



# Cloud Migration and End-to-end DevOps Deployment Reduces Deployment Cost by 80% for a Leading Industrial Automation Solutions Provider





## About the Customer:

Customer is a leading provider of Industrial Automation and Test and Measurement solutions. Combining superior technology with engineering services, project management, and maintenance, they deliver field proven operational efficiency, safety, quality, and reliability.



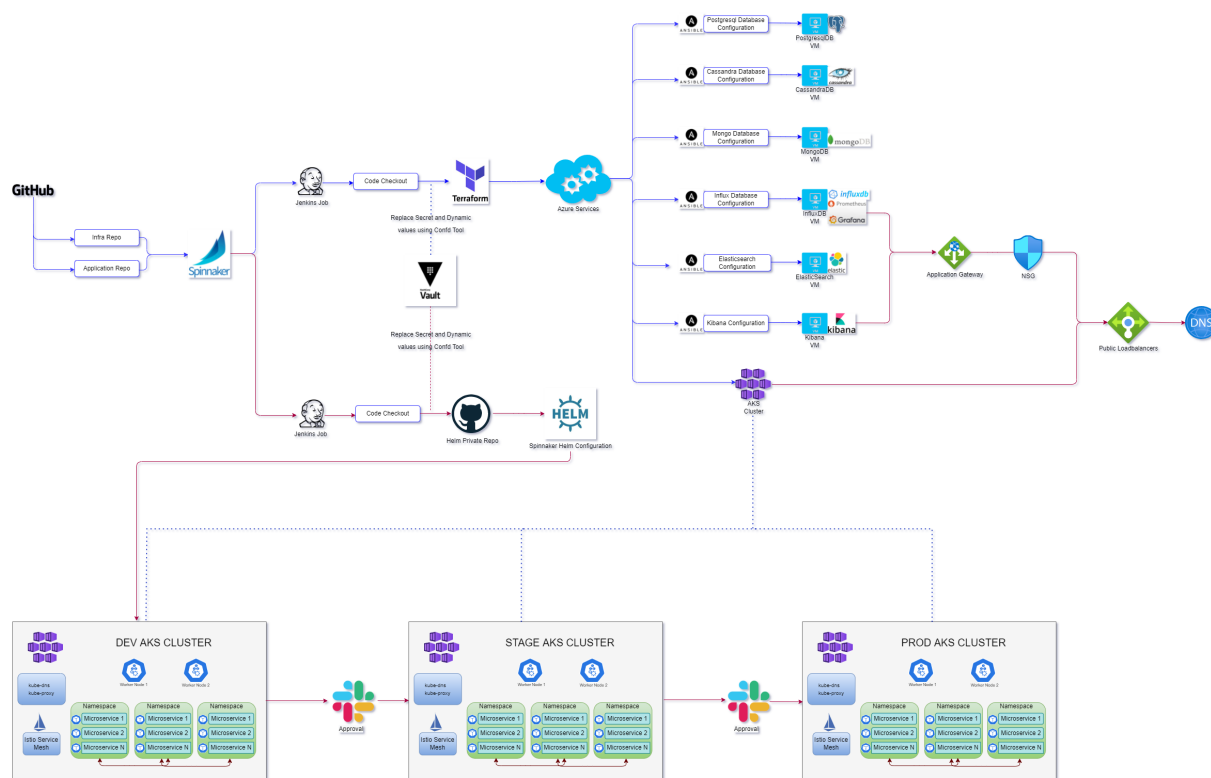
## The Challenge:

The platform consists of infrastructure setup, Multi-Tenant Platform setup and Microservices as Software as setup, databases setup and multi-tenant application setup in cloud environment, this platform is built and developed by third party vendor. To stabilize and enhancing the platform, third party vendor has the process of quarterly releases which comes with latest docker images and helm scripts and database scripts changes; they faced the following business and technical challenges with their existing setup:

- The Manual changes delayed the development activity which made an impact in deadlines
- No notification on deployment status or Track of deployment activities
- They expect a zero downtime during the deployments.
- And Security centric system design.
- The customer needed an automated single click deployment.



