

VIAVI



XEDGE Private Network Intelligence

XEDGE Controller User Guide

Version 2.0

Revision 1.27

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VIAVI Solutions

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XEDGE Controller User Guide

Notice

Every effort was made to ensure that the information in this manual was accurate at the time of printing. However, information is subject to change without notice, and VIAVI reserves the right to provide an addendum to this manual with information not available at the time that this manual was created.

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About This Guide

Purpose and scope

The purpose of this guide is to help you successfully use the XEDGE features and capabilities. This guide includes task-based instructions that describe a quick start to get XEDGE devices operating to perform indoor and outdoor walk tests.

Assumptions

This guide is intended for novice, intermediate, and experienced users who want to use the XEDGE software effectively and efficiently.

Related Information

Use this guide in conjunction with the following document:

- PNI Dashboards User Guide

Document Revision History

This table provides a revision history for this document. Table 1 Document Revision History

Revision	Date	Description
1.25	November 2024	Initial Version compatible with controller version 2.2.25
1.26	December 2024	Version compatible with controller version 2.2.26
1.27	December 2024	Version compatible with controller version 2.2.26

Technical Assistance

If you require technical assistance, please email to XEDGE.support@viavisolutions.com. For the latest TAC information, go to www.viavisolutions.com.

Regulatory compliance

Safety information

Safety information is provided in the Safety Instructions chapter at the end of this document.

California Proposition 65

California Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted in November 1986 with the aim of protecting individuals in the state of California and the state's drinking water and environment from excessive exposure to chemicals known to the state to cause cancer, birth defects or other reproductive harm.

For the VIAVI position statement on the use of Proposition 65 chemicals in VIAVI products, see the **Hazardous Substance Control** section of the [VIAVI Policies & Standards](#) web page.

Federal Communications Commission (FCC)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The authority to operate this equipment is conditioned by the requirements that no modifications be made to the equipment unless the changes or modifications are expressly approved by VIAVI.

This product complies with 47 CFR Part 15 using a modular component authorized under a grant of certification:

- FCC ID: WUW-SXPCEAC2
- FCC ID: WUW-RM520NGL

CAUTION:

- This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment.
- To comply with FCC RF exposure compliance requirements, a separation distance of at least 2.5 cm must be maintained between the antenna of this device and all persons.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Innovation, Science and Economic Development Canada (ISED)

This digital apparatus complies with CAN ICES-003 (B).

Cet appareil est conforme à la norme NMB-003 (B).

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- 1 This device may not cause interference.
- 2 This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs/récepteurs exemptés de licence conformes à la norme Innovation, Sciences, et Développement économique Canada. L'exploitation est autorisée aux deux conditions suivantes:

- 1 L'appareil ne doit pas produire de brouillage,
- 2 L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This product complies with relevant ISED Canada Radio Standard Specifications (RSS) through the use of a modular component authorized under a grant of certification:

- IC: 9613A-SXPCEAC2
- IC: 9613A-RM520NGL

CAUTION:

- This equipment complies with the ISED Canada RF radiation exposure limits set forth for an uncontrolled environment.
- To comply with ISED Canada RF exposure compliance requirements, a separation distance of at least 2.5 cm must be maintained between the antenna of this device and all persons.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Ce produit est conforme aux cahiers des charges sur les normes radioélectriques (CNR) pertinentes d'ISDE Canada grâce à l'utilisation d'un composant modulaire autorisé en vertu d'une délivrance de

certification:

- IC: 9613A-SXPCEAC2
- IC: 9613A-RM520NGL

PRUDENCE:

- Cet équipement est conforme aux limites d'exposition aux rayonnements RF d'ISDE Canada établies pour un environnement non contrôlé.
- Pour se conformer aux exigences de conformité d'exposition RF d'ISDE Canada, une distance de séparation d'au moins 2.5 cm doit être maintenue entre l'antenne de cet appareil et toute personne.
- Cet émetteur ne doit pas être co-localisé ou fonctionner en conjonction avec toute autre antenne ou émetteur.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems. The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.

The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate.

Be advised that high-power radars are allocated as primary users (i.e., priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

L'appareil pour fonctionner dans la bande 5150-5250 MHz est uniquement pour une utilisation à l'intérieur pour réduire le potentiel d'interférence nuisible aux systèmes satellites mobiles co-canaux. Le gain en puissance d'antenne maximal autorisé pour les périphériques dans les bandes 5250 à 5350 MHz et 5470 à 5725 MHz doit respecter la limite EIRP.

Le gain en puissance d'antenne maximal autorisé pour les périphériques dans les bandes 5725 à 5850 MHz doit respecter les limites EIRP spécifiées pour les opérations point à point et non point à point le cas échéant.

Sachez que les radars de haute puissance sont désignés comme utilisateurs principaux (c.-à-d. utilisateurs prioritaires) des bandes 5250 à 5350 MHz et 5650 à 5850 MHz, et que ces radars peuvent causer des interférences ou endommager les périphériques LE-LAN.

EU WEEE and Battery Directives

The equipment, and the batteries used to power it, should not be disposed of as unsorted municipal waste and should be collected separately and disposed of according to your national regulations.

VIAVI has established a take-back process in compliance with the EU Waste Electrical and Electronic Equipment (WEEE) Directive, 2012/19/EU, and the EU Battery Directive, 2006/66/EC. Instructions for returning waste equipment and batteries to VIAVI can be found in the [WEEE](#) section of the [VIAVI Policies & Standards](#) web page.

If you have questions concerning the disposal of your equipment or batteries, contact the VIAVI WEEE Program Management team at weee.emea@viavisolutions.com.

EU REACH

Article 33 of EU REACH regulation (EC) No 1907/2006 requires product suppliers to provide information when a substance included in the list of Substances of Very High Concern (SVHC) is present in a product above a certain threshold.

For information about the presence of REACH SVHC in VIAVI products, see the **Hazardous Substance Control** section of the [VIAVI Policies & Standards](#) web page.

EU CE Marking Directives (LV, EMC, RoHS)

The equipment conforms with all applicable CE marking directives. Please request an EU Declaration of Conformity for further details.

Access to CE compliance labels can be obtained by removing the back cover and separating the module to gain visual access to the labels.

1. Place the unit so you have access to the back and remove the back cover with a slotted screwdriver.
2. Using the hex key located in the groove on the back panel, loosen the four fasteners and lift the base unit off of the XEdge module.
3. You will now have visual access to the CE compliance labels on the base and the module.



To re-assemble the instrument, follow the reverse process:

1. Place the ONA-800 base onto the module, ensuring the mating connectors are aligned.
2. Using the hex key, tighten the captive fasteners on the rear of the base that secure it to the module.
3. Re-attach the back cover with a slotted screwdriver.

EU Radio Equipment Directive

In accordance with Article 10.8 of the EU Radio Equipment Directive 2014/53/EU, the following table provides information on the frequency bands and the maximum RF transmit power of this product for sale in the EU.

Interface	Mode	Frequency Range	Channels Used	Max. Transmit Power (conducted)
WLAN	-	2412-2462	1-11	15 dBm (32 mW)
		5180-5240	36-48	15.5 dBm (36 mW)
		5260-5320	52-64	15.5 dBm (36 mW)
		5500-5700	100-140	15.5 dBm (36 mW)
		5745-5825	149-165	9 dBm (8 mW)
Cellular	WCDMA	-	B1/ 2/ 4/ 5/ 8/ 19	25 dBm (316 mW) (Class 3)
	LTE	-	B1/B2/B3/B4/B5/B7/B8/B12/B13/ B14/B17/B18/B19/B20/B25/B26/ B28/B29/B30/B32/B34/B38/B39/ B40/B41/B42/B43/B48/B66/B71	25 dBm (316 mW) (Class 3)
	LTE HPUE	-	B38/B41/B42/B43	28 dBm (631 mW) (Class 2)
	5G NR	-	n1/n2/n3/n5/n7/n8/n12/n13/n14/ n18/n20/n25/n26/n28/n29/n30/ n38/n40/n41/n48/n66/n70/n71/ n75/n76/n77/n88/n79	25 dBm (316 mW) (Class 3)
	5G NR HPUE	-	n38/n40/n41/n77/n78/n79	28 dBm (613 mW) (Class 2)
	5G NR HPUE	-	n41/n77/n78/n79	28 dBm (613 mW) (Class 1.5)

Japan Radio Law

当該機器には電波法に基づく、技術基準適合証明等を受けた特定無線設備を装着している。

電波法により5.2/5.3 GHz帯は屋内使用に限ります

Safety standards compliance

The equipment meets the following standards and requirements:

- UL 61010-1 / CAN/CSA-C22.2 No.61010-1-12 Safety Requirements for Electrical Equipment for

Measurement Control, and Laboratory Use - Part I: General Requirements; 3rd edition, Rev 6/6/2023

- IEC 61010-1:2010+AMD1:2016 / EN 61010-1:2010+A1:2019 Safety Requirements for Electrical Equipment for Measurement Control, and Laboratory Use - Part I: General Requirements
- Indoor use only
- Altitude: 2000m
- Temperature: 0 to 40°C
- Relative Humidity: 95% (non-condensing)
- Installation Category (Over voltage Category) II under IEC 60664-1
- Pollution Degree 2 Category under IEC 61010-1

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Chapter 1 Getting Started

1. Battery Unit and Power Supply

Check the XEDGE device battery upon unpacking. The battery should be preinstalled in the base unit. If needed, install the battery as shown in Figures 1 and 2 below.

Figure 1



**CAUTION:**

The Lithium Ion batteries shipped with the unit can explode if incorrectly installed. When replacing the battery, ensure that you only use VIAVI approved battery types, as shown in Figure 2, and that they are properly installed. Always dispose of batteries according to your local safety and environmental regulations.

**NOTE:**

VIAVI recommends that you either power off the unit or switch to AC power before replacing the batteries.

Figure 2

The battery compartment is accessed by unscrewing the thumbscrew on the side of the instrument and removing the battery access door.

Reverse the process to remove the battery.

Figure 3



Power is supplied to the instrument by the battery or the AC power adapter. For the XEDGE device, the adapter is supplied with the instrument. Use of batteries or AC power adapters other than those supplied with your XEDGE device is not recommended as other slices/modules may be supplied with incompatible batteries or adapters. Please verify that you have the correct battery and adapter. The battery and AC adapter labels are shown below





The XEDGE unit operates from 19-27V DC and can operate supplied by the 19V DC, 160W AC power adapter shipped with the unit. The nominal input ratings of the power adapter are 100-240V AC, 50-60Hz, and it auto-ranges between 90-264V AC and 47-63Hz. The mains supply cord used with the power adapter must be grounded with a connection to protective earth.



NOTE:

Before connecting an AC power adapter to the unit, refer to the label on the adapter ([Figure 15](#)) to confirm that it is the correct adapter for use with the unit. AC power adapters supplied with other products might not be compatible for use with XEDGE.

2 Antennas Layout and Installation.

Attach the Antennas as per the Label layout on figure 4.

