

# Basic and Advanced Optional Settings on SPA8000 Phone Adapter

## Objective

Optional settings are used to enhance and modify the performance of the WAN connection. A Wide Area Network (WAN) is a network that consists of multiple smaller networks. The most well known WAN is the Internet. To gain access to the Internet, organizations called Internet Service Providers (ISPs) are used. Some of the settings that can be modified are DNS servers, NTP servers, DNS settings, and a few DHCP settings. A Domain Name Service (DNS) server is a server where the record of domain names are stored and matched to IP addresses. DNS translates the domain names into IP addresses. Network Time Protocol (NTP) is designed to synchronize the time on a network of machines. This article explains the basic and advanced optional settings on a SPA8000.

**Note:** If you want to configure the other features for the WAN please follow the steps mentioned in the articles: *Basic and Advanced Point-to-Point over Ethernet (PPPoE) Settings on SPA8000 Analog Telephone Adapter* and *Static IP Settings on the SPA8000 Analog Telephone Adapter*.

## Applicable Device

- SPA8000

## Software Version

- 6.1.12

## Optional Settings Configuration

### Basic Optional Settings

Step 1. Log in to the web configuration utility as an administrator and choose **Basic > Network > WAN Status**. The basic *WAN Status* page opens:

The screenshot shows a web configuration utility interface. At the top, there are tabs for 'Network' and 'Voice'. Below them, there are sub-tabs for 'Status' and 'Wan Status'. The 'Wan Status' tab is active. In the top right corner, there are links for 'Trunk Status', 'User Login', 'basic', and 'advanced'. The main content area is divided into several sections: 'Internet Connection Settings' with a 'Connection Type' dropdown set to 'Static IP'; 'Static IP Settings' with fields for 'Static IP' (192.168.0.1), 'NetMask' (255.255.255.0), and 'Gateway' (192.168.75.1); 'PPPoE Settings' with fields for 'PPPOE Login Name' and 'PPPOE Login Password'; and 'Optional Settings' which is highlighted with a red box. The 'Optional Settings' section contains fields for 'HostName' (SPA8000), 'Domain' (example.com), 'Primary DNS' (4.2.2.2), 'Secondary DNS' (192.168.75.1), and 'DNS Query Mode' (Parallel). At the bottom, there are two buttons: 'Undo All Changes' and 'Submit All Changes'.

Under the Optional Settings area:

Step 2. Enter the host name of the device in the Host Name field. The host name is a user assigned name used to identify the device in the network.

Step 3. Enter the network domain name in the Domain field. The domain name specifies an alphanumeric string that is matched to an IP address by the DNS.

Step 4. Enter the primary Domain Name System (DNS) server address in the Primary DNS field. The primary DNS server is where the DNS queries are first sent to be matched with an IP address.

Step 5. (Optional) Enter the secondary DNS in the Secondary DNS field. In case there is a problem with the primary DNS, the secondary DNS will be the next to be used for domain name requests.

Step 6. Choose the DNS query mode from the DNS Query Mode drop down list. A DNS query is a message that the host sends to the DNS server to find information on a domain name and find an IP address for it.

- Parallel — The device sends the same DNS lookup request to all the DNS servers at the same time.
- Sequential — The device sends the DNS lookup request to all the DNS servers successively.

Step 7. Click **Submit All Changes** to save the configuration.

## Advanced Optional Settings

Step 1. Log in to the web configuration utility as an administrator and choose **Advanced > Network > WAN Status**. The *WAN Status* page opens:

Network		Voice	
Status		Wan Status	
Lan Status		Application	
User Login		basic   advanced	
<b>Internet Connection Settings</b>			
Connection Type:	Static IP		
<b>Static IP Settings</b>			
Static IP:	192.168.0.1	NetMask:	255.255.255.0
Gateway:	192.168.75.1		
<b>PPPoE Settings</b>			
PPPOE Login Name:		PPPOE Login Password:	
PPPOE Service Name:			
<b>Optional Settings</b>			
HostName:	SPA8000	Domain:	example.com
Primary DNS:	4.2.2.2	Secondary DNS:	192.168.75.1
DNS Server Order:	Manual	DNS Query Mode:	Parallel
Primary NTP Server:	135.11.11.11	Secondary NTP Server:	135.15.15.15
DHCP IP Revalidate Timer:	15 Minutes		
<b>MAC Clone Settings</b>			
Enable MAC Clone Service:	no	Cloned MAC Address:	
<b>Remote Management</b>			
Enable WAN Web Server:	yes	WAN Web Server Port:	80
<b>VLAN Settings</b>			
Enable VLAN:	no	VLAN ID:	1 [0x000-0xFF]
Undo All Changes		Submit All Changes	

Under the Optional Settings area:

Step 2. Enter the host name of the device in the Host Name field. The host name is a user assigned name used to identify the device in the network.

Step 3. Enter the network domain name in the Domain field. The domain name specifies an alphanumeric string that is matched to an IP address by the DNS.

Step 4. Enter the primary Domain Name System (DNS) server address in the Primary DNS field. The primary DNS server is where the DNS queries are first sent to be matched with an IP address.

Step 5. (Optional) Enter the secondary DNS in the Secondary DNS field. In case there is a problem with the primary DNS, the secondary DNS will be the next to be used for domain name requests.

Step 6. Choose a DNS server order from the DNS Server Order drop down list. The possible values are:

- Manual — Manually selects the IP address. There is no need to look at a DHCP supplied DNS table.
- Manual/ DHCP — Manually selects the IP address in case that it can not be assigned manually the device assigns the DNS server IP address which is in the DHCP supplied DNS server table.
- DHCP/Manual — Selects the DNS server IP address which is in the DHCP supplied DNS server table. In case it cannot be assigned through DHCP, it will manually select the IP address.

Step 7. Choose the DNS query mode from the DNS Query Mode drop down list. A DNS query is a message that the host sends to the DNS server to find information on a domain name and find an IP address for it.

- Parallel — The device sends the same DNS lookup request to all the DNS servers at the same time.
- Sequential — The device sends the DNS lookup request to all the DNS servers successively.

Step 8. Enter the primary Network Time Protocol (NTP) server IP address in the Primary NTP Server field. NTP is designed to synchronize the time on a network of machines.

Step 9. (Optional) In case any problem with the primary NTP server enter the secondary NTP server IP address in the Secondary NTP Server field. The secondary NTP server can be used to synchronize the time on a network of machines.

Step 10. In the DHCP IP re-validate Timer field enter the time in minutes for DHCP re-validation. This is the interval at which the SPA re-validates the IP address given by DHCP.

Step 11. Click **Submit All Changes** to save the configuration.