



F5 BIG-IP® Edge Gateway™ - Access Policy Manager™ (APM) - V11

Code: ACBE–F5-APM

Days: 3

Course Description:

This three-day course provides security and network professionals with a functional understanding of the BIG-IP® Access Policy Manager (APM). The course includes installation, configuration, management and troubleshooting on a BIG-IP® APM. Lectures, demonstrations, hands-on labs and discussions will be incorporated.

Course Summarize:

Module 1: BIG-IP Installation and Initial Access

BIG-IP Access Policy Manager Overview
Licensing and the Setup Utility

- **Lab 1a** – Installation and Setup
- **Lab 1b** – Changing Initial IP Address
- **Lab 1c** – Licensing and Provisioning the System
- **Lab 1d** – Setup Utility
- **Lab 1e** – Configuration Utility
- **Lab 1f** – Configuration Backup

BIG-IP Hardware Platforms

- **Lab 1g** – SCCP / AOM IP Address Configuration

Module 2: APM Traffic Processing

Virtual Servers and Access Profiles
APM Configuration Wizards
Logging
Reporting

- **Lab 2a** – APM Configuration Wizard
- **Lab 2b** – Configuration Backup

Module 3: APM Access Policies and Profiles

Access Policies Overview
Access Policy Branches
Access Policy Endings

- Configuring Access Policies and Profiles
Using Webtops
Exporting and importing access profiles
- **Lab 3a** – Access Policies
 - **Lab 3b** – Configuration Backup

Module 4: APM Portal Access

- Web Applications Overview
Configuring Web Applications
Rewrite Profiles
SSO and Credential Caching
- **Lab 4a** – Portal Access
 - **Lab 4b** – Configuration Backup

Module 5: APM Network Access

- Network Access Overview
Configuring Network Access
BIG-IP Edge Client
- **Lab 5a** – Network Access
 - **Lab 5b** – BIG-IP Edge Client
 - **Lab 5c** – Configuration Backup

Module 6: APM Application Access

- Application Access Overview
Application Access
Configuring Remote Desktop Access
Configuring Webtops
- **Lab 6a** – Full Webtop
 - **Lab 6b** – Webtop Links
 - **Lab 6c** – Application Access
 - **Lab 6d** – Network Access Optimized Tunnels
 - **Lab 6e** – Terminal Services
 - **Lab 6f** – Single Sign-on for Terminal Services
 - **Lab 6g** – Configuration Backup

Module 7: APM Access Control Lists

- Resources Overview
Access Control Lists
- **Lab 7a** – Access Control Lists
 - **Lab 7b** – Dynamic Access Control Lists
 - **Lab 7c** – Layer 7 Access Control Lists
 - **Lab 7d** – Layer 4 + 7 Access Control Lists
 - **Lab 7e** – Configuration Backup

Module 8: BIG-IP LTM Concepts

LTM Pools and Virtual Servers
Monitor Concepts and Configuration
Secure Network Address Translation (SNAT)

- **Lab 8a** – Virtual Servers and Pools
- **Optional Lab 8b** – Monitors
- **Optional Lab 8c** – SNAT Automap
- **Lab 8d** – Configuration Backup

Module 9: Web Application Access for LTM

APM / LTM Concepts – Web Applications Access
Configuring APM and LTM together
Profiles
Profile Types and Dependencies
Configuring and Using Profiles
SSL Termination/Initiation
SSL Profile Configuration

- **Lab 9a** – Web Applications Access for LTM
- **Optional Lab 9b** – Self-Signed Certificates
- **Lab 9c** – Configuration Backup

Module 10: APM Macros and Authentication Servers

Access Policy Macros
Configuring Access Policy Macros
Authentication with Access Policy Manager
Radius Server Authentication
LDAP Server Authentication
Windows Active Directory Server Authentication

- **Lab 10a** – AAA Servers
- **Lab 10b** – Visual Policy Editor Macros
- **Lab 10c** – Active Directory Query
- **Optional Lab 10d** – **Idapsearch**
- **Lab 10e** – Configuration Backup

Module 11: APM Client Side Checks

Overview of APM Client Side Checks
Configuring Client Side Checks
Overview of Client Side Actions
Configuring Client Side Actions

- **Lab 11a** – Client-Side Process Check
- **Optional Lab 11b** – Protected Workspaces
- **Optional Lab 11c** – AV and Firewall Checking
- **Lab 11d** – Configuration Backup

Module 12: APM Advanced Topics

General Purpose Access Policy Actions
Server Side Checks
Advanced Actions in Access Policies

Session Variables
Access iRules Events
Typical APM iRule Use Case
Configuring Access iRules

- **Lab 12a** – Session Variables
- **Lab 12b** – Customization
- **Lab 12c** – iRule
- **Optional Labs 12d** – Pre-defined iRule
 - **Lab 12e** – Configuration Backup

Module 13: APM Authentication Domains

Authentication Domain Concepts

- **Lab 13a** – Authentication Domains
- **Lab 13b** – Authentication Domains with SSO
- **Optional Lab 13c** – SSO Auth Domain Wrap-Up
- **Optional Lab 13d** – Web App Access Logout
- **Lab 13e** – Configuration Backup

Module 14: Maintaining BIG-IP

Redundant Pair Concepts
F5 Support Resources and Tools
Documentation for Support
Logging and Notification

- **Lab 14a** – tmsh Users
- **Optional Lab 14b** – Remote Syslogging
- **Optional Lab 14c** – SNMP Traps
- **Optional Lab 14d** – AskF5
- **Lab 14e** – Configuration Backup

Module 15: APM Configuration Project

Configuration Project Overview

- **Lab 15a** – Configuration Restore
- **Lab 15b** – Configuration Project

Appendix A - Installation

Pre-Installation Information
Installation Worksheet
V10.x Installation options

- **Optional Lab** – v10 Reload Steps

Appendix B – APM New Features

New Feature summary for Version 10.2.0
New Feature summary for Version 10.1.0

Appendix C – Redundant Pairs

Redundant Pair Concepts
Synchronizations, State and Failover

- **Lab C1** – Redundant Pair Setup
- **Lab C2** – Synchronization

Redundant Pair Communication
Upgrading the Big-IP LTM
High Availability

Failover Trigger Configuration

- **Lab C3** – VLAN Failsafe

Failover Detection

- **Lab C4** – Network Failover

Stateful Failover

- **Lab C5** – Connection Mirroring
- **Lab C6** – Persistence Mirroring

MAC Masquerading

- **Lab C7** – MAC Masquerading

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Appendix D – PowerPoint Slides