Modem 1 utilizes antenna positions A0, A1, A2, A3

Modem 2 utilizes antenna positions B0, B1, B2, B3

Modem 3 utilizes antenna positions C0, C1, C2, C3

Modem 4 utilizes antenna positions D0, D1, D2, D3

Figure 4



Split locker washers are used to provide retention of the antennas

Figure 5



SMA connector with wave split locker washers

Figure 6



Figure 7



Attaching the Antennas to SMA connectors

Figure 8



Tightening the Antennas to SMA connectors

Figure 9



After the antennas are installed, place the antenna alignment frame over the antennas to set their position. Two thumbs screws can be used to secure the antenna alignment frame to the product

Figure 10



3 Connecting Power Cord.

Attach the power cord as shown in Figures 11 to 13

Figure 11



Figure 12



Figure 13



4 Inserting the Sim card(s)

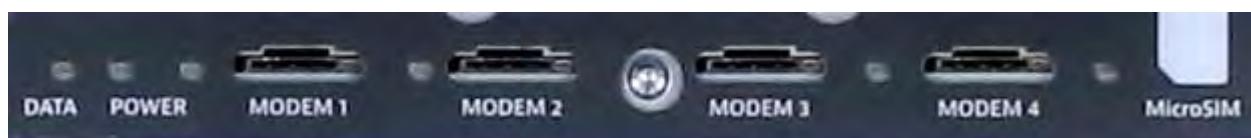
Insert the SIM card(s) into the XEDGE device as shown in Figure 14

Figure 14



Nano SIM card(s) to be inserted.

Figure 15



5 Powering on the device.

Power up the device by pressing the power button for approximately two seconds as shown in Figure 16.

Power down the device by pressing the power button for approximately 8 seconds.

Figure 16



6 Connecting the Ethernet cable.

Insert an ethernet cable in the ethernet port of the XEDGE device as shown in Figures 17 and 18 for network connectivity.

Figure 17



Figure 18

7 Establishing WIFI connectivity.

Next you will need to configure WiFi for your XEDGE device. Navigate to Chapter 2 and perform steps 1-2, 7-17.

8 LED Definition.

The LED's on the device defines the state of the XEDGE device. The LED's can be categorized to 3 types, they are:

- Modem LED's- There are 4 LED's to determine the status for each modem
- Power LED- Single LED to determine Power status.
- Data LED- Single LED to determine Data transfer status.

The LEDs glow in different sequences with blue, green and red color indicating different status. The diagram below shows the LED layout on the XEDGE device.

Figure 19



The different status showcased by the 3 types of LEDs are listed in the tables given below. Note '*' -concurrent, **Modem LEDs**

Sl.No:	LED Color			Condition/State
	BLUE	GREEN	RED	
1	OFF	OFF	SOLID	Starlight (XEDGE application) is booting up
2	OFF	OFF	OFF	Empty Slot or No Modem is detected on the Slot
3	OFF	SOLID	SOLID	Modem Admin Status Down
4	OFF	BLINKING	BLINKING	Modem Admin Status is Maintenance
5	OFF	SOLID	OFF	Telemetry is in progress. When Modem has SIM
6	OFF	BLINKING	OFF	RF Walk test is in progress, When Modem has SIM
7	BLINKING	OFF	OFF	IPERF Test is in Progress
8	SOLID	OFF	OFF	On Management Modem
9	SOLID	SOLID	OFF	On Management modem and Telemetry is in progress
10	BLINKING	BLINKING	BLINKING	No test is running, When Modem has SIM
11	OFF	BLINKING*	BLINKING*	Modem does not have SIM; no test is running and Telemetry not running
12	OFF	SOLID	BLINKING	Modem does not have SIM, Telemetry running
13	OFF	BLINKING	SOLID	Modem does not have SIM and Walk test is running

Power LED

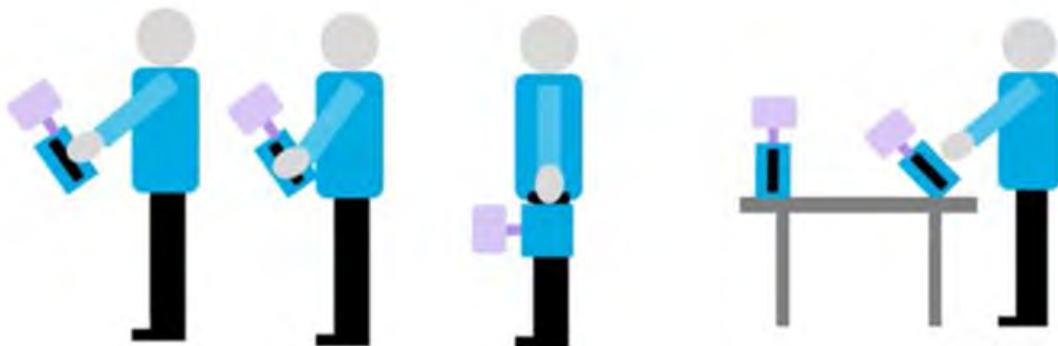
Sl.No:	LED Colour			Condition/State
	BLUE	GREEN	RED	
1	BLINKING	OFF	OFF	Starlight (XEDGE application) is booting up
2	BLINKING	OFF	OFF	Device does not have controller connectivity and in Admin Up/Down/Maintenance State
3	OFF	SOLID	SOLID	Device has controller connectivity and in Admin Down State
4	OFF	BLINKING	BLINKING	Device has controller connectivity and in Admin Maintenance State
5	OFF	SOLID	OFF	Device has controller connectivity and in Admin Up State

Data LED

Sl.No:	LED Colour			Condition/State
	BLUE	GREEN	RED	
1	OFF	OFF	SOLID	No Controller connectivity is established
2	SOLID	OFF	OFF	Controller connectivity is through management modem
3	OFF	SOLID	OFF	Controller connectivity is through WiFi/LAN

9 Carrying the XEDGE device

The user can carry the equipment in multiple ways. Typical use case is to hold the equipment along the side straps with both hands Infront of the body or hold the equipment with one side strap on the side of the body with antennas facing front or back as shown below:



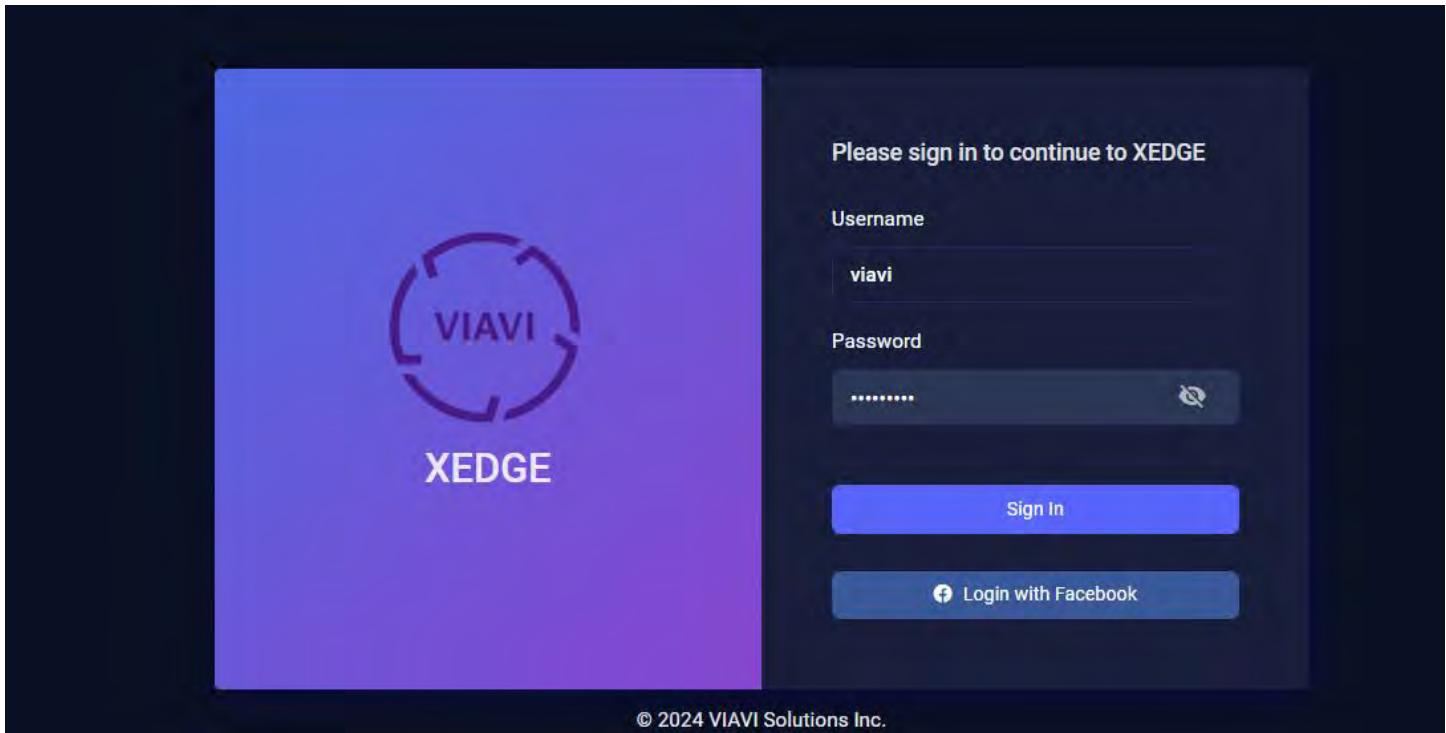
Chapter 2 Accessing the XEDGE UI

This chapter provides task-based instructions for accessing the XEDGE UI. To access the XEDGE UI, complete the following steps:

1 Log In Page

In your browser enter the XEDGE URL ,which will be provided by the support team(Support team email id-XEDGE.support@viavisolutions.com).

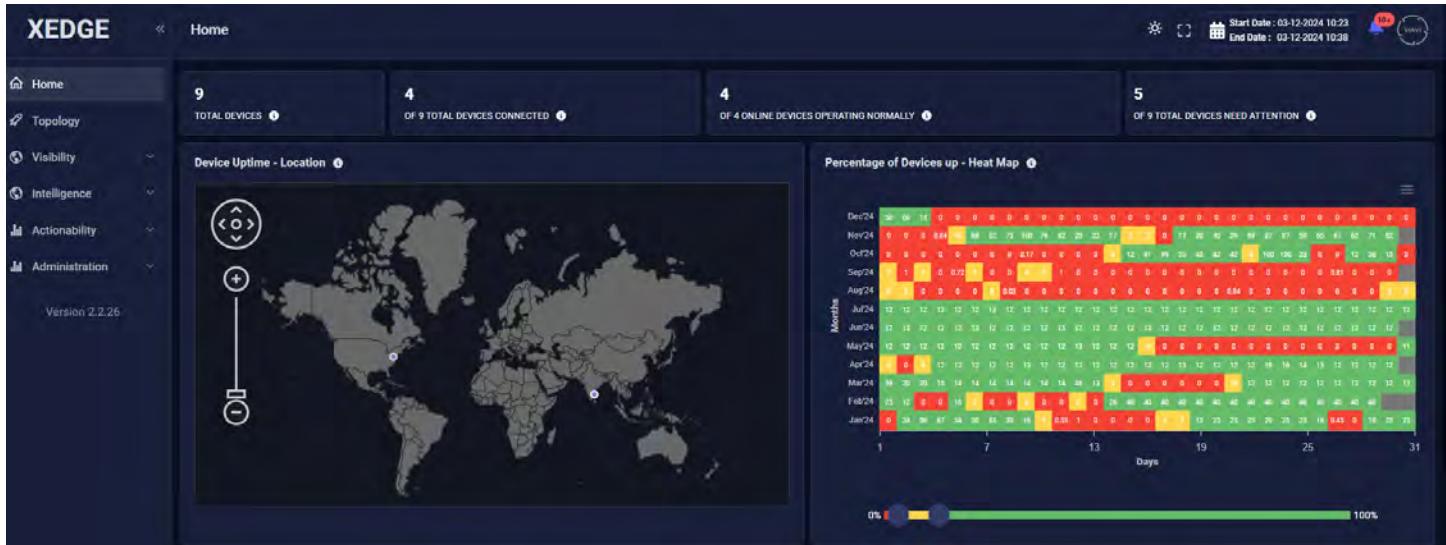
Enter username and password credentials provided by the support team and then sign in.



