



Cisco Small Business Managed Router Feature Configuration Guide SRP526/7 Bridged ADSL Configuration



Introduction

This guide sets out the steps required to configure an SRP500 router as an ADSL modem for a local PPP client. You may wish to use this configuration to allow an Ethernet only device, such as a UC500 or UC320, to effectively terminate a WAN connection delivered by an ADSL service.

The configuration steps below illustrate how to use the PPPoE Relay feature in a simple configuration that dedicates Internet access to the local PPP client. Multiple relay sessions may also be configured to provide more advanced connectivity options. Steps to configure these, however, are outside the scope of this guide.

Configuration Steps

The following steps assume that the SRP500 is initially set to factory defaults. This guide is based on the SRP527W running firmware release 1.1.19(004).

Step 1: ADSL Interface Configuration

The default configuration for the ADSL interface may be sufficient for your Service Provider. Use the following steps to adjust these settings as required.

Log in to the SRP500 using the administrator account (admin) - the default password is admin. The first screen displayed is the Quick Setup > Basic Configuration Setup > WAN Setup page.

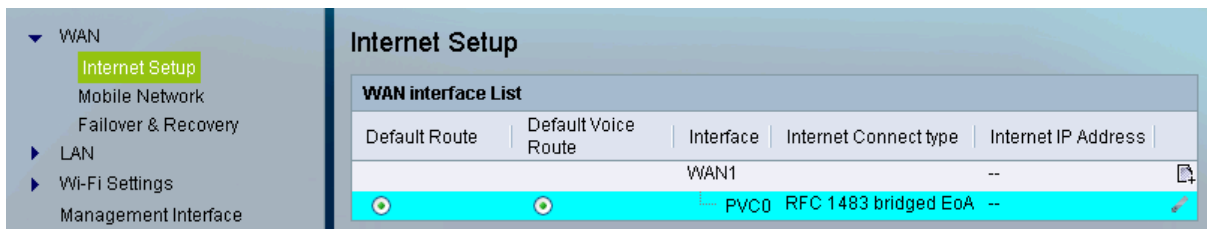
From this page, ensure that the Encapsulation option is set to “**RFC 1483 bridged EoA**”. If required, select the required multiplexing option (LLC or VC) and disable the auto detect feature to manually configure VPI/VCI settings as provided by your Service Provider. The following screenshot illustrates typical settings for a UK Service Provider.

In addition to the DSL settings, it is also necessary to disable IP address negotiation on the WAN interface by manually configuring a dummy address of your preference. In the example below the network 1.1.1.0/30 has been used.

The screenshot displays two configuration panels for the WAN interface. The left panel, titled "Internet Setup", contains the "VC Settings" section. The right panel, titled "IP Settings", contains the IP configuration options.

Section	Field	Value
VC Settings	Encapsulation	RFC 1483 bridged EoA
	Multiplexing	VC
	Gos Type	UBR
	VPI/VCI Auto Detect	Disable
	Virtual Circuit	VPI: 0, VCI: 38
IP Settings	Obtain an IP Address Automatically	Unselected
	Use the Static IP Address	Selected
	Internet IP Address	1.1.1.1
	Subnet Mask	255.255.255.252
	Gateway	1.1.1.2
Primary DNS	0.0.0.0	
Secondary DNS	0.0.0.0	

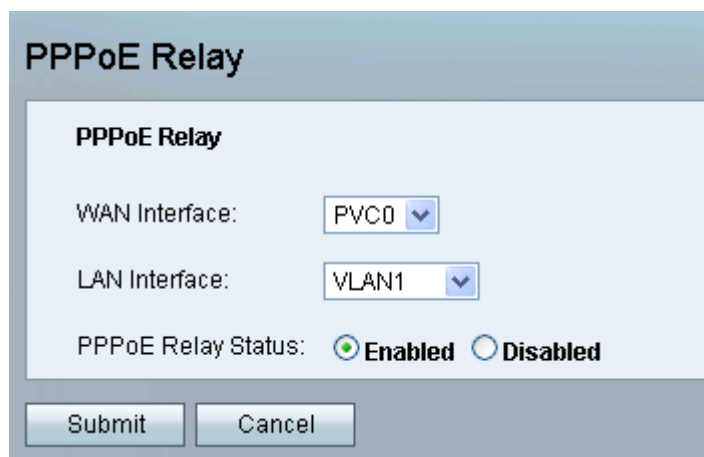
It is also possible to configure the WAN interface via the Internet Setup page (Interface Setup > WAN > Internet Setup). Click on the edit icon to change the settings for PVC0. If necessary, you may also use this page to add an additional ADSL PVC if you prefer to relay the client PPP session via an alternative service.



