

# Configuration of Universal Plug and Play (UPnP) on RV016, RV042, RV042G and RV082 VPN Routers

## Objective

Universal Plug and Play (UPnP) is a set of networking protocols that allow devices to discover each other on the network. The discovered devices can then establish network services for data sharing, communications, and entertainment.

The objective of this document is to show you how to configure UPnP on RV016, RV042, RV042G, and RV082 VPN Routers.

## Applicable Devices

- RV016
- RV042
- RV042G
- RV082

## Software Version

- v4.2.2.08

## UPnP Configuration

Step 1. Log in to the web configuration utility and choose **Setup > UPnP**. The *UPnP* page opens:

**UPnP**

UPnP Function :  Yes  No

Service :

Name or IP Address :

Enable :

Step 2. Click the **Yes** radio button to enable the UPnP feature.

**UPnP**

UPnP Function :  Yes  No

Step 3. From the *Service* drop-down list, choose the appropriate service and the predefined port of the service that you would like to apply for the UPnP device.

Service : DNS [UDP/53~53]

Name or IP Address :

Enable :

DNS [UDP/53~53]

FTP [TCP/21~21]

HTTP [TCP/80~80]

HTTP Secondary [TCP/8080~8080]

HTTPS [TCP/443~443]

HTTPS Secondary [TCP/8443~8443]

TFTP [UDP/69~69]

IMAP [TCP/143~143]

NNTP [TCP/119~119]

POP3 [TCP/110~110]

SNMP [UDP/161~161]

SMTP [TCP/25~25]

TELNET [TCP/23~23]

TELNET Secondary [TCP/8023~8023]

TELNET SSL [TCP/992~992]

DHCP [UDP/67~67]

L2TP [UDP/1701~1701]

PPTP [TCP/1723~1723]

IPSec [UDP/500~500]

**Note:** If the desired service is unavailable, refer to the [Service Management](#) section.

Step 4. In the *Name or IP Address* field, enter the IP address or the name of the UPnP device.

Service : DNS [UDP/53~53]

Service Management

Name or IP Address : 192.168.15.6

Enable :

Step 5. To enable this feature for the respective IP address, check the **Enable** check box.

Step 6. Click **Add to List**. The new entry will be displayed in the list.

**UPnP**

UPnP Function :  Yes  No

Service : DNS [UDP/53~53]

Service Management

Name or IP Address :

Enable :

Add to list

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DNS [UDP/53~53]->192.168.15.6 [Enabled]

Step 7. (Optional) To edit an entry from the UPnP list, choose the entry from the list that you want to edit, edit the necessary information, and click **Update**.

Step 8. (Optional) To delete an entry from the UPnP list, choose the entry from the list that you want to delete and click **Delete**.

Step 9. Click **Save** to save the settings.

Step 10. Click **View** to see the UPnP forwarding table. The *UPnP Forwarding Table List* window opens:

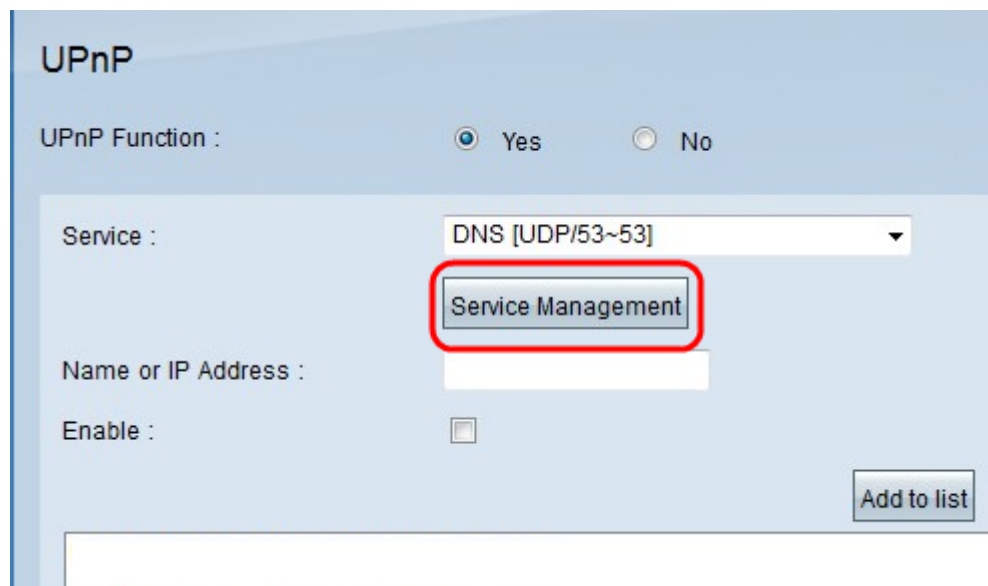
The available options are defined as follows:

- Service Name — Represents the service name.
- Protocol — Represents the protocol used for the service.
- Ext. Port — Represents the external port for the service.
- Internal Port — Represents the internal port for the service.
- IP Address — Represents the IP address of the UPnP device.
- Enable — Represents whether the UPnP is enabled or disabled.

## Service Management

The *Service Management* section is used to create a new service for the UPnP configuration.

Step 1. Click **Service Management**.



The screenshot shows a web interface for UPnP configuration. At the top, the title "UPnP" is displayed. Below it, the "UPnP Function" is set to "Yes" with a selected radio button. The "Service" dropdown menu is set to "DNS [UDP/53~53]". A red rectangular box highlights the "Service Management" button located below the service dropdown. Below this, there are input fields for "Name or IP Address" and "Enable" (which is currently unchecked). An "Add to list" button is located at the bottom right of the form.

The Service Management window appears:

Service Name :

Protocol :

External Port :

Internal Port :

DNS [UDP/53~53]  
FTP [TCP/21~21]  
HTTP [TCP/80~80]  
HTTP Secondary [TCP/8080~8080]  
HTTPS [TCP/443~443]  
HTTPS Secondary [TCP/8443~8443]  
TFTP [UDP/69~69]  
IMAP [TCP/143~143]  
NNTP [TCP/119~119]  
POP3 [TCP/110~110]  
SNMP [UDP/161~161]  
SMTP [TCP/25~25]

Step 2. Enter a service name in the *Service Name* field.

Step 3. Choose the appropriate protocol type from the *Protocol* drop-down list.

Service Name :

Protocol :

External Port :

Internal Port :

DNS [UDP/53~53]  
FTP [TCP/21~21]  
HTTP [TCP/80~80]  
HTTP Secondary [TCP/8080~8080]  
HTTPS [TCP/443~443]  
HTTPS Secondary [TCP/8443~8443]  
TFTP [UDP/69~69]  
IMAP [TCP/143~143]  
NNTP [TCP/119~119]  
POP3 [TCP/110~110]  
SNMP [UDP/161~161]  
SMTP [TCP/25~25]

The available options are defined as follows:

- TCP (Transmission Control Protocol) — Transport layer protocol used by applications that require guaranteed delivery.
- UDP (User Datagram Protocol) — Uses datagram sockets to establish host to host communications.

Step 4. Enter the external port in the External Port field.

**Note:** If the service that has been created has a standard port number, that number must be used as the external port number.

Service Name :

Protocol :

External Port :

Internal Port :

- DNS [UDP/53~53]
- FTP [TCP/21~21]
- HTTP [TCP/80~80]
- HTTP Secondary [TCP/8080~8080]
- HTTPS [TCP/443~443]
- HTTPS Secondary [TCP/8443~8443]
- TFTP [UDP/69~69]
- IMAP [TCP/143~143]
- NNTP [TCP/119~119]
- POP3 [TCP/110~110]
- SNMP [UDP/161~161]
- SMTP [TCP/25~25]

Step 5. Enter the internal port in the *Internal Port* field.

**Note:** The external port number can be used. However, for higher security, any other port number can be used as well.

Service Name :

Protocol :

External Port :

Internal Port :

- NNTP [TCP/119~119]
- POP3 [TCP/110~110]
- SNMP [UDP/161~161]
- SMTP [TCP/25~25]
- TELNET [TCP/23~23]
- TELNET Secondary [TCP/8023~8023]
- TELNET SSL [TCP/992~992]
- DHCP [UDP/67~67]
- L2TP [UDP/1701~1701]
- PPTP [TCP/1723~1723]
- IPSec [UDP/500~500]
- serviceexp[TCP/15->28]

Step 6. Click **Add to list**. The service is displayed in the service field.

Step 7. (Optional) To delete a service, choose the service that you would like to delete from the list and click **Delete**.

Step 8. (Optional) To edit a service, choose the service that you would like to update from the list, edit the necessary information, and click **Update**.

Step 9. Click **OK**. This closes the window and takes you back to the *UPnP* page.