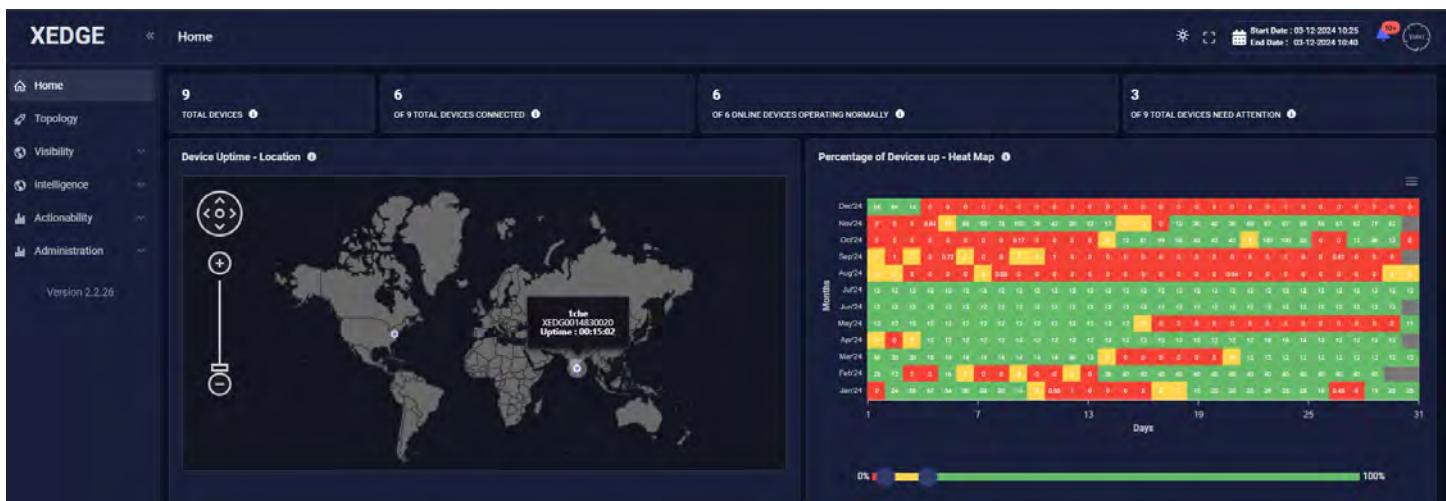
2 Home Page

The 'Home' page is displayed.

Device Uptime is when a device is up but not sending telemetry data to the controller. Device Connectivity is when a device is up and sending telemetry data to the controller.



The Location Map displays where the device is. Hover over to display how long the device has been up and connected to the Controller. One map shows uptime, and one shows connectivity duration.



Heat Map feature.

The following features are available for the heatmap:

- Color legend: The color range is from 0 to 100, where 0 means the critical case and 100 is for the best case.
- The slider under the heatmap is for setting criteria for critical, average, and best cases.
- Users can adjust the percentages as per their criteria for severity:
 - The red grid is in a critical state that needs attention.
 - The green grids are in the range of best cases
 - The yellow are in between critical and the best cases

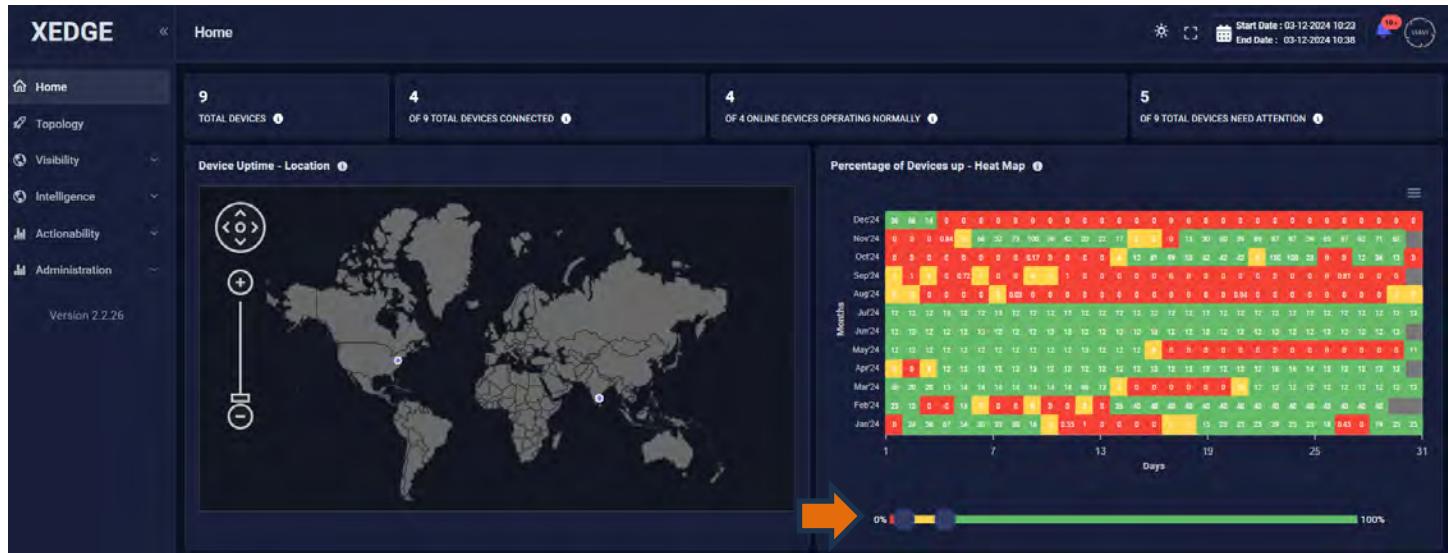
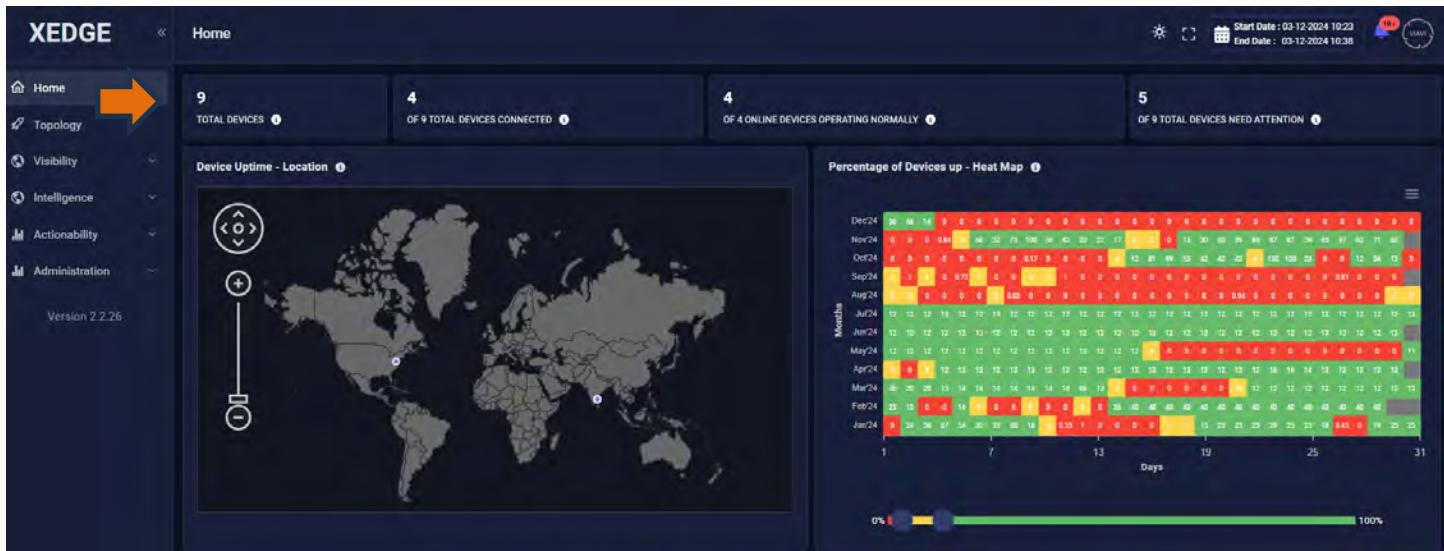


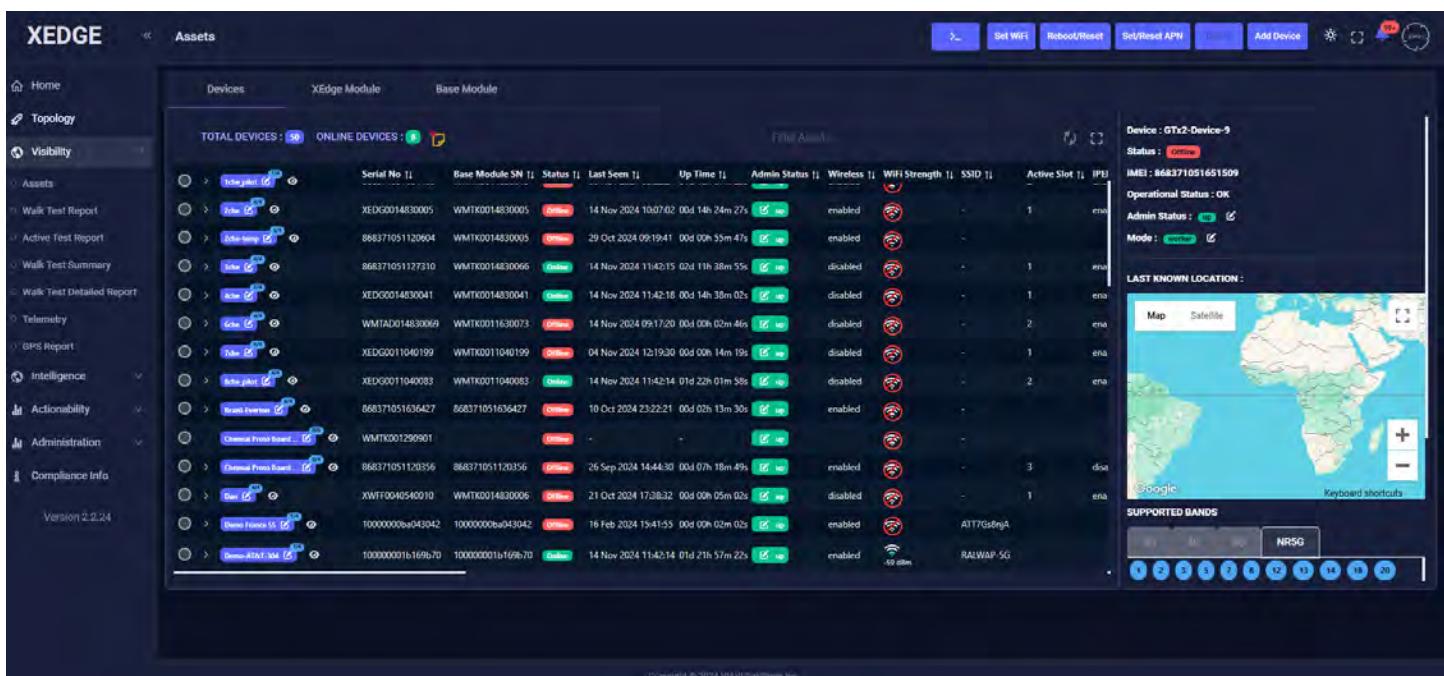
Table 2 Explanation of status on the Home page

Status	Description
Devices	Total number of Onboarded devices
Connected	Total number of Online devices
Operating Normally	Total number of Devices which has operation status as OK for all the modems
Attention Needed	The total number of devices that are either offline or the operation status of any of the modems in devices is not ok



