NuSuMMit

BROCHURE

Elevating Performance through DevOps

Accelerate release cycles and elevate customer experience with DevOps excellence



Introduction

In today's highly competitive digital landscape, where customer expectations are soaring, the need for a transformative approach to software development and deployment is paramount. DevOps, a portmanteau of Development and Operations, emerges as a revolutionary methodology that unifies these traditionally siloed functions. It promotes a culture of collaboration, continuous integration, and continuous delivery, ensuring not only faster release cycles but also elevating the overall customer experience.

Founded on the principles of agility and lean practices, DevOps transcends being merely a methodology; it represents a transformative shift. This paradigm realigns business owners, developers, operations, and quality assurance teams, fostering the delivery of improved, expedited, and consistently stable outcomes. In an era where businesses heavily depend on software for customer interaction and operational optimization, DevOps emerges as a critical factor for success. It offers the essential agility and efficiency required to flourish in the digital landscape.

Solution Overview

At NuSummit, our comprehension of DevOps delves into its essence as a cultural and professional movement. This movement emphasizes communication, collaboration, and integration between software developers and IT operations. More than just a series of practices or a toolbox, at NuSummit, DevOps embodies a comprehensive approach that revolutionizes the entire software development lifecycle. Through dismantling conventional barriers separating development and operations teams, we leverage DevOps to establish an environment

where continuous feedback and iteration are not merely promoted but deeply embedded in the development process. This ensures that the software is not just rapidly developed but also reliably delivered, meeting the highest standards of quality.

NuSummit's DevOps model thrives on automation, constant evolution, and regular improvement through continuous feedback loops, providing real-time insights accessible to all stakeholders on an integrated platform.



DevOps Implementation Approach

The ideal implementation of DevOps requires a strategic approach that combines cultural transformation, technological integration,

- Collaborative Culture: We foster cross-functional collaboration and communication to ensure complete transparency of processes.
- Automation Framework: We implement robust automation for testing, deployment, and monitoring.
- Continuous Feedback: We establish a culture of continuous feedback for iterative improvements.

and streamlined processes. Here's a holistic approach to DevOps implementation that NuSummit adheres to and its key constituents:

- Security Integration: We embed security measures throughout the development lifecycle.
- Toolchain Integration: We ensure seamless integration of tools for an end-to-end automated workflow.
- Scalability: We design a scalable infrastructure to meet evolving business demands.

Solution Architecture Lifecycle



The DevOps lifecycle is a well-orchestrated sequence encompassing planning, coding, building, testing, releasing, deploying, operating, and monitoring. This iterative cycle ensures a continuous loop of improvements, fostering agility and efficiency throughout the software development process. Starting with planning and coding, DevOps ensures that each phase is seamlessly integrated into the next, leading to continuous feedback loops and iterative improvements.

Salient Features



Continuous Integration (CI) for streamlining code integration:

- Automated integration of code changes from multiple contributors.
- Automatic build and testing processes triggered upon code commits.



Continuous Delivery (CD) for automated deployment:

- Seamless and automated deployment of validated code to production.
- Configurable deployment pipelines for different environments.



Automated testing for ensuring highest product quality:

- Automated execution of test cases for comprehensive code coverage.
- Continuous testing throughout the development lifecycle.



Real-time monitoring for proactive issue identification:

- Continuous monitoring of application performance and infrastructure.
- Real-time alerts and notifications for potential issues.



Collaborative development for seamless communication among teams:

- Integrated communication tools for development, operations, and quality assurance teams.
- Shared repositories and documentation for collaborative work.



Scalable Infrastructure for adapting to changing workloads:

- Infrastructure designed to handle varying workloads.
- Automated scaling based on demand and resource requirements.

DevOps Tool Stack Capabilities

Here is the comprehensive list of tools that can be plugged and played.

Project Management



servicenow.

- Jira Software
- Jira Service Management



Asset/Config Management













Build Tools





Monitoring Tools

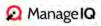










































DB Refresh / Monitoring





























CI/CD

















Data Warehousing Tools

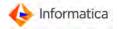






















Data Warehouse



Version Control





















Artifact Repository





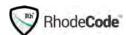


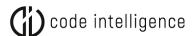






Code Revlew





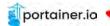








Container Technology













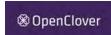








Code Coverage







MQ





LRabbitMQ







Infra Orchestration











Linux









Code Quality

sonarqube



Semmle[™]





Dashboard

















DB













Web Server











Cloud Technologies







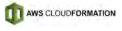






Cloud Orchestration















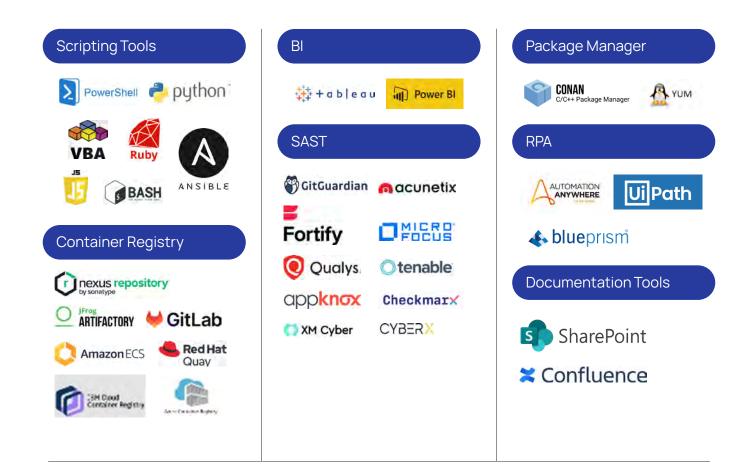


Server Orchestration









DevOps Benefits

- Accelerated Time to Market: Continuous Integration streamlines code integration, minimizing delays and ensuring faster release cycles. This leads to accelerated time to market, a crucial factor in staying competitive in today's fast-paced business landscape.
- Enhanced Productivity: Continuous
 Delivery automates deployment processes, reducing manual efforts and enhancing overall productivity. Teams can focus on value-adding tasks, leading to improved efficiency and faster delivery of features.
- Risk Mitigation: Automated Testing ensures comprehensive code coverage and early defect detection, mitigating risks associated with software bugs. This results in higher product quality and a more robust software ecosystem.

