

BIG-IP[®] System: Initial Configuration

Version 11.6



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Chapter

1

Introduction to BIG-IP Initial Configuration

- *BIG-IP initial configuration*
- *Running the Setup utility to license and provision the BIG-IP system*
- *Configuring the internal network*
- *Configuring the external network*
- *Creating a pool*
- *Creating a virtual server*

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.

For this implementation, you set up a base network using the Setup utility, and then configure both a pool and a virtual server, using the BIG-IP Configuration utility.

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

Before you begin, make sure you have these prerequisites:

- 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

Specify 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

Specify 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 efficiently distribute the load on your server resources.

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, in the illustration, 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 **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 ff01::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.

5. In the **Service Port** field, type a port number or select a service name from the **Service Port** list.
6. Configure any other settings as needed.
7. If this type of virtual server forwards traffic to a pool, then in the Resources area of the screen, from the **Default Pool** list, select the relevant pool name.

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.

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