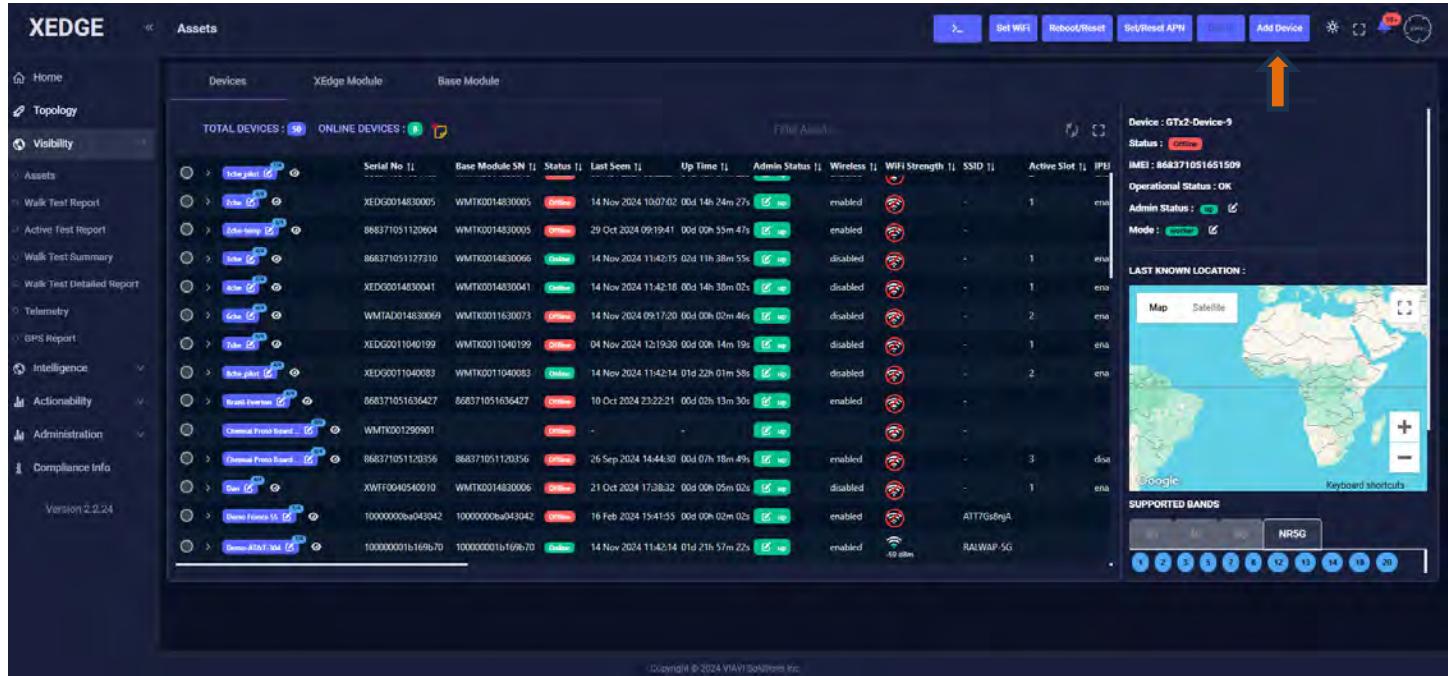
3 Assets Page

Navigate to **Visibility > Assets**.



Onboarding a Device

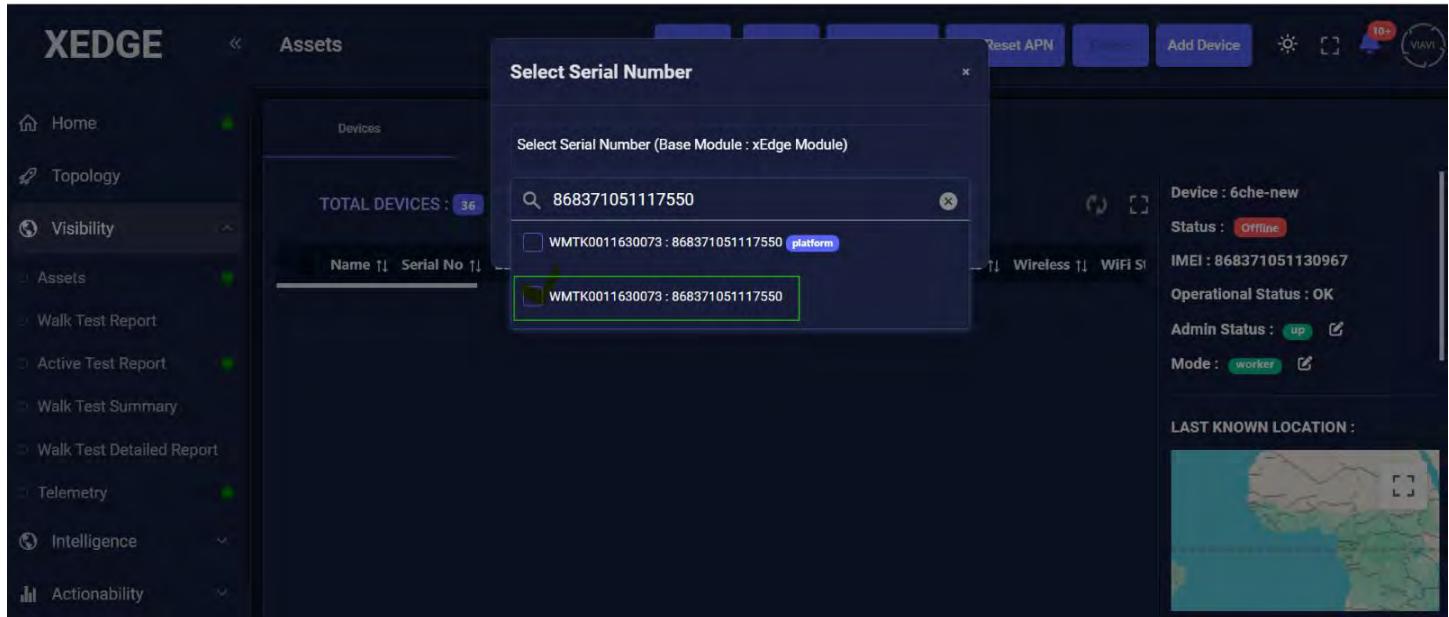
Click “Add Device” to onboard the device you will use



The screenshot shows the XEDGE UI Assets page. The left sidebar contains navigation links for Home, Topology, Visibility, Assets, Walk Test Report, Active Test Report, Walk Test Summary, Walk Test Detailed Report, Telemetry, GPS Report, Intelligence, Actionability, Administration, and Compliance Info. The main content area displays a table of devices with columns: TOTAL DEVICES (58), ONLINE DEVICES (1), Serial No, Base Module SN, Status, Last Seen, Up Time, Admin Status, Wireless, WiFi Strength, SSHD, Active Slot, and IP. A specific device, 'WMTK0011630073', is highlighted with a green border. To the right of the table, there is a detailed device info panel for 'GTx2-Device-9' with fields for Status (Offline), IMEI, Operational Status, Admin Status, Mode, Last Known Location (a map of Africa), and Supported Bands (NR5G). The bottom right of the page shows 'Keyboard shortcuts' and a 'Version 2.2.24' footer.

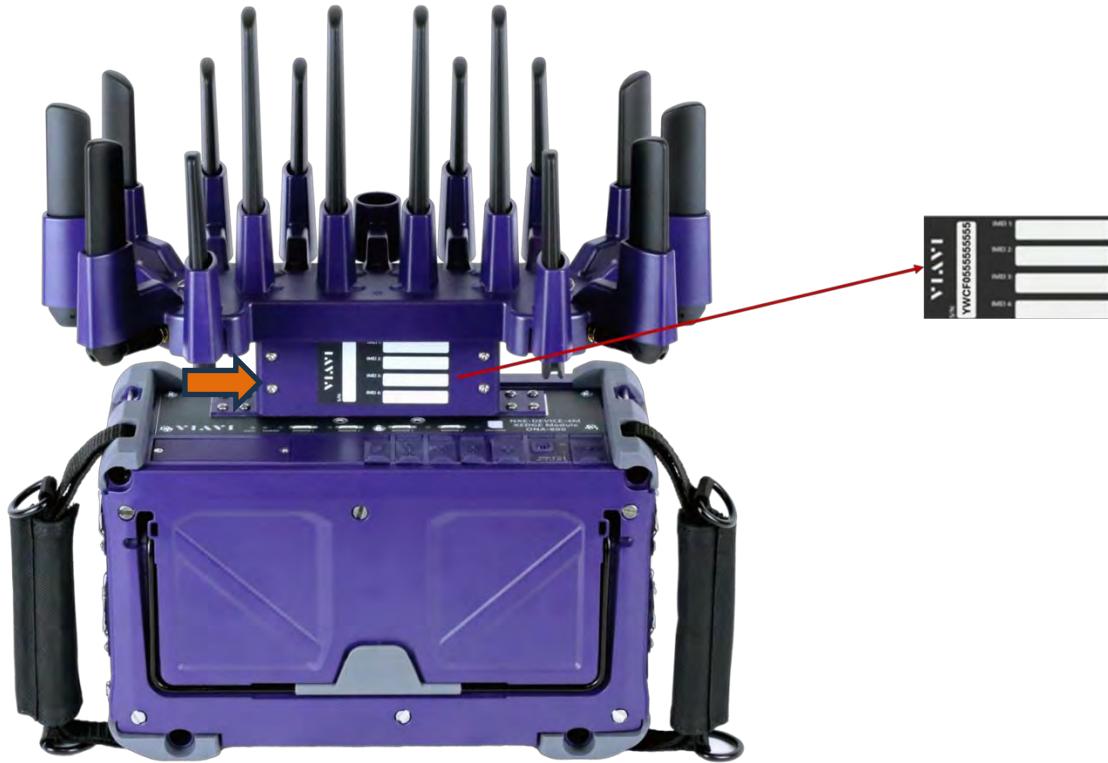
Enter the serial number and click **Next**. The serial number is located on the device label, as shown in the following figure.

Select the BASE SN: XEDGE SN highlighted by rectangle box. Click Next.



The screenshot shows the XEDGE UI Assets page with a 'Select Serial Number' dialog box overlaid. The dialog has a search bar with the text '868371051117550' and a list of entries. One entry, 'WMTK0011630073: 868371051117550', is highlighted with a green border. The right side of the screen shows the device info panel for '6che-new' with fields for Status (Offline), IMEI, Operational Status, Admin Status, Mode, Last Known Location (a map of Africa), and Supported Bands (NR5G). The bottom right of the page shows 'Keyboard shortcuts' and a 'Version 2.2.24' footer.

Serial number will be present on the device



Enter the device name. Click **Onboard**

XEDGE Assets

Enter Device Name

Name	Serial N	Online Status	Wireless 1	Wireless 2	
XEDG0014830020	WMTK0014830020	Online	21 Nov 2024 13:12:06 05d 04h 21m 41s	Up	disabled
868371051634463	WMTK0014830013	Online	21 Nov 2024 13:12:01 00d 03h 52m 40s	Up	enabled
XEDG0014830005	WMTK0014830005	Online	21 Nov 2024 13:11:53 00d 01h 54m 57s	Up	enabled
868371051127310	WMTK0014830066	Offline	18 Nov 2024 11:28:33 00d 00h 27m 49s	Up	disabled
XEDG0014830041	WMTK0014830041	Online	21 Nov 2024 13:02:56 00d 00h 10m 35s	Up	disabled
WMTAD00148300073	WMTK0011630073	Online	21 Nov 2024 13:11:59 00d 01h 10m 53s	Up	disabled
XEDG0011040199	WMTK0011040199	Offline	04 Nov 2024 12:19:30 00d 00h 14m 19s	Up	disabled
XLDG0011040083	WMTK0011040083	Online	21 Nov 2024 13:12:01 00d 03h 40m 54s	Up	disabled
868371051636427	WMTK0011040173	Offline	15 Nov 2024 00:04:23 00d 01h 52m 28s	Up	enabled
Chennai Proto Board...	WMTK001290901	Offline	-	Up	disabled
868371051120356	868371051120356	Offline	26 Sep 2024 14:44:30 00d 07h 18m 49s	Up	enabled

Device : Gtx2-Device-12
Status : Online
IMEI : 868371051633424
Operational Status : OK
Admin Status : Up
Mode : Normal

LAST KNOWN LOCATION :

Map Satellite Google Keyboard shortcuts

SUPPORTED BANDS

The following message appears after clicking the Onboard button.

