

## APN AND BASIC NETWORK CONFIGURATION CRADLEPOINT IBR1700-1200MB

### Background on Cradlepoint Routers:

Cradlepoint provides their web based NetCloud management system to configure their routers. You will need to have the account subscription you used to purchase the routers. For example: *NetCloud Mobile Essentials Package with IBR1700-1200M-B, 5-yr.*

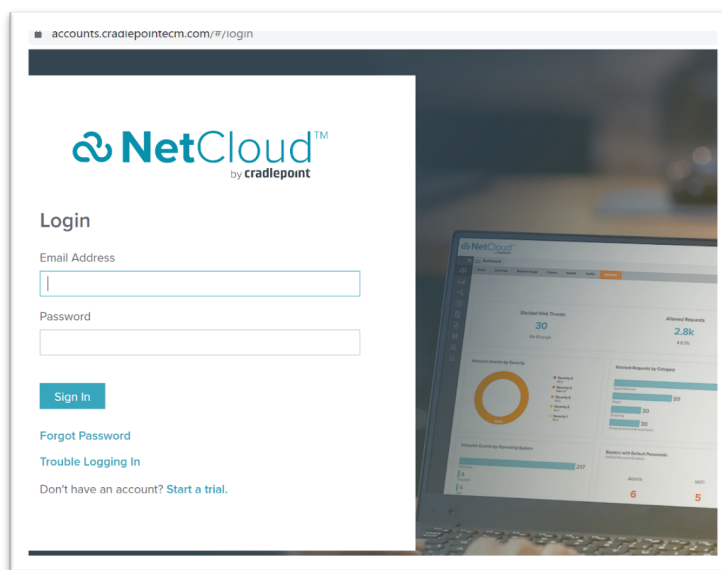
The router will also need to be registered and licensed with Cradlepoint as a part of the Essentials Package.

You can also do the initial configurations locally. NetCloud configurations take priority. To log in locally, scan for a WiFi SSID similar to “IBR1700-b9f” (b9f are the last three characters of the routers MAC address).

The password will be the last 8 characters of the router’s MAC address. Then go to <http://192.168.0.1> The user is admin and the password is the same as the WiFi password.

### **NetCloud Manager by Cradlepoint:**

<https://accounts.cradlepointcm.com/#/login>



When you get a NetCloud account, you will receive the following message from Cradlepoint:

Welcome to Cradlepoint. To ensure a successful onboarding experience with Cradlepoint, please follow these three steps to begin your journey:

**Step 1: Set your password [here](#). Your user name is [first.last@company.com](#), [bookmark](#) the page, and [update your profile](#).**

**Cradlepoint Connect** is your online community where you will **Learn** how to use NetCloud with best practices, **Connect** with Cradlepoint experts, and **Engage** in streamlined technical support.

**Step 2: Explore [NetCloud Manager](#).**

NetCloud is Cradlepoint's cloud-based network management platform that simplifies deployment, monitoring, and management of your network. Please visit the [How-To/Getting Started](#) section in Cradlepoint Connect to learn more about the NetCloud platform.

Your NetCloud credentials have been sent in a separate email. If you believe you have not received the NetCloud credentials email, please contact your NetCloud administrator.

**Step 3: Register for onboarding with Cradlepoint's Customer Success and Support team.**

Your onboarding session with Cradlepoint's Customer Success and Support team will guide you through the tools available to accelerate your success with Cradlepoint solutions and direct you to world-class technical support.

Visit the [Calendar](#) in Cradlepoint Connect and register for your onboarding session now. If you need help with onboarding, please contact [success@cradlepoint.com](mailto:success@cradlepoint.com).

For Cradlepoint technical support chat, you will need to log into the Cradlepoint Connect portal. You can log in from here: <https://customer.cradlepoint.com/s/>. If you need to register, follow the link above and go to "log in", and then "request access". Here's the support team's number as well for you: **1-855-813-3385**

**The following steps will help you to deploy the device:**

**STEP 1: Insert the Geoverse SIM Card:**



Remove the cover of the Cradlepoint 1200M-B module.

