

# Objective

Migrate the current on-prem infrastructure to Oracle Cloud to boost efficiency, scalability, reliability, and operational agility.

# CASE STUDY

## Scope

- Migrate infrastructure components from on-premises setups to Oracle Cloud.
- Implement version control and project management tools to enhance development workflows.
- Establish a CI/CD pipeline for streamlined and automated application deployment.

## Solution

- ✓ Conducted a comprehensive migration of the on-premises infrastructure, including servers, databases, and application stacks to Oracle Cloud.
- ✓ Implemented SCM with Bitbucket for robust version control and integrated Jira for effective project management and ticketing.
- ✓ Set up a CI/CD pipeline using Jenkins, facilitating continuous integration and deployment of applications directly to Oracle Cloud.
- ✓ Utilized Docker for containerization of applications, ensuring consistency across development, testing, and production environments.
- ✓ Employed Kubernetes within Oracle Cloud for orchestrating containerized applications, enhancing scalability and manageability.

## Value Added

- Boosted scalability and reliability with Oracle Cloud for efficient growth support.
- Enhanced development speed and collaboration using Bitbucket and Jira integration.
- Streamlined deployments with CI/CD pipelines, reducing errors and time.
- Achieved cost savings by transitioning to cloud infrastructure, lowering hardware expenses.
- Increased operational agility with cloud tools for quicker market response.

## Frameworks & Tools



# Objective

Provide comprehensive DevOps support for client deployments, including regular deployments, preparation of EASE upgrade packages, server upgrades, and patches.

# CASE STUDY

## Scope

- Support regular deployment activities and prepare upgrade packages for the EASE system.
- Build and maintain branches for various deployment stages.
- Perform upgrades and patches on EASE and EASESCAN servers.
- Ensure rigorous documentation and backup processes are in place for system integrity and recovery..

## Solution

- ✓ Managed branch builds and deployment packages, including EASE system upgrades and patches. Conducted EASESCAN server upgrades from EASERELEASE-SQL for enhanced functionality and security.
- ✓ Implemented comprehensive server monitoring for URL and disk usage, ensuring system performance is maintained at optimal levels. Verified checkpoints regularly to ensure deployments meet quality standards.
- ✓ Managed the backup of the Release\_UTF database and developed detailed documentation for disk utilization, MongoDB installation scripts, and backup procedures to ensure data integrity and recoverability.
- ✓ Utilized Ansible for deployment automation, streamlining the process and reducing the potential for human error.

## Value Added

- Through regular updates and careful monitoring of server performance and disk usage.
- Utilized Ansible to automate deployments, significantly reducing manual efforts and minimizing deployment times.
- Established comprehensive documentation and backup protocols to ensure easy recovery and continuity in case of system failures.
- Provided consistent daytime support to client's vendors, facilitating smooth operations and quick resolution of issues.

## Frameworks & Tools



# Objective

Built a robust indoor air quality monitoring system for real-time data gathering, processing, and visualization, featuring rich live and historical data views and industry-standard report generation.

## CASE STUDY

### Scope

- Implement a complete solution using the MERN stack for development, along with QA and DevOps for deployment and support.
- Build a live dashboard for real-time air quality insights and manage user roles and access within the system.

### Solution

- ✓ Designed and implemented application architecture with modern technologies for real-time data processing and visualization.
- ✓ Developed responsive ReactJS frontend for real-time data visualization across devices.
- ✓ Utilized MongoDB for efficient time-series data handling required for real-time reporting and analysis.
- ✓ Employed Highcharts and GoLang for advanced data processing and visualization.
- ✓ Adopted a microservices architecture to ensure the scalability and maintainability of the system.
- ✓ Integrated RabbitMQ for efficient service communication, enhancing data flow efficiency between devices and the application backend.

### Value Added

- Served as a full technology partner, offering strategic guidance and ongoing support alongside development.
- Provided technical and functional solutions, bridging domain expertise gaps with VAST.
- Implemented cutting-edge technologies for system performance, scalability, and user experience.
- Utilized VAST's interdisciplinary team to translate complex domain requirements into effective tech solutions in the absence of a business analyst.

### Frameworks & Tools

