

# DEVCLLOUD FRAMEWORK

## Pluggable Reference Implementation to Jumpstart Development

IT organizations are charged with modernizing infrastructure, migrating to cloud, and developing and implementing software and solutions quickly, efficiently, and securely—starting with industry best practices and adapting to what works efficiently in the organization.

While the benefits of DevSecOps are clear, realizing these benefits can be daunting—especially when you don't know where to start. Imagine being able to deploy an entire computing environment with your choice of reference applications and best practice workflows.

Peraton's DevCloud can get you there. Our mature, proven, and robust framework can jumpstart development projects with industry best practices built in—eliminating the need to stay on top of the latest tools and which ones can work well together.

## PERATON'S SOLUTION

The pluggable DevSecOps reference implementation brings the industry's leading and latest tool set into an accessible and centralized digital space, while ensuring relevance and interoperability.

DevCloud is designed to fit any environment. It re-factors complex code of common IT aspects—management, operations, support, and infrastructure—so the individual project can uniquely focus on its primary business functionality and leave the undifferentiated heavy lifting to Peraton.

Our framework utilizes compute resources from different sources—on-premise, cloud infrastructure as a service, cloud platform as a service—to provide sufficient compute power with elasticity and durability using Kubernetes container technology and layering pre-integrated DevSecOps functionality out of the box.

Peraton's DevCloud solution leverages existing investments, and best-of-breed tooling to provide a scalable and flexible pathway forward as requirements and standards evolve.

## Functionality Overview

### Centralized Development Management

- Integrated project development and support management tools (JIRA, RallyDev, ALM, etc.)
- Document sharing and corporate knowledge management (Confluence, SharePoint, etc.)
- User and team management (AD, LDAP, etc.)

### Centralized Build/Test/Deploy Orchestration

- Continuous integration and continuous delivery pipeline (Jenkins, Bamboo, etc.)

### Centralized Repository Management

- Binary repository (Nexus, Artifactory, etc.)
- Source code management repository (Git, Team Foundation, etc.)

### Code Viewing/Reviewing Support

- Integrated enterprise code viewing tools (FishEye, Review Board, etc.)
- Code reviewing tools (Crucible Barkeep, etc.)

### Centralized Operational Functionality— Integrated into all Deployed VMs

- Dashboard monitoring and alerting: performance, availability, capacity, efficiency (PACE, etc.)
- Patching services
- Log collection and retention
- Security: periodic scanning, antivirus, network

### Project Template Support

- Different technology projects (Java, LAMP, MEAN, etc.)
- Different solutions space (big data, mobile, warehouse, OLAP, BI/DMD)

- Rapid personnel start-up time:
  - New developers and system administrators are centrally added and assigned to project teams
  - Email groups are automatically managed
  - Instantiate projects using templates—streamlining delivery processes and eliminating errors

#### **Integration of Service-Oriented Architecture into Project Template**

- Technology services
- Access enterprise data

#### **Versioned Workstation Setup to Execution Environment (for dev, test, demo, prod) Infrastructure Code**

- Installation of all required components
- Create execution VMs with the selected providers (AWS, Azure, Docker, Kubernetes, etc.)

## **THE VALUE DELIVERED**

Peraton's DevCloud framework is a proven methodology with real-world instances providing lessons learned and the opportunity to continually evolve and improve the DevCloud platform with new features and enterprise-level functionality.