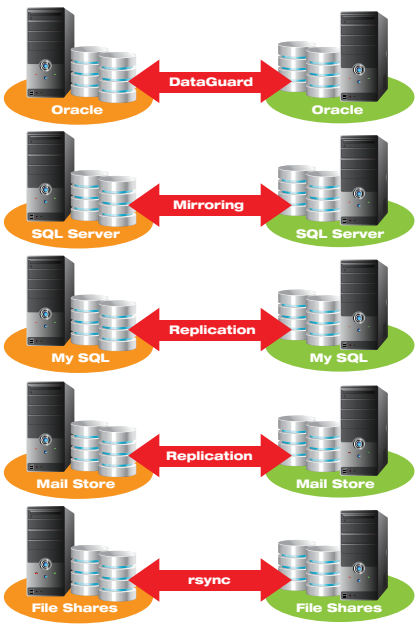
Digital Edge Global Continuity Solution

As compliance & business standards constantly rise, the ability to deploy new applications in-house has become a challenging task. Requiring high availability, legacy system integration, recoverability, and business continuity provisioning, businesses are moving faster than traditional IT departments can keep up with.

Traditional DR Implementation



TRADITIONAL DISASTER RECOVERY IMPLEMENTATION

The traditional way of approaching disaster recovery (DR) is providing duplicate hardware and software in geographically diversified datacenters. Replication is then created to link your production data to a disaster recovery standby environment. This method implies that all data sources from production are mirrored in the disaster recovery site.

In the best case scenario, the data in the DR is available in Read-Only state. However, there are some cases the data is not available in the DR until failover is initiated due to technological constraints. All applications are configured in DR to operate with mirrored data. They sit idle until failover occurs and data becomes available.

Traditional DR Implementation utilizes various mirroring/synchronization mechanisms from different vendors and utilizes different techniques, hardware and sometimes third party software to keep production and DR data in sync. DR requires a second set of hardware and software licenses to have your business application on standby mode. This adds cost to the DR implementation.

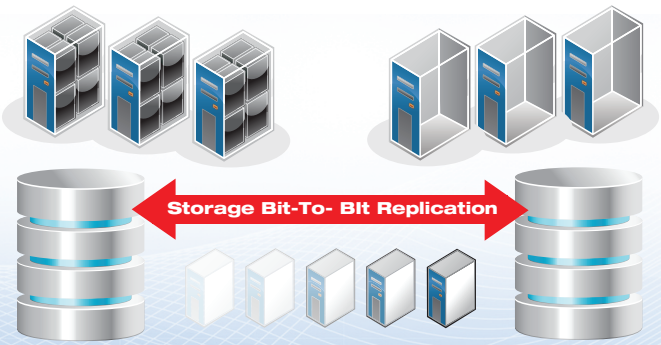
Traditional failover implementation is not a small task. Applications may interdepend on data and the order of startup which increases complexity in the migration process. Most companies have run books, trained personnel, policies and procedures governing disaster declaration and following behavior. Testing of the solution quickly becomes a struggle. Failing back is uncertain and the overall traditional DR implementation ultimately becomes a questionable solution.

DIGITAL EDGE GLOBAL CONTINUITY SOLUTION

The Digital Edge Global Continuity Solution is based on virtualization and storage mirroring technology. Utilizing Digital Edge's cross-connected network, storage infrastructure, and datacenter backbone creates a technology offering unparalleled results in the following areas:

- Financial savings
- Reliability
- Assurance of uptime during natural or human inflicted outages.

Digital Edge Global Failover Cluster



The Digital Edge Global Continuity platform is a dual High Available (HA) virtualization cluster where all of a clients' technology runs. IT groups do not have to analyze and build a solution around new application roll outs as the whole cluster becomes a global, geographically diversified failover cluster.

Both production and DR Datacenters run HA virtualization clusters where each virtual instance uses enterprise storage for their file storage. Digital Edge implements an enterprise storage specific data synchronization technique that keeps storage LUNs in sync and brings any production updates to the DR cluster.

Digital Edge Global Continuity Solution

Bit-to-bit LUN synchronization allows clients to use a single unified method of synchronization data between production and DR, regardless of specifications of the application technologies. Additionally, clients are able to easily transport other applications into the cluster without further analyzing, redesigning synchronization or failover order.

