Progression

Disaster Recovery as a Service 2013

Introduction

As an enterprise automates and integrates more of its processes, the business itself becomes dependent on the technology and its availability. As the business scales, this is an inevitable transformation. The business moves from tedious, error-prone manual processes to automated systems that enable smooth workflows and faster and more accurate decision making. The company invests in ERP, CRM, supply chain management and other solutions. But as the business moves to being dependent on these technology enabled systems, it also becomes vulnerable to outages caused by natural or man-made disasters. The business comes to a standstill the moment its systems and processes become unavailable. That's why a growing enterprise needs to invest in Disaster Recovery (DR) as well.

Till recently, DR was considered an expensive investment and hence only large enterprises would opt for it. Now that DR as a Service has emerged as a viable alternative for most businesses, it's important to get an overview of how an enterprise can move to a DR solution. In India, this offering gains huge significance because of various reasons: frequent occurrence of earthquakes and heavy rains, unrest in various parts of the country that paralyze business activity, and power grid outages that can stretch over days. The media is replete with stories of how many US businesses with a well-planned DR strategy in place were back to work within hours of a major fire or a terror attack. Can Indian businesses claim to have the same level of readiness? With DR as a Service, this is now within reach for many small and medium size companies.

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Why do you need Disaster Recovery?

Consider a manufacturing company with fully automated processes on ERP and SCM. What would happen if the IT setup is not available for a day or a week or a month? What would be the impact on various processes such as issuing invoices to the customer, receiving material from the vendor, forecasting the daily production plan? If these functions don't happen, it brings the business to a standstill.

Most companies consider it sufficient to have a strategy for backups, and expect that this would cover most exigencies. That is, however, only one aspect of it. With automation, businesses now are in a real-time mode, with planning, production and delivery times having shrunk considerably. With transparent workflows and tracking systems, there is high visibility across the value chain, from sourcing of raw material to delivery of product. If this visibility is compromised at any level, the entire business gets impacted. So not only does an enterprise need backups of critical data (and the right technologies to enable rapid recovery) but also ways to ensure that the key workflows do not come to a standstill for an extended period of time.

What could bring a company to a standstill?

Technology breakdowns: Network issues, virus attacks, or hardware failure could lead to downtime.

Fire: A very common occurrence in India, especially in crowded commercial complexes that are at the heart of doing business in the country.

Local unrest: If a manufacturing company has a plant in an industrial area that sees unrest, it is vulnerable to a situation where the employees cannot even report to work. Riots, protests and demonstrations in the location of operations can bring the company to its knees.

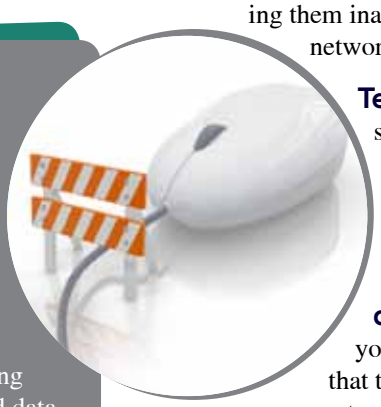
Earthquakes: The northern belt of India has seismic zones with various levels of seismicity, with some areas in Zone 5, the highest level. The Northeast part of India is also a Zone 5 area. Some of the key industrial centers in India lie in Zone 4, or the High Damage Risk zone. This puts a sizable number of businesses in India at risk of incurring earthquake related damages.

Flooding: Unexpected heavy rains often lead to instant flooding in various parts of cities rendering them inaccessible. Flooding and rains usually impact network connectivity as well.

What's the cost of downtime?

While companies do have a sense of the true cost of downtime, here are some factors to consider while calculating it.

- Cost of infrastructure that is not being used because of the downtime
- Loss of productivity of personnel sitting idle without access to applications and data
- Loss of revenue
- Delay in raising invoices
- Delay in payments leading to penalties or loss of face
- Increased cost for additional work, for personnel and operations
- Loss of new opportunities as the time of key people is spent on bringing the systems back to work
- Loss to reputation



Terror attacks: In recent times, India has seen markets being jeopardized and commercial establishments coming under siege. Businesses can come to a standstill if they are not prepared to handle such a scenario.

