The Ongoing Evolution of Disaster Recovery

DR-as-a-Service, secondary data centers in tier 2 cities, purpose-based backup appliances and more are all trends in the DR space. By Jasmine Desai

Having a proper disaster recovery system in place is a must. Systems need to be in place to minimize the effects of a disaster (including natural ones) and ensure that an organization can resume its IT functions in a jiffy. Disaster Recovery has become a complex and multi-layered affair.

According to ABI Research, the global business continuity and data disaster recovery market will exceed $39 billion by 2015. DR has a high potential in India. It is a complex market and there is smorgasbord of solutions available in both hardware and software along with lot of related services. According to Naresh Singh, Principal Research Analyst, Gartner, “There are a wide range of customers with different maturity levels. Based on their Business Impact Analysis (BIA) some organizations have gone in for multiple levels of solutions.” The trend is shifting from looking at only securing the IT set-up to overall business failure. On the hardware side, these solutions are storage and backup based.

Organizations, especially in the BFSI sector, tend to have near site data centers and these are used when you require synchronous replication of data. It brings down the span of interruption in the case of a disaster and this can even dwindle to zero. DR can be wholly outsourced to providers such as Netmagic and CtrlS. Mentioned Singh of Gartner, “There are SIs who are providing DR services in alliance with hosting companies and solution providers that organizations can look to.” It is becoming a highly specialized arena with vendors having solutions for almost every aspect. There are some vendors who specialize only in the technology area like server failover etc. Then there are those who specialize in the entire flow of disaster declaration. Increased virtualized environments are responsible for a lot of DR outsourcing.
Technology trends

Purpose Based Backup Appliances (PPBA) form an important category in backup. According to IDC, EMC has a 62% market share followed by IBM. According to P K Gupta, Director and Chief Architect, BSR Practice, EMC, “Indian customers have started talking about dollar per gigabyte pricing. Customers want more integrated solution on the DR and backup side.”

Then there’s dedupe. According to Vijayant Rai, Director - Channel Sales, India, CA Technologies, “Data deduplication and storage virtualization will be in the end users’ investment radar this year. Data deduplication improves performance, while storage virtualization provides greater flexibility, hardware cost savings and moves data without disruption.” Data Management tools along with solutions for High Availability (HA) and replication will help companies manage growing data stores while providing cost-effective methods for application availability and business continuity.

DR pitfalls

The path to a successful DR implementation is strewn with challenges. According to a Forrester Research Paper by Rachel A. Dines, “Disaster Recovery Exercises Fall Short Of The Finish Line”, enterprise DR preparedness is still lacking. For the most part, it isn’t for a lack of advanced technologies in DR architectures but the lack of formal processes and a strict regimen for exercising DR plans. Although most enterprises claim they conduct a full exercise of their DR plans at least once per year, anecdotal evidence suggests that the majority of these exercises are not comprehensive and thorough; enterprises often just exercise a portion of the plan or a subset of applications.

According to Avinash Pitale, Co-founder & JMD, Omnitech, “As far as the implementation of DR is concerned, the current challenge has been cost but, with the advent of Cloud Computing, the cost will dramatically reduce.”

Also, the challenge within DR/BC is to maintain changes that occur at the primary site. A few tools have been launched in the market to take care of online change management in application, operating system and database simultaneously. Currently, the challenges would be around licensing, which is not uniform for all application vendors when it comes to the DR site.
DR in the Cloud

DR-as-a-Service will steal the show in both the large enterprise and the SMB segments. According to Pitale of Omnitech, “In the next two to three years, we see lot of growth in the IT/DR market especially with the advent of the Cloud. DR-as-a-Service will become a common item on the CIO’s agenda. Companies will start using Cloud technology for their DR in order to take advantage of the pay-per-use model.

This will improve their go-to-market model, reduce their investment on a DR site and offer elasticity of operations in totality.” According to Gartner, by 2014, 30% of mid-sized companies would have adopted recovery-in-the-Cloud, to support their IT operations recovery, up from just over 1% today.

