



Installation, Licensing, and Upgrades for BIG-IP[®] Systems

version 9.0

MAN-0125-00

Product Version

This manual applies to version 9.0 of BIG-IP® Local Traffic Manager™, BIG-IP® Load Balancer Limited™, and BIG-IP® SSL Accelerator™.

Legal Notices

Copyright

Copyright 1996-2004, 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 iControl user licenses. F5 reserves the right to change specifications at any time without notice.

Trademarks

F5, F5 Networks, the F5 logo, BIG-IP, 3-DNS, iControl, FireGuard, Internet Control Architecture, IP Application Switch, iRules, OneConnect, Packet Velocity, SYN Check, Control Your World, ZoneRunner, uRoam, FirePass, and TrafficShield are registered trademarks or trademarks of F5 Networks, Inc. in the U.S. and certain other countries. All other trademarks mentioned in this document are the property of their respective owners. F5 Networks' trademarks may not be used in connection with any product or service except as permitted in writing by F5.

Patents

This product protected by U.S. Patents 6,374,300; 6,473,802. Other patents pending.

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.

Export 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 generates, uses, and may emit radio frequency energy. The equipment has been type tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC rules, which are designed to provide reasonable protection against such radio frequency interference.

Operation of this equipment in a residential area may cause 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 I CES-003.

Standards Compliance

The product conforms to ANSI/UL Std 1950 and Certified to CAN/CSA Std. C22.2 No. 950.

Acknowledgments

This product includes software developed by Bill Paul.

This product includes software developed by Jonathan Stone.

This product includes software developed by Manuel Bouyer.

This product includes software developed by Paul Richards.

This product includes software developed by the NetBSD Foundation, Inc. and its contributors.

This product includes software developed by the Politecnico di Torino, and its contributors.

This product includes software developed by the Swedish Institute of Computer Science and its contributors.

This product includes software developed by the University of California, Berkeley and its contributors.

This product includes software developed by the Computer Systems Engineering Group at the Lawrence Berkeley Laboratory.

This product includes software developed by Christopher G. Demetriou for the NetBSD Project.

This product includes software developed by Adam Glass.

This product includes software developed by Christian E. Hopps.

This product includes software developed by Dean Huxley.

This product includes software developed by John Kohl.

This product includes software developed by Paul Kranenburg.

This product includes software developed by Terrence R. Lambert.

This product includes software developed by Philip A. Nelson.

This product includes software developed by Herb Peyerl.

This product includes software developed by Jochen Pohl for the NetBSD Project.

This product includes software developed by Chris Provenzano.

This product includes software developed by Theo de Raadt.

This product includes software developed by David Muir Sharnoff.

This product includes software developed by SigmaSoft, Th. Lockert.

This product includes software developed for the NetBSD Project by Jason R. Thorpe.

This product includes software developed by Jason R. Thorpe for And Communications, <http://www.and.com>.

This product includes software developed for the NetBSD Project by Frank Van der Linden.

This product includes software developed for the NetBSD Project by John M. Vinopal.

This product includes software developed by Christos Zoulas.

This product includes software developed by the University of Vermont and State Agricultural College and Garrett A. Wollman.

In the following statement, "This software" refers to the Mitsumi CD-ROM driver: This software was developed by Holger Veit and Brian Moore for use with "386BSD" and similar operating systems.

"Similar operating systems" includes mainly non-profit oriented systems for research and education, including but not restricted to "NetBSD," "FreeBSD," "Mach" (by CMU).

This product includes software developed by the Apache Group for use in the Apache HTTP server project (<http://www.apache.org/>).

This product includes software licensed from Richard H. Porter under the GNU Library General Public License (© 1998, Red Hat Software), www.gnu.org/copyleft/lgpl.html.

This product includes the standard version of Perl software licensed under the Perl Artistic License (© 1997, 1998 Tom Christiansen and Nathan Torkington). All rights reserved. You may find the most current standard version of Perl at <http://www.perl.com>.

This product includes software developed by Jared Minch.

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com).

This product contains software based on oprofile, which is protected under the GNU Public License.

This product includes RRDtool software developed by Tobi Oetiker (<http://www.rrdtool.com/index.html>) and licensed under the GNU General Public License.

This product contains software licensed from Dr. Brian Gladman under the GNU General Public License (GPL).

This product includes software developed by the Apache Software Foundation <<http://www.apache.org/>>.

This product includes Hypersonic SQL.

This product contains software developed by the Regents of the University of California, Sun Microsystems, Inc., Scriptics Corporation, and others.

This product includes software developed by the Internet Software Consortium.

This product includes software developed by Nominum, Inc. (<http://www.nominum.com>).

This product contains software developed by Broadcom Corporation, which is protected under the GNU Public License.



