

Enabled agility and efficiency by migrating engineering application to AWS

CloudSMART



About the client:

One of the global car manufacturers that sells a full line of vehicles under different brands. It's global headquarter is in Japan and it manages operations in four regions: Japan-ASEAN, China, Americas and AMIEO (Africa, Middle East, India, Europe & Oceania). With a revenue of \$75 billion in 2022, client was the 9th largest automobile maker in the world and world's largest electric vehicle (EV) manufacturer, with global sales of more than 320,000 all-electric vehicles.

Business requirements:

During the Covid-19 pandemic, engineering organizations experienced operational, security and performance challenges during access of design and product data stored in the product lifecycle management (PLM) environments and CAD files.

Riding this wave, client was also embarking on a 'Cloud Next' strategy. This opportunity was to migrate client's production engineering application Siemens Teamcenter PLM for one of the business divisions and modernize from on premise to client's AWS private cloud.

HCLTech solution:

Aligning to client's 'Cloud Next' strategy for modernization, HCLTech initiated discussions to migrate and modernize Teamcenter Solution from on premise to client's private AWS Cloud. This solution hosts client's Siemens application on AWS. HCLTech conducted proof of concept which helped 'Earn Trust' with the customer and paved the way for implementation.

- Detailed assessment of on-prem environment which includes existing application architecture, servers, network connections, database, storage, security, and integrations.
- Define the target architecture based on the assessment, business challenges for Siemens Teamcenter PLM and NX on AWS Cloud.
- Define the strategy for data migration, application upgrade. Define infrastructure and application validation plan.
- Provisioning of the required infrastructure network, servers, database, storage using infrastructure automation.

Siemens teamcenter PLM on cloud:

- Data Migration from on-premises to cloud using AWS Snowball
- Setup and configure the vault, database and Teamcenter application
- Application configurations for required business processes
- Centralized monitoring of dashboard for infra resources
- Provisioning active alert mechanism for cloud health services & resources
- Backup configuration for Teamcenter Servers, vault storage

AWS services used:

Amazon EC2	Amazon Elastic Block Storage (EBS)	Amazon CloudWatch	Amazon VPC
AWS Backup	AWS IAM	AWS Snowball	

Business benefits:

- Fast provisioning of cloud and setup for prod and non-prod environment
- Reliable and faster environment improving team productivity
- Agile and scalable cloud infra to meet changes in business demand
- Seamless user experience and performance for improved productivity during COVID