



FINANCIAL SERVICES



CLOUD
DEPLOYMENT &
MANAGED
SERVICES



HELPED VOLKSWAGEN FINANCE BUILD A RELIABLE AND SECURE
INFRASTRUCTURE WITH **CLOUD DEPLOYMENT & MANAGED SERVICES.**



CLIENT OVERVIEW

Volkswagen Finance Private Limited ('VWFPL'), incorporated in 2009 and headquartered in Mumbai is jointly owned by Volkswagen Financial Services AG, Germany, and Volkswagen Finance Overseas BV, Netherlands.

Volkswagen Financial Services ('VWFS') AG is a 100% owned subsidiary of Volkswagen AG and has its headquarters in Braunschweig, Germany. VWFS AG is responsible for coordinating the worldwide financial services activities of the Volkswagen Group. More than 50 years ago VWFS AG financed the first Volkswagen vehicles. Since then, they have continuously expanded its scope of products.



CONTEXT

VWFPL supports customers of the Volkswagen Group in India by facilitating the delivery of innovative financing and insurance solutions.

With their comprehensive range of financial services products, we make a significant contribution to the promotion and securing of Volkswagen Group sales and strengthen the link between our customers and the Group brands. They wanted to have a robust infrastructure that can sustain the needs of the business.



KEY BUSINESS CHALLENGES

- Managing a highly scalable, secure, and robust infrastructure.
- Managing a dynamic cloud infrastructure.



SOLUTION

Progressive's certified AWS Solution Architects conducted an exploratory analysis to study the current architecture of the application and the requirement. Since AWS was the preferred (current) cloud were the resources with which client could move faster, operate more securely, and save substantial costs; all while benefitting from the scale and performance of the cloud.

Once the existing architecture was explored, Progressive's team redesigned the applications leveraging the reliability offered by the AWS cloud.

- Assessment of the existing architecture and existing network and security configuration
- Redeploying the applications onto AWS.
- Cost optimization of AWS infrastructure after migration of the infrastructure.

TECH STACK

- AWS Mumbai region was chosen for hosting the servers.
- Different region was chosen for storing the cloud backups.
- WAF protection was enabled.
- Application Load Balancing (ALB) was deployed to reduce latency.
- Custom image from AWS Marketplace was used to log in securely on the AWS infrastructure.
- Amazon Transfer Family, WAF, CloudWatch, AWS CloudTrail, and AWS Config were used to monitor, govern, and evaluate the AWS infrastructure.



SOLUTION ARCHITECTURE

SOLUTION APPROACH

Assessment & Solution

- Assessment of the existing architecture and existing network and security configuration
- Cost optimization of AWS infrastructure after migration of the production environment.
- Multi VPC environment was deployed to host the web servers and applications servers of Linux and Windows
- Application Load Balancing (ELB) was deployed to reduce latency
- Amazon Guard Duty, Amazon CloudWatch, AWS CloudTrail, and AWS Config were used to monitor, govern, and evaluate the AWS infrastructure.

DEPLOYMENT

- The deployment planner had all the milestones and timelines mentioned which ensured that the project was completed on time.

VALIDATE

- Post successful deployment of resources on the cloud, the infrastructure was validated on all the pointers (security, accessibility, etc.) before handing it over to the client.
- After the application was tested by the customer on all the parameters, a cut-over date was agreed for Go-Live.
- Post-Go-Live, a validation tracker was sent to the customer, which ensured all the agreed activities had been done.

TRANSITION

- Smooth transitioning and handover to support were ensured by having proper KT sessions with the team and introducing them to the customer.
- Inventory, Credentials, Security Status, Server Hardening & Patching, and best practices operational checklist were handed over.

TOOLS AND SERVICES USED

- Native AWS monitoring services (CloudWatch, CloudTrail, Config) for auditing and monitoring. Also, the Nagios XI, one of the third-party monitoring tools, was configured to monitor the infrastructure.
- Integration of both Native and other monitoring tools with the ITSM platform (Symphony Summit) made a good experience for real-time incident management. Even, change and CI items were managed properly.
- Centilytics is used as the cloud management platform for providing better visibility and managing spending on the cloud, Also, Reporting, Governance was made easy through this tool.

OS PLATFORMS | WINDOWS & LINUX



DESIGN CONSIDERATIONS

- Security by design solution architecture
- Segregation of subnets based on workload.
- S3 bucket was created for storing objects.



OPERATIONAL BEST PRACTICES

BACKUP & DR

For Backup of EC2 instances, a native image-based incremental backup will be triggered & which will further be integrated with our in-house auto-backup tool for automatic scheduling & alerting for every successful & unsuccessful backup.

TAGGING RECOMMENDATIONS

AWS resources were tagged as per the agreed naming convention & AWS best practices



SERVICES USED

EC2, VPN Gateway, Security groups, S3, AWS Marketplace, Amazon Transfer Family, WAF, CloudWatch, AWS CloudTrail, and AWS Config, GUARD DUTY, KMS



OUTCOMES

AWS was the cloud of choice with which clients could move faster, operate more securely, and save substantial costs; all while benefiting from the scale and performance of the cloud.

The customer has opted for 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 to providing a better customer experience through Alert Management, Security Controls, Infrastructure & Cost Optimization. scheduler has been enabled for the required business hours.