Case Study

Application Containerization on AWS EKS, Infrastructure Automation using Terraform for Germany-based Insurance Provider
Client
The client is a German financial Services Group, serving customers in the Insurance & Financial Asset Management areas. It is also one of the largest insurance services companies, and a global market leader in health, medical & P&C insurance.

Challenges
- The client wanted to deploy their core Insurance Application - ABS, which was the backend for one of their critical banking customers for insurance processing, and its supporting applications on AWS.
- ABS was a monolithic application, while the supporting applications were microservices-based.
- The client wanted to offer this as a service to its end customers and was looking for automated, replicable deployments.
- Being a financial services company, the client was bound by various regulations and compliances, which made a secondary DR site mandatory, along with production. The client expected the RTO to be less than 4 hours and RPO less than 24 hours.

LTIMindtree Solution
- An automated AWS Landing Zone was set up with the following accounts - Organization Account, Production Account, Dev, Pre-Prod, Management, DR, Centralized Logging & Security Account.
- All logs will be centrally stored in the logging account. All management applications like Control-M, AD, Jenkins will be deployed in the management account.
- The core insurance ERP was deployed across multiple AZs and load balanced using ALB.
- Non-ABS applications were microservices-based and talked to the ABS running to process/fetch the required data based on the request.
- Auto-scaling was enabled at the service level and EC2 level to scale out the microservices based on the load.
- Terraform templates were designed for automated, replicable launch of The ABS and non-ABS application infrastructure for the DR accounts.
- The whole AWS infra was built using terraform and any changes to the infra were deployed automatically through the pipeline.
- Jenkins was used as a CI/CD tool for app deployment.
## Business Benefits

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<thead>
<tr>
<th>Benefit</th>
<th>Details</th>
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<tbody>
<tr>
<td>The core ERP &amp; supporting apps were successfully deployed on AWS environment while meeting the security and high availability guidelines as per the compliance</td>
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<td>200 concurrent users handled successfully by the application during load testing</td>
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<td>4X increase in app performance</td>
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<td>Automated infrastructure provisioning reduced the setup time from few days to within three hours</td>
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<td>Automated DR environment reduced time to setup DR from weeks to few hours</td>
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