

Application Migration on Azure for one of **India's Wealth Management Company**



CASE STUDY



About Client

Leading asset and wealth management company



Industry

BFSI



Service

Cloud

Business **Need**

Our client was in midst of rapid business expansion and their existing infrastructure had limitations that were hampering its operations. Migrating their

business applications to cloud without impacting services was an imperative as their applications had strong dependencies on network file systems (NFS).

Business **Challenge**

- ▶ On-premises hardware was running out of support and needed to be migrated in less than a month
- ▶ The client wanted to efficiently host their Windows and Linux - based applications for their Wealth Management System on cloud
- ▶ Since their user base was spread across the Central India region, this migration had to be achieved with no business disruptions or loss of accessibility
- ▶ Being a technical migration, requirements was to ensure near zero disruption to business
- ▶ Deliver a compelling TCO on Cloud.
- ▶ Existing core application could not cope with growing business needs which required an immediate Cloud solution
- ▶ Required a quick transformation to cloud with TCO considerations.
- ▶ On-Premise's setup of Wealth Management Application to the Azure Cloud in Central India Region.
- ▶ DR and backup and restore mechanism for Cloud migration.
- ▶ Financial Data for all users must be kept in a place where the SLA for storage is high and there is near zero data loss

Business **Solution**

We analyzed the client's physical infrastructure utilization for the past three months and provisioned the same infrastructure on Cloud by right sizing Virtual Machines with an intent to enhance client's confidence in migration to the Cloud.

We developed a cloud reference architecture comprising of network security, network connectivity, Azure account, IAM. We also crested the deployment architecture of all applications, and provided a detailed migration plan, schedule and cost for the migration.

In the cloud build stage, we designed a virtual network which included networking, web application firewall (NGFW) and detailed cloud monitoring. We also provided significantly high apps availability by applying CloudOps and ITIL process.

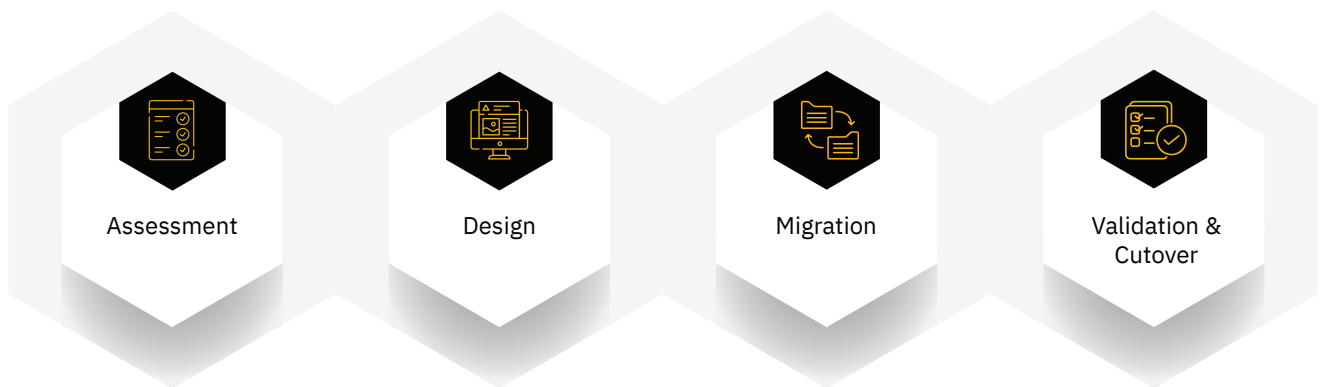
Through this migration, we enabled the client in adjusting to the 'Cloud ways of working' with extremely high SLA compliance at VM level and delivered high data resilience levels using "well architected framework" approach.

Project **Scope**

The Scope of work included:

- ▶ Migration of the on-premise application setup to the Azure Cloud
- ▶ Deploy Azure setup with Azure Virtual Machines, Virtual Network in Central India region
- ▶ Assigned Public IP address to the Webserver Virtual Machine
- ▶ Enable backups and take snapshots for all machines
- ▶ Create ASR (DR) in South-India region
- ▶ Enable log-shipping from on-premise to Cloud for SQL database migration
- ▶ Install monitoring agent and monitor performance of the Server

Our Approach



Assessment

- ▶ CTO meeting to understand goals and objectives
- ▶ Discussion with key IT stakeholders and walkthrough of high-level IT topology
- ▶ Application portfolio inventory with data elements
- ▶ Identification of long prevailing gaps to formulate de-risking mechanisms for a smooth migration

Design

- ▶ Hybrid Cloud approach: We recommended DR on Cloud and on-premises Production to leverage the life of existing hardware and mitigate the client's risk associated with the adoption of new technology
- ▶ To mitigate unknown risks, we recommended a lift & shift approach to rehosting. Post migration, the scope for refactoring and re-platforming is much more with this approach
- ▶ Created Azure, a/c, created RG, users & groups, created network components, deployed compute & storage for Dev, QA, and Production environment
- ▶ Implemented infra security – OS hardening, apply security policy etc.

Migration

- ▶ Moved applications from the on-premises environment to the Cloud with no changes to the underlying application
- ▶ Significant reduction in client's on-premises data center footprint
- ▶ Strategy allowed users to migrate quickly and easily with lesser application breakdown issues
- ▶ Setup Azure Site Recovery
- ▶ Created RG, users & groups, created network components, deployed compute & storage for Dev, QA, and Production environment
- ▶ Implemented security policy

Validation and **Cutover**

- ▶ Pre and post migration benchmark validations for disk IOPS to ensure uncompromised performance. Seamless cutover with minimal downtime for cutover < 3 hours
- ▶ Picked the right type and size of Virtual Machines as a part of Cost Optimization Activity
- ▶ Reduced the configuration based on monthly utilization report analysis
- ▶ Performed and validated backup and restore

Business **Impact**

- ▶ Infrastructure is more flexible to scale up and scale down as per customer requirement
- ▶ Non-Production infra will be run in Business hours only to avoid unnecessary cost
- ▶ Cost and SLA improved by eliminating the need to maintain physical server
- ▶ Improved efficiency by freeing up valuable financial and staff resources
- ▶ Eliminated the need to acquire, enterprise software, or hardware system and also the burden of budgeting for capital equipment and expense
- ▶ Eliminated the need to locate or retrieve data on physical server during critical events such as on-premises data center outage, when many applications must be restored simultaneously and as soon as possible
- ▶ Better uptime numbers, no waiting for hardware repairs and leverage hardware spares at no additional cost
- ▶ Around 40% TCO reduction by using RI & instance start/stop
- ▶ Cost-effective low-cost cross-region DR solution to address region-level failure
- ▶ Solution with significant enhancement in SLA at VM level data resilience level using “well-architected framework” approach

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