View the added device that you added. It should appear online on **Devices** tab as well as the **Base Module** tab.

Name	Serial No	Received xEdge Module Serial	Base Module Status	Connection Status	Connection Message	Last Seen	Version	Total Up time (Last Boot)	Skew Type
3che	WMTK0014830066	868371051127310	Online	Online	connected to peer	14 Nov 2024 11:45:51	v2.0.24 - 08-Nov-2024	02d 22h 58m 48s	NXE-DEVICE-4M

Scroll to the right to view the device details using the scroll bar.

Name	Serial No	Base Module SN	Status	Last Seen	Up Time	Admin Status	Wireless	WiFi Strength	SSID
3che	868371051127310	WMTK0014830066	Online	21 Nov 2024 15:32:00	00d 00h 37m 05s	up	disabled	Weak	-
IMEI	IMSI					Slot	Admin Status		Operat
868371051127310	404909179706910					Slot1	up		OK
868371051122113	404940964690399					Slot2	up		OK
868371051122261	404940968991339					Slot3	up		OK
868371051127211	404940964690397					Slot4	up		OK

Device : 3che
Status : Online
IMEI : 868371051127310
Operational Status : OK
Admin Status : up
Mode : worker

LAST KNOWN LOCATION :

Name	Strength	SSID	Active Slot	IPERF Acc	Software Version	BSP Version	xEdge Module Connection	Temperature	Data LED
3che	2	-	enabled	4.3.2	x1.1.11	active	41.90 C		
status	Operational status	Signal Strength	APN	LED	Telemetry Status				
OK	-73 dBm			Enabled					
OK	-69 dBm			Enabled					
OK	-69 dBm			Enabled					
OK	-73 dBm			Enabled					

Device : 3che
Status : Online
IMEI : 868371051127310
Operational Status : OK
Admin Status : up
Mode : worker

LAST KNOWN LOCATION :

Devices XEdge Module Base Module

TOTAL DEVICES: 7 ONLINE DEVICES: 3 

3che

Name	Power LED	Power LED	Wlan Frequency	LCD Version	Flash Info	FPGA	FPGA Version	Starlight Version	OS Version
3che					WMSX0054430075-005 60.3 GB	Available	19004256 16:09:2024	2.0.24_1	5.10.0-xilinx-v202
D	Telemetry Status	Telemetry Interval	Model Id	RRC Connection					
	Enabled	15	RM520N-GL	NOCONN					
	Enabled	15	RM520N-GL	NOCONN					
	Enabled	15	RM520N-GL	NOCONN					
	Enabled	15	RM520N-GL	NOCONN					

Device : 3che
Status : Online
IMEI : 868371051127310
Operational Status : OK
Admin Status : up
Mode : worker

LAST KNOWN LOCATION :



XEDGE Assets

Devices XEdge Module Base Module

TOTAL DEVICES: 9 ONLINE DEVICES: 7 

3che

Name	Starlight Version	OS Version	Device Type	Telemetry Status	Telemetry Interval	RAM	ARM	Accelerometer	Temp Sensor	GPS Sensor
3che	5.10.0-xilinx-v2021.2	NXE-DEVICE-4M		Enabled	15	7.76 GB	Cortex-A53 Yes	Yes	Yes	
D	RRC Connection	Mode	LAN IPv6	MAC	SPN	SNN	IP			
ON-GL	NOCONN	worker	-	02:50f40000001	airtel	airtel	m			
ON-GL	NOCONN	worker	-	02:50f40000001	airtel	airtel	m			
ON-GL	NOCONN	worker	-	02:50f40000001	airtel	airtel	m			
ON-GL	NOCONN	worker	-	02:50f40000001	airtel	airtel	m			

Device : 3che
Status : Online
IMEI : 868371051127310
Operational Status : OK
Admin Status : up
Mode : worker

LAST KNOWN LOCATION :



SUPPORTED BANDS

NR5G

TOTAL DEVICES : 7 ONLINE DEVICES : 3

3che

Name	Telemetry Status	Telemetry Interval	RAM	ARM	Accelerometer	Temp Sensor	GPS Sensor	Auto Recovery	Connection
3che	Online	15	7.76 GB	Cortex-A53	Yes	Yes	Yes	Yes	dev.viaviedge.net
Mode	LAN IPv6	MAC	SPN	SNN	IPERF Interface				
worker	-	02:50:f4:00:00:01	airtel	airtel	rmnet_mhi0.1				
worker	-	02:50:f4:00:00:01	airtel	airtel	rmnet_mhi1.1				
worker	-	02:50:f4:00:00:01	airtel	airtel	rmnet_mhi2.1				
worker	-	02:50:f4:00:00:01	airtel	airtel	rmnet_mhi3.1				

Device : 3che
Status : Online
IMEI : 868371051127310
Operational Status : OK
Admin Status : up
Mode : worker

LAST KNOWN LOCATION :

Map Satellite

Auto recovery can be enabled and disabled by clicking on the edit button Auto recovery column. This brings up a pop window where the user can select 'Yes' or 'No' followed by clicking on 'Ok' button. The Auto Recovery feature provides device protection by automatically reverting to its original state when issues occur.

TOTAL DEVICES : 9 ONLINE DEVICES

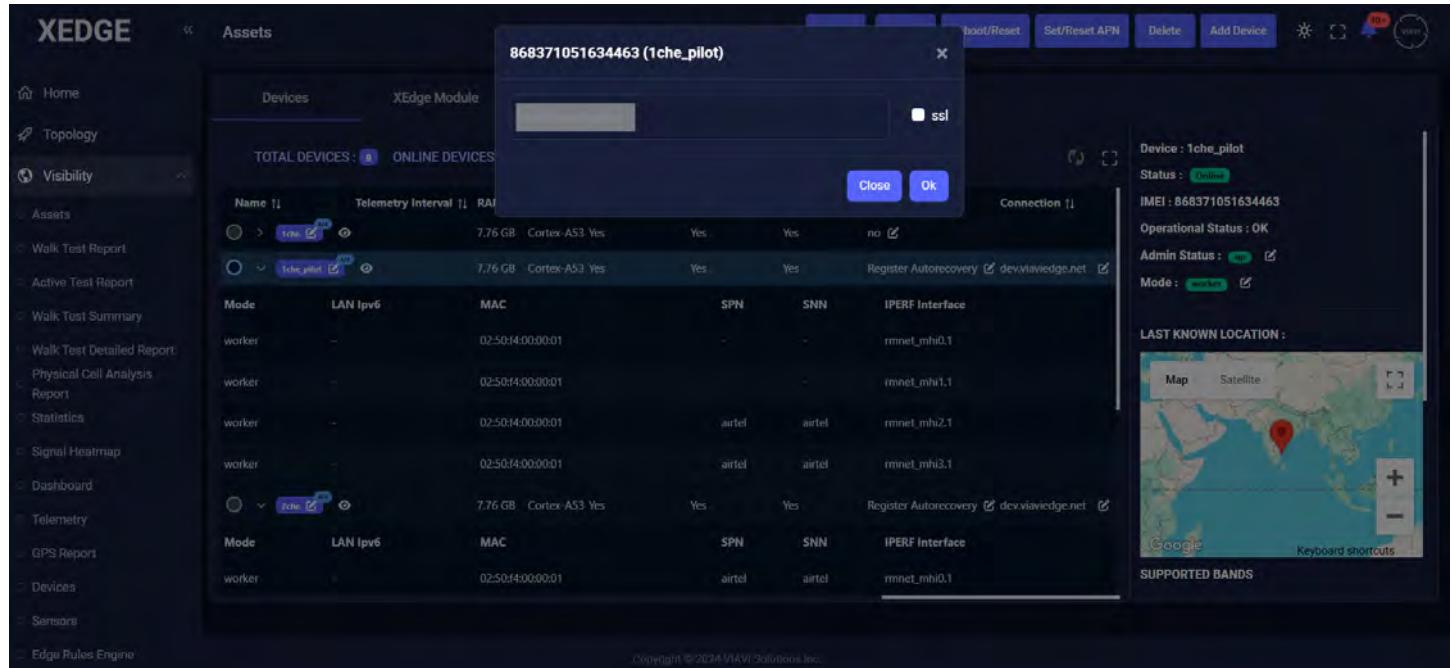
1che_pilot (868371051634463)

Device : 1che_pilot
Status : Online
IMEI : 868371051634463
Operational Status : OK
Admin Status : up
Mode : smartworker

LAST KNOWN LOCATION :

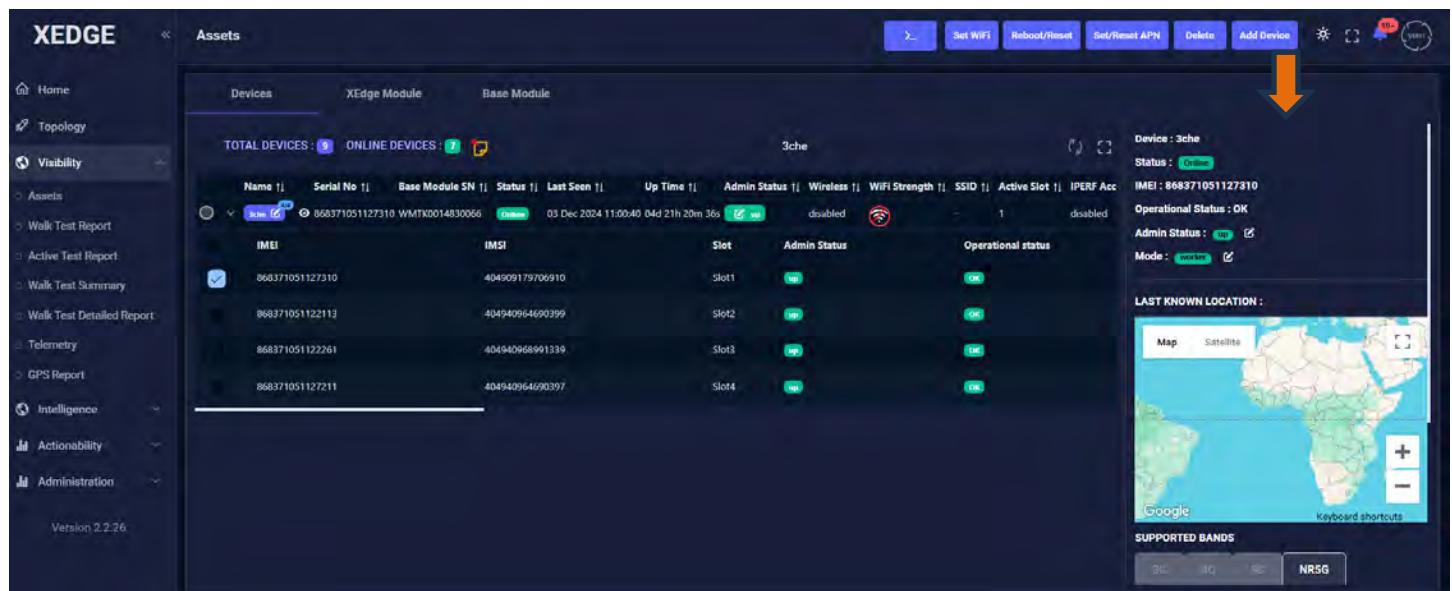
Map Satellite

To change the controller instance and to enable secure controller connection the user can click on the edit button Connection column and then enter the URL and then click on 'ssl' check box followed by clicking on 'Ok'. The user should ensure that no tests are running on the device before making the change. After changing the ssl, the device must be rebooted to ensure the change of controller address.



