

## **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

You can reach us at:

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CODE: LENGTH: PRICE:

SPL ARCH-FT 40 Hours (5 days) €4,000.00

#### **Description**

This course focuses on large enterprise deployments. Students will learn:

- steps and best practices for planning, data collection and sizing for a distributed deployment.
- topics and techniques for troubleshooting a standard Splunk distributed deployment using the tools available on Splunk Enterprise.
- troubleshooting experience before attending more advanced courses. You will debug a distributed Splunk Enterprise environment using the live system. case logs.
- the fundamental knowledge of deploying and managing Splunk Enterprise in a clustered environment. It covers installation, configuration, management, and monitoring of Splunk clusters.

While Splunk Clusters are supported in Windows environments, the class lab environment is running Linux instances only. ONLY for customers with Splunk on-prem

#### **Objectives**

Architecting Splunk Enterprise Deployments: Module 1 – Introduction

- Overview of the Splunk deployment planning process and associated tools Module 2 – Project Requirements
- Identify critical information about environment, volume, users, and requirements
- Review checklists and resources to aid in collecting requirements
  Module 3 Infrastructure Planning: Index Design
- · Design and size indexes
- · Estimate storage requirements
- Identify relevant apps
  Module 4 Infrastructure Planning: Resource Planning
- List sizing factors for servers
- Describe how reference hardware is used to scale deployments
- Identify the impact of clustering for index replication and for search heads Module 5 - Clustering Overview
- · Describe the different clustering capabilities
- Introduce the concepts of indexer and search head clustering Module 6 - Forwarder and Deployment Best Practices
- Review types of forwarders
- Describe how to manage forwarder installation

- Review configuration management for all Splunk components, using Splunk deployment tools
- Provide best practices for a Splunk deployment Module 7 - Integration
  - Describe integration methods
  - · Identify common integration points

Module 8 – Performance Monitoring and Tuning

- Use the Monitoring Console to track test environment performance
- List options to fine tune performance for production environment Module 9 – Use Cases
- Provide example architecture topologies
- Discuss different architecture options based on use case
  Troubleshooting Splunk Enterprise: Module 1 Splunk Troubleshooting Methods and Tools
- · Describe the Splunk Troubleshooting Approach
- List Splunk Diagnostic Resources and Tools
- · Create and Splunk a Diag
- Use RapidDiag Module 2 – Indexing Problems
- Discover Splunk deployment Topology and its Server Roles
- Identify Where to Check the Index-Time Pipeline Status
- Use the metrics.log to Clarify the Index-Time Problem Module 3 Input Configuration Problems
- Data Input issues
- Troubleshooting Inputs with the Monitoring Console Module 4 – Input Deployment Problems
- Deployment server issues
- Forwarding and Receiving Issues
  Module 5 Indexer Cluster Management Administration
- · Peer Offline and Decommission
- Master App Bundles
- Indexer Cluster Storage Utilization Options
- Site Mapping
- Monitoring Console for Indexer Cluster Environment

Module 6 - License, Upgrade, and User Management Problems

- Installation Issues
- Upgrade Considerations

- Splunk Licensing Issues
- Splunk Roles and User Management issues Module 7 – Search Management Problems
- Troubleshoot Distributed Search Issues
- · Identify Job Scheduling Problems
- Learn to Diagnose Crashing Problems
- Describe How to Prioritize Resources for Critical Splunk Processes Module 7 – KV Store Collection and Lookup Management
- · Identify the Types of Search Problems
- Isolate and Troubleshoot Search Problems
  Splunk Enterprise Cluster Administration: Module 1 Large-scale Splunk Deployment Overview
- · Factors that affecting deployment design
- How Splunk Enterprise can scale
- Splunk License Master
  Module 2 Single-site Indexer Cluster
- How Splunk Single-Site Indexer Clusters Work
- · Indexer Cluster Components and Terms
- Splunk Single-Site Indexer Cluster Configuration
- Splunk indexer Cluster Log Channels
  Module 3 Multisite Indexer Cluster
- How Splunk Multi-site Indexer Clusters Work
- Multi-Site Indexer Cluster Terms
- Multi-Site Indexer Cluster Configurations
- Optional Multi-Site Indexer Cluster Configurations
  Module 4 Indexer Cluster Management and Administration
- · Peer offline and decommission
- · Master app bundles
- Indexer Cluster Storage Utilization Options
- Site Mapping
- Monitoring Console for Indexer Cluster Environment

#### Module 5 - Forwarder Management

- Indexer discovery
- o Optional Indexer Discovery Configurations
- Volume-Based Forwarder Load Balancing

Module 6 - Search Head Cluster

• Splunk Search Head Cluster Overview

Search Head Cluster Configuration

Module 7 - Search Head Cluster Management and Administration

- Search Head Cluster Deployer
- · Captaincy Transfer
- Search Head Member Addition and Decommissioning
- Monitoring Console for Search Head Cluster
  Module 8 KV Store Collection and Lookup Management
- KV Store Collection in Splunk Clusters
- KV Store Monitoring with Monitoring Console Module 9 – SmartStore Implementation
- SmartStore Architecture Overview
- Deploy and manage SmartStore

#### **Prerequisites**

To be successful, students should have a solid understanding of the following courses:

- · What is Splunk?
- · What is Splunk?
- Intro to Splunk
- Using Fields
- · Scheduling Reports and Alerts
- Visualizations
- · Leveraging Lookups and Sub-searches
- Search Under the Hood
- Introduction to Knowledge Objects
- · Creating Knowledge Objects
- · Enriching Data with Lookups
- Data Models
- Introduction to Dashboards

Or the following legacy courses: Students should also understand the following advanced coursework:

- Splunk Enterprise System Administration
- Splunk Enterprise Data Administration
- Splunk Enterprise Cluster Administration

#### **Test and Certification**

Splunk Enterprise Certified Architect (Prereq for this cert is the Splunk Core Certified Power User AND Splunk Enterprise Certified Admin)

#### **Session Dates**

On request. Please Contact Us

### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.