

Configure Network Settings for LAN and DHCP on SPA122

Objective

Dynamic Host Configuration Protocol (DHCP) is a network configuration protocol that automatically configures the IP addresses of devices on a network so that they can communicate with each other. DHCP assigns IP addresses to hosts from a pool. The device must have an IP address for identification to be able to connect to the network, and give the administrator the possibility to enter the web configuration utility to make changes.

The objective of this document is to explain how to configure Network Settings on the SPA122 Phone Adapter.

Applicable Device

- SPA122

Software Version

- v1.3.2 (014)

Network Settings

Step 1. Log in to the Phone Adapter Configuration Utility and choose **Network Setup > Basic Setup > Network Settings**. The *Network Setting* page opens:

Network Settings

Router IP

Local IP address: 192 . 168 . 15 . 1

Subnet Mask: 255.255.255.0 ▼

DHCP Server Setting

DHCP Server: Enabled Disabled

IP Reservation: Show DHCP Reservation

Default Gateway: 192 . 168 . 15 . 1

Starting IP Address: 192 . 168 . 15 . 100

Maximum DHCP Users: 50

Client Lease Time: 0 minutes (0 means one day, 9999 means never expire, 5 mins at start up)

Option 66: None ▼

Router IP

The router IP is used to connect the SPA122 with your local network.

Step 1. Enter the LAN IP address for the SPA122 in the *Local IP Address* field. The default IP address for the SPA122 is 192.168.15.1.

Router IP

Local IP address: 192 . 168 . 15 . 1

Subnet Mask: 255.255.255.0 ▼

Step 2. Choose the Subnet Mask for your local network from the *Subnet Mask* drop-down list.

DHCP Server Settings

Step 1. Click the **Enabled** radio button to enable the DHCP server, or click the **Disabled** radio button to disable this feature in the *DHCP Server* field. The SPA122 can use the built-in DHCP server to dynamically assign IP addresses to connected devices. If you choose to disable the feature, skip to Step 12.

DHCP Server Setting

DHCP Server: Enabled Disabled

Step 2. Click **Show DHCP Reservation** to view and manage the DHCP client list. The DHCP reservation list is displayed:

IP Reservation:

Select Clients from DHCP Tables				
Client Name	Interface	IP Address	MAC Address	Select
diana-PC	LAN	192.168.15.100	00:00:00:00:00:00	<input type="checkbox"/>

Manually Adding Client				
Enter Client Name	Assign IP address		To this MAC address	
<input type="text"/>	<input type="text" value="192"/>	<input type="text" value="168"/>	<input type="text" value="15"/>	<input type="text" value="0"/>
			<input type="text" value="00:00:00:00:00:00"/>	<input type="button" value="Add"/>

Clients Already Reserved			
Enter Client Name	Assign IP address	To this MAC address	MAC Address
clientexample	192.168.15.19	00:00:00:00:00:00	<input type="button" value="Remove"/>

Note: To add a different kind of client, please refer to the section [DHCP Reservation](#).

Step 3. Enter the IP address of the Default Gateway to be used by the DHCP clients in the *Default Gateway* field. By default, it is the IP address of the Ethernet (LAN) interface of the SPA122. The default gateway is the IP that it is assigned to the device to communicate with the network.

DHCP Server Setting

DHCP Server: Enabled Disabled

IP Reservation:

Default Gateway: . . .

Starting IP Address: . . .

Maximum DHCP Users:

Client Lease Time: minutes (0 means one day, 9999 means never expire, 5 mins at start up)

Option 66: ▼

Option 67:

Option 159:

Option 160:

DNS Proxy: Enabled Disabled

Step 4. Enter the starting IP address to specify the range of addresses to be assigned dynamically by the DHCP server in the *Starting IP Address* field.

Step 5. Enter the Maximum DHCP users that can lease DHCP addresses from the DHCP server in the *Maximum DHCP Users* field.

Note: The SPA122 can support up to five connected computers for business-related tasks such as web browsing and viewing email. The SPA122 is not designed to support streaming music, video, games, or other network traffic-intensive tasks.

Step 6. Enter the time in minutes that a dynamically assigned IP address can be used by a user in the *Client Lease Time* field. After this time elapses, a client device must request a DHCP lease renewal.

Step 7. Choose the type of provisioning information that you would like to assign the hosts from the *Option 66* drop-down list. Option 66 gives host information about the IP address of the provisioning server. Server information can be defined in one of three ways.

- None — The SPA122 uses its own Trivial File Transfer Protocol (TFTP) server to source provisioning files, so it returns its own local IP address to the client. The TFTP is very simple to manage and does not give any authentication to the user that is going to receive the information.
- Remote TFTP Server — The device is linked to a remote provisioning server that the client requests, and it provides the remote TFTP server information.
- Manual TFTP Server — Allows the manual configuration of a server address. This option requires that the client has some authentication before it can access the provisioning server information.

Note: If Manual TFTP Server is chosen in the step 7, enter the TFTP server IP address, name or URL in the *TFTP server* field.

Step 8. Enter the configuration that you would like to assign to the client in the *Option 67* field. This option is used in conjunction with Option 66 to allow a client to form an appropriate TFTP request for the file.

Step 9. Enter the configuration that you would like to assign to the URL clients in the *Option 159* field. The Option 159 URL defines the protocol and path information by using an IP address for clients that cannot use DNS.

Step 10. Enter the configuration that you would like to assign to clients that are using a DNS domain in the *Option 160* field. The Option 160 URL defines the protocol and path information by using a fully qualified domain name for clients that can use DNS.

Step 11. Click the **Enabled** radio button to enable the *DNS Proxy* feature, or click the **Disabled** radio button to disable it. If DNS proxy is disabled, then DHCP clients will be offered DNS server information by using the Static DNS servers. The DNS proxy is used to validate the internet traffic and block illegal DNS packets.

Step 12. Click **Submit** to save your settings.

DHCP Reservation

The DHCP Reservation allows the administrator to reserve IP addresses from the pool, which can only be assigned to certain hosts that are registered via MAC address. There are two methods to add clients to the DHCP Reservation list.

Step 1. Click **Show DHCP Reservation** to view and manage the DHCP client list. The DHCP reservation list is displayed.

To reserve a static IP address for a current DHCP Client:

Client Name	Interface	IP Address	MAC Address	Select
diana-PC	LAN	192.168.15.100		<input checked="" type="checkbox"/>

Step 1. Check the check box for the client in the Select Clients from DHCP Tables list.

Step 2. Click **Add Clients**. The selected clients are added to the Clients Already Reserved list. These clients are given static IP addresses.

To add a client that is not in the *Select Clients from DHCP Tables* list:

Enter Client Name	Assign IP address	To this MAC address	
clientexample1	192.168.15.18		<input type="button" value="Add"/>

Step 1. Enter the name for the client in the *Enter Client Name* field

Step 2. Enter an IP address you want to reserve for this client in the *Assign IP Address* field.

Step 3. Enter the MAC address of the client in the *To This MAC Address* field:

Step 4. Click **Add**.

Clients Already Reserved			
Enter Client Name	Assign IP address	To this MAC address	MAC Address
clientexample1	192.168.15.18	XXXXXXXXXX	<input type="button" value="Remove"/>
diana-PC	192.168.15.100	XXXXXXXXXX	<input type="button" value="Remove"/>

Step 5. (Optional) To delete any client from the *Clients Already Reserved* table, click **Remove**.