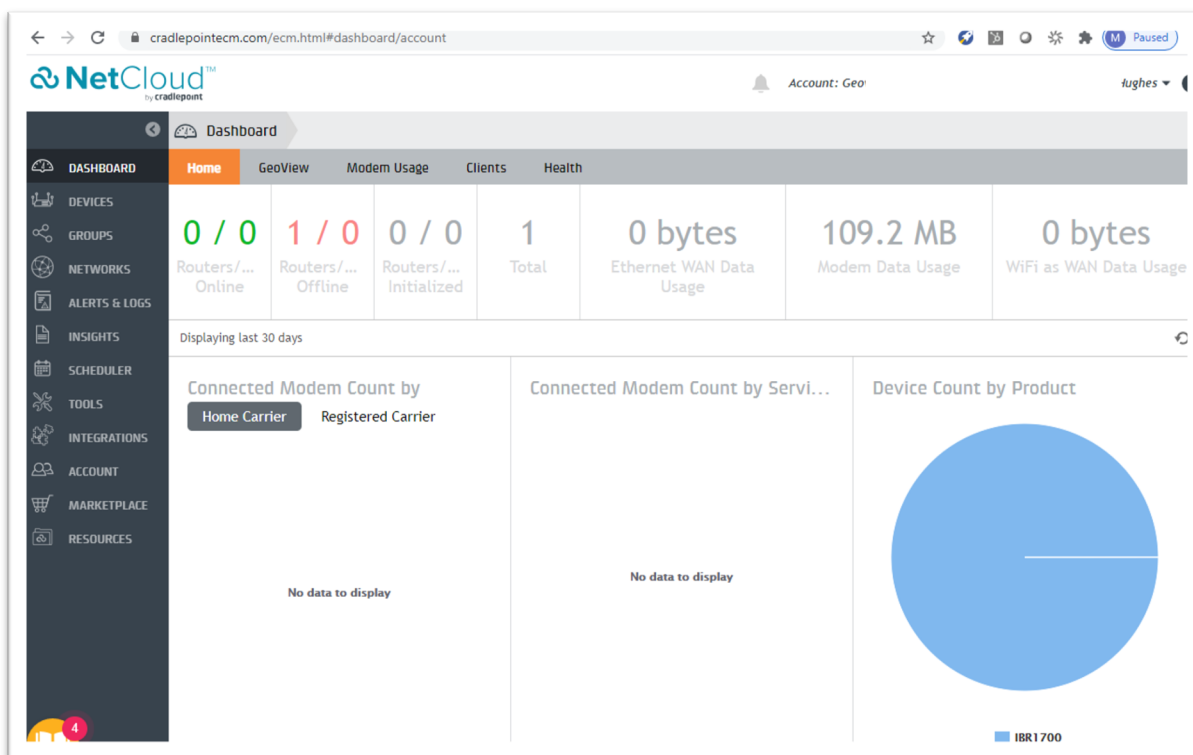


Insert the SIM (size 2FF-mini, full cut-out) into SIM1 slot, metal contacts up and notch in. It will click into place. Depress again to remove.

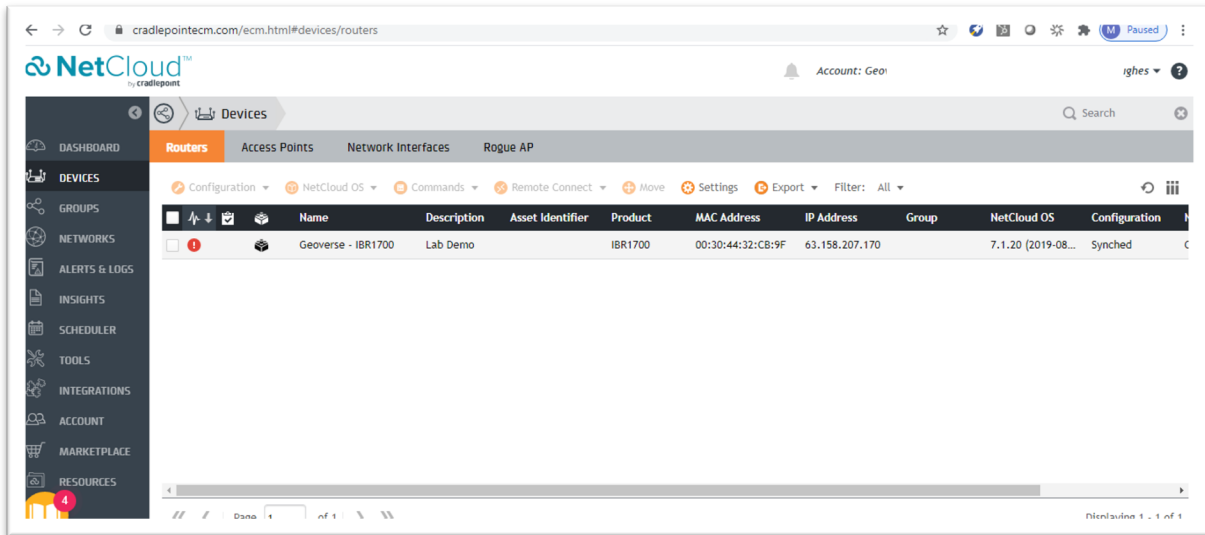
Please note: the smaller "**micro-SIM**" (3FF; 15.0mm x 12.0mm x 0.76mm) and "**nano-SIM**" (4FF; 12.3mm x 8.8mm x 0.67mm) cards **will NOT fit** in the Cradlepoint's SIM card slot.

