F5 Networks Training

Getting Started with BIG-IP Local Traffic Manager (LTM)

Part Two: iRules

Lab Guide

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Getting Started with BIG-IP Local Traffic Manager
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Part Two: iRules

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Getting Started with BIG-IP Local Traffic Manager Lab Guide

Lab 1: Directing Traffic with iRules

This lab corresponds with the activities presented in **Lesson One** of *Getting Started with BIG-IP LTM: Part 2 – Directing Traffic with iRules.*

Estimated time for completion: 15 minutes

Lab Objectives

- Create an iRule that directs traffic to load balancing pools based on HTTP header control
- Associate the iRule with a virtual server
- Verify functionality by looking at statistics

Lab Requirements

You must have successfully completed the instructions entitled "Starting up the Lab Environment" in the *Getting Started Lab Introduction* document.

Access the BIG-IP System

- Click the **Firefox Web Browser** icon in the toolbar to access your BIG-IP system. (The icon automatically opens a browser session to the BIG-IP system at https://192.168.1.31.)

- Log in to your BIG-IP system as the **admin** user and with password **admin.**

Restore the BIG-IP Configuration

1. On your BIG-IP system, navigate to **System » Archives**

2. Click the **LTM2_Lab1_iRules.ucs** file from the list, and then click the **Restore** button.

3. The restore process will take about a minute or two. Please wait until the **Operation Status** message indicates **Saving active configuration…** Be patient.

4. Then click the **OK** button.

Create an iRule

Here's an opportunity for you to create a simple iRule that will direct traffic to different load balancing pools based on browser language.

1. Create an iRule using the information in the following table:

Configuration Utility	
Local Traffic » iRules, then click Create	
Properties section	
Name	**HTTP_Accept_Language_Rule**

<pre>when HTTP_REQUEST {
 switch [string tolower [substr [string trimleft [HTTP::header Accept-Language]] 0 2]] {
  "en" { pool pool_en }
  "es" { pool pool_es }
  default { pool pool_default }
 }
}</pre>	

When complete, click…	**Finished**

2. Examine the iRule and answer the following questions:

   o   What event triggers this iRule?

   o   What action will be taken?

Assign the iRule to a Virtual Server

3. Assign **HTTP_Accept_Language_Rule** to **http_vs.**

> In order to process HTTP traffic, the http_vs Virtual Server will need to have an **http profile** assigned. We will do that in the next step.

| Configuration Utility	
Local Traffic » Virtual Servers : Virtual Server List, then select **http_vs**	
Properties tab → Configuration section	
HTTP Profile	Select **http**, then click **Update**
Resources tab → iRules section, click **Manage**	
iRule	Move **HTTP_Accept_Language_Rule** from the **Available** column to the **Enabled** column, then click **Finished**.

In this next section, you will drive application traffic through the BIG-IP system, not as an administrator (as you have done previously) but as a user accessing an application that is delivered by the BIG-IP system. Keep this in mind as you switch between your roles as a BIG-IP administrator and an application user.

Test behavior using browser with English language settings

4. Click on the Chrome icon on the left to open a browser session.

5. In the upper right corner of the Chrome browser window, click on the **Customize and Control Google Chrome** option.
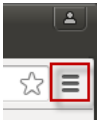
6. Menu options are displayed. Scroll down and select **Settings**. In the new **Settings** tab, scroll down and select **Show Advanced Settings**.

7. Scroll down all the way to the **Languages** section. Click the **Language and Input Settings** option.

8. Here you can see which languages are pre-loaded. Click and drag the **English** language so that it is on top of the list. Click **Done** and close the window.

9. Back on the Firefox Web Browser, in the Configuration Utility, navigate to **Statistics » Module Statistics: Local Traffic**. From the **Statistics Type** menu, select **Pools**. Why do you think the statistics are set to zero?

10. Using the Chrome browser, open a session to **http://10.10.1.100**. Refresh the screen 5-10 times using **Ctrl** + **F5** to force the browser not to use its cache, and note the results.

11. Verify that traffic was sent through the expected pool member by examining statistics:

Configuration utility	
Statistics » **Module Statistics** » **Local Traffic**	
Display Options section	
Statistics Type: **Pools**	
Click the **Refresh** button	
Is traffic being directed solely to pool_en?	
Is there any traffic being directed to pool_es?	

Test behavior using browser with Spanish language settings

12. In the upper right corner of the Chrome browser window, click on the **Customize and Control Google Chrome** option.

13. Menu options are displayed. Scroll down and select **Settings**. In the new **Settings** tab, scroll down and select **Show Advanced Settings**.

14. Scroll down all the way to the **Languages** section. Click the **Language and Input Settings** option.

15. Here you can see which languages are pre-loaded. If Spanish is not currently listed, follow these steps to add it. If you see the Spanish language listed, skip to step 19.

16. Click the **Add** button.

17. The **Add Language** window opens. Click to select the **Spanish – español** option, and click **OK** to confirm your selection. You will be directed back to the **Languages** window.

18. Select the **Spanish** option from the list.

19. Click and drag the **Spanish** option to ensure it is listed as the first option in the **Language** list.

20. Click the **Done** button to save your changes.

21. Close your current Chrome browser session(s) for your changes to take effect.

    You can ignore this message:

    This computer will soon stop receiving Google Chrome updates because the Linux system will no longer be support.

22. Open a new Chrome browser session to http://10.10.1.100. Refresh the screen 5-10 times using Ctrl + F5 to force the browser not to use its cache.

23. Use the **Refresh** button to refresh the traffic statistics data. Which pool did you connect to and why?

Expected Results

Connections originating from the browser set in the English language generates traffic to **pool_en**. After changing the browser's language to Spanish and establishing a new session, statistics should show traffic flowing to the **pool_es** pool.

You have completed the labs associated with this WBT. Please terminate your lab session now.