

Tableau Certified Architect

Course Duration: 40 Hours

Course Description:

This course is intended for individuals who manage Tableau Server infrastructure. They have knowledge, skills, and experience in designing, deploying, monitoring, and maintaining a scalable Tableau platform, as well as migrations to Tableau Cloud. Professionals who design and manage the overall IT architecture and want to include Tableau in their solutions.

Prerequisite:

Individuals should have substantial experience with Tableau, including advanced knowledge of data connections and server.

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Module1: Design a Tableau Infrastructure

1.1 Gather requirements for implementing a complex Tableau deployment

- User Requirements
- Identify growth-related constraints.
- Recommend licensing strategy
- High Availability and disaster recovery.
- Add-Ons: Map Tableau Server.

1.2 Plan and implement Tableau Cloud

- Tableau Bridge
- Authentication
- User Provisioning: Automate with SCIM.
- Configuration Issues

1.3 Plan a migration

- Cloud to Server
- Server to Cloud
- Windows to Linux
- Identity Store

- Server Consolidation
- Environment Migration
- Scripting
- Migration Tool

1.4 Design an appropriate process topology

- Process counts/Sizing
- Service Relationships
- External Services

1.5 Recommend a Tableau Server configuration

- Identity and Authentication
- Configuration Keys
- Security
- Hardware/Network
- Disaster Recovery

Module 2: Deploy Tableau Server

2.1 Implement production-ready Tableau Server deployments

- Deploy, configure and troubleshoot Tableau Server processes
- Configure an external file store
- Configure an external repository
- Configure an external gateway
- Configure an unlicensed node
- Configure a coordination ensemble
- Configure a backgrounder process with a specific node role
- Configure Tableau for a load balancer
- Configure the Metadata API
- Install in an air-gapped environment
- Validate a disaster recovery/high availability test strategy
- Perform a blue-green deployment
- Locate and interpret Tableau Server installation logs

- Install and configure Resource Monitoring Tool server and agents

2.2 Configure and troubleshoot supported authentication methods

- Configure and troubleshoot SAML
- Configure and troubleshoot Kerberos
- Configure and troubleshoot OpenID Connect
- Configure and troubleshoot Mutual SSL
- Configure and troubleshoot trusted authentication
- Configure and troubleshoot Connected App authentication
- Configure and troubleshoot LDAP
- Configure and troubleshoot Azure Active Directory
- Identify dependencies

2.3 Implement encryption

- SSL encryption
- Database encryption
- Extract encryption
- Set up service principal names (SPNs) for Kerberos

2.4 Install and verify Tableau Server on Linux

- CLI or the Installation Wizard
- Identify and resolve issues
- Identify and resolve issues with operating system and networking configurations
- Identify and resolve issues with interfaces and interactions with external systems
- Identify and resolve issues with proxy issues
- Identify appropriate operating system logs and Tableau logs for troubleshooting
- Verify system groups and file system permissions

2.5 Install and verify Tableau Server on Windows

- CLI or the Installation Wizard
- Identify and resolve issues with installation on Windows
- Identify and resolve issues with operating system and networking configurations
- Identify and resolve issues with interfaces and interactions with external systems
- Troubleshoot proxy issues

- Identify appropriate operating system logs and Tableau logs for troubleshooting
- Verify system groups and file system permissions
- Use the Run As service account

Module 3: Monitor and Maintain a Tableau Deployment

3.1 Create custom administrative views

- Interpret the repository schema and the event types
- Build admin dashboards for common scenarios

3.2 Perform load testing

- Recommend a strategy
- Configure and use a load testing tool such as TabJolt
- Configure a test environment
- Create appropriate test plans
- Interpret load test results and determine the appropriate action

3.3 Identify and resolve performance bottleneck

- Troubleshoot complex performance issues
- Perform resource analysis, latency analysis, and workload analysis to determine root cause of performance issues
- Create an action to resolve issues
- Optimize caching for Tableau Server

3.4 Maintain and tune a Tableau Server environment by using observability data

- Resource Monitoring Tool
- Log Analysis
- Process Metrics
- OS/Hardware Metrics
- Data Interpretation
- Architecture Revision
- Connectivity Troubleshooting

3.5 Automate server maintenance functions

- Resource Management

- Script Deployment
- Automated Deployment
- Disaster Recovery
- Server Upgrades
- Maintenance Tasks

3.6 Manage server extensions

- Content Automation
- Dashboard Extensions
- Embedded Solutions