**HR-Brain & IDEA-Infrastructure**

**Hybrid Cloud Infrastructure Setup – HR-Brain & IDEA-Infrastructure**

**Company:** Mercedes-Benz R&D Pvt Ltd

**Client:** Daimler (Germany)

**Duration:** *(Nov 2018 – Feb 2022)*

**📖 Project Overview**

The **HR-Brain** and **IDEA-Infrastructure** projects were part of Mercedes-Benz’s digital transformation initiative, aimed at modernizing internal HR systems and infrastructure management. As a DevOps Engineer, I was responsible for designing and implementing a **Hybrid Cloud infrastructure** to support scalable, secure, and resilient deployments of both applications.

**🎯 Objectives**

* Set up a robust and scalable infrastructure across on-premises and cloud environments.
* Containerize and deploy applications using Kubernetes.
* Implement centralized monitoring and logging.
* Automate configuration and deployment processes using industry-standard tools.

**🛠️ Technologies Used**

| **Category** | **Tools & Technologies** |
| --- | --- |
| Container Registry | Harbor |
| Orchestration | Kubernetes |
| Monitoring | Grafana, Prometheus |
| Configuration Mgmt | Ansible |
| CI/CD | GitHub Actions, Shell Scripts |
| Cloud Infrastructure | Hybrid Cloud (On-prem) |
| Version Control | Git, GitHub |

**👨‍💻 Roles & Responsibilities**

* Designed and deployed Kubernetes clusters for HR-Brain and IDEA-Infrastructure applications.
* Set up **Harbor** as a private container registry for secure image storage and management.
* Automated infrastructure provisioning and configuration using **Ansible** playbooks.
* Integrated **Grafana** and **Prometheus** for real-time monitoring and alerting.
* Managed secrets, config maps, and persistent volumes in Kubernetes.
* Implemented CI/CD pipelines for container build, test, and deployment.
* Collaborated with cloud architects to ensure seamless integration between on-prem and cloud environments.
* Conducted performance tuning and capacity planning for production workloads.
* Documented infrastructure architecture and deployment procedures for internal teams.

**📈 Key Achievements**

* Reduced deployment time by 70% through automation and containerization.
* Achieved high availability and fault tolerance across hybrid environments.
* Enabled real-time monitoring and proactive issue resolution using Grafana dashboards.
* Successfully transitioned legacy systems to containerized microservices architecture.