

# SurfBeam 2 Modem Swap Job Aid

## Summary

This Job Aid covers:

[Troubleshooting Modem before replacing](#)

[Connecting the Replacement Modem](#)

[Validating Modem Lock](#)

[SurfBeam 2 Provisioning](#)

This Job Aid supports the Technician audience.

## Troubleshooting Modem before replacing

All troubleshooting steps must be complete before swapping a modem. Following the Trouble Isolation Check Sheet, a Modem Test must fail in order to continue. Do not replace the modem until the TIC directs the Technician to do so.

## Connecting the Replacement Modem

There are three (3) cables coming out of the existing modem:

- One Power cord
- One Coaxial cable that connects to the antenna
- One Ethernet cable that connects to the computer

Follow the steps below to properly disconnect the existing modem and reconnect the replacement modem.

Caution: The Coaxial cables emit power. Follow each step in order to ensure safety!

Power off the computer that is connected to the existing modem

Unplug the modem power supply from the power source.

Unplug the Transmit cable from the TX port on the existing SurfBeam (SB2) modem.

Connect the Transmit cable to the TX port on the *replacement* SB2 modem.

Unplug the Ethernet cable from the Ethernet port on the existing SB2 modem.

Connect the Ethernet cable from the PC to the Ethernet port on the *replacement* SB2 modem

Plug the power connector from the *replacement* power supply into the *replacement* SB2 modem.

Plug the AC power cord into the power supply.

Plug the power supply into an AC outlet. Wait approximately two minutes for the modem to power on.

- Once the power supply is plugged into an AC outlet, the PWR light on the modem comes on and the RX light starts blinking.

Power on the computer and open the Internet browser.

## **Validating Modem Lock**

When swapping a SurfBeam 2 (SB2) modem, the Technician verifies the modem lock process by accessing the Basic Status

Page. This ensures that the modem locked correctly before proceeding to provision the new modem.

These steps assume that the ODU is mounted properly, aligned correctly and cabling/grounding are complete.

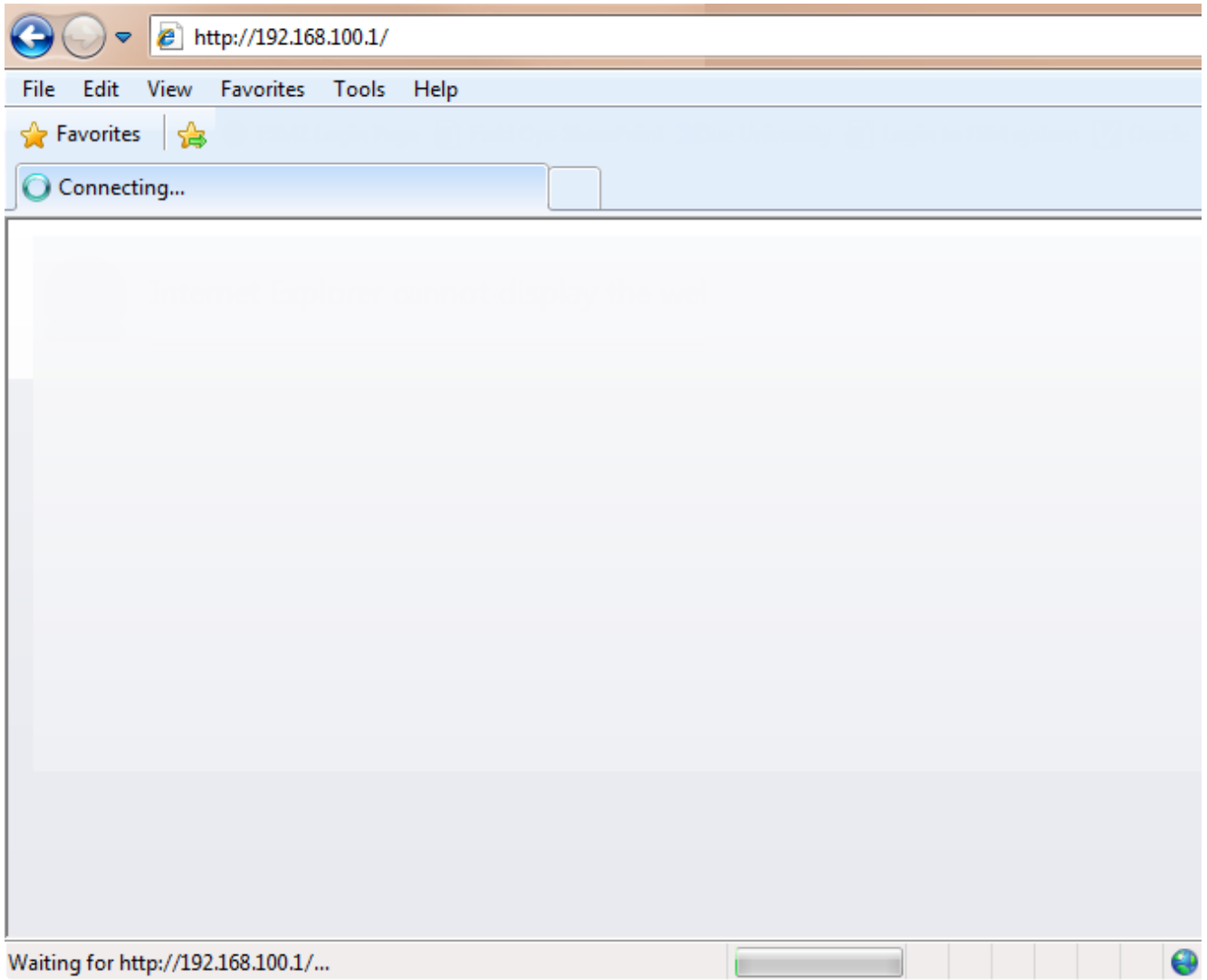
Open the computer's Internet Explorer browser and type this URL into the Address bar:

