

F5 Networks Training

Getting Started with BIG-IP

Part One: Administration

Lab Guide



April, 2015

Getting Started with BIG-IP Lab Guide

Part One: Administration

Lab Guide

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8,346,993; 8,347,100; 8,352,597; 8,352,785; 8,375,421; 8,379,515; 8,380,854; 8,392,372; 8,392,563; 8,396,836; 8,396,895; 8,397,059; 8,400,919; 8,407,771; 8,412,582; 8,417,681; 8,417,746; 8,417,833; 8,418,233; 8,429,783; 8,432,791; 8,432,799; 8,433,735; 8,438,253; 8,447,871; 8,447,883; 8,447,884; 8,453,120; 8,463,850; 8,463,909; 8,477,609; 8,477,798; 8,484,361; 8,499,100; 8,516,113; 8,516,156; 8,533,254; 8,533,308; 8,533,662; 8,537,825; 8,539,062; 8,548,953; 8,549,582; 8,554,999; 8,559,313; 8,560,709; 8,565,088; 8,566,444; 8,566,452; 8,572,219; 8,611,222; 8,612,374; 8,613,045; 8,615,010; 8,621,078; 8,627,467; 8,630,174; 8,645,556; 8,650,389; 8,670,304; 8,676,955; 8,681,610; 8,682,916; 8,700,892; 8,711,689; 8,713,197; 8,738,700.

Other patents may be pending. This patent list is complete as of 1 Oct 2014.

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Part One: Administration

Getting Started with BIG-IP Lab Guide

Lab 1: BIG-IP Administration



This lab corresponds with the activities presented in *Getting Started with BIG-IP: Part 1 – Administration*.

Lab Objectives

- Run the Setup utility and configure system access parameters
- Create a UCS archive of the BIG-IP system configuration.
- Create a qkview file, upload to BIG-IP iHealth for analysis, and review the diagnostics produced
- Estimated time for completion: **25 minutes**

Lab Requirements

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

Current BIG-IP Settings

At this point, your BIG-IP system is licensed and provisioned for the LTM module. The management address is already set to **192.168.1.31/16**.

Lab 1A: Set up the BIG-IP

Run the Setup utility

1. 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>.)
2. When prompted, log in with a username of **admin** and with a password of **admin**.
3. In the **Welcome** screen, click the **Next** link to access the Setup utility.
4. On the subsequent **Setup Utility » License** page, review the features that have been licensed and then click **Next**.

Verify Provisioning

5. On the **Resource Provisioning** page of the Setup utility, verify your provisioning settings match those listed in the table below. For these labs, the systems are already licensed and provisioned for Local Traffic Manager.

Setup Utility » Resource Provisioning	
Current Resource Allocation section	
Management (MGMT)	Small
Local Traffic (LTM)	Nominal
When complete, click...	Next

Accept the BIG-IP Self-Signed Device Certificate

6. After provisioning is complete, the **Device Certificates** page in the Setup Utility is displayed. We will be using the BIG-IP system's self-signed certificate in this lab. Note the expiration date for the certificate. Click the **Next** button to continue.

Verify Platform General Properties

- In the **General Properties** section of the next page, configure general properties and administrative access usernames/passwords. Some fields may already contain the correct values. Leave the default values for the fields not mentioned in the table below.

Setup Utility » Platform		
General Properties section		
	Management Port Configuration	Manual
	Host Name	bigip1.f5trn.com
	Host IP address	Use Management Port IP address
	Time Zone	America/Los Angeles
User Administration section		
	Root Account	Password: default Confirm: default
	Admin Account	Password: admin Confirm: admin
When complete, click	Next	



After clicking the Next button in the previous step, you will be logged out of BIG-IP. A message prompting you to log back in will be displayed. Click OK to proceed.

- Log back in to BIG-IP as user **admin** with password **admin**. You should be taken directly to the **Setup Utility » Network** page.

Configure the Network

- Continue the Setup utility by performing a Standard Network Configuration. Click the **Next** button under the **Standard Network Configuration** heading.

Configure Redundant Device Wizard options

- Use the default settings to configure the **Redundant Device Wizard Options**, then click **Next**.

Configure Self IPs, VLANs, and High Availability

11. Configure the internal network and internal VLAN by entering the following settings:

Setup Utility » VLANs	
Internal Network Configuration section	
Self IP	Address: 172.16.1.31 Netmask: 255.255.0.0 Port Lockdown: Allow Default
Floating IP	Address: 172.16.1.33 Port Lockdown: Allow Default
Internal VLAN Configuration section	
VLAN Tag ID	auto
Interfaces	VLAN Interfaces: Select 1.2 Tagging: Select Untagged Click the Add button
When complete, click...	Next

12. Next, configure the external network and VLAN by entering the following settings:

Setup Utility » VLANs	
External Network Configuration section	
External VLAN	Create VLAN external radio button selected
Self IP	Address: 10.10.1.31 Netmask: 255.255.0.0 Port Lockdown: Allow 443
Floating IP	Address: 10.10.1.33 Port Lockdown: Allow 443
External VLAN Configuration section	
VLAN Tag ID	auto
Interfaces	Interfaces: Select 1.1 Tagging: Select Untagged Click the Add button
When complete, click...	Next