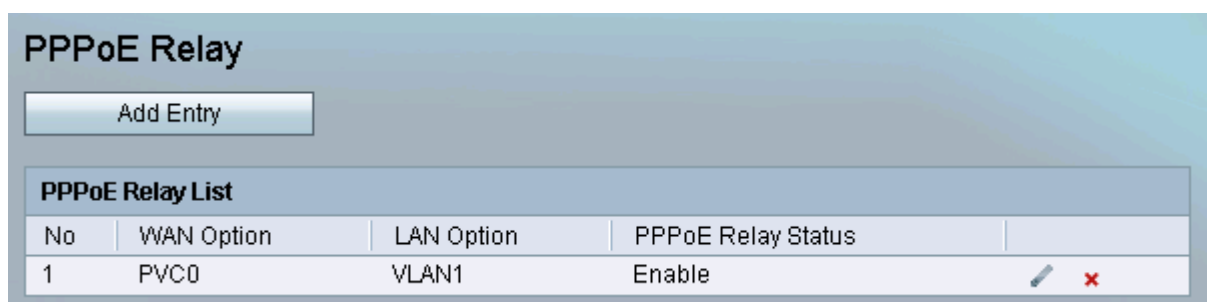
Step 2: Configure PPPoE Relay

To complete a basic configuration, it is necessary only to enable the PPPoE Relay feature. Browse to the Network Setup > PPPoE Relay page, then click “Add Entry”.

At the PPPoE Relay entry page (illustrated below), select the VLAN to which the local PPP client is connected (**VLAN1** by default) and the target WAN interface to which the PPP session should be relayed (PVC0 by default). Ensure that the **Enabled** option is selected and click **Submit**.



The new PPPoE Relay session is summarised as below.



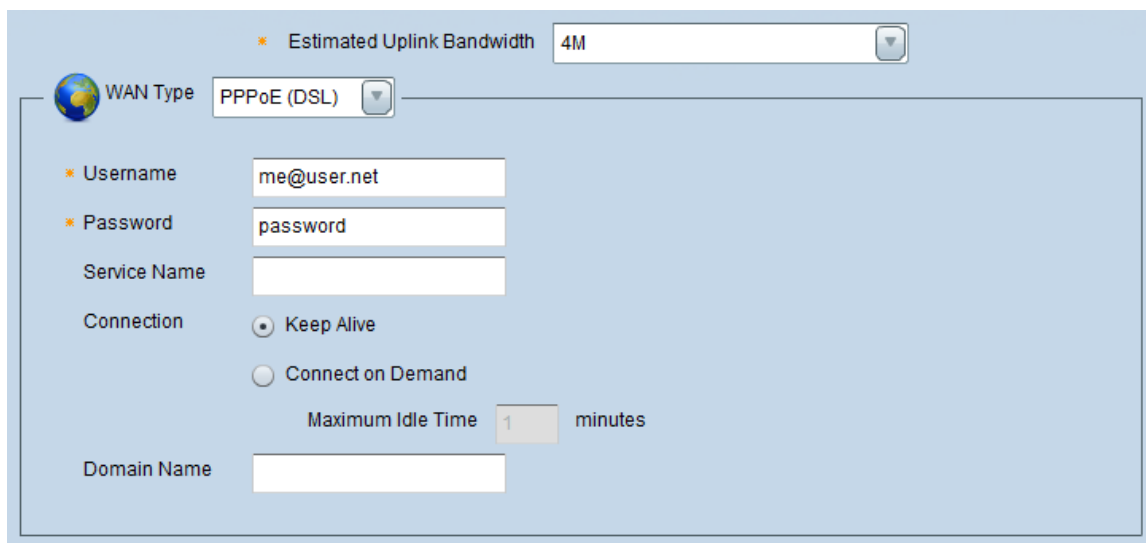
At this point, the SRP500 is ready to relay the local PPP session. If you have decided to use an alternative ADSL PVC for the relayed session, ensure that this is selected appropriately in the step above.

Step 3: Create PPPoE Session from LAN client.

The following provides an illustration of how to configure a local PPP client (a UC320W in this case) to use the SRP500 configuration above.

Connect the UC320W to any of the SRP500 LAN interfaces, then access the configuration utility from a UC320W LAN interface. Configure the **WAN Type** as PPPoE (DSL) and enter the username and password provided by your Service Provider. Select **Keep Alive** or **Connect on Demand** as required.

To ensure that UC320W WAN quality of service is assured, ensure that the **Estimated uplink Bandwidth** setting is selected to match that of the DSL service. Select the next lower setting on the UC320W if the DSL service value is not available as an option. i.e. if you have a service that offers 800kbps upstream, select 768kbps on the UC320.



The screenshot displays a configuration window for a WAN connection. At the top, there is a dropdown menu for "Estimated Uplink Bandwidth" set to "4M". Below this, the "WAN Type" is set to "PPPoE (DSL)". The configuration includes fields for "Username" (me@user.net), "Password" (password), and "Service Name". Under the "Connection" section, the "Keep Alive" radio button is selected, and the "Maximum Idle Time" is set to 1 minute. A "Domain Name" field is also present at the bottom.