

Large two wheeler Company achieved 99.9% uptime & dramatically cut costs with our auto-scaling DR solution on the Cloud

Our customer is one of the largest two wheeler manufacturers in the world. They have plants in different parts of India as well as in multiple countries. Their IT operations are run centrally from their data center in India. The customer is completely on SAP for the ERP operations. Being such a large company, with a global footprint, they could not afford to have downtime caused by a disaster.

So about eight years back they had setup DR operations at a hosting company where they had put up exact replicas of the production servers. Not only was keeping such high end replicas of the production servers an expensive proposition but the servers were running idle, except during the DR drills.

Company Overview

CIT has more than **700** engineers from across the world.

It has a market share of about **37.1%** in the two-wheeler industry

Five manufacturing facilities based at Dharuhera, Gurugram, Neemrana, Haridwar and Halol.

IT Environment

Heavy user of SAP ERP, VMware and Oracle.

1000 servers spread across 3 Datacenter's in North India.

One DR Site on IBM SmartCloud.



CHALLENGES



Long application loading time and mounting the database



High speed of replication, which caused data corruption



Increased AMC for maintaining old hardware and becoming exorbitant with each passing year.



DR set-up with more flexibility and lower CAPEX



IBM Cloud – with the capability of Bare metal server with all the necessary security compliances and the flexibility of taking a public cloud



Migration of on-prem to public cloud

SOLUTIONS



Customer moved from CAPEX to OPEX model



Saved on AMC and other Maintenance costs resulted in better utilization of their budgets.



Improved their RPO/RTO

IMPACT

Case Study | DR Management Solution

AUTO SCALING MANAGING DR TO CLOUD

During the Tech refresh of SAP servers, the customer decided that they wanted to utilize the flexibility and power of the cloud to cut costs as well as improve availability. One of the challenges however was the fact that all the production servers were on IBM AIX. Only IBM cloud had this facility. No other cloud provider was able to give IBM AIX based systems.

The Other Challenge was to figure out how to transport more than 10 terabytes of data which was On-Prem to the systems on the cloud. 10TB of data meant transporting so many physical tapes safely. Then recovering all the data from the tape and then loading it on to the database server on to the cloud and rebuilding the application to test its workability.

In addition, the customer wanted that the switch over be completely automated once a DR is declared with scaling of the servers all achieved by the automation tool.

CHOOSING THE RIGHT SOLUTION AND MEETING THE DEADLINES

Since this IBM AIX solution was only available on the IBM cloud we worked along with IBM to setup the systems on the IBM cloud. In terms of sequencing the migration from the hosting cloud environment to the cloud based DR environment - we first got the AD server on DR and then got SAP ECC, NW, BI, DI along with Oracle.

The customer was using IBM Spectrum Protect (earlier known as IBM Tivoli Storage Manager) with the SAP agent for backup. Using Spectrum protect we made a point in time copy of the 10 TB database and then restored the complete database on the cloud environment.

Oracle Data Guard was configured to ensure that the logs get synced between the primary servers at the data center and the server on the cloud.

Since it's a cloud environment we have taken low end IBM AIX machines just for the DB database / log replication purposes. When a DR is invoked we increase the configuration of the Machines "on the fly".



We also use the Perpetuity Tool Continuity Patrol to enable automatic failover, switch over syncing checks and alerts. DCM has 2 NOCs – one in Gurgaon and another in Hyderabad. These NOCs have a pool of Subject Matter Experts(SMEs) in multiple technologies. Onsite and offshore teams access these resources in case there are problems which need specific interventions of specialists.

From the NOCs we monitor the complete DR activity on a 24*7 basis ensuring that log replication is happening between the sites. In case of a DR being declared the NOC teams will ensure that the customer's complete operations are up and running and users transferred to the DR site within 2 hours.

One of the primary benefits is the fact that the customer has been able to reduce cost since he does not have to host the same configuration machines which are in the production environment.

In-spite of taking lower end machines and scaling them on demand, there is an improvement in the RPO and RTO parameters.

Since it is a managed services contract which covers SAP and Oracle also, the customer is certain of business continuity.