



POWER
GENERATION &
UTILITIES



WINDOWS
WORKLOAD
MIGRATION TO AWS



HELPED ONE OF THE LEADING PRIVATE POWER GENERATION
BUSINESSES IN INDIA WITH **WINDOWS WORKLOAD
MIGRATION TO AWS.**

Start Date – 3rd January 2018 **End Date** – 6th April 2018



CLIENT OVERVIEW

The company is an effective and one of the leading private power generating businesses in India. In developing 5400 MW of coal-based Thermal Power (2700 MW at each site) in Amravati and Nasik, the power-generating firm has already invoked an investment of INR 17000 cr.



CUSTOMER OBJECTIVE

- The customer was looking for lift-shift Windows workload to AWS due to a retiring hardware on-premise.
- Direct Connect connections would be utilized for data flow between the on-premises infrastructure and AWS.
- Customer needed help with the deployment and further management of the AWS infrastructure.



LANDSCAPE

- Total 46 Production servers and 9 Dev/Test/QA ones. Mostly Windows servers except for the SAP infrastructure which is based on RHEL hardware
- VMWare virtualization ESXi 5.5 is used for hosting the VMs.
- Two critical workloads are running –
 - SAP
 - Exchange



SOLUTION APPROACH

AWS India (Mumbai) region will be main site for hosting the servers.

All the servers will be placed in a Private Subnet which will be connected with the on-premises datacenter.

Direct Connect link will be established between the corporate DC and AWS VPC.

MPLS links will be established between the HO and other branch offices.

Backups will happen on S3 using EBS snapshots. As the data being stored does not require application aware backups, snapshots will be enough.

Barracuda NG series Firewall can be used to achieve the following:

- o Internet Gateway & NAT Gateway
- o Proxy/Content filtering
- o Firewall

AWS CloudTrail will be enabled for security logging. Progressive will audit security logs periodically and share reports with Rattan India.

Security Postures taken into consideration during solution –

- o Root Account Protection by enabling MFA
- o Limit user access through CloudTrail and IAM policy
- o EBS volume encryptions
- o Activate VPC flow logs to collect, store and analyse the logs
- o Protect EC2 Key Pairs through managing the keys
- o Enabling Security groups for EC2 Security
- o Data encryption S3 Buckets and inbound & outbound S3 traffic

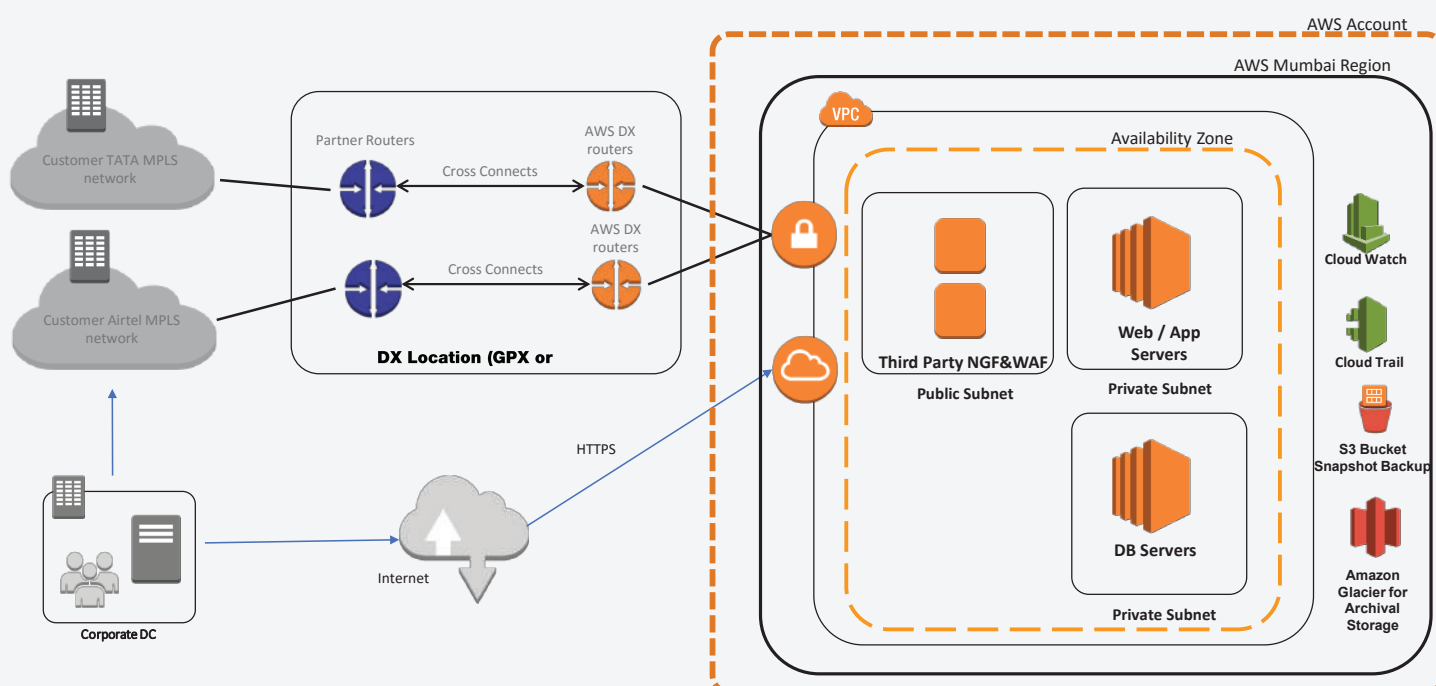


OS PLATFORMS

Windows and Linux



SOLUTION ARCHITECTURE





SERVICES USED

DIRECT CONNECT

THIRD PARTY NEXTGEN FIREWALL AND WAF

SECURITY GROUPS

VPC

GLACIER

S3

CLOUDWATCH

CLOUDTRAIL

EC2

EBS

EBS SNAPSHOTS



OUTCOMES

- Performance of the Windows application has improved after migration to latest Windows platform. Also, the EC2 performance being superior than the on-premise server has given a boost to the user experience.
- As Managed Services Provider we have helped the client optimize cost of the infra by 30% using Cloud Management Platform recommendations.
- A continuous monitoring and Support & Remediation has helped ensure proactive alerting of infra issues.

The customer has opted 24x7 managed service support where Progressive Infotech is offering Proactive Monitoring, support, advisory, and management of the infrastructure. As part of the managed service deliverables, Progressive Infotech is committed in providing better customer experience through Alert Management, Security Controls, Infra & Cost Optimization. Currently customer has opted the consumption mode as Reserved Instance (RI) for the whole infrastructure.