13. Configure the high availability network to use the existing VLAN **internal**.

Setup Utility » VLANs	
High Availability Network Configuration section	
High Availability VLAN	Click the Select existing VLAN radio button
Select VLAN	internal
When complete, click...	Next

Configure Network Time Protocol

14. Leave this page with its default settings, and click the **Next** button to continue.

Configure Domain Name Server

15. Leave this page with its default settings, and click the **Next** button to continue.

Configure ConfigSync

16. Use the default settings for **ConfigSync** configuration, as shown below:

Setup Utility » ConfigSync	
ConfigSync Configuration section	
Local Address	172.16.1.31 (internal)
When complete, click...	Next

Configure Unicast and Multicast Failover settings

17. Use the default settings for **Failover Unicast Configuration** and **Failover Multicast Configuration**, as shown below:

Setup Utility » Failover	
Failover Unicast Configuration section	
Local Address Port VLAN	172.16.1.31 1026 internal 192.168.1.31 1026 Management Address
Failover Multicast Configuration section	
Use Failover Multicast Address	Unchecked (Disabled)
When complete, click...	Next

Configure Mirroring

18. Use the default primary and secondary local mirror address settings for **Mirroring Configuration**.

Setup Utility » Mirroring	
Mirroring Configuration section	
Primary Local Mirror Address	172.16.1.31 (internal)
Secondary Local Mirror Address	None
When complete, click...	Next

Complete the Setup utility

19. You have now configured the network interfaces required to support a standard BIG-IP configuration.
20. Click the **Finished** button under the **Advanced Device Management Configuration** heading. There should be a message at the top of the page indicating **Setup Utility Complete**.

Lab 1B: Create a UCS Archive of Your Configuration

1. Navigate to **System » Archives** to create a backup of your current configuration.

Configuration Utility	
System » Archives then click Create	
General Properties section	
File Name	lab_base
When complete, click...	Finished , then click OK when the archive is complete

2. Download your new UCS backup to your Ubuntu client.

Configuration Utility	
System » Archives then click lab_base.ucs	
General Properties section	
Archive File	Click Download: lab_base.ucs , then click OK to save when prompted.

Lab 1C: Generate a qkview File



If you do not have an iHealth account, please register for one at **iHealth.f5.com** before beginning this lab. You will need a valid email address to receive the registration confirmation email in order to finish creating your account. To register for an iHealth account, click on **Register for an Account** from iHealth.f5.com.

1. Generate a qkview file on your BIG-IP.

Configuration Utility	
System » Support	
Support Snapshot section	
QKview	Check the box to the right of qkview
When complete, click...	Start

The qkview process may take several minutes to complete. When it does, continue with the steps below.

Download the qkview file

- Download the qkview file to your workstation.

Support Snapshot section	
Snapshot File	Click the Download Snapshot File button

A confirmation window will open, prompting you to either open the file or save it.

- Select the **Save File** checkbox and click **OK**.
- Click the **Downloads** icon in your Firefox browser to see a list of downloaded files.



- Identify the downloaded qkview file in the list. (The file should have a name similar to **case_number_###_support_file.qkview**).

If you were to open a case with F5 Support, they may ask you to upload a qkview file to iHealth. If this were the case, you would re-name your qkview file to include the F5 Support case number.

Upload the qkview file to iHealth

- Open a browser tab by clicking the plus icon from Firefox, and connect to **ihealth.f5.com**.
- Sign in using your iHealth account credentials.
- Click the **Upload** button.
- Click the **Choose** button, navigate to the **Downloads** folder in your Ubuntu client, and double-click to select the qkview that you identified in step 5.
- Click the **Upload QKView(s)** button to continue. The BIG-IP iHealth system may take several minutes to upload and extract the file.
- After the analysis is complete, you will see your QKView listed in the **My QKViews** menu. You will be able to easily identify it by looking at the information in the **Generation Date** column.
- Click on your QKView to view the results of your qkview file analysis.

Review diagnostic information

- Do you have any high priority diagnostic results? What are the recommended actions?

Execute Commands against the qkview output

- Click on the **Commands** menu in the iHealth window.
- Click the **tmsh** folder.
- Expand the **net** folder.
- Run the following commands by clicking on them from the list:
 - list /net self all-properties
 - show running-config /net self

19. Explore iHealth's ability to display data graphically by going to **Graphs > Standard**. Explore how you can view the **Memory Used** and **System CPU Usage** over different time periods.
20. Add a comment to your qkview file. In the upper right area of the page, click the plus icon next to **Comments** and enter: **This is a test qkview**, then **Save**.

Remember: Whatever comments you put here are visible by F5 Technical Support staff.

21. View and customize your iHealth settings at **Options > Settings** (upper right corner of the page).



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