The screenshot shows the XEDGE UI interface. On the left, the navigation menu includes Home, Topology, Visibility (selected), Assets, Walk Test Report, Active Test Report, Walk Test Summary, Walk Test Detailed Report, Physical Cell Analysis Report, Statistics, Signal Heatmap, Dashboard, Telemetry, GPS Report, Devices, Sensors, and Edge Rules Engine. The main content area is titled 'Assets' and shows a table of devices. A modal dialog is open for the device with IMEI 868371051634463, named '1che_pilot'. The modal has fields for 'Name' (1che_pilot), 'Telemetry Interval' (7.76 GB), 'RAI' (Cortex-A53 Yes), 'Mode' (LAN IPv6), 'MAC' (02:50:40:00:00:01), 'SPN' (airtel), 'SNN' (airtel), and 'IPERF Interface' (rmnet_mhi0.1). There are 'Close' and 'Ok' buttons. To the right of the modal, detailed device information is displayed: Device: 1che_pilot, Status: Online, IMEI: 868371051634463, Operational Status: OK, Admin Status: up, Mode: worker. Below this is a 'LAST KNOWN LOCATION' map showing a red dot in a coastal area. At the bottom right is a 'SUPPORTED BANDS' section with a map of the Americas and a legend for 3G, 4G, and NRSG.

Details of the selected modem appear on the right side of the page, as shown in the figure below.



The screenshot shows the XEDGE UI interface. The navigation menu is the same as the previous screenshot. The main content area is titled 'Assets' and shows a table of devices. A modal dialog is open for the device with IMEI 868371051127310, named '3che'. The modal has fields for 'Name' (3che), 'Serial No' (868371051127310), 'Base Module SN' (WMTK0014830066), 'Status' (online), 'Last Seen' (03 Dec 2024 11:00:40), 'Up Time' (04d 21h 20m 36s), 'Admin Status' (disabled), 'Wireless' (disabled), 'WIFI Strength' (0), 'SSID' (None), 'Active Slot' (1), and 'IPERF Acc' (disabled). To the right of the modal, detailed device information is displayed: Device: 3che, Status: Online, IMEI: 868371051127310, Operational Status: OK, Admin Status: up, Mode: worker. Below this is a 'LAST KNOWN LOCATION' map showing a red dot in South America. At the bottom right is a 'SUPPORTED BANDS' section with a map of the Americas and a legend for 3G, 4G, and NRSG. An orange arrow points from the top of the right side panel to the right side panel itself.

Last Known Location

Supported and locked bands.

Configuring WIFI

Select an XEDGE device.

Device : Behe_pilot
Status : Online
IMEI: 8683771051118798
Operational Status : OK
Admin Status :
Mode :

LAST KNOWN LOCATION :

SUPPORTED BANDS

NR5G

Click on “Set WiFi”

Device : Behe_pilot
Status : Online
IMEI: 8683771051118798
Operational Status : OK
Admin Status :
Mode :

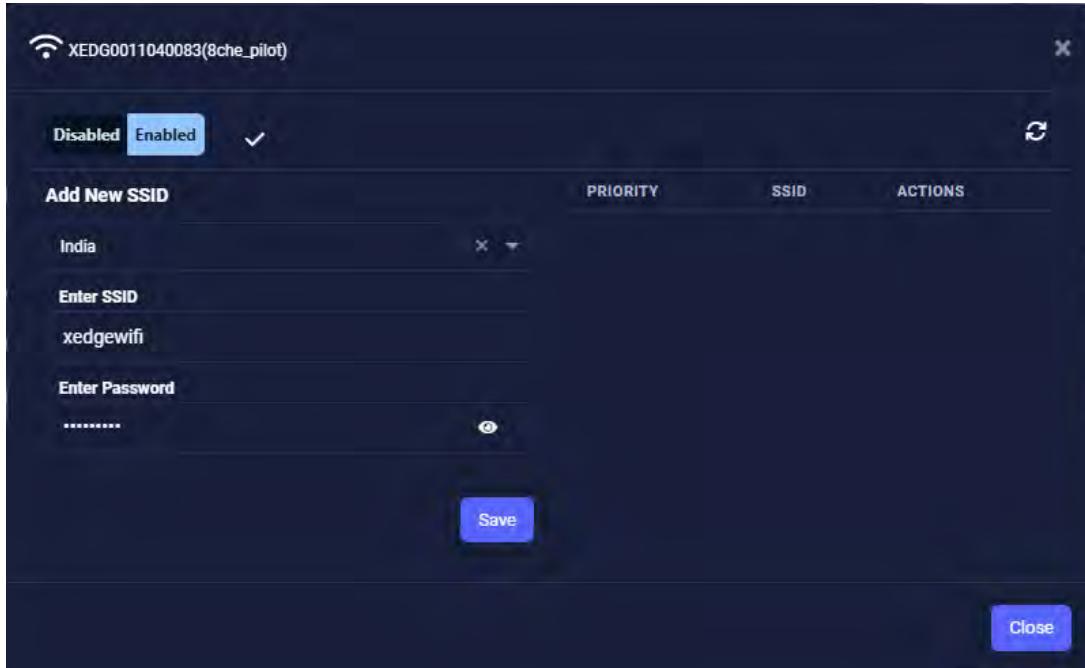
LAST KNOWN LOCATION :

SUPPORTED BANDS

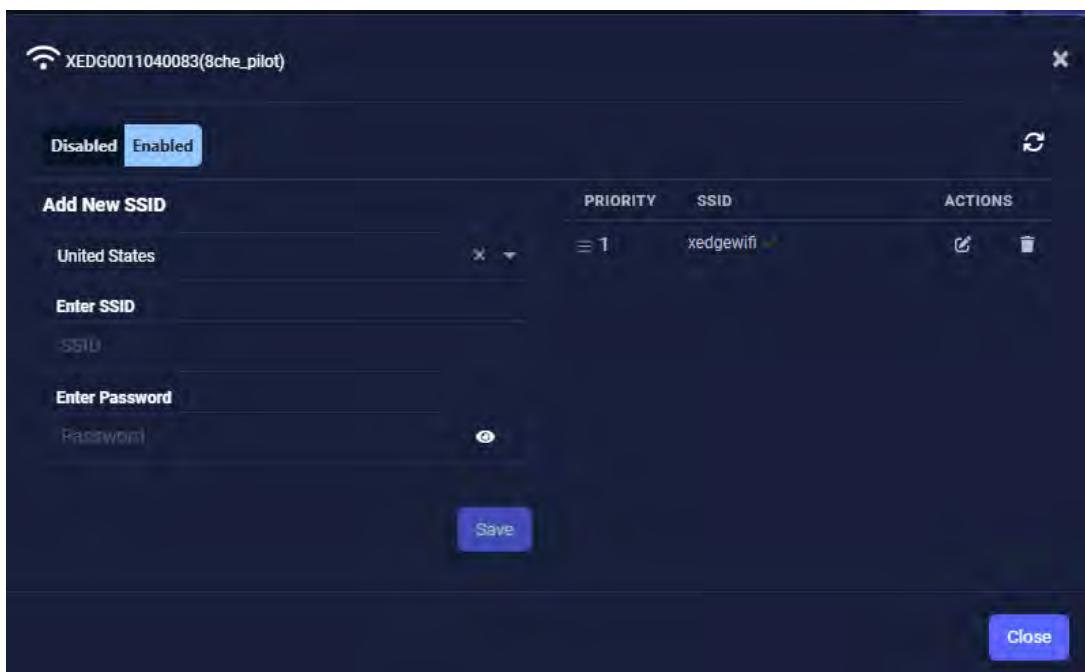
NR5G

Enter the Country where the device is located using the dropdown menu, then enter the SSID and Password of your Router or Hotspot and click “Save.”

To enable or disable, WiFi toggle it to Enable or Disable respectively and then select the tick icon to confirm.



WiFi gets connected based on the priority list. When connected to WiFi, the device shows a green tick against the connected SSID in the priority list.



The device status is refreshed on the asset page with new WiFi settings. To verify, select the device again and click on the dropdown and view the:

- New SSID entered
- Wireless mode “enabled”
- WiFi strength

Rebooting a XEDGE device

Select the device as explained above, then click on “Reboot”

Select **Device Reboot** or any other advanced option provided, then click the **YES** button to proceed with rebooting.

- XEDGE Module Cold Restart- Only XEDGE module is given a cold reset, recovery time is around 180 sec.
- XEDGE Module warm Restart-Software restart of XEDGE module, recovery time is around 180 sec.
- Application restart level 1-Agent software restart of the Base module, recovery time is around 60 sec.
- Application restart level 0-Agent software restart of XEDGE module, recovery time is around 180 sec.

The device should reboot and come back online shortly after.

Setting the APN

Select a device and click on the expand button of the device selected and then select modem.

The screenshot shows the XEDGE UI Assets page. On the left, there is a sidebar with various visibility and actionability options. The main area displays a table of devices with columns for Name, Serial No, Base Module SN, Status, Last Seen, Up Time, Admin Status, Wireless, WiFi Strength, SSID, Active Slot, and IPERF Acc. A map is visible on the right. At the top right, there are several buttons: Set WiFi, Reboot/Reset, Set/Reset APN, Add Device, and a gear icon. An orange arrow points from the 'Visibility' menu to the device list, and another orange arrow points to the 'Set APN' button.

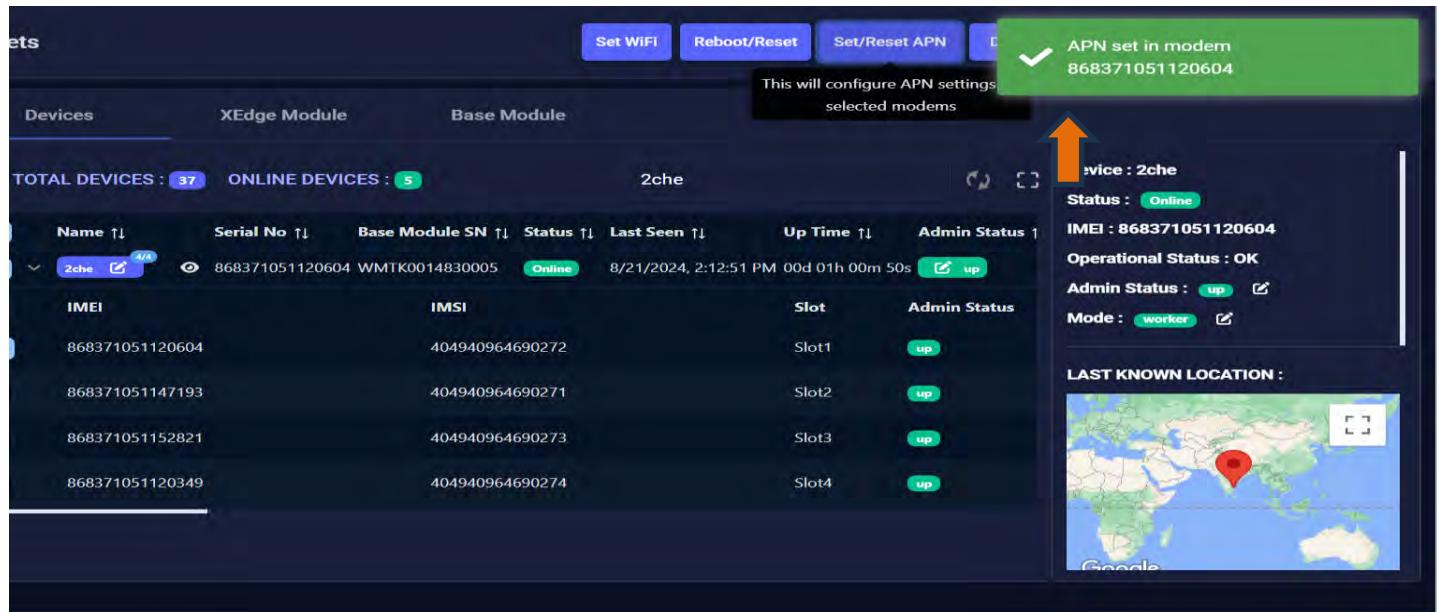
Click on “Set APN”

The screenshot shows the XEDGE UI Assets page with a modal window for 'Set APN'. The modal has two radio buttons: 'Set APN' (selected) and 'Reset APN'. Below the radio buttons, it shows the device selected: '868371051127310 (3che)'. The 'Enter APN' field is empty. At the bottom of the modal are 'Close' and 'Ok' buttons. An orange arrow points to the 'Set APN' button in the top right of the modal.

