

Study Plan DevOps (Development and Operations)

ADINUSA PRO TRAINING



About This Course

This course comprehensively covers key tools in the DevOps ecosystem. Participants will be guided in understanding the concepts and practical implementation of GitLab CI/CD for development and delivery automation. Additionally, they will learn about Kubernetes as a container orchestration platform, ArgoCD for efficient application management, and performance monitoring tools like Grafana and Prometheus for data analysis and visualization. The course also includes code analysis with SonarQube to identify and fix code issues and implement better coding practices. Participants will gain practical skills in implementing and managing these DevOps tools in a production context.



Summary



Training Duration: 32 Hours (4 Days)

Course Main Subjects

- Introduction to DevOps
- Management and Operation Harbor Image Registry
- Software Development Life Cycle (SDLC)
- Management and Variables CI/CD
- DevOps Pipeline
- DevOps Deployment
- System Monitoring



Target Audience

System Administrators, Cloud Administrators, Developers, Site Reliability Engineer.

Prerequisites

- Kubernetes Administration (K9-ADM)
- Docker Administration (DO-ADM)

Learning Outcomes

The learning topics will assist participants in :

- Basic to complex understanding for DevOps implementation in scope of work.
- Participants can perform analyses using unit testing and security testing methods to ensure each process runs according to standards
- Participants can perform daily operations for each activity in CI/CD



Technical Requirements

Participants must have a laptop or computer with the following minimum specifications and tools installed:

Specification	Details
Operating System	Windows, Linux, or MacOs
Processor	Intel Core i3
Memory	4 GB RAM
SSH Client	Termius / Putty / MobaXTerm
Text Editor	Sublime Text / VSCode
Browser	Chrome and Firefox
VPN (Optional)	https://client.pritunl.com/

Facilities and Resources

Participants will have access to the following resources on and after the training:

- **Virtual machine lab** : Available until H+5 post-training for hands-on practice and experimentation.
- **Discussion group** : Available until H+30 post-training for ongoing support and collaboration with peers.
- **Class materials** : Access to all class materials for 1 year (start day one training)
- **Certificate** : Participants will receive a certificate of completion upon finishing the course.
- **Recording Class** : Access to recorded sessions for review and reinforcement of learning.

Terms and Conditions

Course Purchase Rules

- **Registration:**

Participants must register through the official ADINUSA website and fill out the registration form with accurate and complete information.

- **Payment:**

Course payment must be made in full before access to training materials is granted. Accepted payment methods include bank transfer, credit card, and digital payment.

- **Purchase Confirmation:**

After payment is received, participants will receive a confirmation email containing course details and instructions for accessing the materials.

- **Schedule Changes:**

ADINUSA reserves the right to change the course schedule or replace instructors if necessary. Participants will be notified of such changes via email or whatsapp.

Terms and Conditions

Access Management

- **Access License:**

Each participant will be granted an access license for 1 year, starting from the date of registration. This license includes access to all relevant training materials.

- **Use of Materials:**

Training materials may only be used for personal purposes and may not be distributed, sold, or published without written permission from ADINUSA.

- **Account Security:**

Participants are responsible for maintaining the confidentiality of their account information. ADINUSA is not liable for any losses arising from unauthorized account use.

- **Access Termination:**

ADINUSA reserves the right to terminate a participant's access to training materials if violations of the applicable terms and conditions are found, including but not limited to unauthorized distribution of materials.

For detailed information regarding our terms and conditions, please visit [Terms and Conditions](#).

Certification

Upon successful completion of the course, participants will receive two certificates:



Physical Certificate



Digital Certificate



Learning Strategies



Pre-Test



Theory



Hands-on Lab



Post-Test



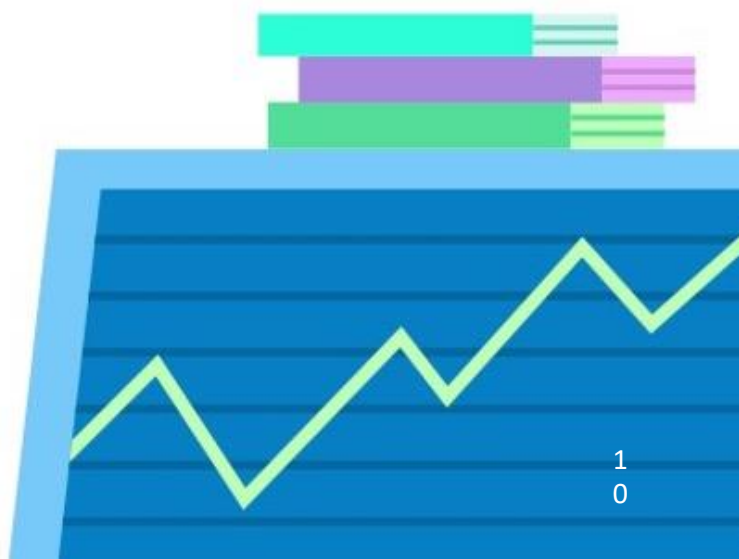
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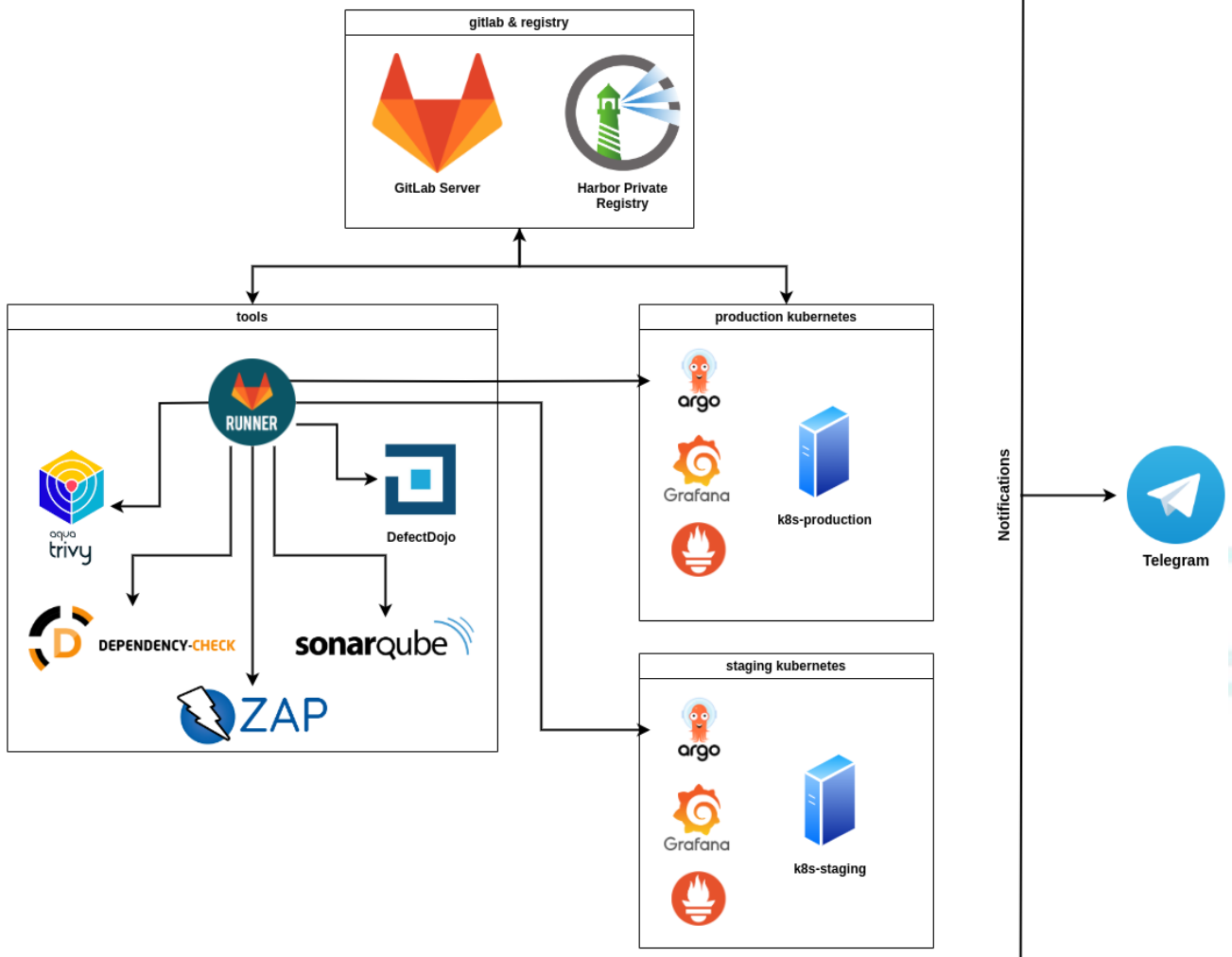
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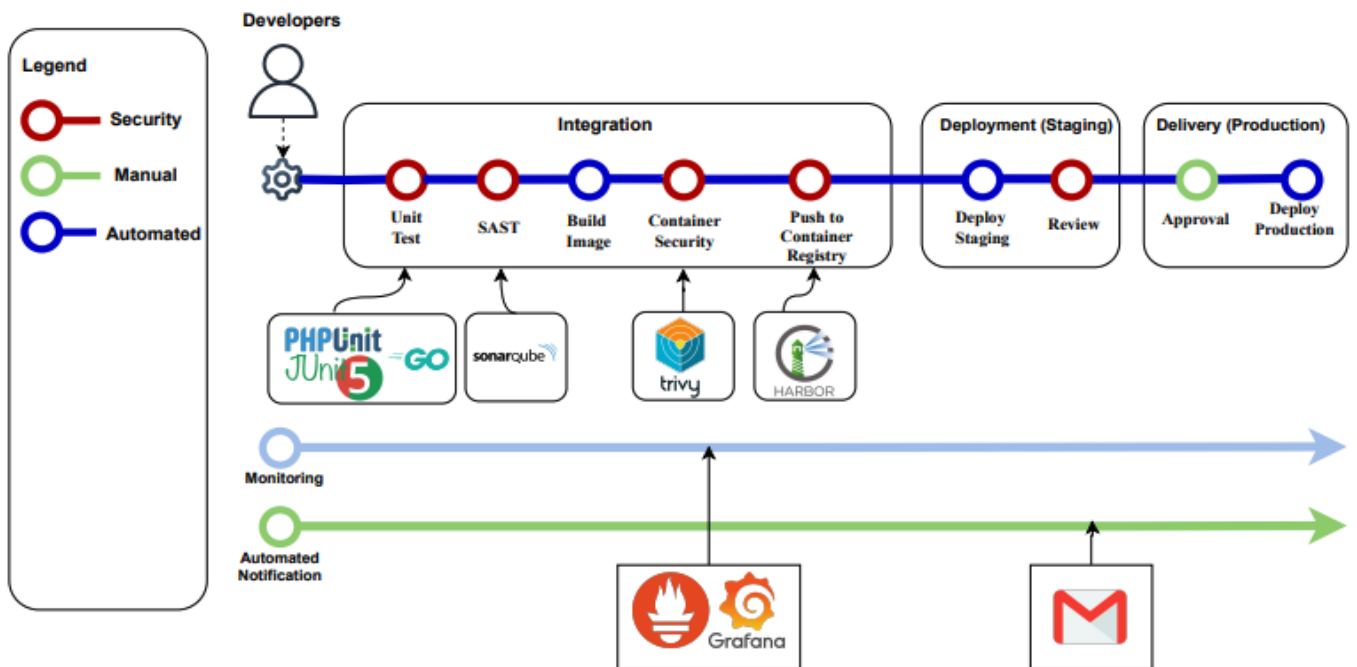
Forum
Discussion