Table of Contents

Introduction to Installation, Licensing, and Upgrades for the BIG-IP System

Getting started	Introduction-1
Installing software upgrades	Introduction-1
Configuring the management interface	Introduction-1
Using the Configuration utility	Introduction-1
Choosing a configuration tool	Introduction-1
Additional information	Introduction-2
Stylistic conventions	Introduction-3
Finding additional help and technical support resources	Introduction-4

1

Installing the Software

Performing a software installation	1-1
Before you install an IM package	1-1
Backing up an existing configuration	1-1
Using an IM package to install new software	1-2
Creating a RAM file system	1-2
Copying the IM package into the RAM file system	1-3
Starting the IM installation	1-3
Rebooting the system after the upgrade	1-3

2

Connecting a Management Workstation or Network

Understanding management connection options	2-1
Connecting with a null modem cable to the serial console	2-1
Configuring the management interface	2-2
Connecting to the management interface using the default network	2-4
Running the Configuration utility remotely	2-4

3

Licensing and Configuring the System

Licensing the traffic management software using the Configuration utility	3-1
Creating the platform management configuration	3-3
Platform setup screen settings	3-4
Rerunning the Setup utility	3-5
Configuring the traffic management network	3-6
Using the Basic Network Configuration wizard	3-7



Introduction to Installation, Licensing, and Upgrades for the BIG-IP System

- Getting started
- Additional information

Getting started

This guide describes how to install the BIG-IP software, license the system, and use the Setup utility to perform basic configuration tasks.

Before you start installing the BIG-IP system, we recommend that you review the basic configuration tasks and the few pieces of information, such as IP addresses and host names, that you should gather in preparation for installing and configuring the software.

Once you gather the necessary network information, turn to the *Configuration Worksheet* and *Platform Guide* for hardware installation instructions.

Installing software upgrades

You need to upgrade using the installation manager (IM) script. For detailed installation information, see Chapter 1, *Installing the Software*.

Configuring the management interface

Once you install the software, you need to connect to the serial console and configure the management interface. You can configure the management interface using the LCD panel, or using the command line utility **config** command. For detailed instructions, see Chapter 2, *Connecting a Management Workstation or Network*.

Using the Configuration utility

All users need to use the web-based Configuration utility in order to license the system for the first time. In addition, this utility guides you through the initial system set up. You can run the Setup utility from a supported web browser. The Setup utility prompts you to enter basic system information including a **root** password, **admin** password, and the IP addresses that will be assigned to the management port. For information about using the Setup utility, see Chapter 3, *Licensing and Configuring the System*.

Choosing a configuration tool

The BIG-IP system offers both web-based and command line configuration tools, so that users can work in the environment that they are most comfortable with.

The Configuration utility

The Configuration utility is a web-based application that you use to configure and monitor the BIG-IP system. Once you complete the instructions for the Setup utility described in this guide, you can use the Configuration utility to perform additional configuration steps necessary for your configuration. In the Configuration utility, you can also monitor current system performance. The Configuration utility supports Netscape® Navigator™, version 7.1, or other browsers built on the same engine, such as Mozilla™, Firefox™, and Camino™, and Microsoft Internet Explorer version 6.x and later.

The bigpipe command line utility

The **bigpipe**™ utility is the command line counter-part to the Configuration utility. Using **bigpipe** commands, you can configure virtual servers, open ports to network traffic, and configure a wide variety of features. You can use the **bigpipe** utility directly on the BIG-IP system console, or you can run bigpipe commands from the web-based Configuration utility using the System Console screen.

Additional information

In addition to this guide, there are other sources of the documentation you can use in order to work with the BIG-IP system. The information is organized into the guides and documents described below. The following printed documentation is included with the BIG-IP system.

- ◆ **Configuration Worksheet**

This worksheet provides you with a place to plan the basic configuration for the BIG-IP system.

- ◆ **BIG-IP Quick Start Instructions**

This pamphlet provides you with the basic configuration steps required to get the BIG-IP system up and running in the network.

The following guides are available in PDF format from the CD-ROM provided with the BIG-IP system. These guides are also available from the first Web page you see when you log in to the administrative web server on the BIG-IP system.

- ◆ **Platform Guide**

This guide includes information about the BIG-IP system. It also contains important environmental warnings.

- ◆ **Configuration Guide for Local Traffic Management**

This guide provides detailed configuration information for the BIG-IP local traffic management (LTM) products. It also provides syntax information for **bigpipe** commands, other command line utilities, configuration files, system utilities, and monitoring and administration information.

Stylistic conventions

To help you easily identify and understand important information, our documentation uses the stylistic conventions described below.

Using the solution examples

All examples in this documentation use only non-routable IP addresses. When you set up the solutions we describe, you must use IP addresses suitable to your own network in place of our sample addresses.

Identifying new terms

To help you identify sections where a term is defined, the term itself is shown in bold italic text. For example, a ***virtual server*** is a specific combination of a virtual address and virtual port, associated with a content site that is managed by a BIG-IP system or other type of host server.

