## FortiGate-50A LED Indicators

LED	State	Description
Power	Green	The FortiGate unit is powered on.
1 Ower	Off	The FortiGate unit is powered off.
	Flashing Green	The FortiGate unit is starting up.
Status	Green	The FortiGate unit is running normally.
	Off	The FortiGate unit is powered off.
Internal Green		The correct cable is in use, and the connected equipment has power.
External (Front)	Flashing Green	Network activity at this interface.
(FIOIII)	Off	No link established.
Internal Green The correct cable is in use, and the chas power.		The correct cable is in use, and the connected equipment has power.
(Back)		Network activity at this interface.
(Back)	Off	No link established.

Checking the package contents





# QuickStart Guide

© Copyright 2004 Fortinet Incorporated. All rights reserved.

Trademarks

Еонтібнте 50А

Products mentioned in this document are trademarks or registered trademarks of their respective holders. 06 December 2004

For technical support please visit http://www.fortinet.com.

PWF

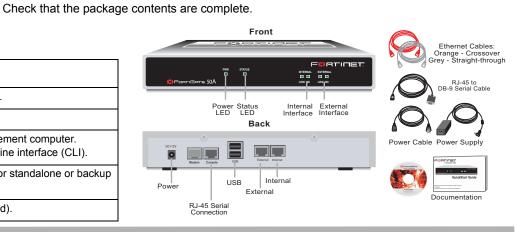
STATUS

**Regulatory Compliance** 

FCC Class A Part 15 CSA/CUS

## 01-28005-0031-20041206

_				
Connector	Туре	Speed	Protocol	Description
Internal	RJ-45	10/100Base-T	Ethernet	Connection to the internal network.
External	RJ-45	10/100Base-T	Ethernet	Connection to the Internet.
CONSOLE	RJ-45	9600 bps	RS-232 serial	Optional connection to the management computer. Provides access to the command line interface (CLI).
USB	USB	—	USB	Optional connection to a modem for standalone or backup operation.
Modem	RJ-11			Inactive port for this model (blocked).



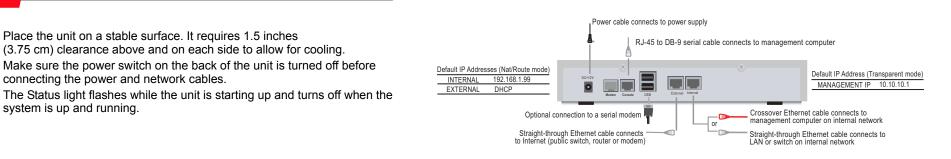
## **Connecting the FortiGate-50A**

Place the unit on a stable surface. It requires 1.5 inches

connecting the power and network cables.

system is up and running.

(3.75 cm) clearance above and on each side to allow for cooling. Make sure the power switch on the back of the unit is turned off before Connect the FortiGate-50A unit to power outlets and to the internal and external networks.



## Planning the configuration

Before configuring the FortiGate-50A, you need to plan how to integrate the unit into your network. You can select NAT/Route mode (the default) or Transparent mode. In NAT/Route mode you can also use the default settings to quickly configure the unit on your network.

## Quick configuration using the default settings

You can quickly set up your FortiGate unit for a home or small office using the webbased manager and the default settings in NAT/Route mode.

All you need to do is set your network computers to use DHCP, access the web-based manager, and configure the required settings for the external interface. You can also configure DNS and a default route if needed. The FortiGate unit automatically assigns IP addresses to up to 100 computers in the internal network

- 1. Connect the FortiGate unit to the network.
- 2. Set the all the network computers to use DHCP to automatically obtain an IP address
  - The FortiGate internal interface acts as a DHCP server for the internal network and assigns IP addresses to all computers in the range 192.168.1.110 -192.168.1.210.
- 3. From the management computer browse to https://192.168.1.99. The FortiGate web-based manager appears.
- Go to System > Network > Interface and select Edit for the external interface. 4.
- 5. Select one of the following Addressing modes
  - Manual: enter a static IP address and netmask, select OK, and go to step 6
  - DHCP: to get an IP address from the ISP select DHCP and go to step 9
  - PPPoE: to get an IP address from the ISP select PPPoE and go to step 9

7. Select one of the following DNS settings

- Obtain DNS server address automatically: select to get the DNS addresses from the ISP, select Apply
- Use the following DNS server addresses: select and enter the DNS server addresses given to you by the ISP, select Apply
- 8. Go to Router > Static, select Create New, enter the default gateway address and select OK.

