



Dynatrace Training Plan

Course Overview

This 4-day hands-on training program covers end-to-end Dynatrace capabilities, including architecture, APM, RUM, AI-driven insights, cloud monitoring, and security integrations. Participants will gain proficiency in deploying, configuring, and leveraging Dynatrace for full-stack observability and performance optimization.

Course Objectives

By the end of this course, participants will be able to:

- Deploy and configure Dynatrace components (OneAgent, ActiveGate, Cluster).
- Monitor infrastructure, applications, databases, and cloud environments.
- Utilize DAVIS AI for automated problem detection and root cause analysis.
- Create dashboards, custom alerts, and reports for actionable insights.
- Integrate Dynatrace with third-party tools and APIs.
- Apply best practices for governance, security, and scaling.

Participant Prerequisites

- Basic knowledge of IT infrastructure, networking, and cloud platforms.
- Familiarity with application monitoring concepts.
- Experience with Linux/Windows environments is beneficial.

Target Audience

- IT Operations and DevOps Engineers
- Application and Infrastructure Architects
- SREs and Performance Engineers
- Cloud and Security Professionals

Day-wise Course Outline

Day 1

Introduction, Architecture & Core Components

1. Dynatrace Overview & Value Proposition

- What is Dynatrace?
- Capabilities overview: APM, Infra, RUM, AI, etc.
- Monitoring modern apps: microservices, containers, cloud, etc.

2. Dynatrace Architecture

- Key architectural components (OneAgent, ActiveGate, Cluster)
- Communication flow, data processing

- Deployment Models: SaaS vs. Managed
- High-Level Cluster Architecture
- Cluster sizing, availability, and scaling

3. OneAgents

- Deep dive into OneAgent capabilities
- Installation and configuration

4. User Management - Managed

- Access management via CMC
- Role-Based Access Control (RBAC)

5. Organizing Your Environment

- Entity hierarchy: Hosts, Services, Processes
- Tagging: auto-tag rules, manual tags
- Management Zones: scoping access and views

6. Dynatrace UI Fundamentals

- Navigating the UI
- Global search, menus, entity drilldowns
- Workflow best practices

7. Smartscape

- Real-time topology mapping
- Horizontal (tier) and vertical (dependency) views
- Visualizing host-process-service relationships

8. Traversing Your Stack

- Drilldowns from user to code to infrastructure
- Linking telemetry across layers

Day - 2

9. Application Performance Monitoring (APM)

- Code-level visibility for Python and NodeJS based Application
- Method hotspots, CPU profiling
- Web request tracing C service flow
- Apache Kafka or Cribl Messaging Queue monitoring

10. Real User Monitoring (RUM) Overview

- JavaScript injection model
- RUM vs. Synthetic
- Benefits and visibility scope

11. RUM - Web Applications

- Page performance (Visually complete, TTI)
- JavaScript errors, 3rd-party content
- Geo/user/device breakdowns

12. RUM - User Sessions

- Session C action analysis
- Behavior metrics and conversion tracking
- Funnel and crash analytics

13. Database Monitoring

- DB visibility via OneAgent
- Top queries, slow transactions
- DB service overview and tuning

14. Synthetic Monitoring

- HTTP and browser monitors
- Setting up tests, locations
- Use cases (availability, SLA)

15. URL Monitoring (via Synthetic)

- Specific endpoints/transaction checks
- Validations, error reporting

Day - 3

16. DAVIS AI

- AI engine overview
- Problem cards, event correlation
- Root cause analysis automation

17. Dashboards

- Dashboard creation and tiles
- Custom charts and filters
- Dashboards for different stakeholders (Ops, Dev, Mgmt)

18. Overview of Container Monitoring

- Overview of container monitoring
- Kubernetes container monitoring

19. Overview of Cloud Monitoring

- AWS integrations
- Cloud service visibility
- Tag-based discovery and monitoring

20. Deployment Status Monitoring

- Tracking deployment of OneAgents, ActiveGates
- Troubleshooting connectivity and deployment failures

21. Network Monitoring

- Flow analysis and traffic inspection
- Network dependencies and latency insights

22. Log Monitoring Using Dynatrace

- Log ingestion methods (OneAgent, external sources)
- Log processing and analytics
- Log Management Best Practices

23. Log Analytics

- Searching logs, extracting fields
- Building log-based metrics and alerts
- Deployment Status Monitoring

24. Diagnostic Tools

- Memory dumps, CPU sampling
- Thread and heap analysis
- Problem investigation with PurePath

Day - 4

25. Reports and Alerts

- Custom alerts and problem thresholds
- Alerting profiles and routing
- Scheduled and ad hoc reports

26. Extending Dynatrace

- Integration with third-party systems (e.g., ServiceNow, Splunk)

27. Monitoring Settings

- General monitoring configurations
- Network zones, data retention

28. Process Group Settings

- Optimizing PG detection rules
- PG naming and custom metadata

29. AppSec (Application Security Monitoring)

- Vulnerability detection in runtime
- Security overview dashboard
- DevSecOps use cases

30. SLOs & SLIs

- Defining service-level objectives and indicators
- Setting thresholds and tracking compliance
- Shift-left strategies for performance

31. Best Practices & Wrap-up

- Governance, monitoring strategy
- Scaling Dynatrace in large environments
- Training resources and certifications