Identifying references to objects, names, and commands

We apply bold text to a variety of items to help you easily pick them out of a block of text. These items include web addresses, IP addresses, utility names, and portions of commands, such as variables and keywords. For example, with the **bigpipe pool <pool_name> show** command, you can specify a specific pool to show by specifying a pool name for the **<pool_name>** variable.

Identifying references to other documents

We use italic text to denote a reference to another document. In references where we provide the name of a book as well as a specific chapter or section in the book, we show the book name in bold, italic text, and the chapter/section name in italic text to help quickly differentiate the two.

Identifying command syntax

We show complete commands in bold Courier text. Note that we do not include the corresponding screen prompt, unless the command is shown in a figure that depicts an entire command line screen. For example, the following command shows the configuration of the specified pool name:

```
bigpipe pool <pool_name> show
```

or

```
b pool <pool_name> show
```

Table Introduction.1 explains additional special conventions used in command line syntax.

Item in text	Description
\	Indicates that the command continues on the following line, and that users should type the entire command without typing a line break.
< >	Identifies a user-defined parameter. For example, if the command has <your name>, type in your name, but do not include the brackets.
	Separates parts of a command.
[]	Indicates that syntax inside the brackets is optional.
...	Indicates that you can type a series of items.
::=	Means is defined as . Indicates that an argument is followed by the description of the elements that you can use for the argument.

Table Introduction.1 Command line syntax conventions

Finding additional help and technical support resources

You can find additional technical information about this product in the following locations:

◆ Release notes

Release notes for the current version of this product are available from the product web server home page, and are also available on the technical support site. The release notes contain the latest information for the current version, including a list of new features and enhancements, a list of fixes, and, in some cases, a list of known issues.

◆ Online help

You can find help online in three different locations:

- The web server on the product has PDF versions of the guides included in the Software CD.
- The web-based Configuration utility has online help for each screen. Simply click the **Help** tab.
- Individual **bigpipe** commands have online help, including command syntax and examples, in standard UNIX man page format. Simply type the command followed by the word **help**, and the BIG-IP system displays the syntax and usage associated with the command.

◆ Ask F5 Technical Support web site

The F5 Networks Technical Support web site, <http://tech.f5.com>, provides the latest documentation for the product, including technical notes, answers to frequently asked questions, updates for guides (in PDF format), and the Ask F5 natural language question and answer engine. To access this site, you need to register at <http://tech.f5.com>.

◆ **F5 Solution Center**

The F5 Solution Center contains proven interoperability and integration solutions that empower organizations to deliver predictable and secure applications in an unpredictable network environment. The F5 Solution Center offers detailed documentation that demonstrates how to increase the return on investment (ROI) of your application and network infrastructures through superior reliability, security, and performance. You can access this site at <http://www.f5.com/solutions>.

◆ **Note**

All references to hardware platforms in this guide refer specifically to systems supplied by F5 Networks, Inc. If your hardware was supplied by another vendor and you have hardware-related questions, please refer to the documentation from that vendor.



I

Installing the Software

- Performing a software installation
- Before you install an IM package
- Using an IM package to install new software

Performing a software installation

This chapter describes how to use installation manager (IM) packages to apply upgrades and maintenance releases to the traffic management software. This chapter also describes some best practices for applying upgrades.

Before you install an IM package

Before you install an IM package, there are several things to take into consideration. You should:

- Perform a backup of the existing configuration.
- Save the backup user configuration set (UCS) to a remote location.
- Install the IM on the standby system in a redundant system.

See the following sections for more information about these recommendations.

Backing up an existing configuration

When performing a full install of the software or making configuration changes on the BIG-IP system, we recommend that you first make the changes on the standby unit, then confirm, from the web-based configuration utility or command line, that the configuration is correct and the system is functioning properly. After you confirm that the system is functioning properly, you can failover to the other unit.

Performing a backup and saving the UCS to a remote location

Before installation or upgrade, run the **bigpipe config save** command on the system you intend to upgrade. Use the following command to create a user configuration set (**.ucs** or UCS) file, where **<myucs>.ucs** is the name you want to use for the UCS.

```
bigpipe config save /<myucs>.ucs
```

This command saves the UCS file to the root directory (**/**). Copy this file to a remote location. In the event that you need to perform a recovery, you can copy this file from its remote location back to your local system, prior to running the **bigpipe config install** command to restore the system.

Installing a maintenance release on a redundant system

When installing a maintenance release, we recommend that you install the software on the standby unit, then log in to the Configuration utility on the standby unit to make sure that the configuration is intact and functioning. Once you have verified that everything looks good, you can failover to the standby unit and upgrade the other unit in the system.

Using an IM package to install new software

The following instructions explain how to install the traffic management software onto existing systems running version 9.0 and later using an IM package. The installation script saves your current configuration.