- Product Stability: Real-time monitoring proactively identifies and resolves performance issues, contributing to increased product stability. Users experience fewer disruptions, leading to a more reliable and stable software environment.
- Enhanced Customer Experience:
 Collaborative Development fosters seamless communication among teams, leading to quicker issue resolution and improved collaboration. This translates to an enhanced customer experience, as products are developed and improved more efficiently.
- Increased Operational Efficiency: Scalable Infrastructure allows for dynamic resource allocation based on demand, increasing operational efficiency. This ensures cost-effective resource utilization and optimal handling of changing business requirements.

The NuSummit Advantage

Partnering with NuSummit for DevOps transformation brings the advantage of 20+ years of rich domain knowledge and complex delivery experience. Our DevOps services ensure reduced time to market, increased productivity, low risk, and product stability. With a focus on full-stack

capabilities, NuSummit establishes cohesive processes and integrates the right tools to deliver the desired business impact.

Few of the key advantages that NuSummit offers to its customers are:



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DevOps Maturity Assessment:

NuSummit offers DevOps Maturity Assessment service which helps enterprises assess their tech landscape and cultural feasibility for DevOps adoption.

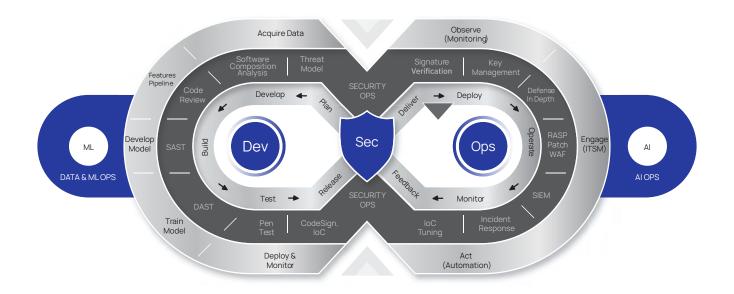
No Code Low Code Platforms for Faster Turnaround:

NuSummit's proprietary low code-no code platforms ensure faster and secure development cycles DevOps adoption.

DevXOps:

NuSummit helps enterprises to use the DevOps methodology across functions such as security, Testing, Data & ML and Al.

DevXOps - A Continuous Everything



Here is a glimpse into a few of NuSummit's DevOps implementations

DevOps solution and support for a leading stock exchange: enhanced security and efficiency in IT operations:

• Facing challenges with servers and data over the internet, local user access without AD connectivity, absence of CI/CD, and deployment-related checks, the client partnered with NuSummit for a transformative solution. NuSummit addressed these issues by migrating JIRA and Confluence, integrating with LDAP, and automating build and deployment using Git, Jenkins, Nexus, Sonar, and Checkmarx. The result was a significant reduction in lead time for environment provisioning, enhanced security, and improved operational efficiency, laying the foundation for a resilient IT infrastructure.

DevOps solution and support for a leading commodity trading organization revolutionizing software development lifecycle:

Challenged by manual SDLC processes, unstructured source code maintenance, and manual production code deployment, the client sought NuSummit's expertise.
 NuSummit orchestrated a migration to GitLab, introduced Ansible for server provisioning, and implemented CI/CD using JIRA, GitHub, TeamCity, SonarQube, Maven, Nexus, and Ansible. The outcome was a remarkable 50% reduction in code deployment time, substantial savings in development efforts, and a transformative shift towards agility and efficiency in the software development lifecycle.

DevOps solution for a leading power exchange streamlining source code management:

 Struggling with manual SDLC processes and SVN-based source code management, the client collaborated with NuSummit for a comprehensive solution. NuSummit facilitated a smooth transition by migrating to Git and implementing automated build and deployment processes using Git, Jenkins, Nexus, and Sonar. The result was a structured source code repository, reducing build and deployment time, and enhancing version control, bringing efficiency to software asset management.

Secure software distribution and update for a leading stock exchange securing software distribution with CodeSign

Faced with challenges in secure software
distribution and maintaining software
integrity, the client adopted CodeSign by
Aujas Cybersecurity through NuSummit. The
platform provided automated code signing
with leak-free malware scanning, ensuring
the integrity of software releases. This
implementation significantly improved
security, reduced the effort in the code
signing process, and provided a reliable
mechanism to assure end-users of software
authenticity, fostering trust and compliance.

About NuSummit

NuSummit is a global technology leader in Al-led digital transformation, specializing in applications, data, analytics, cloud, and cybersecurity. With over 300 clients worldwide, including 22 Fortune 500 companies, NuSummit supports organizations across industries. Our core expertise lies in banking, insurance, and capital markets, where we offer specialized solutions for these sectors.

With over two decades of experience and 3,000+ professionals, we deliver Al-driven, end-to-end solutions that integrate advanced cloud infrastructure and cybersecurity. Certified to top industry standards and backed by a robust partner ecosystem of hyperscalers and niche innovators, NuSummit is a trusted partner for secure, impactful digital innovation.

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For more information, visit us at nusummit.com

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