**STEP 2: Configure Access Point Name (APN):**

Log into your NetCloud Manager account.

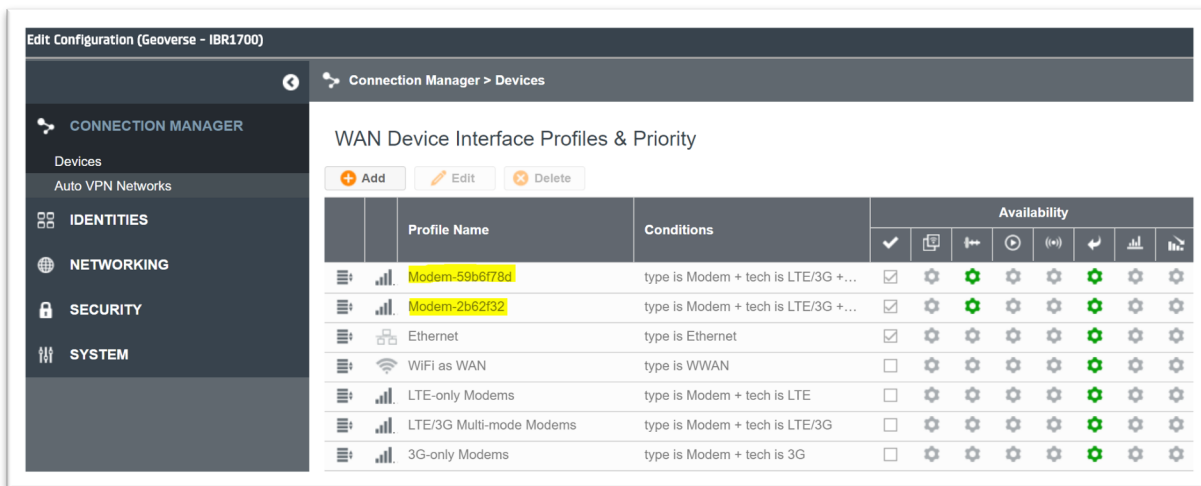


On the left-hand column menu, select Devices. If your device is registered through Cradlepoint, it will show up in the view.



Select the device you would like to configure. Click on the Configuration drop-down and select Edit. You should see the various WAN Device Interfaces.

With the 1200M-B module you will see two modems, one for each SIM. If you are only using the Geoverse SIM, configure both the same so you can insert the SIM in either port.



To configure the modem, click on the modem and then select Edit. Select Modem and configure Modem Connection Mode as 'Force LTE', Carrier Select as 'Generic', Network Selection Mode as 'Auto', and make sure 'Enable Band 48' is selected. Click Save.

**WAN Interface Profile**

- General
- IPv4 Configuration
- IPv6 Configuration
- Modem**
- CDMA
- SIM/APN/Auth
- Filter Criteria

Modem Connection Mode: Force LTE

Carrier Select: Generic

Enable Aux Antenna:

Enable GPS:

GPS Signal Source: No Change

Network Selection Mode: Auto

Enable eHRPD:

Network-Initiated Alerts: When Disconnected

Functional Mode: IPPT

NOTE: Only NAT mode allows user access to the modem web UI

AT Config Script:

AT Dial Script:

Cancel Save

To set the Geoverse APN on the modem, select SIM/APN/Auth on the left-hand column. Configure Authentication Protocol as 'Auto', Access Point Name (APN) as 'Default Override', and APN as 'geoverse.xxxx' (xxxx provided to you by your Geoverse representative). Click Save.