Inability of staff to manage processes manually: As enterprises welcome younger people into their workforce, they realize that the new generation is accustomed to working on automated systems and cannot be expected to use manual processes as an alternative till the systems come back on. This shortens the window for the downtime as well.

DR as a Service

Disaster Recovery as a Service is seeing wide acceptance by enterprises that cannot afford to invest in replicating their IT infrastructure for DR. With DR now available as a service in India, a host of benefits open up for enterprises who don't have deep pockets to build and run elaborate DR plans. Here are some of the benefits that DRaaS brings to businesses:

No need to set up DR infrastructure: There is no need to buy expensive servers, storage servers or worry about the costs that go into maintaining them. All that becomes part of the service provided by the DRaaS provider.

Flexibility: Companies can choose the parts of their IT setup that needs to be brought under DRaaS. They can define the Recovery Point Objective and Recovery Time Objective as per their business needs. And if that changes over time, the DRaaS provider will be able to scale up or scale down as required.

Opex Vs Capex: DRaaS allows users to pay on a monthly basis without upfront investments.

This makes the whole proposition affordable for small and medium size enterprises.

Reliability: Running DR as an internal process is challenging as the internal resources are constantly focused on the production environment and supporting the customers. DR doesn't get enough attention to keep it up to date. Even routine DR drills may not get enough internal resources. DRaaS companies, with their processes and scale, take on a lot of effort from the internal IT teams and ensure that the DR infrastructure is in sync with the production environment, and that regular DR drills are conducted without taking too much bandwidth of the internal resources. In effect, with DRaaS the process is significantly more reliable and successful.

Access from anywhere: With DRaaS, companies can access their key applications from anywhere so work doesn't come to a halt. This works well in case of disasters which cut off access to the physical workplaces.

No need for internal DR teams: With a DRaaS solution, companies do not need to have highly trained DR teams to take care of their infrastructure, or worry about their attrition or growth.

DRaaS Technologies

Some of the key technologies that are at the forefront of DR are:

VMware vCenter Site Recovery Manager: vCenter Site Recovery Manager is a leading disaster recovery management product. It ensures simple and reliable disaster protection for all virtualized applications. It uses vSphere Replication or storage-based replication to provide:

- Simple management of recovery and migration plans
- Non-disruptive testing
- Fully automated site recovery and migration

It supports a broad set of storage replication products to replicate virtual machines to a secondary site. When there is a site failover or migration, Site Recovery Manager automates failover and failback processes.

Why Progression

- Vast experience of delivering pioneering IT solutions, in India and across the world
- Deep expertise in managing all major enterprise applications on Private and Public Data Centers
- Focus on DRaaS solutions that deliver business value, expertise in technology and process with infrastructure available as a service across diverse locations in India
- Partnerships with VMware, Oracle and HP to deliver state-of-the-art DR solutions cost effectively
- Established reputation for delivering outstanding technology support and service

Oracle Data Guard: Oracle Data Guard is a disaster recovery solution to protect mission critical databases on Exadata, which is Oracle's database solution for different types of workloads. Data Guard is also used to maintain availability if the production database is impacted for any reason, and to minimize downtime during planned maintenance.

Data Guard provides the software needed for management, monitoring, and automation to create

and maintain one or more synchronized copies of the primary database.

HP Serviceguard: HP Serviceguard helps companies monitor the availability and accessibility of the critical IT services, such as applications and databases. Those applications, and the IT infrastructure they use are monitored for any fault in hardware, software, operating system, virtualization, storage, or the network. When a failure or threshold violation is detected, Serviceguard automatically and transparently resumes normal operations in seconds by restarting the service in the pre-defined manner and data center.