Type the APN name per your MNO provider. (AT&T, T-Mobile etc....) and click “OK.”

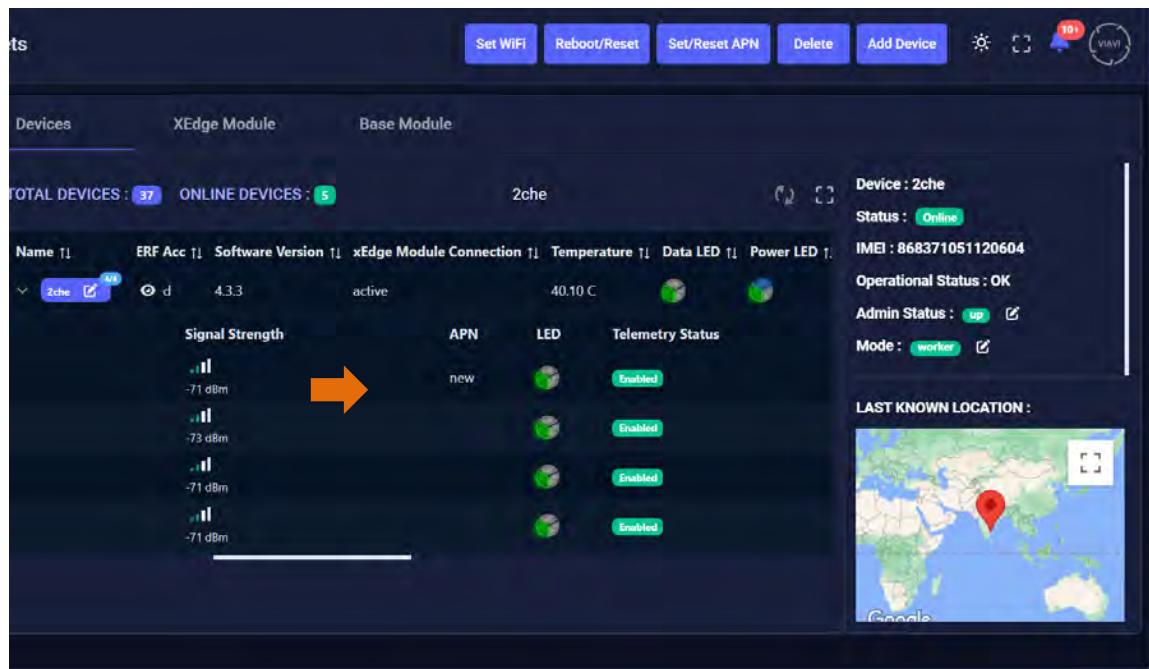
The screenshot shows the XEDGE UI Assets page with the 'Set APN' modal open. The modal displays the selected modem: '868371051127310 (3che)'. The 'Enter APN' field is empty. At the bottom right of the modal, the 'Ok' button is highlighted with an orange arrow. The background shows the device list and map.

The following message appears.



This screenshot shows the XEDGE Controller UI. At the top, there are buttons for 'Set WiFi', 'Reboot/Reset', 'Set/Reset APN', and a 'Success' message: 'APN set in modem 868371051120604'. Below this, a sub-menu for 'Devices' is open, showing 'TOTAL DEVICES : 37' and 'ONLINE DEVICES : 5'. The device '2che' is selected. The main table lists 'IMEI' and 'IMSI' for five devices, with 'Slot' and 'Admin Status' columns. To the right, a detailed view for '2che' shows its status as 'Online' (IMEI: 868371051120604, Operational Status: OK, Admin Status: up, Mode: worker). It also displays the 'LAST KNOWN LOCATION' on a map.

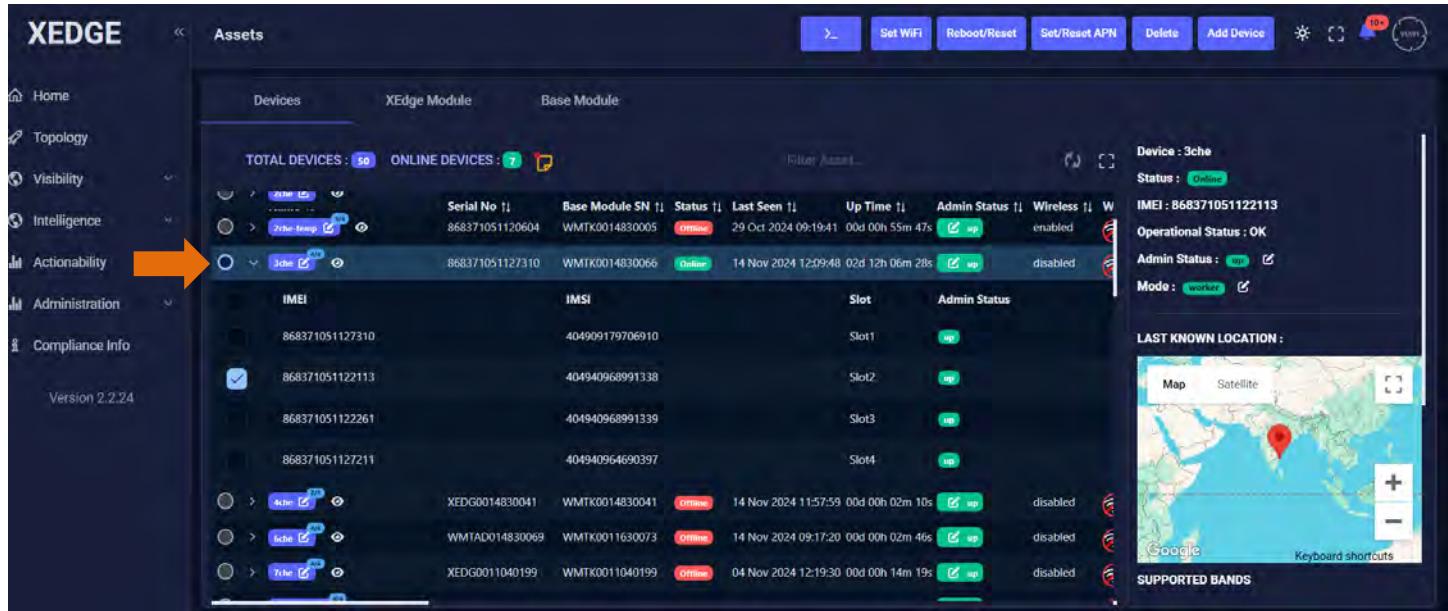
View the new APN name. Use the scroll bar at the bottom of the page to scroll over to see it if required.



This screenshot shows the XEDGE Controller UI. The 'Devices' sub-menu is open, showing 'TOTAL DEVICES : 37' and 'ONLINE DEVICES : 5'. The device '2che' is selected. The main table includes columns for 'ERF Acc', 'Software Version', 'xEdge Module Connection', 'Temperature', 'Data LED', and 'Power LED'. To the right, a detailed view for '2che' shows its status as 'Online' (IMEI: 868371051120604, Operational Status: OK, Admin Status: up, Mode: worker). It also displays the 'LAST KNOWN LOCATION' on a map. An orange arrow points to the 'APN' column in the table, which shows 'new'.

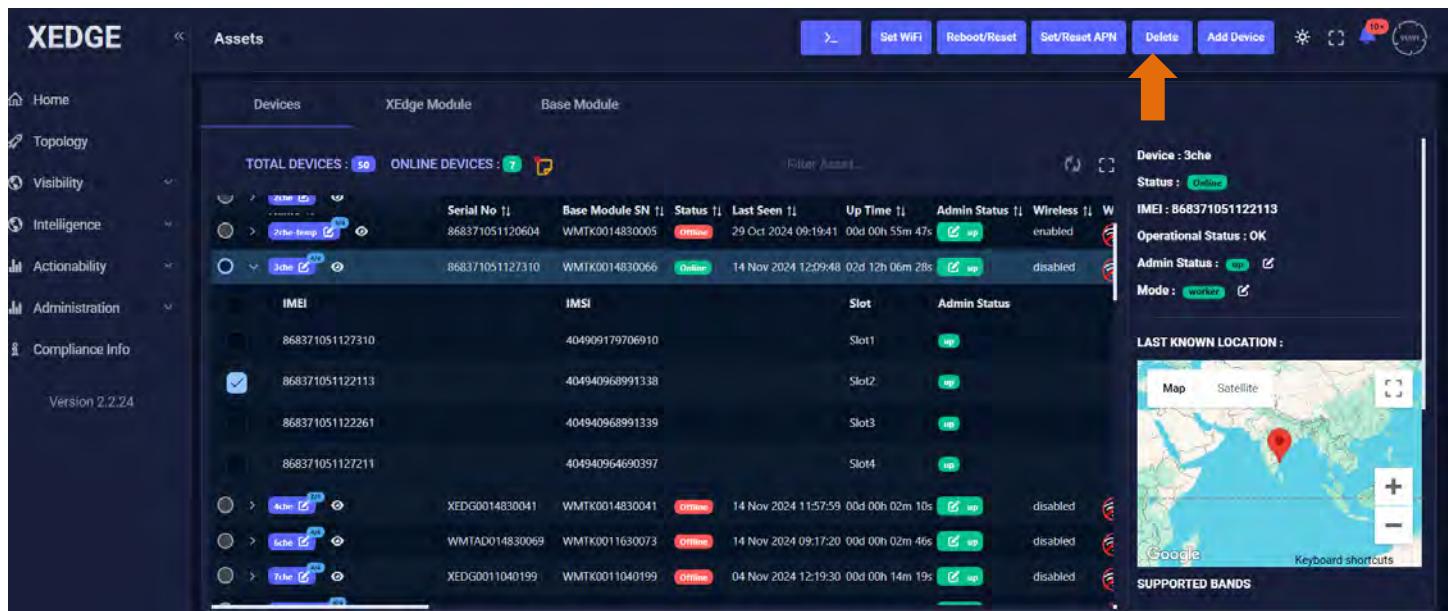
Deleting a XEDGE device

Only a user with admin privileges will be able to delete a device from the asset page. Select the XEDGE device entry you want to delete.



The screenshot shows the XEDGE Assets page. On the left, a sidebar lists navigation options: Home, Topology, Visibility, Intelligence, Actionability (with an orange arrow pointing to it), Administration, and Compliance Info. The main content area displays a table of devices. The table has columns for Serial No, Base Module SN, Status, Last Seen, Up Time, Admin Status, and Wireless. The first device in the list has a checked checkbox next to it. To the right of the table, detailed device information is shown, including Device ID, Status, IMEI, IMSI, Slot, Admin Status, and a map showing the last known location. A blue 'Delete' button is located at the top right of the main content area.

