

Training: F5  
Developing iRules for BIG-IP



## TRAINING GOALS:

This course provides networking professionals a functional understanding of iRules development. The course builds on the foundation of the Administering BIG-IP v11 course, demonstrating how to logically plan and write iRules to help monitor and manage common tasks involved with processing traffic on the BIG-IP. Course Labs consist of writing, applying and evaluating the effect of iRules on LTM traffic. This hands-on course includes lectures, labs, and discussions.

### Audience:

This course is intended for system administrators, network administrators and application developers responsible for the customization of traffic flow through a BIG-IP system.

## CONSPECT:

- Setting Up the BIG-IP System
  - Introducing the BIG-IP System
  - Initially Setting Up the BIG-IP System
  - Archiving the BIG-IP Configurations
  - Leveraging F5 Support Resources and Tools
- Getting Started with iRules
  - Customizing Application Delivery with iRules
  - Triggering an iRule
  - Leveraging the DevCentral Ecosystem
  - Using the F5 iRule Editor
  - Assigning and Testing iRules
- Exploring iRule Elements
  - Understanding Events and Event Context
  - Introducing iRule Constructs
  - Working with iRule Commands
  - Working with User-Defined Variables
  - Working with Operators and Data Types

- Working with Control Structures
- Logging from an iRule Using syslog-ng
- Incorporating Best Practices in iRules
- Developing and Troubleshooting iRules
  - Mastering Whitespace and Special Symbols
  - Developing and Troubleshooting Tips
  - Using Fiddler to Test and Troubleshoot iRules
- Optimizing iRules Execution
  - Understanding the Need for Efficiency
  - Measuring iRule Runtime Efficiency
  - Modularizing for Administrative Efficiency
  - Using Procedures to Modularize Code
  - Optimizing Logging
  - Implementing Other Efficiency Best Practices
- Securing Applications with iRules
  - Reviewing BIG-IP Security Features
  - Preventing Common HTTP Attacks
- Working with Numbers and Strings
  - Understanding Number Forms and Notation
  - Working with Strings
    - Parsing Strings
    - Combining Strings
    - iRule String Parsing Functions
- Focusing on HTTP Traffic
  - Reviewing HTTP Headers and Commands
  - Accessing and Manipulating HTTP Headers
  - Parsing the HTTP URI
  - Selectively Compressing HTTP Data
- Working with iFiles and Data Groups
  - Working with iFiles
  - Working with Data Groups
  - Processing Data Groups
- Using iRules with Universal Persistence, Stream, and Statistics Profiles
  - Implementing Universal Persistence
  - Working with the Stream Profile
  - Working with the Statistics Profile

- Using iStats
- Incorporating Advanced Variables
  - Using Advanced Variables
  - Using Static Variables
  - Understanding Global Variables
  - Using the Session Table
- Additional Training and Certification
  - Getting Started Series Web-Based Training
  - F5 Instructor Led Training Curriculum
  - F5 Professional Certification Program

## REQUIREMENTS:

Before attending the Troubleshooting, ASM, DNS, APM, AAM, AFM, VIPRION or iRules courses is mandatory:

- to take part in the BIG-IP Admin or LTM course
- or possession of F5-CA or F5-CTS LTM certification
- or pass special assessment test with score 70% or greater.

To take assessment test:

**Step 1: get an account on F5 University <https://university.f5.com>**

**Step 2: goto My Training and find Administering BIG-IP Course Equivalency Assessment**

Take the test. Pass mark is 70%

**Step 3: take a screen shot as proof of results**

If this prerequisite is not met, F5 Networks have the right to refuse entry to the class.

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by F5 Networks (course completion).

## TRAINER:

Certified F5 Networks Trainer.