

# Configuring F5 SSL Orchestrator (SSLO)

ID SSLO Preis US \$ 2.376,- (exkl. MwSt.) Dauer 2 Tage

## Kursüberblick

In this 2 day course, students are provided with a functional understanding of how to deploy, test and maintain F5 SSL Orchestrator to optimize the SSL infrastructure, provide security devices with visibility of SSL/TLS encrypted traffic, and maximize efficient use of that existing security investment.

The course includes lecture, hands-on labs, and discussion about the importance of SSL visibility, how F5 SSL Orchestrator supports policy-based management, steering of traffic flows to existing security devices and centralizes the SSL decrypt/encrypt function through multi-layered security, dynamic service chaining, topology selections and security policies.

## Voraussetzungen

The following general network technology knowledge and experience are recommended before attending any F5 Global Training Services instructor-led course:

- OSI model encapsulation
- Routing and switching
- Ethernet and ARP
- TCP/IP concepts
- IP addressing and subnetting
- NAT and private IP addressing
- Default gateway

The following course-specific knowledge and experience is suggested before attending this course:

- HTTP, HTTPS protocols
- TLS/SSL
- Security services such as malware detection, data loss/leak prevention (DLP), next-generation firewalls (NGFW), intrusion prevention systems (IPS), and Internet Content Adaptation Protocol (ICAP)

## Kursziele

- Understand basic use cases for decryption and re-

- encryption of inbound and outbound SSL/TLS network traffic
- Create dynamic service chains of multiple security services
- Configure security policies to enable policy-based traffic steering
- Add SSL visibility to existing applications
- Deploy SSL Orchestrator configurations based on topology templates
- Troubleshoot an SSL Orchestrator deployment

## Kursinhalt

- Compare F5 SSL Orchestration to manual “daisy chaining” of security services
- Learn essentials of PKI and certificates, how to create a certificate signing request, and how to import certificates and private keys into BIG-IP
- Implement certificate forging in an SSL Forward Proxy deployment
- Understand HTTP, ICAP, L3/L2, and TAP security services
- Configure traffic classification and URL bypass within a security policy
- Define security services to include in a dynamic service chain
- Use the Guided Configuration to deploy an outbound Layer 3 transparent forward proxy
- Use the Guided Configuration to deploy an outbound Layer 3 explicit forward proxy
- Use the Guided Configuration to deploy an inbound Layer 3 reverse proxy
- Use the Guided Configuration to deploy an SSL Orchestration for an existing application
- Configure High Availability for SSLO devices
- Troubleshoot SSLO and traffic flow issues

## Detaillierter Kursinhalt

### Chapter 1: Introducing SSL Orchestrator

- Why is SSL Visibility Needed?
- SSL Visibility without SSL Orchestrator
- The SSL Orchestrator Solution
- SSLO Placement on the Network
- Platform and Licensing Requirements
- Leveraging F5 Support Resources and Tools

## Chapter 2: Reviewing Local Traffic Configuration

- Reviewing Nodes, Pools, and Virtual Servers
- Reviewing Address and Port Translation
- Reviewing Routing Assumptions
- Reviewing Application Health Monitoring
- Reviewing Traffic Behavior Modification with Profiles
- Reviewing the TMOS Shell (TMSH)
- Reviewing Managing BIG-IP Configuration Data

## Chapter 3: Certificate Fundamentals

- Overview of Internet Security Model
- Understanding how Certificates are Used
- Using a Certificate in Profiles
- SSL Forward Proxy
- SSLdump

## Chapter 4: SSLO Traffic Flow

- SSL Orchestration is more than Visibility
- Inbound/Outbound Inspection
- Flow Support and Cipher Diversity
- Broad Topology and Device Support
- Dynamic Service Chaining and Policy-based Traffic Steering
- Advanced Monitoring
- Dynamic Scaling
- Dynamic Evaluation
- Selecting the Appropriate Topology

## Chapter 5: Using SSLO Guided Configuration

- Introducing Guided Configuration
- Reviewing the Landing Page
- Differentiating Topologies
- SSL Configuration
- Services and Service Handling
- Constructing Service Chains
- Creating a Security Policy
- Defining an Interception Rule
- Examining Egress
- Applying Log Settings
- Summary page and Deployment
- Exploring the Dashboard

## Chapter 6: SSLO Deployment Scenarios

- Transparent Forward Proxy
- Explicit Forward Proxy
- Classroom Lab Environment
- Gateway Reverse Proxy (L3 Inbound)
- Existing Application

## Chapter 7: Managing the SSLO Security Policy

- Review creating Security Policies
- View Security Policies
- Viewing Per-Request Policies

## Chapter 8: Troubleshooting SSLO

- Solving Traffic Flow Issues
- Solving Guided Configuration (UI) and iAppLX issues
- Determining SSLO Version
- Troubleshooting using cURL
- Viewing Log Files
- Capturing Traffic using tcpdump
- Backing up SSLO
- Deleting a SSLO Configuration

## Chapter 9: SSLO High Availability

- Deploying BIG-IP Systems to Achieve High Availability
- Establishing Device Trust
- Establishing a Sync-Failover Device Group
- Synchronizing Configuration Data
- SSLO High Availability (HA) Requirements
- Installation and Upgrade Cautions
- Troubleshooting HA

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