## Architecture Diagram



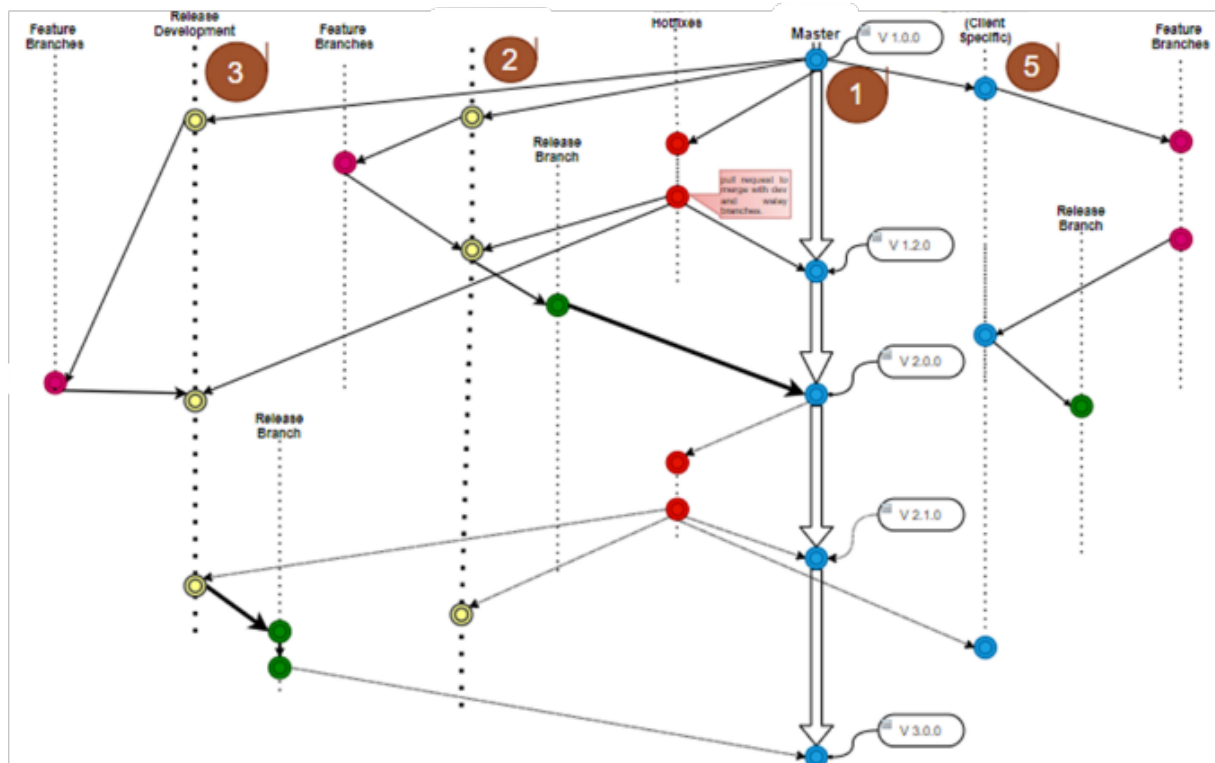
Above Diagram depicts the DevOps Process for understanding purpose only, deviations might exist when implemented.

## Aspire's Solution:

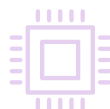
- Proper branching policies have been enabled for all the branches.
- Replaced Secret/access key with Hashicorp Vault using – ConfD.
- Incorporated multi-environment setup comprising of DEV, QA and PROD with proper pipeline setup
- The Pipeline setup was seamless without manual intervention expect for approval on deployment phase to the environments with proper rollback feature enabled.
- The Aspire team also ensured zero percent downtime, using Istio's service mesh configuration.



## Branching Diagram



## Technology Snapshot:



- » **CICD Tools:** Spinnaker, Jenkins.
- » **Dynamic Configuration Management:** ConfD.
- » **Secret Management:** Hashicorp Vault.
- » **Infrastructure Provisioning:** Terraform, Ansible.
- » **Cloud Provider:** Azure Cloud.
- » **Log Management:** Elasticsearch.
- » **Notification:** Spinnaker with Slack
- » **Service Mesh:** ISTIO Mesh.
- » **Monitoring:** Prometheus, Grafana, Kibana.



## The Results & ROI:

- Aspire's Team have Achieved **80%** reduction in deployment cost.
- Automation features enhanced overall productive increased by **33%**.
- We have reduced the time to market by **40%**.
- The end-to-end flow was completely secured and we gained the customer's trust.
- Aspire's Deployment Workflow helped the team to deploy on one click.
- IaC [Terraform] provisioning reduced the manual efforts of deploying infrastructure to matter of minutes from hours.
- **200%** increase in release frequencies.

## The Future Impact:

Aspire team implemented industry best practices across the development and the workflow. Thus achieved a proper DevOps process and culture.



Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of "Attention. Always." communicates our belief in lavishing care and attention on our customer and employees.

For more info contact: [info@aspresys.com](mailto:info@aspresys.com) or visit [www.aspiresys.com](http://www.aspiresys.com)

### USA

+1 630 368 0970

### SINGAPORE

+65 3163 3050

### INDIA

+91 44 6740 4000

### UK

+44 203 170 6115

### NETHERLANDS

+31 (0)30 800 92 16

### POLAND

+48 58 732 77 71

### MEXICO

+52 222 980 0115