

# Getting started with Grafana

**Duration: 24 hours**

## Overview

Grafana is an open-source analytics and interactive visualization web application used for monitoring, observability, and data exploration. It enables users to query, visualize, alert, and explore metrics, logs, and traces from multiple data sources.

## Audience Profile

The Grafana training is designed for professionals across various domains who seek to gain hands-on expertise in monitoring, visualization, and analytics. The target audience includes:

- IT Professionals & System Administrators
- Data Analysts & Business Intelligence Professionals
- Developers & Software Engineers
- Network Engineers & Security Analysts
- IoT & Industrial Engineers
- Cloud Administrators

## Course Syllabus

### Module 1: Introduction to Grafana

- What is Grafana?
- Features and Benefits
- Use Cases & Industry Applications

### Module 2: Installation and Setup

- System Requirements
- Installing Grafana on Linux, Windows, and Docker
- Configuration and Initial Setup

### Module 3: Understanding Grafana Dashboards

- Creating and Managing Dashboards
- Using Panels and Visualizations

- Variables in Dashboards

## **Module 4: Data Sources and Integrations**

- Supported Data Sources
- Connecting to a Database
- Querying and Filtering Data

## **Module 5: Advanced Dashboard Customization**

- Customizing Themes and Layouts
- Using Annotations and Alerts
- Dynamic Dashboards with Variables

## **Module 6: Grafana Alerting and Notification System**

- Setting Up Alerts
- Notification Channels
- Alert Rules and Conditions
- Handling Alert Silences and Notifications

## **Module 7: Performance Optimization and Troubleshooting**

- Performance Tuning Best Practices
- Debugging Query Performance Issues
- Common Errors and Fixes

## **Module 8. Grafana Loki for Logs Monitoring**

- Introduction to Loki
- Setting Up and Configuring Loki
- Querying and Filtering Logs in Grafana