

BIG-IP[®] System: Initial Configuration

Version 12.0



Table of Contents

Legal Notices.....	5
Legal notices.....	5
Introduction to BIG-IP Initial Configuration.....	7
About BIG-IP initial configuration.....	7
Running the Setup utility to license and provision the BIG-IP system.....	7
Configuring the internal network.....	8
Configuring the external network.....	8
Creating a pool.....	9
Creating a virtual server.....	9

Legal Notices

Legal notices

Publication Date

This document was published on September 1, 2015.

Publication Number

MAN-0536-XX

Copyright

Copyright © 2015, F5 Networks, Inc. All rights reserved.

F5 Networks, Inc. (F5) believes the information it furnishes to be accurate and reliable. However, F5 assumes no responsibility for the use of this information, nor any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent, copyright, or other intellectual property right of F5 except as specifically described by applicable user licenses. F5 reserves the right to change specifications at any time without notice.

Trademarks

AAM, Access Policy Manager, Advanced Client Authentication, Advanced Firewall Manager, Advanced Routing, AFM, APM, Application Acceleration Manager, Application Security Manager, AskF5, ASM, BIG-IP, BIG-IP EDGE GATEWAY, BIG-IQ, Cloud Extender, Cloud Manager, CloudFucious, Clustered Multiprocessing, CMP, COHESION, Data Manager, DDoS Frontline, DDoS SWAT, Defense.Net, defense.net [DESIGN], DevCentral, DevCentral [DESIGN], DNS Express, DSC, DSI, Edge Client, Edge Gateway, Edge Mobile, Edge Mobility, Edge Portal, ELEVATE, EM, ENGAGE, Enterprise Manager, F5, F5 [DESIGN], F5 Agility, F5 Certified [DESIGN], F5 Networks, F5 SalesXchange [DESIGN], F5 Synthesis, f5 Synthesis, F5 Synthesis [DESIGN], F5 TechXchange [DESIGN], Fast Application Proxy, Fast Cache, FCINCO, Global Traffic Manager, GTM, GUARDIAN, iApps, IBR, iCall, iControl, iHealth, Intelligent Browser Referencing, Intelligent Compression, IPv6 Gateway, iQuery, iRules, iRules OnDemand, iSession, L7 Rate Shaping, LC, Link Controller, LineRate, LineRate Point, LineRate Precision, LineRate Systems [DESIGN], Local Traffic Manager, LROS, LTM, Message Security Manager, MobileSafe, MSM, OneConnect, Packet Velocity, PEM, Policy Enforcement Manager, Protocol Security Manager, PSM, Ready Defense, Real Traffic Policy Builder, SalesXchange, ScaleN, SDAS (except in Japan), SDC, Signalling Delivery Controller, Solutions for an application world, Software Designed Application Services, Silverline, SSL Acceleration, SSL Everywhere, StrongBox, SuperVIP, SYN Check, SYNTHESIS, TCP Express, TDR, TechXchange, TMOS, TotALL, TDR, TMOS, Traffic Management Operating System, Traffix, Traffix [DESIGN], Transparent Data Reduction, UNITY, VAULT, vCMP, VE F5 [DESIGN], Versafe, Versafe [DESIGN], VIPRION, Virtual Clustered Multiprocessing, WebSafe, and ZoneRunner, are trademarks or service marks of F5 Networks, Inc., in the U.S. and other countries, and may not be used without F5's express written consent.

All other product and company names herein may be trademarks of their respective owners.

Patents

This product may be protected by one or more patents indicated at: <https://f5.com/about-us/policies/patents>

Export Regulation Notice

This product may include cryptographic software. Under the Export Administration Act, the United States government may consider it a criminal offense to export this product from the United States.

RF Interference Warning

This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Any modifications to this device, unless expressly approved by the manufacturer, can void the user's authority to operate this equipment under part 15 of the FCC rules.

Canadian Regulatory Compliance

This Class A digital apparatus complies with Canadian ICES-003.

Standards Compliance

This product conforms to the IEC, European Union, ANSI/UL and Canadian CSA standards applicable to Information Technology products at the time of manufacture.

Introduction to BIG-IP Initial Configuration

About BIG-IP initial configuration

This implementation describes a new installation, and not an existing configuration. The networks described do not use dynamic routing, and have pool members that are on the directly connected network. Performing the tasks results in a standalone BIG-IP[®] system that processes application traffic and sends it to a server pool on the BIG-IP device's internal network.

Be sure you use the platform guide that corresponds to the installation you are doing.

Before you begin, make sure you have this information:

- BIG-IP base registration key
- Internal self IP address, netmask, and default gateway
- External self IP address, netmask, and default gateway
- IP address on the management route
- BIG-IP passwords and passwords for other devices
- Pool member addresses
- Virtual server destination address
- NTP server IP address

Running the Setup utility to license and provision the BIG-IP system

Before you begin, be sure to have the BIG-IP base registration key.

Using the Setup utility, you can activate the license and provision the BIG-IP system.

1. From a workstation attached to the network on which you configured the management interface, type the following URL syntax where *<management_IP_address>* is the address you configured for device management: `https://<management_IP_address>`
2. At the login prompt, type the default user name `admin`, and password `admin`, and click **Log in**.
The Setup utility screen opens.
3. Click **Next**.
The General Properties screen opens.
4. Click **Activate**.
The License screen opens.
5. In the **Base Registration Key** field, paste the registration key.
You receive your registration key when you purchase the BIG-IP device or module.
6. Click **Next**.
7. Provision the Local Traffic (LTM) module to **Nominal**.
8. Click **Next**.
The device certificate is displayed.
9. Click **Next**.

