

# Connectivity Problems for uBR900 Cable Modems

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## Questions

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## Introduction

This document addresses common connectivity-related questions and issues that new owners of uBR900 series cable modems may encounter. For information about other aspects of configuring and using uBR900 series cable modems, consult the following documents:

- [Beginners FAQ for uBR900 Series Cable Modem End Users](#)
- [Configuring the uBR900 Series Cable Modem](#)
- [uBR900 Cable Modem Performance Issues](#)
- [uBR900 Cable Modem Error Messages](#)
- [Upgrading Cisco IOS Software on a uBR900 Series Cable Modem](#)
- [Miscellaneous Questions About uBR900 Series Cable Modems](#)

## **Q. How can I tell if my uBR900 cable modem has successfully connected to the service provider and has come online?**

**A.** The easiest way to determine whether your cable modem has successfully connected to your cable service provider is by the lights on the front of the modem. If the link LED is turned on and remains on, then your cable modem is connected to the service provider and is online.

If the link LED keeps blinking and the US or U2 LED never turns on, then you may have a signal level problem between you and your cable service provider, in which case you should call your cable service provider for assistance.

If the link LED keeps blinking, but periodically the US or U2 LEDs turn on for a while then turn off, the signal level between you and your cable service provider is probably all right. However, the cable service provider may not have your cable modem's details correctly listed in their database, in which case you should call your cable service provider for assistance.

For further details on what the lights on the front of the uBR900 cable modem mean, refer to [What do the lights on the front display of the uBR900 cable modem mean?](#)

## **Q. How long should it take for my uBR900 cable modem to come online?**

**A.** This depends on how your cable service provider has configured their network. In normal circumstances it should take less than five minutes for your uBR900 cable modem to come online from the time it is turned on; however, it is possible that it could take up to 15 minutes in rare circumstances.

## **Q. My uBR900 cable modem is not coming online. Who should I call for help?**

**A.** If your uBR900 cable modem is not coming online, then the most likely cause is some factor in the cable service provider's network; therefore, the best first point of contact is your cable service provider. The service provider is able to verify that the signal levels are correct and the details for your uBR900 cable modem are accurately registered in their system.

The other point of contact is the Cisco Technical Assistance Center (TAC). However, bear in mind that the Cisco TAC does not have control over a cable service provider's network. If a cable service provider has a problem in their network that is preventing your modem from coming online, there is very little the Cisco TAC can do to help you. It is best to contact the Cisco TAC after you have engaged your cable service provider, and you suspect there is a problem with the uBR900 cable modem hardware or software. You can contact the Cisco TAC at [Cisco Technical Support](#).

## **Q. The link LED on my uBR900 cable modem is on and my uBR900 cable modem is online, but my workstation cannot get a DHCP lease, and it cannot get access to the Internet. What should I do?**

**A.** The most common cause for this type of behavior is that the service provider does not have a record of your new cable modem's details, and so they view your uBR900 cable modem as unauthorized. Cable service providers can send a special parameter to unauthorized cable modems to stop them from passing data to the Internet.

When you try to connect a new cable modem to a cable system the first thing you need to do is make sure that your cable service provider has a record of your cable modem's details in their database. If your cable modem is not listed correctly in their system, then your cable modem is considered unauthorized and is not allowed to pass traffic to the Internet.

You can verify whether your cable service provider is allowing your uBR900 cable modem to pass traffic to the Internet by logging into the uBR900 cable modem and issuing the following enable mode command:

```
show controller cable 0 mac state | incl Access
```

In this first example, the uBR900 cable modem is allowed to pass data to the Internet because the Network Access attribute is set to TRUE.

```

Router> enable
Router# show controller cable 0 Mac state | incl Access
  Network Access:          TRUE
Router#

```

In this second example, the uBR900 cable modem is not allowed to pass data to the Internet because the Network Access attribute is set to FALSE.

```

Router> enable
Router# show controller cable 0 Mac state | incl Access
  Network Access:          FALSE
Router#

```

In this third example, the uBR900 cable modem has not yet come online properly because the **show controller** command returns no output. Consequently, the cable modem is unable to pass data to the Internet.