**WAN Interface Profile**

- General
- IPv4 Configuration
- IPv6 Configuration
- Modem
- CDMA
- SIM/APN/Auth**
- Filter Criteria

SIM Card Lock: No Change

SIM PIN:

Show PIN:

Authentication Protocol: Auto

Username:

Password:

Access Point Name (APN): Default Override

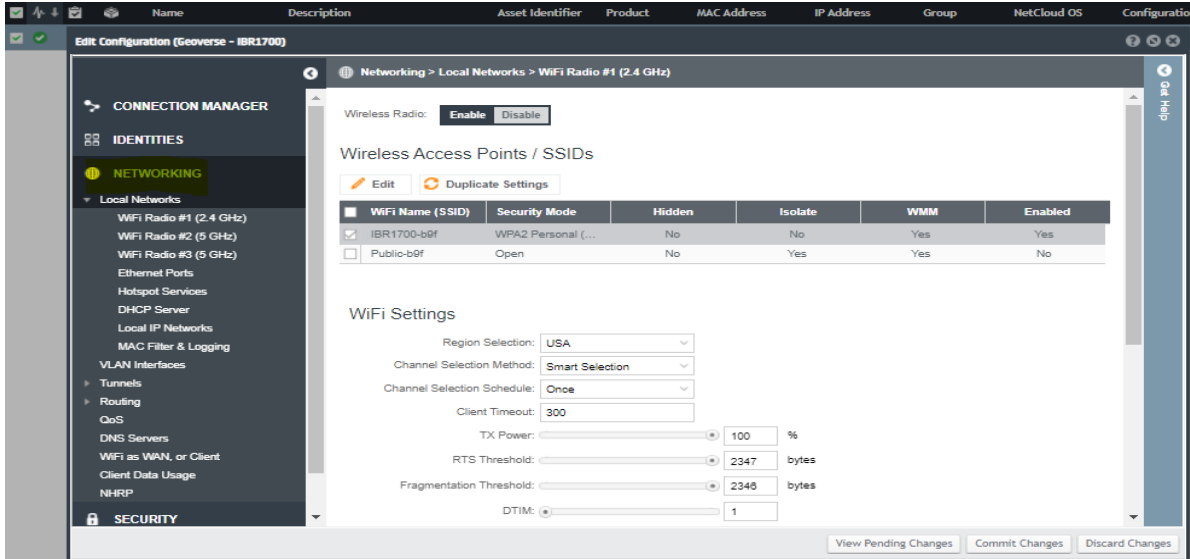