**http://192.168.100.1.**

Click the forward arrow in the Address bar. The modem enters the **Basic Status Mode**.

**Note 1:** Google Chrome or Mozilla Firefox are the preferred browsers for this step. Other browsers may have different results.







**Note 2:** If a 'website not found' error appears, click the browser's refresh button until the page appears.



Click the modem icon to follow the modem lock process.



## Basic Status

 HOME	GENERAL		
 MODEM			
 TRIA	MODEM ▶	IFL ▶	TRIA ▶

The Basic Status page changes to Modem/IFL Cable Status page. Confirm that these three events are happening:

- The SB2 modem's RX and LAN lights are flashing.
- The Status is showing "Online"
- Confirm the current software is downloaded.




## Modem/IFL Cable Status

[HOME](#)  
[MODEM](#)  
[TRIA](#)

---

### MODEM STATE

Status  **Online** Online Time 000:00:08:23

---

### GENERAL

Rx Power: -44.6 dBm Rx SNR: 9.9 dB ODU Telemetry status: Active

Cable Resistance: 1.5 Ohms Cable Attenuation 13.1 dB

---

### IDENTIFICATION

IP Address	10.176.1.181	MAC Address	00:A0:BC:26:50:B7
Software Version	UT_1.2.1.3.1	Hardware Version	UT_7 P3_V1
Serial Number	282911011055	Part Number	1113450002
IFL Type	Single		

---

### ETHERNET INTERFACE STATISTICS

If the modem fails to lock (online status indicator), then put the modem into Install Mode using this URL: **192.168.100.1/install**. Return to the antenna and complete a Push/Pull Test, and attempt Modem Lock again. Continue to follow the TIC until the modem locks, if necessary.

Close the browser.

## SurfBeam 2 Provisioning

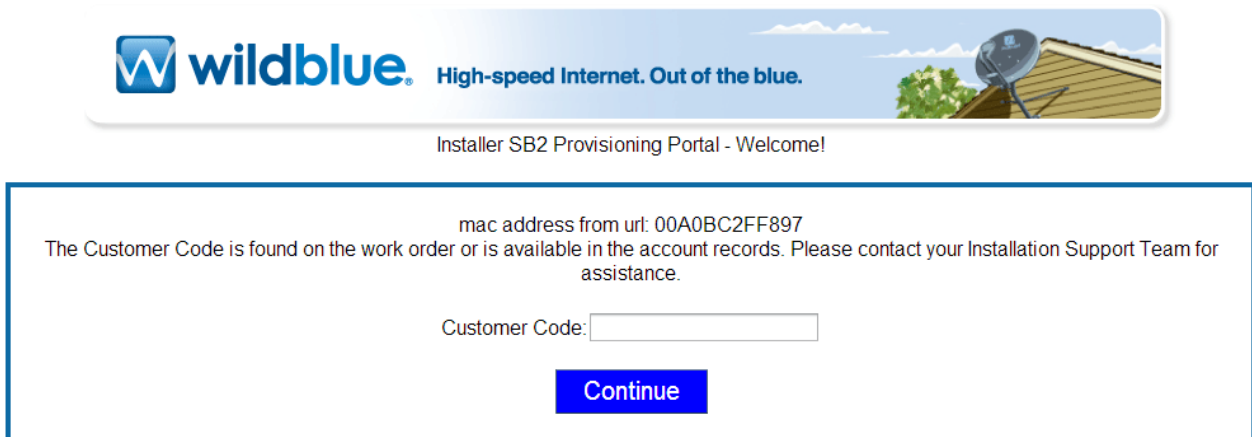
To complete the replacement modem's provisioning, follow these steps:

Click the Internet Browser graphic Icon. This Icon is usually located on the Computer Desktop.

When the Internet browser opens, the Gateway automatically directs the browser to the Provisioning Network. The Provisioning System then displays the **Installer SB2 Provisioning Portal – Welcome** page.

On this page, enter the **Customer Code** in the Customer Code field. This code is found on the work order or in the **Installation** area of the **SVT** tab in the **Support Portal**.

Click **Continue** button to display the next page.

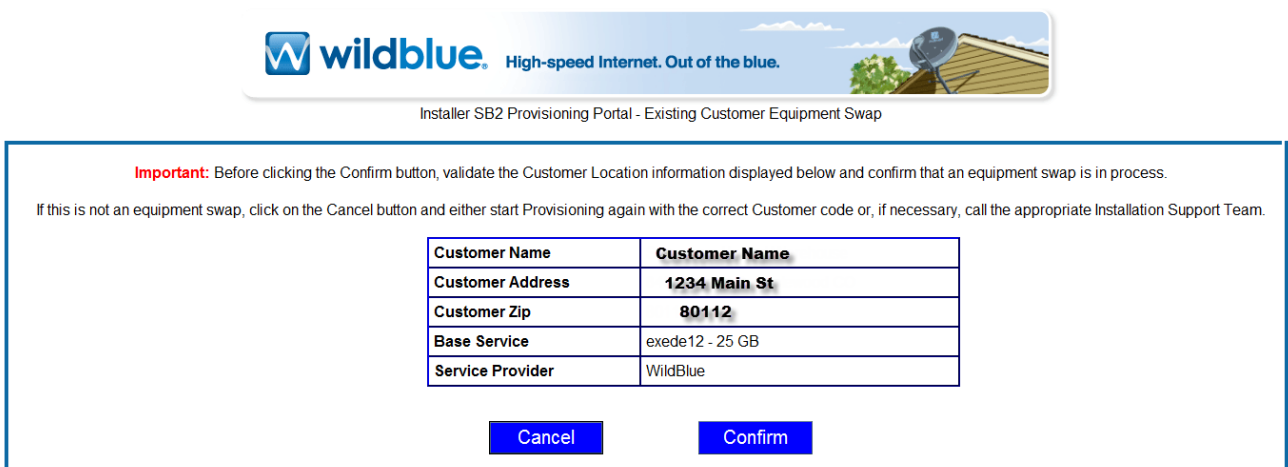


mac address from url: 00A0BC2FF897  
The Customer Code is found on the work order or is available in the account records. Please contact your Installation Support Team for assistance.

Customer Code:

**Continue**

On the **Customer Confirmation** page, validate the Customer Location information. If it is incorrect, click Cancel and re-enter the correct Customer Code. Click the Confirm button to continue with the modem swap.



**Important:** Before clicking the Confirm button, validate the Customer Location information displayed below and confirm that an equipment swap is in process.  
If this is not an equipment swap, click on the Cancel button and either start Provisioning again with the correct Customer code or, if necessary, call the appropriate Installation Support Team.

Customer Name	Customer Name
Customer Address	1234 Main St
Customer Zip	80112
Base Service	exede12 - 25 GB
Service Provider	WildBlue

**Cancel** **Confirm**

Once the **Service Activated** page displays, the Network requests a modem reboot. Verify that this reboot completes with Modem

Lock. If the modem fails to reboot, force a reboot by removing power and supplying power again.

Once the modem has achieved Modem Lock, reboot the computer.

Once the computer reboot is complete, open the browser and complete **Customer Internet Test** to validate that the computer can access and surf the internet.



Installer SB2 Provisioning Portal - Service Activated!

Congratulations, your Internet service has been activated.

Your modem will now automatically reset. After modem reset is complete, close this browser and reboot your computer.

After the computer reboot is complete, you are ready to surf the internet!