



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

---

**You can reach us at:**

Arrow ECS B.V., Kromme Schaft 5, 3991 AR Houten, The Netherlands

Email: [education.ecs.nl@arrow.com](mailto:education.ecs.nl@arrow.com)

Phone: +31 20 582 6109

# Configuring BIG-IP APM: Access Policy Manager v.15.1

CODE:	LENGTH:	PRICE:
F5N_BIG-EGW-APM	24 Hours (3 days)	€2,395.00

## Description

This 3 day course gives network administrators, network operators, and network engineers a functional understanding of BIG-IP Access Policy Manager as it is commonly deployed in both application delivery network and remote access settings. The course introduces students to BIG-IP Access Policy Manager, its configuration objects, how it commonly deployed, and how typical administrative and operational activities are performed.

The course includes lecture, hands-on labs, interactive demonstrations, and discussions. Topics Covered

- Getting started with the BIG-IP system
- APM Traffic Processing and APM Configuration Wizards
- APM Access Policies, Access Profiles
- Visual Policy Editor, Branches and Endings
- APM Portal Access and Rewrite Profiles
- Single Sign-On and Credential Caching
- APM Network Access and BIG-IP Edge Client
- Layer 4 and Layer 7 Access Control Lists
- APM Application Access and Webtop Types
- Remote Desktop, Optimized Tunnels and Webtop Links
- LTM Concepts including Virtual Servers, Pools, Monitors and SNAT'ing
- APM + LTM Use Case for Web Applications
- Visual Policy Editor Macros
- AAA Servers and Authentication and Authorization with Active Directory and RADIUS
- Endpoint Security with Windows Process Checking, Protected Workspace and Firewalls
- iRules, Customization and SAML

## 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 instructor-led course or
- ? F5 Certified BIG-IP Administrator

The following free web-based courses, although optional, will be very helpful for any student with limited BIG-IP administration and configuration experience. These courses are available at LearnF5 (<https://www.f5.com/services/training>):

- ? Getting Started with BIG-IP web-based training
  - ? Getting Started with BIG-IP Access Policy Manager (APM) web-based training
- 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
  - ? Network firewalls
  - ? 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

- ? Introducing the BIG-IP System
  - ? Initially Setting Up the BIG-IP System
  - ? Archiving the BIG-IP Configuration
- Chapter 1: Setting Up the BIG-IP System? Leveraging F5 Support Resources and Tools
- ? Review of BIG-IP LTM
  - ? Introduction to the Access Policy
  - ? Web Access Application Configuration Overview
- Chapter 2: Configuring Web Application Access? Web Application Access Configuration in Detail
- Chapter 3: Exploring the Access Policy? Navigating the Access PolicyChapter 4: Managing BIG-IP APM
- ? Introduction to Access Policy Authentication
  - ? Active Directory AAA Server
  - ? RADIUS
  - ? One-Time Password
- ? BIG-IP APM Sessions and Access Licenses
- ? Session Variables and sessiondump
- ? Session Cookies
- ? Access Policy General Purpose Agents ListChapter 5: Using Authentication? Local User Database
- Chapter 6: Understanding Assignment Agents? List of Assignment AgentsChapter 7: Configuring Portal Access
- ? Concurrent User Licensing
  - ? VPN Concepts
  - ? Network Access Configuration Overview
  - ? Network Access Configuration
- ? Introduction to Portal Access
- ? Portal Access Configuration Overview
- ? Portal Access Configuration
- ? Portal Access in Action
- Chapter 8: Configuring Network Access? Network Access in Action
- ? Access Policy Macros
  - ? Configuring Macros
  - ? An Access Policy is a Flowchart
  - ? Access Policy Logon Agents
- Chapter 9: Deploying Macros? Configuring Logon Agents
- Chapter 10: Exploring Client-Side Checks
- ? Server-Side Endpoint Security Agents List
- ? Client-Side Endpoint SecurityChapter 11: Exploring Server-Side Checks? Server-Side and Client-Side Checks Differences
- ? Active Directory Query
  - ? Active Directory Nested Groups
- Chapter 12: Using Authorization? Configuration in Detail
- ? Application Access
- ? Remote Desktop
- ? Network Access Optimized Tunnels
- ? Landing Page Bookmarks
- Chapter 13: Configuring App Tunnels
- ? Introduction to Access Control Lists
  - ? Configuration Overview
  - ? Dynamic ACLs
- Chapter 14: Deploying Access Control Lists? Portal Access ACLs
- ? Remote Desktop Single Sign-On
- Chapter 15: Signing On with SSO? Portal Access Single Sign-On
- Chapter 16: Using iRules
- ? Customization Overview
  - ? BIG-IP Edge Client
  - ? Advanced Edit Mode Customization
- ? iRules Introduction
- ? Basic TCL Syntax
- ? iRules and Advanced Access Policy RulesChapter 17: Customizing BIG-IP APM? Landing Page Sections
- ? SAML Conceptual Overview
  - ? Webtops
- Chapter 18: Deploying SAML? SAML Configuration OverviewChapter 19: Exploring Webtops and Wizards? Wizards
- ? BIG-IP Edge Client for Windows Installation
- Chapter 20: Using BIG-IP Edge Client? BIG-IP Edge Client in Action
- Chapter 21: Configuration Project

Follow on courses

F5N\_BIG-LTM-CFG-3, Configuring BIG-IP LTM: Local Traffic Manager v.15.1  
F5N\_BIG-DNS-I, Configuring BIG-IP DNS (formerly GTM) v.15.1  
F5N\_BIG-AWF-CFG, Configuring F5 Advanced WAF (previously licensed as ASM) v15.1

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](http://www.vue.com/f5) to schedule exams at a time and location convenient to the attendee.

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
27 May 2024	Virtual Classroom (CET / UTC+1)	CEDT	English	Instructor Led Online		€2,395.00

Additional Information

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