Indian companies have begun setting up DR sites as part of their business continuity plans and are looking at high availability and disaster recovery solutions. IT Departments will face challenges when it comes to data management. Without a doubt, data will continue to pile up and their internal end users and customers will demand even higher levels of application availability. The expectation today is that all data and applications should be available instantly. In addition, there is an increasing amount of regulatory oversight, which mandates that companies hold on to data longer than they had to in the past. The customers challenge will be to manage the continued explosive growth of data, protecting critical applications and ensuring that comprehensive business continuity and disaster recovery measures are in place.

From a data management perspective, on a macro level, the challenge will be to manage the continued explosive growth of data, protecting critical applications and building DR capabilities. According to Rai of CA Technologies, “There is an increased appreciation in end user organizations that a single service disruption—be it the failure of a critical system, an unplanned outage or natural disaster—can do irreparable damage to the organization and that they need comprehensive business continuity and disaster recovery measures in place.” In addition, due to a rise in the incidence of virtualized environments there will be plethora of managed services offerings specially targeting SMBs. Organizations want to get more out of both their existing environment as well data management solutions.

All this spiraling complexity will prove to be a great catalyst for Cloud services and pay-per-use models. The latter will not only help reduce upfront costs on DR but will also offer flexibility for expansion. Whenever there is an increase in an organization’s quantum of business and the primary site has grown, thanks to elasticity of operation due to the Cloud, it will be able to expand its DR site with immediate effect.

DR is rapidly catching on in tier 2 cities. According to Sunil Chandana, CEO, Stellar Data Recovery, “We see more automation in small towns and cities, where they have no proper backup facility available that increases the time taken to recover vital data.”
Factors prompting adoption

In today’s technology-dependent business, even small data disruptions can render heavy losses. Growing incidents of data loss has led to the growth of the data recovery requirement. There have been remarkable advances in data recovery technology. Going by the present trend, one can safely assume that there will be a meteonic rise in the growth of the data recovery industry. Customers have become more aware of their needs in this space and expect quick, efficient, and safe services.

Natural disasters will continue to push organizations in the direction of DR. According to Symantec research, there were significantly more natural disasters in 2011 than during previous years. According to Anand Naik, Director, Technology and Sales, India & SAARC, Symantec, “During 2012 we will continue to see mother nature test organizations’ disaster recovery plans. Unplanned outages caused by human error, system failure, and poor planning made the headlines of major newspapers and required corporate spin doctors to repair damaged reputations.”

The likelihood of organizations that will need to implement their DR plans is greater than ever before. Risk to reputation will be a major factor in implementing DR services, more than compliance and business competitiveness. There are so many new risks that arise, that just having plans is not sufficient. Virtualization and the Cloud have put greater pressure on IT organizations to rethink their strategies, but the speed with which these solutions have been deployed has often meant that business continuity plans were not well thought out.

Organizations will need to start looking at business services more holistically and automate recovery to expedite the process while reducing their reliance on personnel. They will need to become disaster proof. Organizations have to built strategies of working their way around new technologies.

According to Rahaju Pal, Director, Deloitte India, “For any DR plan to be successful it needs to be constantly communicated in the organization. India is a service-oriented market and there is a need to demonstrate maturity in this space.”

Another trend which will be critical in the way that DR is planned will be predictive analytics. Pal of Deloitte said, “Organizations will be looking into things, which can go wrong and accordingly plan and design their DR strategy.” This process is called Risk Intelligence BCM. Organizations are also automating failover situations. This has a lot of traction in the BFSI sector. It also enables much smoother operation by eliminating manual intervention and decision making. It is getting a lot of visibility at the senior management level and has started penetrating into operational processes.

2012-13 will see growth in the DR market especially on account of the advent of the Cloud. This will help companies fine tune their go-to-market model, reduce their investment on DR and offer elasticity of operations in totality.