APN: geoverse.bellevue

Cancel Save

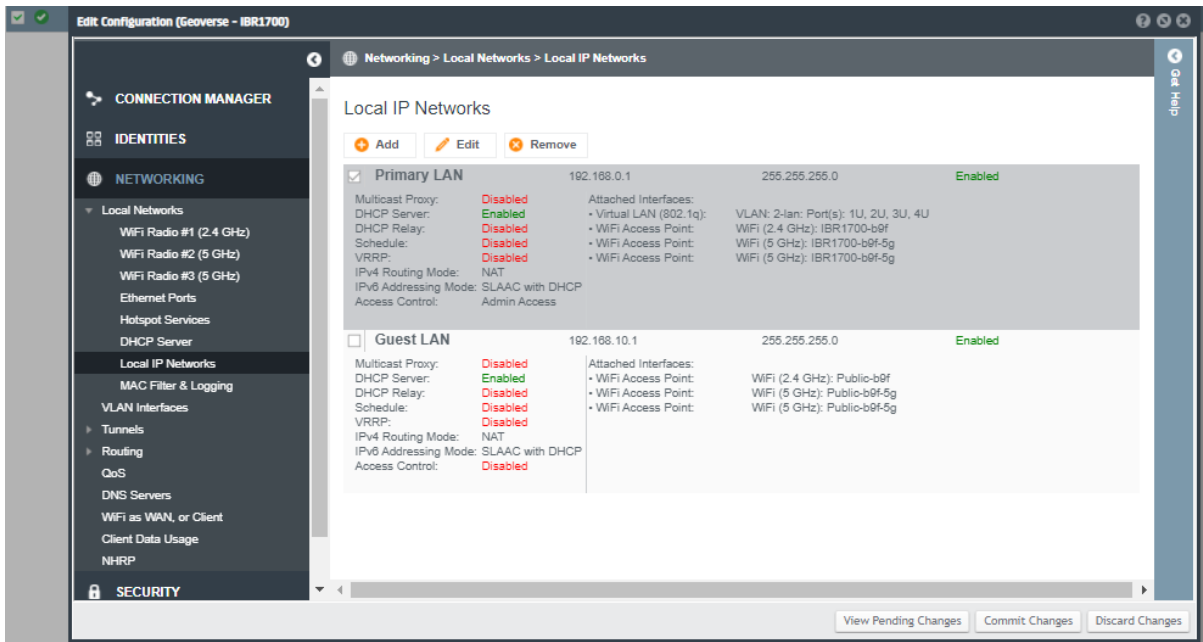


**STEP 3: Configure other interfaces:**

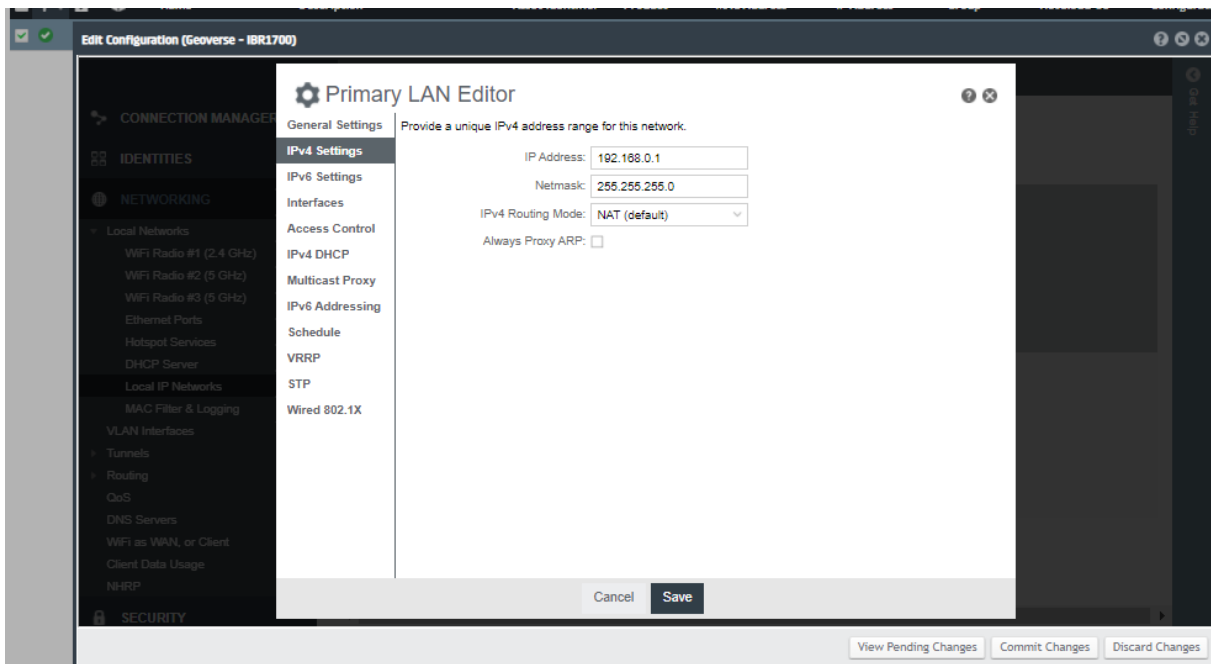
On the left-hand column menu, select Networking. From here you can configure the local LAN client side of the device: WiFi, ethernet ports, DHCP server, VLANs, etc.