These instructions assume that you have downloaded the upgrade IM package. For detailed information about downloading the IM package, refer, on Ask F5 to **Solution Number 167**, *How do I download software from F5 Networks?*

You must complete the following tasks to install an IM package on the system.

- Create a RAM file system to temporarily hold the upgrade IM package.
- Copy the IM package into the RAM file system.
- Run the IM package.

Creating a RAM file system

The first step in installing an IM package is to make a RAM file system to receive the upgrade package. The RAM file system provides the space to hold the upgrade package without writing it to a hard drive. To create a RAM file system, type the following command:

```
mkdir /var/ramfs
```

After you make the directory, mount the directory with the following command.

```
mount -t ramfs none /var/ramfs
```

After you create and mount the RAM file system, you can copy the IM package into the RAM file system as described in the following section.

Copying the IM package into the RAM file system

After you create the RAM file system, you can copy the IM package into the RAM file system. This example shows how you would use the **scp** command to copy the file from another system that has the file, where **<Upgrade>.im** is the name of the IM you copied into the RAM file system and the **<systemwiththeim>** is the system from which you want to copy the IM file.

```
scp <Upgrade>.im root@<systemwiththeim>:/var/ramfs/.
```

The IM file name in this example is only to illustrate the format of the IM file name.

Starting the IM installation

After the file has been completely copied into the RAM file system, you can use the IM script to install the upgrade, where **<Upgrade>.im** is the name of the IM you copied into the RAM file system.

```
im /var/ramfs/<Upgrade>.im
```

Rebooting the system after the upgrade

After the upgrade script completes, you must reboot the system. To reboot the system, type the following command.

```
reboot
```

Rebooting the system completes the upgrade process, and removes the RAM file system and the upgrade package.



2

Connecting a Management Workstation or Network

- Understanding management connection options
- Connecting with a null modem cable to the serial console
- Configuring the management interface
- Connecting to the management interface using the default network

Understanding management connection options

Before you can configure and manage the system, you need to connect the unit to a management workstation or network. There are three ways to attach a management workstation or network to the traffic management system.

- ◆ **Use a Serial console**

You can connect a null modem cable to the port marked **CONSOLE** on the unit, and access the command line with a terminal emulator.

- ◆ **Add a network to the management interface**

You can configure an IP address on the Ethernet interface 1.1 labeled **MGMT** and access the web-based Configuration utility to configure the traffic management software.

- ◆ **Use the default network to connect to the management interface**

You can connect a cable to the Ethernet interface 1.1 labeled **MGMT** and access the web-based Configuration utility to configure the traffic management software and use the default network for setup.

Connecting with a null modem cable to the serial console

You can use a terminal emulator through a null modem cable attached to the serial port labeled **CONSOLE** on the unit during the installation process, and to configure the management port. To connect through the serial port, you must have a DB9 null modem cable, and a vt100-capable terminal emulator available on a computer in close proximity to the unit you want to configure.

Use the following process to connect the unit and the terminal emulator.

1. Connect the null modem cable to the unit. Use the DB9 port labeled **CONSOLE** on the unit.
2. Connect the null modem cable to a serial port on the system with the terminal emulator.
3. Start the terminal emulator.
Set the emulator to 19200 baud and choose the correct serial device.
4. Turn on the hardware.
It may take a moment for the terminal emulator to connect.
5. At the login prompt, type the user name **root** with the password **default**.

Configuring the management interface

You must configure an IP address and net mask before you can use the Ethernet management interface, or you must use the default network on the management interface to connect. There are three ways to configure the management interface:

- If the unit has an LCD panel, you can use the LCD controls to add the configuration.
- If you have a serial console configured, you can configure the management IP through the serial console.
- If you want to connect directly to the management interface, you can use the default network configuration on the management interface.

◆ Note

Any self IP addresses you add to the system cannot be on the same network as the management interface. The management interface functions separately from other system functions and cannot share the same network.

Adding an IP address to the management interface using the LCD panel

The first task you need to complete when you configure the management IP address is to add an IP address.

1. Press the **X** button on the display.
2. Using the arrow buttons, navigate to the System menu and press the check mark button.
3. Using the arrow buttons, navigate to IP Address menu and press the check mark button.
4. Press the check mark button on the IP Address.
5. Enter your management IP address using the up and down arrow keys, and press the check mark button.

After you enter the IP address, add the netmask for the address:

1. Using the arrow buttons, navigate to the Netmask menu, and press the check mark button.
2. Enter your netmask, and press the check mark button.

After you add the IP address and netmask, you have the option to add a default route.

1. Using the arrow buttons, navigate to the Default Route menu, and press the check mark button.
2. Enter your default route using the up and down arrow keys, and press the check mark button. If you do not have a default route, use **0.0.0.0**.
3. Navigate to the Commit menu, and press the check mark button.
4. When you see the OK menu blinking, press the check mark button.