Network configuration is complete. Proceed to part 7 of this Quick Start Guide.

9. Select Retrieve default gateway from server and Override internal DNS options if your ISP supports them, select OK, and proceed to part 7 of this Quick Start Guide. Go to step 6 if you are not selecting these options.



### **NAT/Route mode**

In NAT/Route mode, the FortiGate-50A is visible to the networks that it is connected to. All of its interfaces are on different subnets. You must configure the internal and external interfaces with IP addresses.

You would typically use NAT/Route mode when the FortiGate-50A is deployed as a gateway between private and public networks. In its default NAT/Route mode configuration, the unit functions as a firewall. Firewall policies control communications through the FortiGate-50A unit.



In NAT/Route mode, firewall policies can operate in NAT mode or in Route mode. In NAT mode, the FortiGate-50A performs network address translation before IP packets are sent to the destination network. In Route mode, no translation takes place. By default, the unit has a single NAT mode policy that allows users on the internal network to securely access and download content from the Internet. No other traffic is possible until you have configured more policies.

## Transparent mode

In Transparent mode, the FortiGate-50A is invisible to the network. All of its interfaces are on the same subnet. You only have to configure a management IP address so that you can make configuration changes.

You would typically use the FortiGate-50A in Transparent mode on a private network behind an existing firewall or behind a router. In its default Transparent mode configuration, the unit functions as a firewall. By default, the unit has a single firewall policy that allows users on the internal network segment to connect to the external network segment. No other traffic is possible until you have configured more policies.



You can connect two network segments to the FortiGate-50A unit to control traffic between these network segments.

Refer to the Documentation CD-ROM for information on how to control traffic, and how to configure HA, antivirus protection, Web content filtering, Spam filtering, intrusion prevention (IPS), and virtual private networking (VPN).

Choosing a configuration tool

## Web-based manager and Setup Wizard

Using the Setup Wizard you can add basic settings by stepping through the wizard pages and filling in the information required.

The FortiGate web-based manager is an easy to use management tool. Use it to configure the administrator password, interface addresses, the default gateway address, and the DNS server addresses.

**Requirements:** An Ethernet connection between the FortiGate-50A and a management computer running Internet Explorer version 6.0 or higher.

5 Collect	ng informatio	n
-----------	---------------	---

## NAT/Route mode

Internal Interface:	IP:	·
	Netmask:	···
External Interface:	IP:	···
	Netmask:	·

The internal interface IP address and netmask must be valid for the internal network.

### **General settings**

Administrator pass	word:					
Network Settings:	Default Gateway:		·_	•	 •	
	Primary DNS Serve	:	·_	·	 ·	
	Secondary DNS Se	ver:	·_	·	 •	

A default gateway is required for the FortiGate unit to route connections to the Internet.

3.

## Configuring the FortiGate-50A

## Web-based manager and Setup Wizard

4. Type admin in the Name field and select Login.

### NAT/Route mode

To configure the FortiGate-50A using the Setup Wizard, select the Easy Setup Wizard button and follow the prompts.

- To change the administrator password
- 1. Go to System > Admin > Administrators.
- 2. Select Change Password for the admin administrator and enter a new password.

#### To configure interfaces

#### 1. Go to System > Network > Interface.

- 2. Select the edit icon for each interface to configure.
- 3. Select one of the following Addressing modes (see the online help for information
  - Manual: enter a static IP address and netmask, select OK
  - DHCP: select DHCP and any required settings
  - PPPoE: select PPPoE and enter a username and password and any other required settings

#### To configure the Primary and Secondary DNS server IP addresses

 Go to System > Network > DNS, enter the Primary and Secondary DNS IP addresses that you recorded above and select Apply.

#### To configure a Default Gateway

- 1. Go to Router > Static and select Edit icon for the static route.
- 2. Set Gateway to the Default Gateway IP address recorded above and select OK.

**Command Line Interface (CLI)** 

The CLI is a full-featured management tool.

Use it to configure the administrator password, the interface addresses, the default gateway address, and the DNS server addresses. To configure advanced settings, see the Documentation CD-ROM.

**Requirements:** An RJ-45-serial connection between the FortiGate-50A and management computer and a terminal emulation application (HyperTerminal for Windows) on the management computer.

