ESSAR Group

Category: Cloud Computing Adoption

Background:

ESSAR Group explored the cloud technology for infrastructure consolidation and timely fulfilment of business needs dynamically. It exploited the cloud technologies by optimizing existing investments (IT Infrastructure) and also ventures public cloud offerings from various cloud service providers.

The key business objectives behind the IT initiative were:

- Mobility and lesser dependence on real estate based offices

- Minimal downtime and service disruptions as compared to native hosting

- Reduction in Operation Costs

- Business agility to dynamic scenario of mergers and acquisitions and faster platform for new office locations

- Move close towards Green IT, an initiative supported Group CSR

- Lower Total Cost of Ownership

IT initiative/Project: Cloud Adoption Initiatives

- The project was initiated in January 2011 and ended in December 2011

SaaS on Public Cloud

- Performance Management and Talent Management systems deployed on cloud

- Presently 75,000 employees from over 200 locations across the globe are using this solution for the appraisal process. The solution has already been used for the Mid-year review and Final appraisal for the year 2011 – 12

- Integrated with Microsoft Active directory and other systems like SAP HR and Integrated Learning systems

PaaS on Public Cloud

- 2 critical applications have been migrated to Microsoft Azure Cloud as part of Phase-1. ESSAR has now chosen 6 more applications to be migrated onto Azure cloud as a part of Phase-2 and going ahead 10 more applications to be migrated onto Azure cloud in Phase-3. ESSAR target phase-2 to get accomplished by end of June-12 and phase-3 by end of August-12

- 20 applications testing phase presently for immediate deployment on the Azure platform

IaaS on On-Premise Private Cloud

On-Premise Hosted Desktop Virtualization Solution:

- Unlimited Licensing agreement with Citrix for organization rollout of desktop virtualization.

- EA with Microsoft for support done to ensure coverage of the licensing from Microsoft front for a desktop Virtualization solution implementation

- Desktop Virtualization implemented in Mumbai Locations of Mahalaxmi and BKC office

- 3000+ users have already been moved to the desktop Virtualization platform

- 12,000 with desktops in one year for 40,000 users in one year across group locations. Vadinar and Hazira Locations planned to be completed in the next 6 months

- Riverbed WAN optimization solution implemented across location for optimization of WAN bandwidth and ensuring impact of Desktop Virtualization on Bandwidth managed effectively.

- To ensure latency free access of the Virtual desktops across the LAN, backend network core in the datacenter upgraded to a 10 GB LAN

- Load balancing for the access of the virtual desktop done by Citrix Netscaler equipment deployed in ESSAR Environment

- 5,000 users migrated till time to Desktop Virtualization from standalone environments

On-Premise Hosted Converged Infrastructure Solution:

- Implementation of Microsoft Hyper V based Server Virtualization solutions in Vadinar and BKC Offices

- 225+ servers already virtualized, which constitute almost 30 percent of the x86 servers infrastructure

- Critical applications running on virtual environment

- 200 physical servers targeted for Virtualization for next year

On-Premise UNIX OS based Virtualization solution:

- Virtual partitions for consolidation of HP Itanium based servers

- Multiple Unix Instances on multiple Physical Servers in Hazira Data Centre consolidated onto few High end Physical Servers with Virtualization

Sap Server Consolidation:

- Unix Infrastructure On-Premise Cloud solution based on HPUX and Itanium solution for consolidation of SAP applications in Hazira Datacenter. Large scale consolidation with the use of Virtual Server partitioning has been done to optimize the Infrastructure utilization

Application Virtualization:

- Citrix XenApp application used as virtualization platform for streaming of business critical applications like SAP, Primavera, Ariba, etc

- The same integrated with VPN solution for dual factor authentication software to ensure security of the corporate data that is streamed to the user end point

Impact:

- Net Savings/month by deploying applications on Microsoft Azure Cloud is 70 percent

- Saving on OPEX as a result of On-Premise Hosted Desktop Virtualization Solution is around INT 10 crores per annum

- Energy savings as a result of implementation of On Premise Hosted Converged Infrastructure Solution was close to 71% as it managed to free 150 servers and 20 racks

- Other benefits achieved include:

  o Reduced Infrastructure Management Overheads

  o Achieved Superior Scalability in terms of compute and storage resources

- o Decrease dependence on PCs, laptops and other devices.
- o Scalable and secured client operating environment
- o Significantly reduced IT management costs and complexity
- o Enhanced Information Security as all data lies on Server
- o Increased operational flexibility
- o Gained faster scalability
- o Reduced number of servers and associated TCO
- o Reduced carbon footprint
- o Released critical DC floor space for future scalability
- o Expert resources now can focus more on key tasks and initiatives
- o Enabled greater mobility and productivity
- o Gained faster scalability as compared to Desktop and Laptops deployment to new users
- o VDI allows employees to use the computing device of their choice to access a consistent desktop experience.
- o For today's end users that are highly mobile, ESSAR Group Cloud computing provides more secure, flexible access
- o Faster resolution and deployment of applications
- o Maximize efficient use

About the company:

The ESSAR Group is a multinational conglomerate and operates in the sectors of steel, oil and gas, power, communications and business process outsourcing (BPO), shipping, ports and logistics, projects, and minerals serving government as well as private sectors inclusive of retail markets. With operations in more than 25 countries across five continents, the group employs 75,000 people, with revenues of $17 billion.

C N. Ram, Group CIO, ESSAR Group quotes

ESSAR's Cloud journey was a result of a well-though wisely chosen strategic decision that witnessed an early adaptation to Virtualization & Cloud Services. Seen as an early adaptor to these technologies, we now are geared up to for a massive leap towards Cloud Computing technology, ensuring seamless end user experience, conserving existing investments as well as better ROI for new investments.

Jayantha Prabhu, Group CTO, ESSAR Group quotes

Lately since past 3years ESSAR has witnessed tremendous increase in its horizontal plane of IT Infrastructure & Technology. Our rigor to adapt new technologies enabled us to implement and cherish the benefits of Virtualization & Cloud services at an early stage while major part of the customer community was skeptical to plunge into these technologies.