After you add an IP address, net mask, and gateway to your management port, you can log in to the Configuration utility (graphical user interface) and configure the unit. For instructions on accessing the Configuration utility through the management port (MGMT), see *Licensing the traffic management software using the Configuration utility*, on page 3-1.

Adding an IP address to the management interface using the config command

After you complete the installation of the software, run the **config** command to configure an IP address, net mask, and gateway on the management port (MGMT). The **config** command is a command line utility created for this purpose. You can run the **config** command from the serial console you used during installation. For more information about configuring the serial console, see *Connecting with a null modem cable to the serial console*, on page 2-1.

To run the **config** command, type the following command:

```
config
```

After you run this utility and add an IP address, net mask, and gateway to your management port, you can log in to the Configuration utility (graphical user interface) and configure the unit. For instructions on accessing the Configuration utility through the management port (MGMT), see *Licensing the traffic management software using the Configuration utility*, on page 3-1.

Connecting to the management interface using the default network

All BIG-IP systems ship with a default network configured on the management interface. You can access the web-based Configuration utility through the management port, and configure the unit directly. You can use this method if you do not want to configure the management interface before you connect to the web-based configuration utility.

Running the Configuration utility remotely

You can run the Configuration utility remotely only from a workstation that is on the same LAN as the unit. To allow remote connections for the Configuration utility, the traffic management software comes with two pre-defined IP addresses, and a pre-defined root password. The default root password is **default**, and the preferred default IP address is **192.168.1.245**. If this IP address is unsuitable for your network, the traffic management software uses an alternate IP address, **192.168.245.245**. However, if you define an IP alias on an administrative workstation in the same IP network as the system, the unit detects the network of the alias and uses the corresponding default IP address. Once the utility finishes and the system reboots, these default IP addresses are replaced by the information that you entered in the initial configuration you create with the Configuration utility.

Setting up an IP alias for the default IP address before you start the unit

You must set up an IP alias for your remote workstation before you turn on the unit and connect to the Configuration utility. The remote workstation must be on the same IP network as the unit. If you add this alias prior to booting up the BIG-IP system, the unit detects the alias and uses the corresponding address.

Setting up an IP alias for the alternate IP address

The IP alias must be in the same network as the default IP address you want the system to use. For example, on a UNIX workstation, you might create one of the following aliases.

- If you want the unit to use the default IP address **192.168.1.245**, then add an IP alias to the machine you want to use to connect to the unit using the following command:

```
ifconfig exp0 add 192.168.1.1
```

- If you want to use the default IP address **192.168.245.245**, then add an IP alias such as:

```
ifconfig exp0 add 192.168.245.1
```

WARNING

On Microsoft Windows® or Windows NT® machines, you must use a static IP address, not DHCP. Within the network configuration, add an IP alias in the same network as the IP address in use on the unit. For information about adding a static IP address to a Microsoft Windows operating system, please refer to the vendors documentation.

Determining which default IP address is in use

After you configure an IP alias on the administrative workstation in the same IP network as the BIG-IP system and you turn the system on, the BIG-IP software sends ARPs on the management interface to see if the preferred **192.168.1.245** IP address is in use. If the address is appropriate for the network and is currently available, the BIG-IP software assigns it to the management interface. You can immediately use it to connect to the unit and start the Configuration utility.

If the alternate network is present on the LAN, **192.168.245.0/24**, or if the node address **192.168.1.245** is in use, then the BIG-IP software assigns the alternate IP address **192.168.245.245** to the management interface instead.

Starting the utility from a web browser

After you get the management workstation connected to the management interface, you can open the Configuration utility and begin licensing the system. When you start the utility from a web browser, you use the selected default IP address as the application URL.

To start the Configuration utility in a web browser

1. Open a web browser on a workstation connected to the same IP network as the management interface IP address.
2. Type the following URL, where **<default IP>** is the IP address in use on the management interface IP address.

```
https://<default IP>
```

3. At the login prompt, type **root** for the user name, and **default** for the password.
The Licensing screen of the Configuration utility opens.
4. Click the **Activation** button to begin the licensing process.
For details about licensing and configuring the system, see *Licensing the traffic management software using the Configuration utility*, on page 3-1



3

Licensing and Configuring the System

- Licensing the traffic management software using the Configuration utility
- Creating the platform management configuration
- Rerunning the Setup utility
- Configuring the traffic management network

Licensing the traffic management software using the Configuration utility

To activate the license for the system, you must have a base registration key. The base registration key is a 27-character string that lets the license server know which F5 products you are entitled to license. If you do not already have a base registration key, you can obtain one from the sales group (<http://www.f5.com>).

If the system is not yet licensed, the Configuration utility prompts you to enter the base registration key. Certain systems may require you to enter keys for additional modules in the **Add-On Registration Key List** box.

