

# Set up a Cisco Small Business VoIP Router Using DSL Internet Service

Document ID: 108669

## Contents

**Introduction** How can I set up a Cisco Small Business VoIP Router Using DSL Internet Service?  
**Related Information**

## Introduction

This article is one in a series to assist in the setup, troubleshooting, and maintenance of Cisco Small Business products.

### **Q. How do I set up a Cisco Small Business VoIP Router using DSL Internet Service?**

**A.**

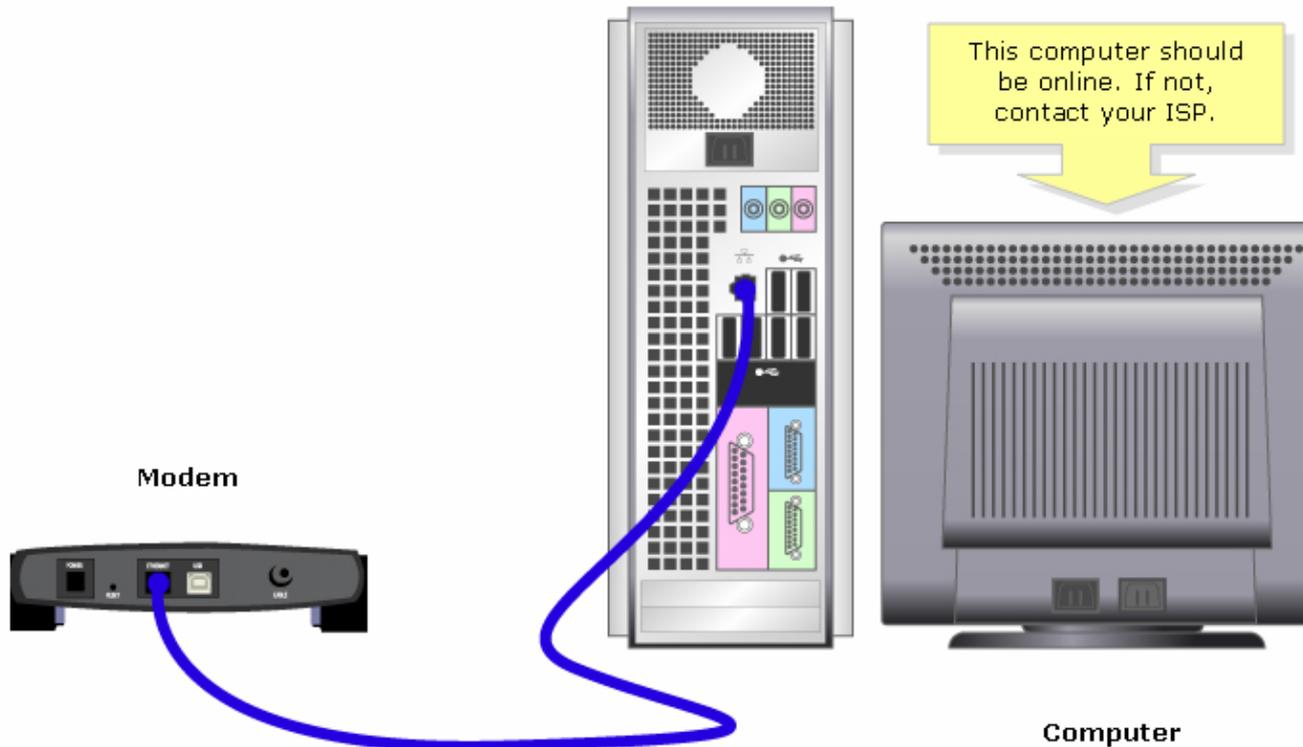
Most DSL providers use Point-to-Point Protocol over Ethernet (PPPoE) in order to establish Internet connections for end-users. In order to set up a Cisco Small Business router, you need to enable PPPoE on the router's web-based setup page.

