


Extra help: Private networks with DHCP

This section provides instructions for troubleshooting connection issues when your network uses DHCP to connect to your ISP and configure your internal network.

1. Check the wan interface.

Verify that the wan interface is getting network settings from the ISP. Go to **System > Network > Interfaces**. Highlight the wan interface and select **Edit**. Confirm that the **Addressing Mode** is set to DHCP and that the **Distance** is set to 5, and ensure that **Retrieve default gateway from server** and **Override internal DNS** are both enabled.

Addressing mode	<input type="radio"/> Manual <input checked="" type="radio"/> DHCP <input type="radio"/> PPPoE
Status	connected 
Obtained IP/Netmask	172.20.120.229 255.255.255.0 <input type="button" value="Renew"/>
Expiry Date	December 09, 2013 03:32 PM
Acquired DNS	8.8.8.8 None
Default Gateway	172.20.120.2
Distance	<input type="text" value="5"/>
Retrieve default gateway from server.	<input checked="" type="checkbox"/>
Override internal DNS.	<input checked="" type="checkbox"/>

If the IP address seems incorrect or missing, select **Renew** to renew the lease and get a new IP configuration from your ISP. If you cannot get a valid IP address this way, the FortiGate unit cannot communicate with the ISP's DHCP server.

2. Verify that your ISP automatically provides a DNS server with DHCP.

If your ISP does not supply a DNS server with DHCP, you can go to **System > Network > DNS** and manually add one.

3. Verify that your ISP supplies a default gateway with DHCP.

If your ISP does not supply a default gateway with DHCP, you can go to **Router > Static > Static Route > Create New** and manually add a default route that points from the wan interface to the ISP's default gateway.

4. Check the internal network configuration.

If the internal network is configured to get IP addresses from the FortiGate DHCP server, go to **System > Interfaces**. In the **Address Range** highlight your interface and click **Edit**. Confirm that the DHCP server configuration uses system DNS settings as shown below.

DHCP Server Enable

Address Range + Create New ✎ Edit 🗑 Delete

Starting IP	End IP
192.168.1.110	192.168.1.210

Netmask

Default Gateway Same as Interface IP Specify

DNS Server Same as System DNS Specify

5. Confirm that your PC successfully receives its address using DHCP.

Go to **System > Monitor > DHCP Monitor** to view information about the PCs configured by the FortiGate unit DHCP server. There should be one entry here for each PC on the network that successfully receives its address using DHCP. The following example can be used for comparison.

Interface	IP	MAC	Host Information	Expire	Status
lan	192.168.1.110	c4:2c:03:0b:0c:0f	Hostname: techdocs-Mini	Wed Dec 25 06:08:33 2013	Leased out

If problems persist, see [“Connecting a private network to the Internet using NAT/Route mode”](#) on page 8.