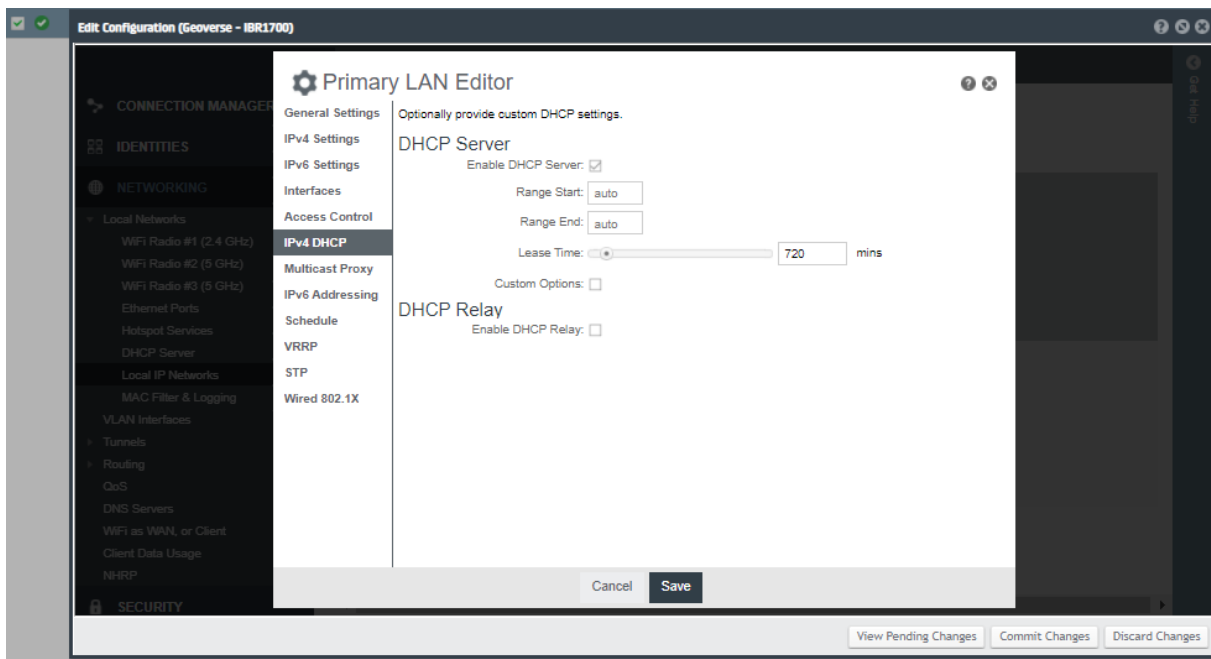
Under "Local IP Networks", you can configure the LAN.



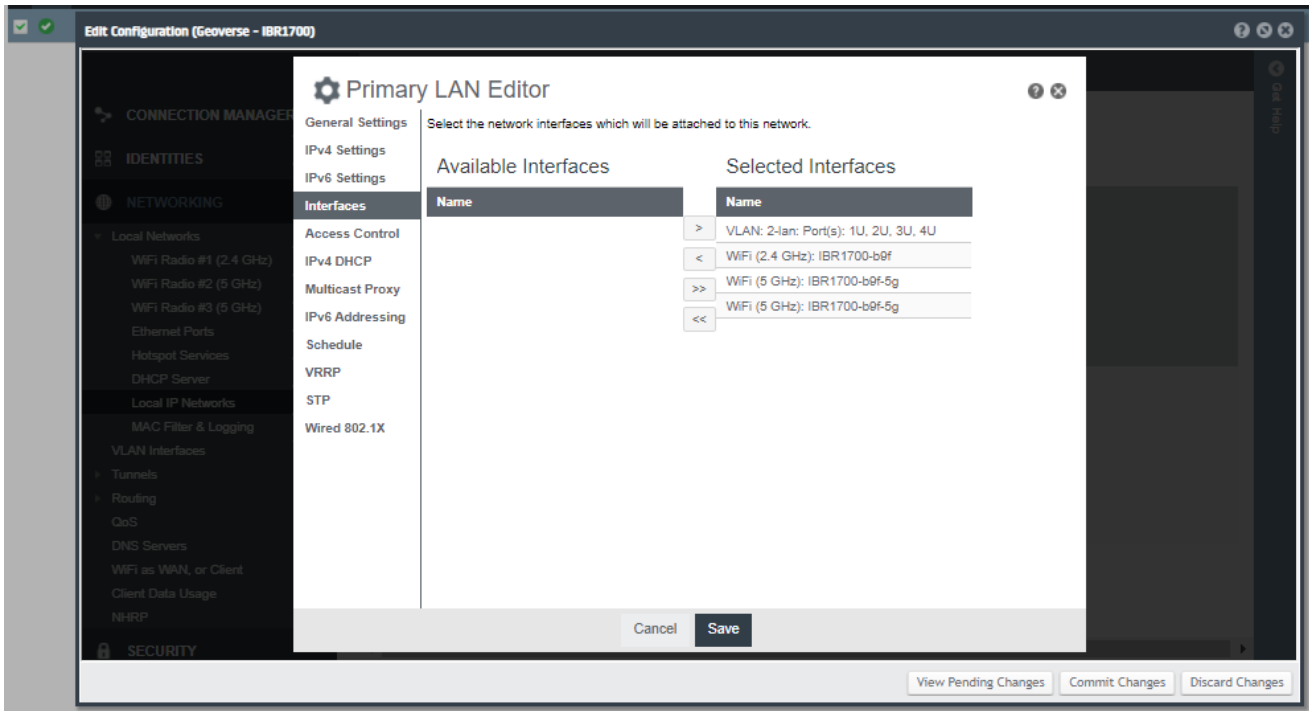
Provide the device IP address.