In order to set up a Cisco Small Business router with a DSL connection, perform these steps:

1. Verify Internet Connection
2. Connect the Devices Together
3. Check the LEDs
4. Set up a DSL ISP on a Cisco Small Business Router

#### ***Verify Internet Connection***

Connect the Broadband modem to the computer using an Ethernet cable without the router installed and make sure that the Internet connection is active. If not, contact your Internet Service Provider (ISP).



**Note:** The image may vary depending on the computer and modem you are using.

Once an active Internet connection is established through the modem, complete the steps in the next section in order to connect the modem and the computer to the router.

### ***Connect the Devices Together***

After you verify that you have an active Internet connection, connect the modem to the router's Internet port and the computer to any of the four Ethernet ports.

After you connect the devices, complete the steps in the next section in order to check the LEDs.

### ***Check the LEDs***

After you connect your modem and PC to the router, check the lights on the front panel of the router.

After you check the router's LEDs, complete the steps in the next section in order to configure the router for static IP account.

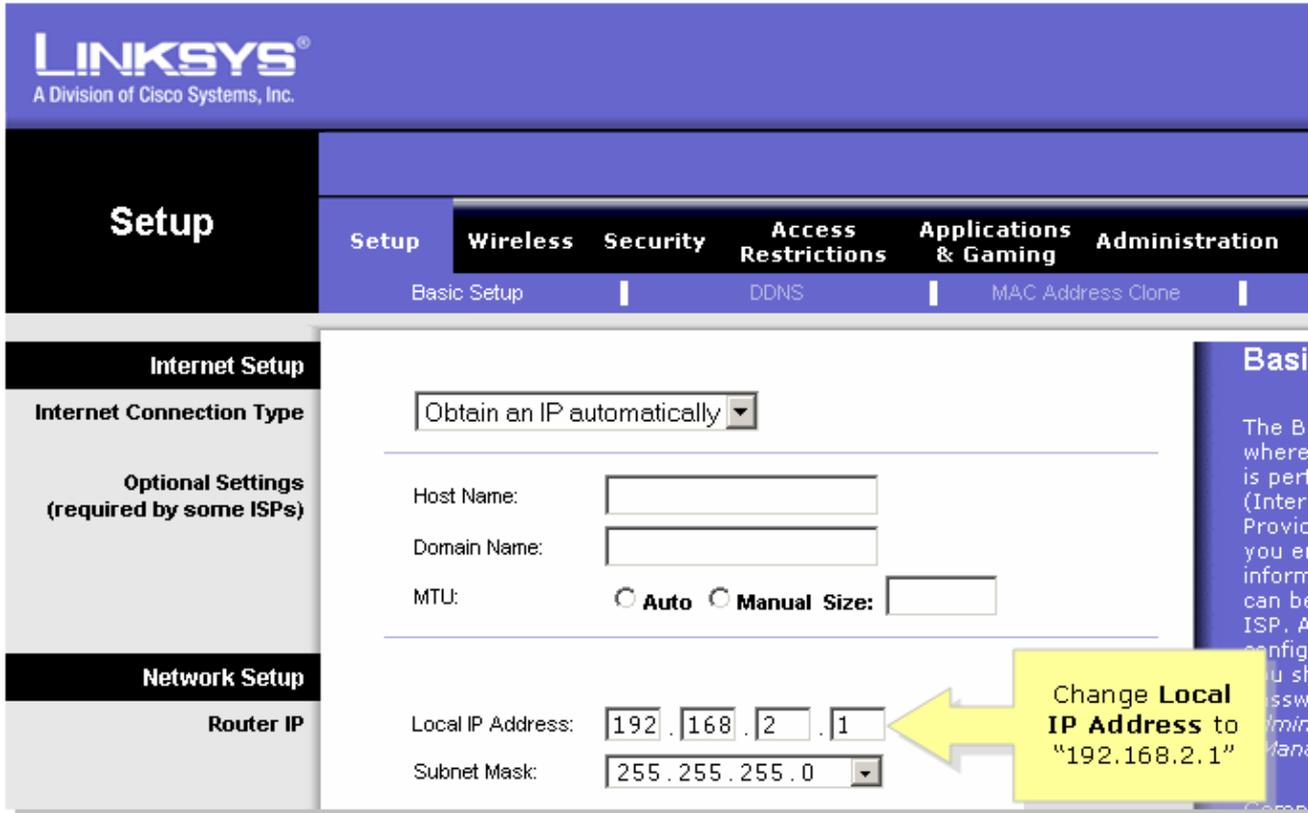
### ***Set up a DSL ISP on a Cisco Small Business Router***

#### ***Step 1:***

Access the router's web-based setup page. For instructions, click [here](#).

