

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

## **TRAINING OFFERING**

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# Configuring BIG-IP APM: Access Policy Manager v.16.1

CODE: LENGTH: PRICE:

F5N BIG-EGW-APM 24 Hours (3 days) £2,295.00

#### **Description**

Learn how to set up and operate BIG-IP Access Policy Manager to protect your enterprise network and your data center using remote access methods such as SSL VPN, per-application layer 4 and reverse proxy layer 7 access methods as well as remote desktop access using Microsoft, Citrix and VMware protocols. Learn how to protect applications by adding Access Policies to BIG-IP LTM virtual servers that allow or deny user access based on a set of conditions, such as user authentication using Active Directory or RADIUS or by determining if the client is running up-to-date anti-virus or firewall software.

Discover how to configure multiple resources using the aforementioned remote access methods, to provide applications such as SSH or Windows desktop to remote servers. With multiple resources created, dynamically assign resources based on the level of trust determined by conditions such as a user's group membership, the client IP address geolocation information, the status of applications running on the client, and other available information. See how to craft complicated policies using easy-to-learn graphical flowcharting techniques that are quick to update and simple to propagate.

Learn how to use SSO techniques to make applications more accessible and more secure using credential reuse or federated single sign-on such as SAML – including both SP and IdP use cases. Review underlying technology and discuss typical use cases. Complete hands-on labs to reinforce each new topic as well as instill confidence for using the BIG-IP system in a production environment.

#### **Objectives**

At the end of this course, the student will be able to:

- Configure remote access methods Network Access, Portal Access and Application Access and understand the differences and use cases for each
- Configure APM and LTM to work together for advanced application delivery as well as understand the APM + LTM use case versus the remote access use case
- Configure advanced policies using the Visual Policy Editor with all of its features such as macros, branches and multiple endings
- Understand the role of iRules and how they work together with BIG-IP in general and APM in specific
- Understand the role of Federated Single Sign-On using SAML and deploy a basic configuration
- Configure multiple authentication methods and understand how they can work together in a single access policy
- Set up, license, and provision the BIG-IP system out-of-the-box
- · Create, restore from, and manage BIG-IP archives

• Use profiles to manipulate the way the BIG-IP system processes traffic through a virtual server

#### **Audience**

This course is intended for network administrators, operators, and engineers responsible for managing the normal day-to-day operation and administration of BIG-IP Access Policy Manager.

#### **Prerequisites**

Students must complete one of the following F5 prerequisites before attending this course:

- Administering BIG-IP (ILT)
- F5 Certified BIG-IP Administrator

Suggested Prework

The following free Self-Directed Training (SDT) courses, although optional, are helpful for any student with limited BIG-IP administration and configuration experience:

- · Getting Started with BIG-IP
- · Getting Started with Local Traffic Manager (LTM)
- Getting Started with BIG-IP Access Policy Manager (APM)

General network technology knowledge and experience are recommended before attending any F5 Global Training Services instructor-led course, including OSI model encapsulation, routing and switching, Ethernet and ARP, TCP/IP concepts, IP addressing and subnetting, NAT and private IP addressing, NAT and private IP addressing, default gateway, network firewalls, and LAN vs. WAN. The following course-specific knowledge and experience is suggested before attending this course:

- · Hands-on experience with BIG-IP
- Basic web application delivery (BIG-IP LTM)
- HTML, HTTP, HTTPS as well as some CSS and JavaScript
- Telnet, SSH and TLS/SSL
- VPN or tunnel encapsulation, Layer 4 NAT and Access Control Lists

#### **Programme**

Chapter 1: Setting Up the BIG-IP System

- · Introducing the BIG-IP System
- Initially Setting Up the BIG-IP System
- Archiving the BIG-IP Configuration
- Leveraging F5 Support Resources and Tools Chapter 2: Configuring Web Application Access
- Review of BIG-IP LTM
- · Introduction to the Access Policy