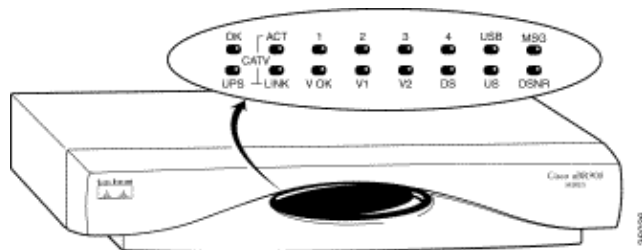
```

Router> enable
Router# show controller cable 0 Mac state | incl Access
Router#

```

The next most common cause for a PC not being able to get a DHCP lease or connect to the Internet is a poor connection between the cable modem's Ethernet port and the PC. While the PC is connected to the uBR900, the link LED on the front of the uBR900 cable modem, corresponding to the Ethernet port to which the PC is connected, should be lit up. If this is not the case, then replace the Ethernet cable between the PC and the uBR900 cable modem and verify that you are using a straight-through Ethernet patch cable. If this does not work, then connect the PC to a different Ethernet port on the uBR900 cable modem to see if this makes a difference.

Below is a picture of a uBR925 cable modem with a detailed view of the LED panel.



**Q. I replaced my non-Cisco brand cable modem with a uBR900 cable modem. My non-Cisco brand cable modem worked, but my new uBR900 cable modem does not. What should I do?**

**A.** The most common cause for this issue is that the service provider has not been told about the new cable modem, and still thinks that you are using the old one. Therefore, the service provider views the new uBR900 cable modem as unauthorized and does not let it pass Internet traffic. See the answer to The link LED on my uBR900 cable modem is on and my uBR900 cable modem is online, but my workstation cannot get a DHCP lease, and it can't get access to the Internet. What should I do? for more details.

**Q. What information does a service provider typically need in order to let my uBR900 cable modem come online?**

**A.** Generally the service provider needs some or all of the following pieces of information:

- ◆ **The cable modem's MAC address** This should be printed on a sticker on the outside of the cable modem. If not, it can be obtained by connecting to the console of the uBR900 cable modem and issuing the **show interface cable-modem 0** command. See [How do I find out the MAC address of my uBR900 cable modem?](#) for more details.
- ◆ **The cable modem's serial number** This should be printed on a sticker on the outside of the cable modem. If not, then it can be obtained by connecting to the console of the uBR900 cable modem and issuing the **show version** command. See [How do I find out the serial number of my uBR900 cable modem?](#) for more details.
- ◆ **The manufacturer and model of the cable modem** Your uBR900 series cable modem's manufacturer is Cisco Systems. The model number will typically be one of uBR904, uBR905, uBR924 or uBR925. The exact model number should be printed on the front of the cable modem.
- ◆ **The version of firmware on the cable modem** The firmware running on a uBR900 cable modem is called Cisco IOS® Software. You can find out the version of Cisco IOS Software currently loaded on your uBR900 cable modem by issuing the **show version** command. See [How do I find the version of Cisco IOS Software on my uBR900 cable modem?](#) for more details.

## **Q. My cable service provider says that they will not support my uBR900 cable modem, and they will not let it connect to their network. What can I do?**

**A.** If your service provider is not willing to allow your uBR900 cable modem to connect to their system, then there is very little that you can do, and nothing Cisco can do. The service provider has complete control of what types of cable modems are allowed to connect to their system.

## **Q. How does the service provider know what type of cable modem is connecting to their system?**

**A.** When your cable modem tries to connect to the cable service provider's network, your cable modem sends details of its MAC address to the service provider. This is how the service provider knows which cable modems are connecting to their system. If the MAC address of your cable modem is not in the service provider's database of authorized cable modems, then your modem is not allowed to connect. See [How do I find out the MAC address of my uBR900 cable modem?](#) to find out how to determine the MAC address of your uBR900 cable modem.

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## **Related Information**

- [Broadband/Cable Solutions](#)
- [Cisco uBR900 Series Software Release Notes and Features](#)
- [Cable Solutions](#)
- [Technical Support – Cisco Systems](#)