Enable DHCP.

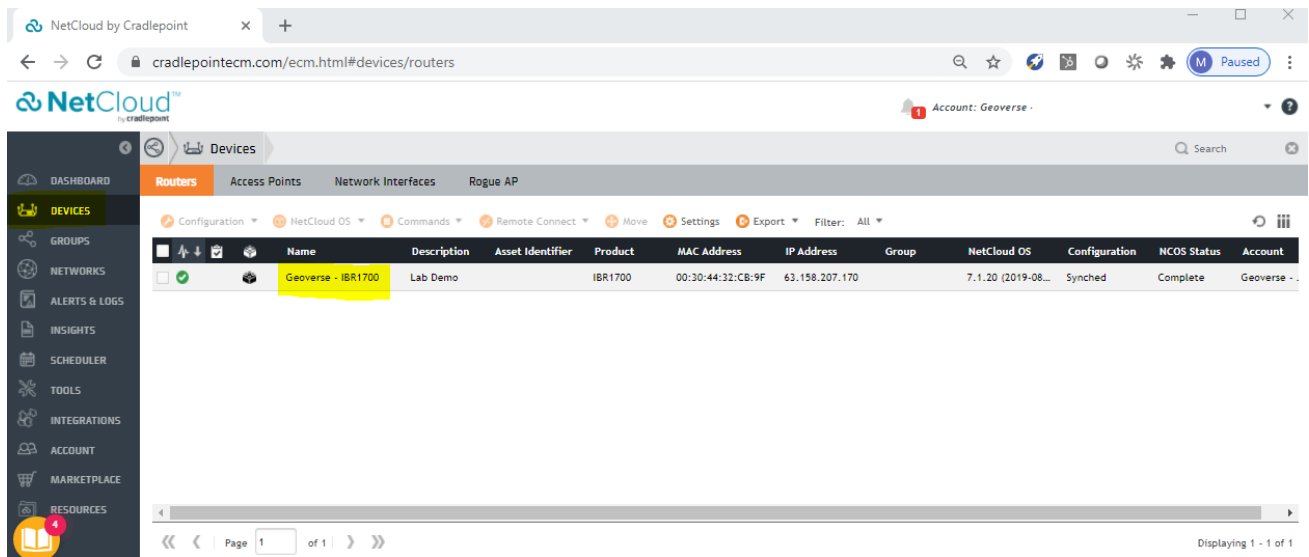


Select Interfaces for the LAN.



**STEP 4: Verify Operations:**

On the left-hand column menu, select Devices. If your device is registered through Cradlepoint, it will show up in the view. Click on the device 'Name' that you want to verify.



You will see the summary of the device’s performance.



The screenshot shows the NetCloud dashboard for a Geoverse router. The 'Summary' tab is selected, displaying the following information:

- Connection Status:** Three SIMs are listed: MC400 1200M-B (SIM1) with LTE status (green checkmark), GEVERSE | PRIVATE LTE with Wifi as WAN status (red exclamation mark), and MC400 1200M-B (SIM2) with a red exclamation mark.
- Usage by WAN:** Ethernet: 0.0 B (No Trend Data), Modems: 24.9 MB (↓ 22.6%), Wifi as WAN: 0.0 B (No Trend Data).
- WAN Uptime:** 86.64% Total Uptime (↓ 1.12%). A donut chart shows 87% uncategorized and 13% offline.
- GeoView:** A map showing the location at 13920 SE Eastgate Way, Bellevue, WA 98005, USA.