Before you can license the system, you need to consider the method you want to use to access the management interface on the system. For more information, see *Understanding management connection options*, on page 2-1.

After you configure an IP address, net mask, and gateway on the management port, you can access the Configuration utility (graphical user interface) through the management port.

To license the system using the Configuration utility

1. Open a web browser on a work station attached to the network on which you configured the management port.
2. Type the following URL in the browser, where **<IP address>** is the address you configured for the management port (MGMT):

https://<IP address>/

3. At the password prompt, type the user name **admin** and the password **admin**, and click **OK**.

The Licensing screen of the Configuration utility opens (Figure 3.1). The Setup utility, displays automatically the first time you run the Configuration utility.

4. To begin the licensing process, click the **Activate** button. Follow the on-screen prompts to license the system. For additional information, click the Help tab.

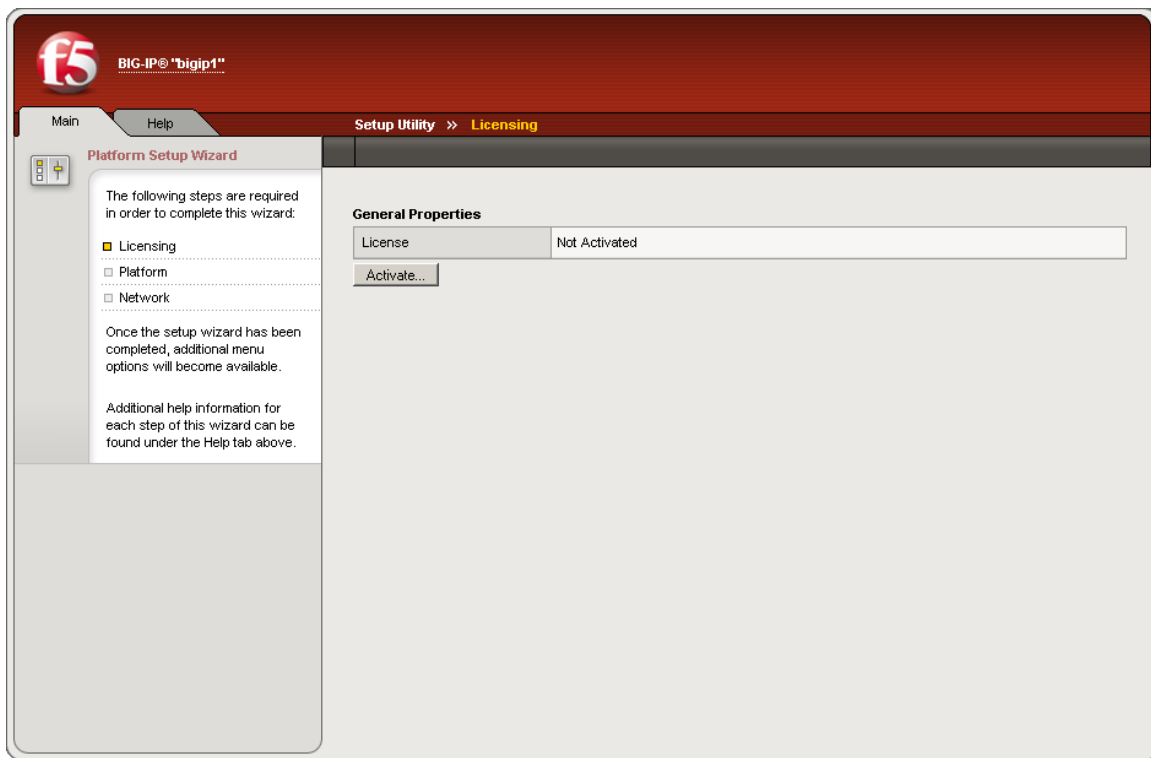


Figure 3.1 The Licensing screen in the Setup utility

Note that you can update the license at any time by using the options that are available under the **License** section of the Main tab.

Creating the platform management configuration

After you have activated the license on the system, the Configuration utility prompts you for the basic configuration information for managing the system (Figure 3.2). This required information includes the following settings.

- Management interface settings such as the IP address, netmask, and default gateway
- Host IP address
- High availability settings
- Time zone settings
- User account settings, such as the root and admin passwords
- Support access
- SSH access

f5 BIG-IP® "bigip1" Activation Complete
This BIG-IP® system has been successfully activated.

Main Help Setup Utility >> Platform Setup

Platform Setup Wizard

The following steps are required in order to complete this wizard:

- Licensing
- Platform
- Network

Once the setup wizard has been completed, additional menu options will become available.

Additional help information for each step of this wizard can be found under the Help tab above.