• Web Access Application Configuration Overview • Active Directory Query

Web Application Access Configuration in Detail
Active Directory Nested Groups

Chapter 3: Exploring the Access Policy

· Navigating the Access Policy

Chapter 4: Managing BIG-IP APM

- BIG-IP APM Sessions and Access Licenses
- · Session Variables and sessiondump
- Session Cookies
- Access Policy General Purpose Agents List Chapter 5: Using Authentication
- Introduction to Access Policy Authentication
- Active Directory AAA Server
- RADIUS
- One-Time Password
- · Local User Database

Chapter 6: Understanding Assignment Agents

· List of Assignment Agents

Chapter 7: Configuring Portal Access

- Introduction to Portal Access
- Portal Access Configuration Overview
- · Portal Access Configuration
- · Portal Access in Action

Chapter 8: Configuring Network Access

- Concurrent User Licensing
- VPN Concepts
- Network Access Configuration Overview
- Network Access Configuration
- · Network Access in Action

Chapter 9: Deploying Macros

- Access Policy Macros
- · Configuring Macros
- · An Access Policy is a Flowchart
- Access Policy Logon Agents
- Configuring Logon Agents

Chapter 10: Exploring Client-Side Checks

- Client-Side Endpoint Security
- Chapter 11: Exploring Server-Side Checks
- Server-Side Endpoint Security Agents List
- Server-Side and Client-Side Checks Differences F5 Professional Certification Program

Chapter 12: Using Authorization

- Configuration in Detail

Chapter 13: Configuring App Tunnels

- Application Access
- Remote Desktop
- Network Access Optimized Tunnels
- Landing Page Bookmarks

Chapter 14: Deploying Access Control Lists

- Introduction to Access Control Lists
- · Configuration Overview
- Dynamic ACLs
- Portal Access ACLs

Chapter 15: Signing On with SSO

- Remote Desktop Single Sign-On
- · Portal Access Single Sign-On

Chapter 16: Using iRules

- · iRules Introduction
- · Basic TCL Syntax
- iRules and Advanced Access Policy Rules

Chapter 17: Customizing BIG-IP APM

- Customization Overview
- BIG-IP Edge Client
- Advanced Edit Mode Customization
- Landing Page Sections

Chapter 18: Deploying SAML

- SAML Conceptual Overview
- SAML Configuration Overview

Chapter 19: Exploring Webtops and Wizards

- Webtops
- Wizards

Chapter 20: Using BIG-IP Edge Client

- BIG-IP Edge Client for Windows Installation
- · BIG-IP Edge Client in Action

Chapter 21: Configuration Project

Chapter 22: Additional Training and Certification

- · Getting Started Series Web-Based Training
- F5 Instructor Led Training Curriculum

#### Follow on courses

F5N BIG-LTM-CFG-3, Configuring BIG-IP LTM: Local Traffic Manager v.16.1 F5N\_BIG-DNS-I, Configuring BIG-IP DNS (formerly GTM) v.16.1

F5N BIG-AWF-CFG, Configuring F5 Advanced WAF (previously licensed as ASM) v16.1

#### **Test and Certification**

Exam 304 - BIG-IP APM Specialist Prerequisites: Valid F5-CA, BIG-IP Certification

In passing Exam 304, candidates receive the F5 Certified! Technology Specialist, Access Policy Manager certification. Individuals who receive this certification have demonstrated that they have the skills and understanding necessary for day-to-day management of Application Delivery Networks that incorporate technologies based on TMOS operation system, and to implement, troubleshoot, and maintain BIG-IP APM in a variety of application environments, with special emphasis on different types of authentication, authorization, and accounting resources.

Receiving the BIG-IP APM Specialist certification is a prerequisite for the Security Solutions Expert certification track. Exam vouchers can be purchased from Arrow ECS at an additional charge. Vouchers can be used at www.vue.com/f5 to schedule exams at a time and location convenient to the attendee.

#### **Further Information**

Course Changes since v15

Configuring BIG-IP APM did not change significantly with version 16.1. Minor changes were made to remove out of date features and show the improved VPN split tunnelling configuration.

#### **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
15 May 2024	Virtual Classroom	BST	English	Instructor Led Online		£ 2,295.00 £1,950.75
09 Oct 2024	Virtual Classroom	BST	English	Instructor Led Online		£2,295.00
04 Dec 2024	Virtual Classroom	GMT	English	Instructor Led Online		£2,295.00

#### **Additional Information**

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