#### ***Step 2:***

When the router's web-based setup page appears, look for **Local IP Address** and change it to "192.168.2.1" in order to avoid IP address conflict.



**Step 3:**

Click **Save Settings**.

**Step 4:**

Renew the computer's IP address.

**Step 5:**

Access the router's web-based setup using "192.168.2.1" as the IP address.

**Step 6:**

When the router's web-based setup page appears, click **Status**, then check if **Internet IP Address** has numbers or values. If the **Internet IP Address** has numbers, the computer should now be able to access the Internet.

**LINKSYS**  
A Division of Cisco Systems, Inc.

**Status**

Setup | Wireless | Security | Access Restrictions | Applications & Gaming | Administration

Router | Local Network | Wireless | Voice

**Information**

Firmware Version:

Current Time: **Not Available**

MAC Address: **00:00:00:00:00:00**

**Status**

Login Type: **DHCP**

Internet IP Address: **0.0.0.0**

Subnet Mask: **0.0.0.0**

Default Gateway: **0.0.0.0**

DNS 1: **0.0.0.0**

DNS 2: **0.0.0.0**

DNS 3: **0.0.0.0**

MTU: **1500**

DHCP Release | DHCP Renew

Check the value of the **Internet IP Address**.

**Note:** If the *Internet IP Address* is all zeroes (*0.0.0.0*) click  , then click  . If the *Internet IP Address* is still all zeroes (*0.0.0.0*), enable PPPoE on the router. In order to enable PPPoE on the router, complete the steps below.

**Step 7:**

When the router's web-based setup page appears, under *Setup* look for *Internet Connection Type*. Select *PPPoE* on the drop-down menu arrow.

## Setup

Setup

Wireless

Security

Access  
Restrictions

Applications  
& Gaming

Administration

Basic Setup

DDNS

MAC Address Clone

### Internet Setup

#### Internet Connection Type

PPPoE

Select PPPoE.

User Name:

Password:

Connect on Demand: Idle Timeout  Min.

Keep Alive: Redial Period  Sec.

Host Name:

Domain Name:

MTU:

Auto  Manual Size:

Optional Settings  
(required by some ISPs)

#### Step 8:

Enter the username and password that your ISP provided you in the *User Name* and *Password* fields, including the domain in the username if necessary such as yourusername@isp.net.

## Setup

Setup

Wireless

Security

Access  
Restrictions

Applications  
& Gaming

Administration

Basic Setup

DDNS

MAC Address Clone

### Internet Setup

#### Internet Connection Type

PPPoE

User Name:

yourusername@isp.net

Password:

Connect on Demand: Idle Timeout  Min.

Keep Alive: Redial Period  Sec.

Host Name:

Domain Name:

MTU:

Auto  Manual Size:

Optional Settings  
(required by some ISPs)