Select 'Interfaces'. You can verify the WAN IP address and its gateway assigned to the device from the LTE network.

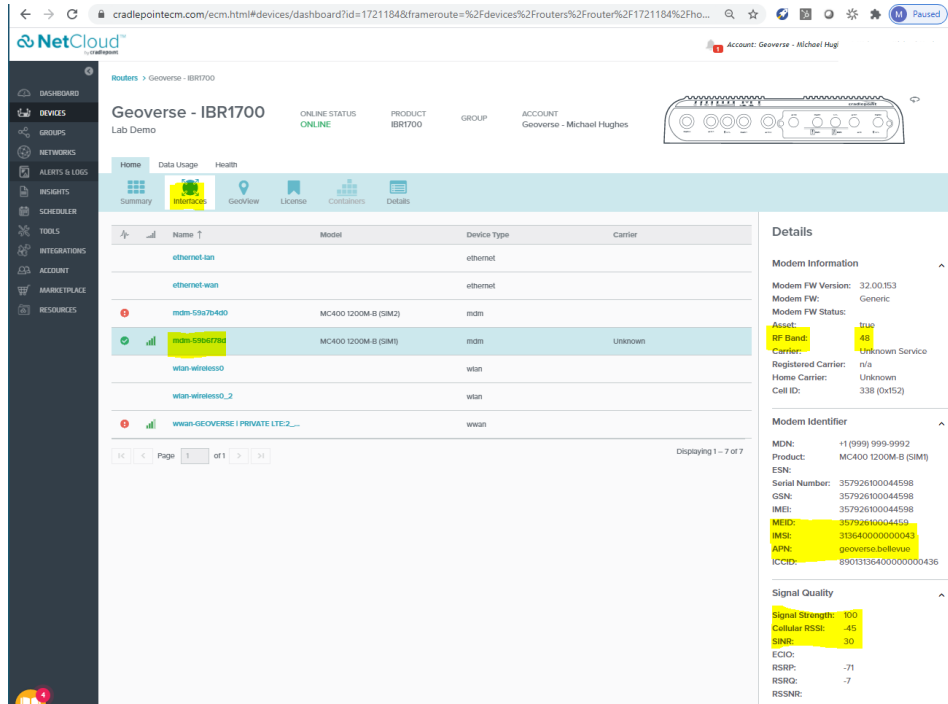
The screenshot shows the NetCloud dashboard with the 'Interfaces' tab selected. The interface table is as follows:

Name	Model	Device Type	Carrier
ethernet-lan		ethernet	
ethernet-wan		ethernet	
mdm-59b7b490	MC400 1200M-B (SIM2)	mdm	
mdm-59b6f78d	MC400 1200M-B (SIM1)	mdm	Unknown
wlan-wireless0		wlan	
wlan-wireless0_2		wlan	
wlan-GEVERSE   PRIVATE LTE2...		wwan	

The 'Details' panel for the selected interface (mdm-59b6f78d) shows the following configuration:

- Name:** mdm-59b6f78d
- Model:** MC400 1200M-B (SIM1)
- Online Status:** Connected
- Connection State:** Connected
- Uptime:** 3 days, 19 hours, 8 minutes
- IP Address:** 192.168.2.28
- Primary DNS:** 8.8.8.8
- Secondary DNS:** 8.8.4.4
- Gateway:** 192.168.2.29
- Netmask:** 255.255.255.248
- Port:**
- ID:** 55003303
- Device Type:** mdm
- Service Type:** LTE
- UID:** 59b6f78d
- Manufacturer:** Cradlepoint Inc.
- Family:** wlan
- Last Update:** 2020-10-21T03:09:52+00:00
- MTU:** 1428
- NAI:**

Scrolling down on the Details, you can verify operations on Band 48 and verify the IMSI, APN, and signal strengths.



**STEP 5: Enjoy connectivity wherever you go.**

As long as the option under Devices, then Modem, then Network Selection is configured as 'Auto', the device should be able to roam when taken off-net from the Geoverse network. In order to prevent roaming, change Network Selection to 'Home Only'.

