

Streamlining Your Development: Exploring the Progress OpenEdge DevOps Framework

WHITEPAPER

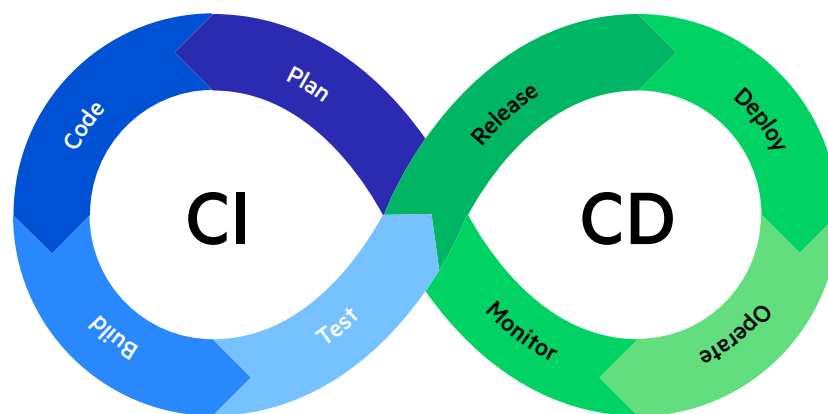


Abstract

Mission-critical business applications undergo many cycles of incremental changes over their lifespan, including code changes, compilation, builds and validation. Often, these cycles are repeated multiple times a day before a release is made available to users. Continuous integration (CI) is a practice that focuses on optimizing the process of generating and validating these incremental builds.

The OpenEdge DevOps Framework emerges as a transformative solution, seamlessly integrating development and operations processes to enhance collaboration, accelerate delivery and maintain quality in application development.

This whitepaper explores the OpenEdge DevOps Framework, outlining its principles, components, benefits and implementation strategies.



Introduction

Software development methodologies have evolved significantly over the years, propelled by the need for faster delivery, improved quality and increased collaboration. DevOps has emerged as a paradigm shift, fostering closer alignment between development and operations teams to streamline processes and accelerate the delivery of software products.

For ABL (Advanced Business Language) applications, the Progress OpenEdge DevOps Framework is designed to help implement an efficient CI pipeline that handles compilation, repository integration, testing and packaging. It also provides the convenience of sharing the CI pipeline configuration between the development and production build processes.

The OpenEdge DevOps Framework comprises a set of plugins designed to address the requirements of two types of users:

- Users new to the CI process who want a straightforward way to set up their pipeline.
- Advanced DevOps engineers with a complex CI process and additional flexibility needs.

Understanding the OpenEdge DevOps Framework

The OpenEdge DevOps Framework is designed to facilitate the seamless integration of development and operations activities throughout the software development lifecycle. The framework emphasizes automation, collaboration and continuous improvement to drive efficiency and enhance productivity.

Core Principles

- **Automation:** Leveraging automation tools and practices to streamline repetitive tasks, such as building, testing and deployment.
- **Collaboration:** Fostering close cooperation between development, operations and other stakeholders to facilitate alignment and shared responsibility.
- **Continuous Improvement:** Embracing a culture of constant improvement through feedback loops, monitoring and iterative enhancements.

Components

The OpenEdge DevOps Framework comprises several key components, each serving a specific role in the development and delivery process:

- **Continuous Integration (CI) Tools:** Automating the build and integration process to detect errors early.
- **Continuous Deployment (CD) Pipelines:** Automating the deployment process to promote rapid and reliable releases.
- **Testing Automation Frameworks:** Enabling automated testing to maintain product quality and reliability.

Benefits of the OpenEdge DevOps Framework

The adoption of the OpenEdge DevOps Framework offers numerous benefits to organizations seeking to modernize their development practices and enhance their competitiveness:



01. Accelerated Delivery

The OpenEdge DevOps Framework enables organizations to release software updates faster and more frequently, reducing time to market and keeping pace with evolving customer demands by automating critical aspects of the development and deployment process.



02. Improved Quality

Automated testing and continuous integration practices embedded within the framework help identify and address defects early in the development cycle, leading to higher product quality and greater customer satisfaction.



03. Enhanced Collaboration

The framework promotes collaboration and communication among development, operations and other cross-functional teams, fostering a culture of shared responsibility and collective ownership of the software delivery process.



04. Increased Efficiency

The OpenEdge DevOps Framework optimizes resource utilization, minimizes downtime and maximizes productivity across the development lifecycle by streamlining workflows and reducing manual intervention.

Implementing the OpenEdge DevOps Framework

Successful implementation of the OpenEdge DevOps Framework requires careful planning, collaboration and commitment from all stakeholders involved. Key steps in implementing the framework include:

Assessing Current Practices

Conducting a comprehensive assessment of existing development and operations practices to identify areas for improvement and determine readiness for DevOps adoption.

Defining Processes and Workflows

Collaboratively designing and documenting development, testing, deployment and monitoring processes to establish clear guidelines and expectations for all team members.

Selecting Tools and Technologies

Evaluating and selecting appropriate tools and technologies that align with the organization's goals, infrastructure and technical requirements to uphold compatibility and scalability.

Training and Skill Development

Investing in training and skill development programs to empower team members with the knowledge and expertise to support effective use of the OpenEdge DevOps Framework and associated tools.

Continuous Monitoring and Improvement

Establishing ongoing monitoring, measurement and feedback mechanisms to identify bottlenecks, address challenges and continuously optimize the DevOps workflow.

Conclusion

The OpenEdge DevOps Framework represents a change in thinking in software development. It offers organizations a comprehensive approach to enhancing collaboration, accelerating delivery and retaining quality in application development. By embracing automation, collaboration and continuous improvement, organizations can leverage the full potential of the Progress OpenEdge platform to drive innovation and stay ahead in today's dynamic market.



Learn more today about the OpenEdge
DevOps Framework






About Progress

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