



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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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
  - 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.](#)