Use these tables to record your FortiGate-50A configuration settings.

## Transparent mode

Management IP:	IP:	··
	Netmask:	···

The management IP address and netmask must be valid for the network from which you will manage the FortiGate-50A.

## Factory default settings

NAT/Route mode		Transparent mode		
Internal interface	192.168.1.99	Management IP 10.10.10.1		
External interface	192.168.100.99	Administrative account settings		
DHCP server on Internal	192.168.1.110 – 192.168.1.210	User name admin		
interface		Password (none)		

- Connect the FortiGate-50A internal interface to a management computer Ethernet interface. Use a cross-over Ethernet cable to connect the devices directly. Use straight-through Ethernet cables to connect the devices through a hub or switch.
- 2. Configure the management computer to be on the same subnet as the internal interface of the FortiGate-50A. To do this, change the IP address of the management computer to 192.168.1.2 and the netmask to 255.255.255.0.
  - To access the FortiGate web-based manager, start Internet Explorer and browse to https://192.168.1.99 (remember to include the "s" in https://).

## Transparent mode

#### To switch from NAT/route mode to transparent mode

- 1. Go to **System > Status**, select Change beside Operation Mode, and select OK.
- 2. Change the IP address of the management computer to 10.10.10.2 and use Internet Explorer to browse to https://10.10.10.1.

To configure the FortiGate-50A using the Setup Wizard, select the Easy Setup Wizard button and follow the prompts.

#### To change the administrator password

- 1. Go to System > Admin > Administrators.
- 2. Select Change Password for the admin administrator and enter a new password.

#### To configure the management interface

- 1. Go to System > Network > Management.
- 2. Enter the Management IP address and netmask that you recorded above.
- 3. Select administrative access options if required and select OK.

#### To configure the Primary and Secondary DNS server IP addresses

- 1. Go to **System > Network > DNS**, enter the Primary and Secondary DNS IP addresses that you recorded above and select Apply.
- To configure a Default Gateway
- 1. Go to System > Network > Management.
- 2. Set Default Gateway to the Default Gateway IP address that you recorded above and select OK.

Note: If you change the internal interface IP address (NAT/Route mode) or management IP address (Transparent mode), you must use this address to reconnect to the web-based manager and Setup Wizard. You might also have to change the IP address of the management computer to be on the same subnet as the new IP address.

## Using the Command Line Interface

- 1. Use the serial cable to connect the FortiGate Console port to the management computer serial port.
- 2. Start a terminal emulation program (HyperTerminal) on the management computer. Use these settings: Baud Rate (bps) 9600, Data bits 8, Parity None, Stop bits 1, and Flow Control None.
- 3. At the Login: prompt, type admin and press Enter twice (no password required).

## NAT/Route mode

1. Configure the FortiGate-50A internal interface. config system interface

## Transparent mode

1. Change from NAT/Route mode to Transparent mode. config system global

Select the Easy Setup Wizard

î 📼 î

```
edit internal
set mode static
set ip <intf_ip> <netmask_ip>
end
```

- 2. Repeat to configure each interface, for example, to configure the external interface config system interface edit external
- 3. Configure the primary and secondary DNS server IP addresses.

```
config system dns
   set primary <dns-server_ip>
   set secondary <dns-server_ip>
end
```

4. Configure the default gateway.

```
config router static
    edit 1
        set gateway <gateway_ip>
end
```

```
set opmode transparent end
```

- 2. Wait a moment and then log in again at the prompt.
- 3. Configure the Management IP address.

```
config system manageip
   set ip <mng_ip> <netmask>
end
Configure the DNS server IP address.
config system dns
   set primary <dns-server_ip>
   set secondary <dns-server_ip>
end
```

4. Configure the default route.

```
config router static
    edit 1
        set gateway <gateway_ip>
end
```

## Completing the configuration

#### Congratulations!

You have finished configuring the basic settings. Your network is now protected from Internet-based threats. To explore the full range of configuration options, see the online help or the Documentation CD-ROM.

## **Restarting the FortiGate-50A**

Should you mistakenly change a network setting and cannot connect to the unit, reboot the unit and try again or to set the unit back to factory defaults and start over again.

- To restart the unit, go to System > Maintenance > ShutDown and select Reboot.
- To reset the unit, go to System > Maintenance > Shutdown and select Reset to factory default.

CLI: execute reboot

CLI: execute factoryreset