the cloud one day, if you don't already.

2. **Multi-cloud support** – you should be able to use more than one cloud service or platform concurrently (e.g. AWS, Azure, Softlayer, HP Helion, vCloud Air, Google, etc.) to mitigate the risk of your sole cloud service suffering a major outage. This also frees you to switch from one cloud service vendor to another in the future.

3. **Recovery into the cloud** – rather than just having a "recoverable backup image" in the cloud, you want to be able to actually switch operations to your cloud backup servers should a disaster occur.

4. **Flexible licensing** – your technology provider should offer DR with subscription based, service-oriented licensing and billing options.

5. **Real-time replication** – true real-time replication captures changes as they happen, eliminating the risk of losing critical data. All other solutions have a varying sized window where data/changes will be lost if an outage occurs.

6. **Scalability** – your DRaaS solution should be able to grow as you grow, whether you are a small business with just a few servers or your datacenter is expanding to thousands of physical and virtual machines.

Recommendations

DRaaS solutions have advanced to the point that they are now realistic solutions for companies of every size, from SMBs to Large Enterprise. Organizations that already have a DR site in place should investigate whether their TCO could be reduced by implementing DRaaS through a service provider. They should also consider DRaaS as a cost-effective way to further strengthen and diversify their existing DR capabilities.

Double-Take: The Choice of Leading DRaaS Providers Worldwide

DRaaS solutions built on Double-Take provide the ability to respond on-demand to all your workload protection and recovery needs with a single easy to manage technology. Because it is hardware, hypervisor and platform independent, Double-Take is the solution of choice for implementing DRaaS. Best of all, Double-Take is ready to support even the most scalable hypervisor and cloud computing technologies by enabling many-to-one protection of physical, virtual and cloud-based server workloads.

Migrate, Protect & Recover… Anywhere.

Vision Solutions is the premier provider of software solutions designed to protect data, minimize downtime and maximize resources for the modern data center.

We are the only company to deliver workload migrations, high availability, disaster recovery and data sharing – across multiple operating systems, on any hardware and on any physical, virtual or cloud-based environment. Our solutions perform near-zero downtime migration of data, applications and systems to significantly reduce cost, risk and resource requirements.

We utilize real-time replication to prevent data loss and enable fast recovery to secondary servers in the event of a planned or unplanned failure at the primary site. Our software also enables different database platforms to seamlessly share and consolidate data in real-time for proactive, business critical decision-making.

Vision Solutions has been serving enterprises and managed service providers for over 25 years through our portfolio of Double-Take®, MIMIX® and iTERA® product brands.

For more information call: 1.800.957.4511 (toll-free U.S. and Canada)
info@visionsolutions.com or visit visionsolutions.com

Also find us on:

Facebook:	http://www.facebook.com/VisionDoubleTake
Twitter:	http://twitter.com/#!/VSI_DoubleTake
YouTube:	http://www.youtube.com/VisionDoubleTake
Vision Solutions Blog:	http://blog.visionsolutions.com/

Double-Take®
by **Vision Solutions**®

15300 Barranca Parkway
Irvine, CA 92618
1.800.957.4511
info@visionsolutions.com
visionsolutions.com