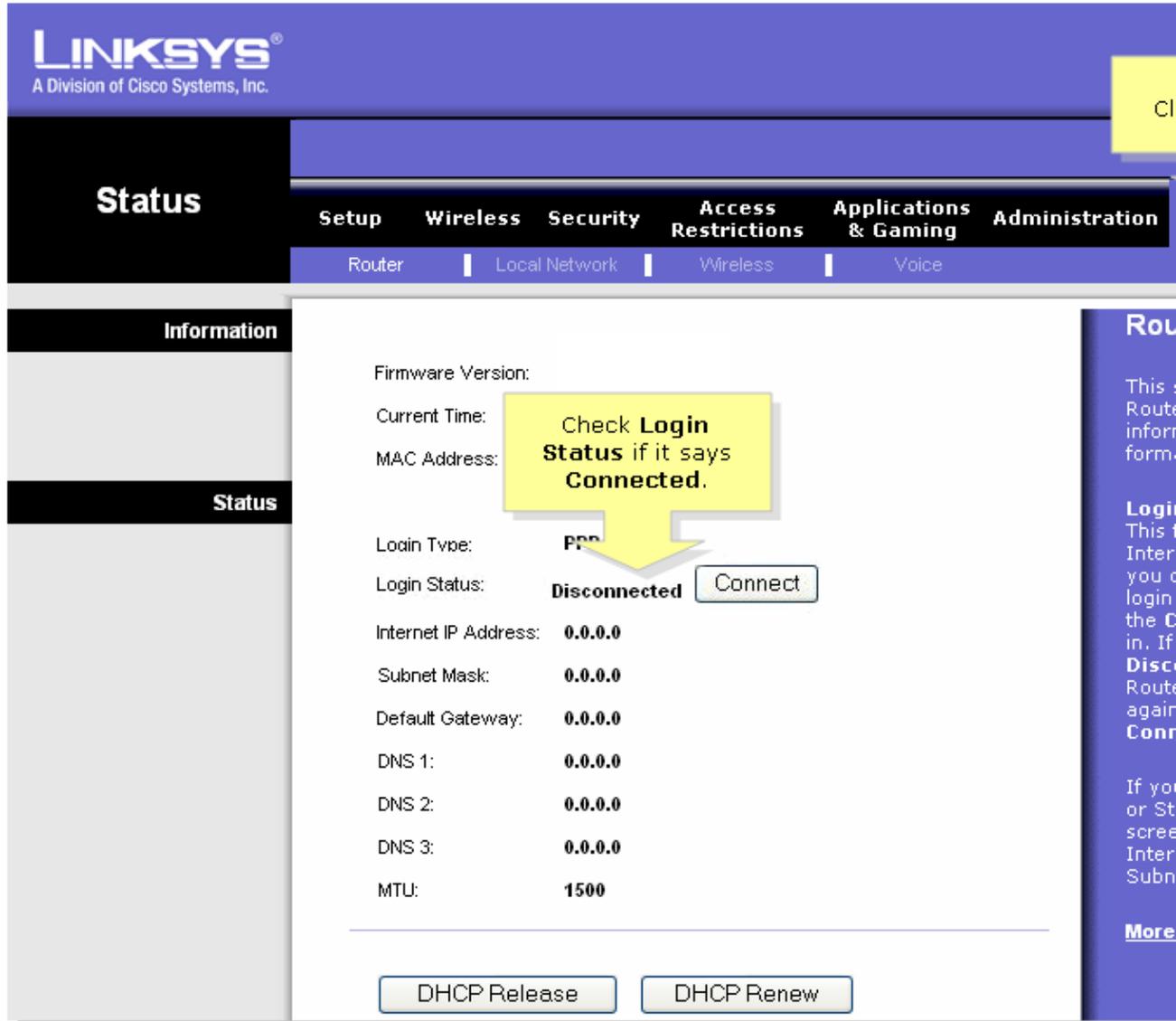
Enter your username and password that your ISP provided you with. Include the domain in the username if necessary such as yourusername@isp.net where "isp" is the name of your Internet Service Provider then type in your password.

**Step 9:**

Click [Save Settings](#).

**Step 10:**

Click **Status**, look for **Login Status**, then check if it says **Connected**. If it is connected, you should be able to access the Internet.



**Note:** If the **Login Status** says **Disconnected**, click [Connect](#), then check if you receive an error message. In order to resolve error messages, consult the link below.

### **Resolve PPPoE Error Messages**

There are four error messages that might come up when setting up PPPoE on your router.

## **Related Information**

- [Technical Support & Documentation – Cisco Systems](#)

