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Updated 03/14/2025

Sign up

Quickwit training

3 days (21 hours)

Presentation

Our **Quickwit training course** will enable you to perform distributed indexing of large quantities of data. Quickwit is an open source solution developed with Rust principles for log search and analytics. It is designed to be fast, massively scalable and cost-effective.

Our training program will teach you Quickwit's distributed architecture and show you the differences with tools such as Loki, Elastic and Splunk. You'll learn how to install the tool on your DevOps environments (Docker, Kubernetes...).

You'll also learn how to manage large-scale environments, as well as scalability and optimization of your Quickwit tool.

As always, our training based on the latest versions of these tools, i.e. Quickwit 0.8

Objectives

- Quickwit architecture and concepts
- Integrate it into your DevOps environment
- Optimize Quickwit

Target audience

- DevOps system administrators
- Developers
- Infrastructure architects

Prerequisites

- Basic knowledge of a Unix/Linux system
- Experience Prometheus

Software requirements

- Recent version of Docker

Quickwit training program

Introducing Quickwit

- Quickwit presentation: history, positioning
- Distributed architecture: splits, object storage
- Use cases: observability, long-term logging
- Comparison with Loki, Elastic, Splunk
- Strengths: scalability, low costs, performance
- Technical prerequisites: environment, dependencies

Installation & Initial setup

- Bare metal installation: official binary, basic configuration
- Docker deployment: official images, env variables
- Installation on Kubernetes : Helm chart, secrets, RBAC
- Storage configuration: S3, MinIO, GCS
- Metastore & indexing: PostgreSQL, file-based
- First index: log ingestion and verification

DevOps queries & integration

- Search syntax: Boolean operators, filtering
- Advanced queries: aggregations, range queries
- Visualization with Grafana: Quickwit datasource
- Integration with collectors (Fluentd, Beats, Vector)
- Quickwit vs Loki / Elastic comparison
- CI/CD automation: log pipelines

Large-scale management & Observability

- Partitioning: by date, application or tenant
- Retention strategies: purging, archiving, cold storage
- Segment merging: merge, pruning, perf gains
- Monitoring: Quickwit metrics, Prometheus, alerting
- Dashboards: best practices for large logs

- Quick workshop: creating a simple dashboard

Optimization, Scalability & Safety

- Best practices for ingesting massive volumes
- Horizontal scalability: multi-node indexers/searchers
- Object storage: cost reduction, merge segments
- Security: deployment behind a proxy (TLS, auth)
- Multi-maintenance: team management, index isolation
- Access management: metastore, backend rights

Automation & High Availability

- Terraform: automated deployment (EC2, S3, Postgres)
- Ansible: idempotent installation and configuration
- HA strategies: several redundant indexers/searchers
- Failover: failure detection, automatic restart
- Recovery plan: testing, chaos engineering
- Quick workshop: Terraform/Ansible scripting

Advanced analysis & Case studies

- Anomaly detection: static rules, external ML
- Metrics extraction: aggregate calculation from logs
- SIEM integration: event correlation, threats
- Use cases: migrations from Elasticsearch, PB archives
- Troubleshooting: Quickwit logs, metrics, troubleshooting
- Final workshop: full deployment, search & alerts

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 training: 60% Practical, 40% Theory. Training material distributed in

to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, 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.