The General Properties and User Administration screen is displayed.

10. For the **Management Port Configuration** setting, click **Manual**.
11. In the **Host Name** field, type the host name of this BIG-IP system.
For example, `www.siterequest.com`.
The BIG-IP system prompts you to log in again.
12. Log in to the BIG-IP system again.
The BIG-IP system license is now activated, and the BIG-IP Local Traffic module is provisioned. The standard network configuration screen within the Setup utility is displayed.
13. Click **Next**.
The Redundant Device Wizard Options screen opens.
14. For the **Config Sync** and **High Availability** settings, clear the check boxes.
15. Click **Next**.
The internal VLAN screen displays.

The next step in this process is to configure the internal network.

Configuring the internal network

Using the Setup utility, you can configure the internal network by specifying self IP addresses and settings for VLAN `internal`, which is the default VLAN for the internal network.

1. Specify the **Self IP** setting for the internal network:
 - a) In the **Address** field, type a self IP address.
 - b) In the **Netmask** field, type a network mask for the self IP address.
 - c) For the **Port Lockdown** setting, retain the default value.
2. For the **VLAN Tag ID** setting, retain the default value, **auto**.
This is the recommended value.
3. For the **Interfaces** setting:
 - a) From the **Interface** list, select an interface number.
 - b) From the **Tagging** list, select **Tagged** or **Untagged**.
Select **Tagged** when you want traffic for that interface to be tagged with a VLAN ID.
 - c) Click **Add**.
4. Click **Next**.
This completes the configuration of the internal self IP addresses and VLAN, and displays the screen for configuring the default VLAN **external**.

Configuring the external network

Using the Setup utility, you can configure the external network by specifying self IP addresses and settings for VLAN `external`, which is the default VLAN for the external network.

1. Specify the **Self IP** setting for the external network:

- a) In the **Address** field, type a self IP address.
 - b) In the **Netmask** field, type a network mask for the self IP address.
 - c) For the **Port Lockdown** setting, retain the default value.
2. In the **Default Gateway** field, type the IP address that you want to use as the default gateway to VLAN **external**.
 3. For the **VLAN Tag ID** setting, retain the default value, **auto**.
This is the recommended value.
 4. For the **Interfaces** setting:
 - a) From the **Interface** list, select an interface number.
 - b) From the **Tagging** list, select **Tagged** or **Untagged**.
Select **Tagged** when you want traffic for that interface to be tagged with a VLAN ID.
 - c) Click **Add**.
 5. Click **Finished**.
This causes you to leave the Setup utility.

Creating a pool

You can create a pool of servers that you group together to receive and process traffic, to enable the BIG-IP system to efficiently distribute the load on servers.

1. On the Main tab, click **Local Traffic > Pools**.
The Pool List screen opens.
2. Click **Create**.
The New Pool screen opens.
3. In the **Name** field, type a unique name for the pool.
4. In the Resources area of the screen, use the **New Members** setting to add the pool members. For example, the pool members for `http_pool` are `192.168.100.10:80` and `192.168.100.11:80`. The pool members for `specificport_pool` are `192.168.100.20:80` and `192.168.100.21:80`.
5. Click **Finished**.

The load balancing pool appears in the Pools list.

Creating a virtual server

Before creating a virtual server, verify that you have created the pool to which you want this virtual server to send traffic.

When you create a virtual server, you specify a destination IP address and service port. All other settings on the virtual server have default values. You can change the default values of any settings to suit your needs.

1. On the Main tab, click **Local Traffic > Virtual Servers**.
The Virtual Server List screen opens.
2. Click the **Create** button.

The New Virtual Server screen opens.

3. In the **Name** field, type a unique name for the virtual server.
4. In the **Type** field, verify that Standard is selected.
5. In the **Destination Address** field, type the IP address in CIDR format.

The supported format is address/prefix, where the prefix length is in bits. For example, an IPv4 address/prefix is 10.0.0.1 or 10.0.0.0/24, and an IPv6 address/prefix is `ffe1::0020/64` or `2001:ed8:77b5:2:10:10:100:42/64`. When you use an IPv4 address without specifying a prefix, the BIG-IP® system automatically uses a /32 prefix.

Note: The IP address for this field needs to be on the same subnet as the external self-IP address.

6. In the **Service Port** field, type a port number or select a service name from the **Service Port** list.
7. Retain the default values for all other settings.
8. From the **Default Pool** list, choose the pool you created.

After performing this task, you have a virtual server that listens for application traffic and acts according to the values configured within the virtual server.

Index

B

BIG-IP system
 about licensing 7
 and Setup utility 7
 licensing 7
 provisioning 7

E

external network
 configuring 8

F

floating IP addresses
 configuring 8

I

initial configuration
 for BIG-IP LTM 7
interfaces
 and external VLAN configuration 8
 and internal VLAN configuration 8
internal network
 configuring 8

L

license
 activating for BIG-IP system 7
licensing
 about 7

P

pools
 creating load balancing 9

S

self IP addresses
 for external network 8
 for internal network 8
Setup utility
 and base network configuration 8
 running for BIG-IP system 7

V

virtual servers
 creating 9
VLAN IDs
 configuring 8
VLAN tags, See VLAN IDs