General Properties

Management Port	IP Address: 192.168.1.245 Network Mask: 255.255.255.0 Management Route:
Host Name	
Host IP Address	Use Management Port IP Address
High Availability	Single Device
Time Zone	America/Los Angeles

User Administration

Root Account	Password: <input type="password"/> Confirm: <input type="password"/>
Admin Account	Password: <input type="password"/> Confirm: <input type="password"/>
Support Account	Disabled
SSH Access	<input checked="" type="checkbox"/> Enabled
SSH IP Allow	* All Addresses

Back Next...

Figure 3.2 The Platform settings screen

Platform setup screen settings

The following pages provide some details on the required platform settings.

Management port

You can specify an IP address for the management (administrative) port. If you set the management interface IP address using the LCD screen that is available on some platforms, you do not need to configure this setting. You can also specify a network mask for the administrative port's IP address and the IP address of the default route for the management port.

Host name

You must enter a fully qualified domain name (FQDN) for the system. Only letters, numbers, and the characters underscore (_), dash (-), and period (.) are allowed.

Host IP address

The host IP address is the IP address that you want to associate with the host name. You can select **Use Management Port IP Address** to associate the host name with the management port's IP address. This is the default setting.

Select **Custom Host IP Address** to type an IP address other than the management port's IP address.

High availability

A high availability system consists of two units that share configuration information and are fail-over peers. Select **Single Device** if the system is not a unit in a high availability system. Select **Redundant Pair** if the system is a unit in a high availability system.

Unit ID

Select **1** or **2** to identify the system's unit ID number in the redundant system. The default unit ID number is **1**. If this is the first unit in the redundant system, use the default. When you configure the second unit in the system, type **2**. These unit IDs are used for active-active redundant configuration.

Time zone

Select the time zone that most closely represents the location of the system. This ensures that the clock for the BIG-IP system is set correctly, and that dates and times recorded in log files correspond to the time zone of the system administrator. Scroll through the list to find the time zone at your location.

Root account

The root account provides only console access to this system. Type the password for the built-in account, **root**. In the **Confirm** box, retype the password that you typed in the **Password** box. If you mistype the password confirmation, the system prompts you to retype both entries.

Admin account

The admin account provides only browser access to the system. Type the password for the built-in account, **admin**. In the **Confirm** box, retype the password that you typed in the **Password** box. If you mistype the password confirmation, the system asks you to retype both entries.

Support account

This setting enables the built-in account, **support**, for access to the system's command line interface and browser interface. If you activate the account, you must also supply a password and password confirmation. The technical support staff uses the support account to analyze the system if you need assistance with troubleshooting issues.

SSH access

Check the **Enabled** box if you want to activate SSH access to the BIG-IP system.

SSH IP allow range

If you have enabled SSH access, you can specify the IP address or address range for other systems that can use SSH to communicate with the system. To grant unrestricted SSH access to all IP addresses select ***All Addresses**. To specify a range, select **Specify Range**, and then type an address or address range in the box, to restrict SSH access to a block of IP addresses. For example, to restrict access to only systems on the **192.168.0.0** network, type **192.168.*.***.

Rerunning the Setup utility

Once you have configured the system, you can run the Setup portion of the Configuration utility again by clicking Run the Setup utility on the Welcome screen. As you proceed through the Setup utility, click the Help tab for information about the settings on each screen.

Configuring the traffic management network

Once you have licensed the system, and configured the basic management system settings, the Options screen opens in the Configuration utility. The Options screen contains two options for creating the traffic management configuration.

- ◆ **Basic Network Configuration**

Click the **Next** button to start the basic network configuration wizard. This wizard guides you through a basic network configuration that includes an internal and external VLAN and interface configuration.

- ◆ **Advanced Network Configuration**

If you want to create a custom traffic management configuration, click the **Finished** button to exit to the Main tab. Choose this option if you want to create a custom VLAN configuration. If you choose this option, after you click the **Finished** button, you should click the **Network** option on the Main tab.

