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# StackState training

3 days (21 hours)

### Presentation

Our StackState training course will teach you how to monitor your entire infrastructure. Optimize your performance and speed up troubleshooting of your IT system. Better observability will enable you to deliver better quality applications. Thanks to this course, you'll be able to install and configure StackState to discover its main features. You'll learn how to integrate different services such as Kubernetes, cloud hosts, Prometheus and GitLab. We'll teach you how to collect data via metrics, logs and traces. You'll be able to create dashboards and analyze your data, so you can respond quickly to incidents and create automations with the API. Thanks to this StackState training course, you'll be able to protect your data via access control or by integrating good security practices.

## Objectives

- Installing and configuring StackState
- Understand the data model, topology and healthcare concepts
- Integrate StackState with Kubernetes, cloud services and CI/CD tools
- Master the collection and analysis of metrics, logs and traces with StackState

# Target audience

- System administrators
- DevOps
- Infrastructure engineers
- Application Manager
- SDM
- Incident manager
- Load testers
- Developer
- Q/A Manager

### **Prerequisites**

### **OUR STACKSTATE TRAINING PROGRAM**

#### INTRODUCTION TO STACKSTATE

- Introducing StackState
- Use cases in a DevOps environment
- The benefits of StackState
- Overview of main features
- Concrete examples of use

#### INSTALLING AND CONFIGURING STACKSTATE

- Installation requirements
- Installation steps for different environments
  - Local
  - Cloud
- Initial configuration of StackState
- Installation check
- Troubleshooting

#### **KEY CONCEPTS**

- The StackState data model
- Notions of topology, state and telemetry
- Component relationships
- Understanding topological views
- Introduction to the concepts of health and impact

#### INTEGRATION

- Kubernetes
- Cloud Services
  - AWS
  - Azure
  - GCP
- Prometheus and Grafana
- Jenkins and GitLab Cl
- Configuring connectors and plugins

#### DATA COLLECTION

- Metrics collection
- Collecting logs
- Trace collection
- Use of collection agents
- Analysis of collected data

#### VISUALIZATION AND ANALYSIS

- Create customized dashboards
- Using topological views for analysis
- Dependency and impact analysis
- Using filters and queries
- Topology analysis case studies

#### INCIDENT MANAGEMENT

- · Configuring alerts in StackState
- Incident and notification management
- Integration with incident management systems
  - PagerDuty
  - Opsgenie
- Root cause analysis
- Automated incident response

#### **AUTOMATION**

- Using the StackState APIs
- Workflow automation
- Scripts and orchestration tools
- Integration with CI/CD pipelines

#### SAFETY AND COMPLIANCE

- Access and permissions management
- Data security
- Compliance with standards and regulations
- Best safety practices
- Audit
- Reporting

#### SUPPORT AND MAINTENANCE

- StackState maintenance strategies
- Update and upgrade management
- Technical support and community
- Performance monitoring and optimization
- Capacity and scalability planning

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

### Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

### Sanction

A certificate will be issued to each trainee who completes the course.