Topologi Training



Topologi Training : Pipeline Flow



Learning Modules

Training Plan	
Topic	Outcome
Introduction to DevOps	<ul style="list-style-type: none"> • Participants will understand how DevOps enhances efficiency, collaboration, and business outcomes. • Participants will learn to integrate speed and collaboration throughout the development lifecycle.
Software Development Life Cycle (SDLC)	<ul style="list-style-type: none"> • Participants will grasp the fundamentals of the Software Development Lifecycle (SDLC) and its importance in development. • Participants will learn how to implement and manage SDLC processes effectively within their development environment.
Management and Operation Harbor Image Registry	<ul style="list-style-type: none"> • Participants understand the Container Image Lifecycle • Participants can manage projects within Harbor. • Participants can manage users within Harbor. • Participants can manage container images.

CI/CD	<ul style="list-style-type: none">• Participants will grasp the core concepts of GitLab Continuous Integration (CI).• Participants will be able to create and integrate CI/CD pipelines within GitLab.
DevOps Pipeline	<ul style="list-style-type: none">• Participants will understand the basics of static testing and its role in finding vulnerabilities early.• Participants will learn to integrate SonarQube for static analysis in repositories and CI/CD pipelines.• Participants will manage app builds, create container images, and perform security scans on containers.• Participants will develop unit tests and integrate them into CI/CD pipelines for automated testing.
DevOps Deployment	<ul style="list-style-type: none">• Participants will learn to configure environment variables across different environments.• Participants will understand how to deploy applications using Kubernetes.• Participants will manage deployments in both staging and production environments.

<p>System Monitoring</p>	<ul style="list-style-type: none">• Participants will monitor CI/CD processes, infrastructure, and application performance.• Participants will enforce security policies through code and policy-based controls.• Alert Notification to slack / email / telegram
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Thank You

Explore our full course offerings in the training catalog:

<https://adinusa.id/pro-training/catalogue>

For further assistance, please contact us at:

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