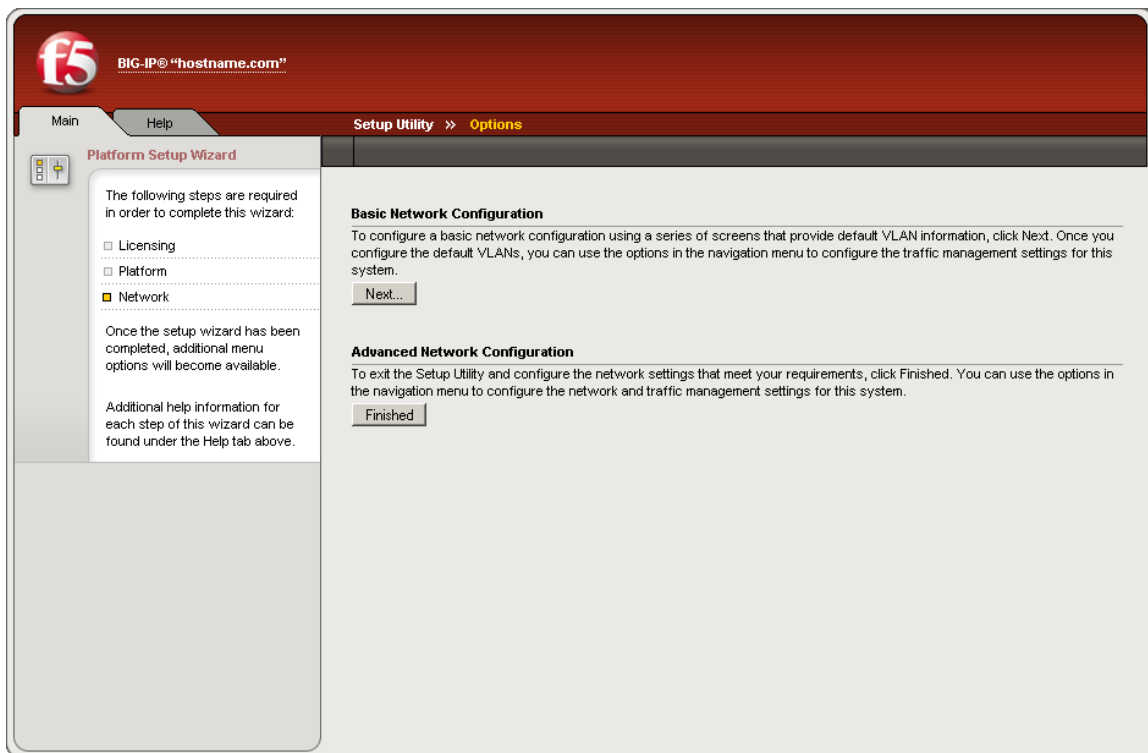


Figure 3.3 The Options screen for configuring the traffic management network

Using the Basic Network Configuration wizard

You can use the Basic Configuration wizard to configure two default VLANs for the system, **internal** and **external**. Note that you can update the network configuration at any time by using the options that are available under the Network section on the System tab.



Index

A

- additional information
 - Ask F5 Technical Support web site Introduction-4
 - BIG-IP Quick Start Instructions Introduction-2
 - Configuration Guide for Local Traffic Management Introduction-2
 - Configuration Worksheet Introduction-2
 - F5 Solution Center Introduction-5
 - Online help Introduction-4
 - Platform Guide Introduction-2
 - Release notes Introduction-4
- address range
 - for SSH access 3-5
- admin account 3-5
- advanced network
 - configuring 3-6

B

- base registration key 3-1
- basic network
 - configuring 3-6
- bigpipe utility Introduction-2
- browsers
 - supported versions Introduction-2

C

- Configuration 3-1
- configuration backup 1-1
 - installing 1-1
- configuration tool
 - choosing Introduction-1
- Configuration utility
 - accessing 3-1
 - for Setup utility Introduction-1
 - using web-based Introduction-2
- console
 - configuring 2-1
- conventions Introduction-3
 - for syntax Introduction-3

D

- default network 2-4

F

- F5 Solution Center Introduction-5
- fully qualified domain name 3-4

H

- high availability 3-4

I

- IM installation
 - rebooting after 1-3
- IM package
 - copying 1-3
 - installing 1-2
- installation manager. See IM package.
- installation process 2-1
- installation script 1-2
- IP addresses
 - defining Introduction-1
- IP alias
 - adding to UNIX system 2-5
 - creating 2-4

L

- LCD
 - controls 2-2
 - panel 2-2
 - setting management IP address 3-4
- load balancing, introduced Introduction-2

M

- maintenance release
 - installing 1-2
- management interface 2-1, 2-2, 3-4
- management port 2-1
- management workstation
 - connecting 2-1

N

- null modem cable 2-1

P

- password
 - default root 2-4
- platform management
 - settings 3-3
- platform management configuration
 - creating 3-3

R

- RAM file system 1-2
 - creating 1-2
- redundant pair 3-4
- redundant system 3-4
- root account 3-5
- root password
 - describing Introduction-1

S

- serial console 2-1, 2-2
- Setup utility
 - rerunning 3-5
- SSH access 3-5
- standby unit
 - installing software 1-2
- stylistic conventions Introduction-3
- support account 3-5
- syntax conventions Introduction-3
- system
 - licensing 3-1
 - using unit ID 3-4
- system backup
 - creating 1-1
- system performance
 - monitoring Introduction-2
- system reboot
 - after upgrade 1-3

T

- Technical Support web site Introduction-4
- terminal emulator 2-1
- time zone 3-4
- traffic management network
 - configuring 3-6
- traffic management software
 - activating 3-1
 - licensing 3-1

U

- UCS 1-1
- upgrade
 - applying 1-1
 - installing Introduction-1
- user configuration set. See UCS.