Choose your DR option

There are several approaches for disaster recovery. An enterprise has to choose the best approach depending on a range of factors such as cost, key applications, security and regulatory issues, and so on.

New generations of employees are used to working on automated systems and cannot be expected to use manual processes as an alternative till the systems come back on

Physical or virtual infrastructure

Companies can replicate their existing physical infrastructure or parts of it to an infrastructure that is either physical or virtual. In the physical infrastructure mode, service providers will set up the IT setup within their data centers or the company's data center with dedicated infrastructure assigned for its DR.

This approach is preferred by companies who are finicky about their setup being tangible, that is, the infrastructure can be seen physically.

Companies can also choose to have their DR setup in the dedicated virtual mode in their own data center or that of the service provider. This allows for better efficiencies in the use of the infrastructure.

Shared or dedicated infrastructure

As mentioned above, the company can choose to have a virtual infrastructure that can either be shared or dedicated. With the shared approach, costs come down significantly.

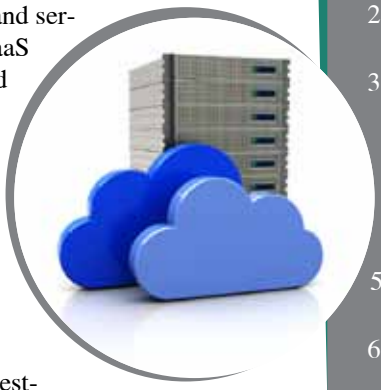
Near-site and remote DR

Companies can opt to have near-site DR and/or remote DR depending on their business needs. This means that in the event of a disaster or downtime, the switchover happens on a site that is located geographically near or far away. If a company faces hiccups frequently, it could be a good decision to have a near-site DR approach, as the data latency will be less in comparison to a remote site.

Some companies opt for both sites to ensure that they build geographical redundancy into the disaster recovery plan.

Conclusion

Many mid-size and large Indian businesses have not considered DR as a key business initiative though they do understand that it is a critical aspect that must not be ignored. With DRaaS now becoming a reliable and financially feasible option, companies can put into place the systems, processes, tests to have the right DR plan in place. Progression, a pioneer in IT technologies and services, is leading the DRaaS deployments in India and helping mid-size and large manufacturing and service companies scope out their DR strategies, making DR operational and managing it for them.



For more details on DR strategies, Return on Investments on DR, write to us at **info@progression.com**

Assess your DR needs

There is no one DR or DRaaS solution that fits everyone. Each business is different, and hence its DR needs are different. Here are some key points to help in DR sizing.

1. Calculate how long the business can operate without access to the critical applications and databases. What is the maximum downtime the business can withstand?
2. How much data is the company willing to lose in the event of a disaster?
3. Which are the key applications and databases that need to be restored? In how much time?
4. How much of the IT setup needs to be covered under the DR plan? Is it 25%, 50%, or all of it?
5. What is the load percentage for the DR provisioned? (100 % users or less)
6. What are the regulatory requirements of the industry in which the company operates with respect to disaster recovery?
7. What is the budget for DR?

About Progression

Ever since its inception in 1995, Progression has been at the forefront of technology delivering outstanding IT infrastructure services to create significant business value for its customers. Today, Progression is a leading IT infrastructure service provider offering a comprehensive range of cloud offerings, remote management services, co-location hosting, managed Hosting and DR services to its valued customers across the world.

With a team strength of over 150 and growing, Progression has engineers trained and certified in designing, architecting, selling, servicing and optimizing computing infrastructure based on products from market leaders such as VMware, HP, Oracle and Microsoft. Progression is widely recognized for its passion to stay abreast of the latest technology innovations and breakthroughs. It has been a leader in Server virtualization/consolidation solutions, builds Private Clouds and offers Public Cloud computing services for business critical applications.

Progression adheres to ITIL and ISO standards in service delivery. The company has been recognized for its commitment to deliver the right solutions to customers through awards instituted by VMware, Hewlett Packard, Dataquest and others.

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