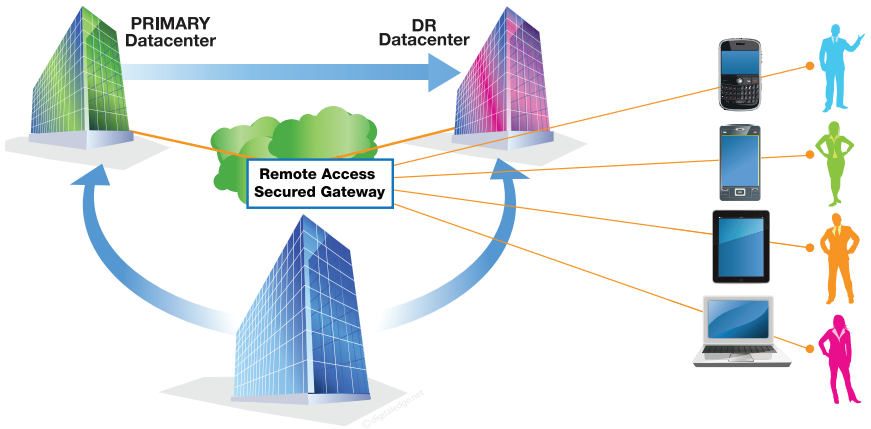
Digital Edge implements standard control over replication and tests failover and performance of the system so the solution is centrally managed by a single operator. The failover process is defined in the recovery scripts. Because it is fully automated, the needs for run books and training are eliminated.
Typical system architectures include MPLS or private point-to-point connectivity between both the production and DR Datacenters. Digital Edge operates our own inter-datacenter network backbone that can be used by clients.

The client's office(s) have seamless access to both production and DR Datacenters. Aside from their dedicated access to production and DR Datacenters, Digital Edge provides secure remote connection that corresponds with the specs of each client. The connection could include dual encryption, single sign-on, mobile device support and other features.

All of the client's virtual machines remain running on enterprise storage. LUN changes are mirrored by enterprise storage bit-to-bit replication to the DR enterprise storage. By doing this, the whole production VMs are kept in sync with DR VMs.

DR VMs can be started at any time picking up changes on DR enterprise storage. The startup order is defined by management software controlling changes required to enable DR environment. A DR enablement script can be of any complexity or length and replaces traditional run books.

Get a full grip on recovery solutions with the ability to manage multiple datacenters through Digital Edge's Recovery Automation Plan. Enjoy top class technology and policy provision planning that suits your needs.



TESTING CAPABILITIES

1

Isolated Test

These tests allow DR VMs to be brought up to an isolated network. The change replication from Production to DR is paused. The Production environment continues to function. Remote access from the client environment is prohibited but administrative tools will have access to the isolated network & verification so client functionality remains possible. After the test is conducted, the DR site is converted back to standby mode and continues receiving changes from the production site.

2

Production Freeze Test

During this test, the change replication from Production to DR is paused. When Production environment is frozen the DR enablement procedure is fully executed to bring DR into operational mode. Operation and data availability tests are able to be performed in the DR without affecting the production of data. After testing, all changes in DR will be rolled back. The DR site is then pushed back into standby mode and the Production environment returns to operational mode.

3

Full Failover

This is a full failover switch Production & DR where DR receives live transactions.

CONCLUSION

By owning and operating common network backbones in multiple datacenters, your business is able to benefit from our cross connections and solid partnerships with leading providers in the HA & BC industries. Digital Edge is able to provide a unique opportunity for small to medium size businesses that provides:

AUTOMATION

Failing over to a mirrored environment utilizing a recovery wizard eliminates the need to maintain complex processes, documentation and training for internal staff and IT groups.

ASSURANCE

Your business's applications and hardware are preconfigured & ready to use from your backup site. This technology allows quick tests for failover processes and operations in the DR environment.

SIMPLICITY

Minimize your integration complexity and enhance your productivity and limit purchasing risks. The Digital Edge experience guarantees a smooth implementation and further operation.

SAVINGS

Cut company spending by lowering the costs of providing double licensing for multiple sites.