Click on “Delete”



The screenshot shows the XEDGE Assets page with the 'Delete' button highlighted by an orange arrow. The rest of the interface is identical to the previous screenshot, showing the list of devices and detailed device information on the right.

Click "Yes"

Delete Device
868371051127310(3che)

Do you want to delete the device(s)?
• 868371051127310 (3che)

No Yes

IMEI	IMSI	Slot	Admin Status		
068371051127310	404909179706910	Slot1	up		
068371051122113	404940968991338	Slot2	up		
068371051122261	404940968991339	Slot3	up		
068371051127211	404940964600397	Slot4	up		
XEDG0014830041	WMTK0014830041	offline	14 Nov 2024 11:57:59 00d 00h 02m 10s	up	disabled
WMTAD014830069	WMTK0011630073	offline	14 Nov 2024 09:17:20 00d 00h 02m 46s	up	disabled
XEDG0011040199	WMTK0011040199	offline	04 Nov 2024 12:19:30 00d 00h 14m 19s	up	disabled

LAST KNOWN LOCATION :

Map Satellite Google Keyboard shortcuts

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Device entry should be deleted.

Assets

Devices XEdge Module Base Module

TOTAL DEVICES: 50 ONLINE DEVICES: 7

Serial No	Base Module SN	Status	Last Seen	Up Time	Admin Status	Wireless
WMTAD014830069	WMTK0011630073	offline	14 Nov 2024 09:17:20	00d 00h 02m 46s	up	disabled
XEDG0011040199	WMTK0011040199	offline	04 Nov 2024 12:19:30	00d 00h 14m 19s	up	disabled
XEDG0011040083	WMTK0011040083	online	14 Nov 2024 12:11:47	01d 22h 31m 31s	up	disabled
68371051636427	68371051636427	offline	10 Oct 2024 23:22:21	00d 02h 13m 30s	up	enabled
WMTK001290901		offline	-	-	up	
68371051120356	68371051120356	offline	26 Sep 2024 14:44:30	00d 07h 18m 49s	up	enabled
XWFF0040540010	WMTK0014830069	offline	21 Oct 2024 17:38:32	00d 00h 05m 02s	up	disabled
10000000ba043042	10000000ba043042	offline	16 Feb 2024 15:41:55	00d 00h 02m 02s	up	enabled
100000001b169b70	100000001b169b70	online	14 Nov 2024 12:11:47	01d 22h 26m 56s	up	enabled
10000000db48a0c0	10000000db48a0c0	offline	29 May 2024 00:13:58	02d 18h 09m 53s	up	enabled
100000002889441e	100000002889441e	offline	16 Feb 2024 01:58:21	00d 00h 35m 22s	up	enabled

LAST KNOWN LOCATION :

Map Satellite Google Keyboard shortcuts

SUPPORTED BANDS

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Status of XEDGE device

The following table provides an explanation of Status messages.

Table 3 Explanation of status on Assets page

Status	Explanation
Offline	No internet connectivity
Online	Has internet connectivity
Admin Status (Device Level):	
up	Device up and functioning
down	<ul style="list-style-type: none"> Device unavailable for test Telemetry is disabled
maintenance	<ul style="list-style-type: none"> Device unavailable for test Device can be used for debugging Telemetry is disabled Device can be used to run some commands (system commands)
Admin Status (Modem Level):	
up	Modem up and functioning
down	<ul style="list-style-type: none"> Modem unavailable for test Telemetry is disabled
maintenance	<ul style="list-style-type: none"> Modem unavailable for test Modem can be used for debugging Telemetry is disabled Modem can be used to run some commands (system commands)
Mode (Modem Level):	
worker	Modem is available for test.
management	Management modems can act as backhaul connectivity to the XEDGE Controller

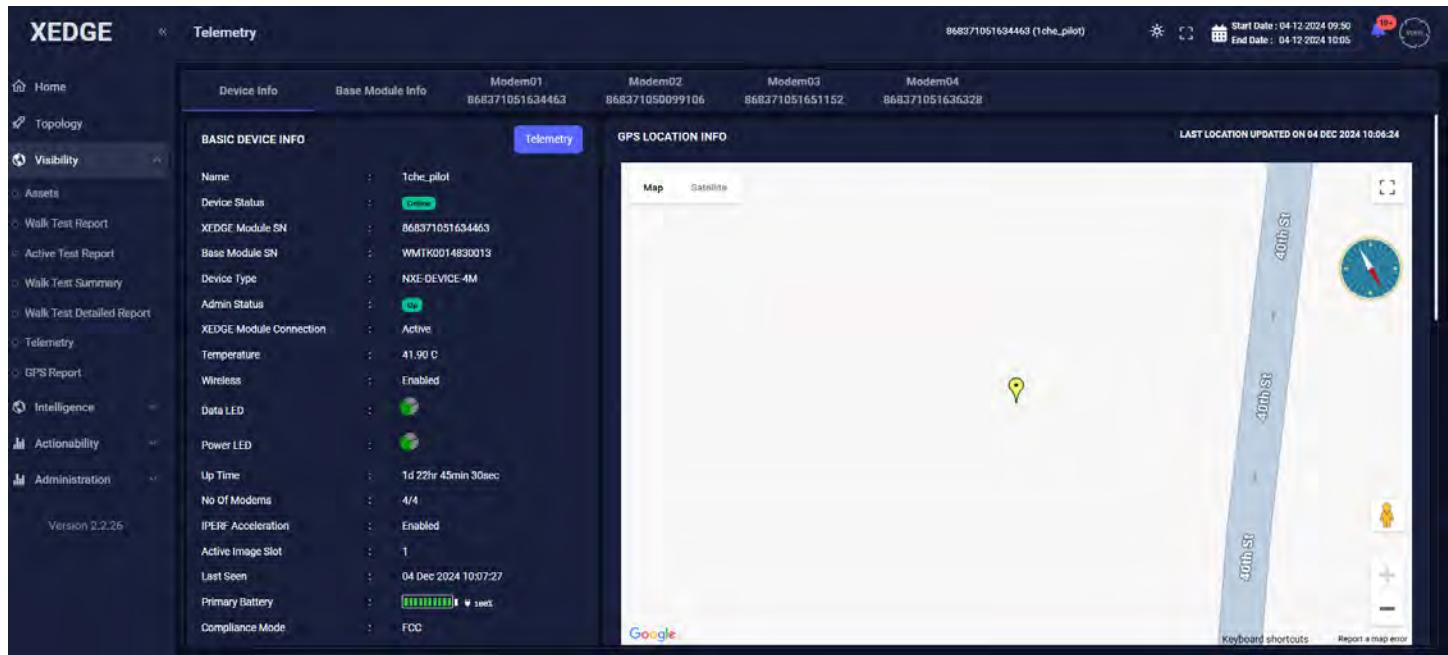
Visualizing MNO mapping and Group manager from Assets page.

By clicking on the Eye button next to the Device name the user can visualize the MNO mapping and the Group with which the device is associated. Further explanation regarding the MNO Mapping and Group Manager is explained in chapters 3 and 4.

The screenshot shows the XEDGE Assets page. On the left, a sidebar lists various navigation options: Home, Topology, Visibility (selected), ANR/ID, Walk Test Report, Active Test Report, Walk Test Summary, Walk Test Detailed Report, Inventory, Intelligence, Actionability, Administration, and a note about version 2.0.6161. The main content area is titled 'Assets' and shows a list of devices. One device, 'Sohn' (ID: 86837105), is highlighted in blue and has an 'Eye' icon next to its name. Clicking this icon opens a detailed view. This view includes a 'Groups' section with 'Demo-Brazil' and 'Claro' (with 'Template' and 'Device Details' buttons), a 'Templates' section with 'Claro Brazil' (with 'Edit' and 'Delete' buttons), and a 'Map' section showing a location in Brazil with a red marker. The 'Reported Bands' section shows a grid of 3GPP bands (1-27, 34-45, 77-79) with 'NR5G' highlighted. The 'TD-Perf' section shows performance metrics for 'TD-Main Map AG 4G' and 'TD-Main Map AG 5G'. The 'TD-Perf' section also includes a table with columns: ID, IP, MAC, Port, Status, and 'TD-Perf'. The table contains three rows for '10000000b043042', '10000000b169670', and '10000000b45a0c0'.

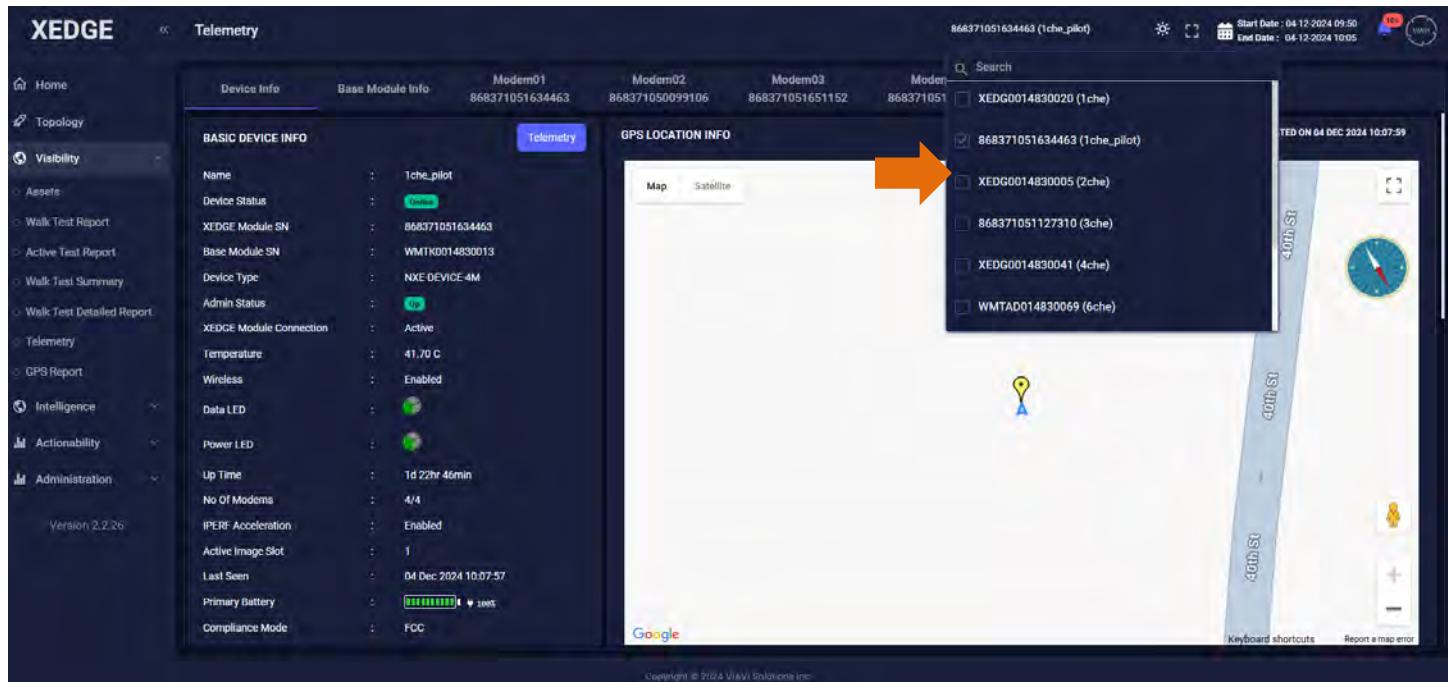
4 Telemetry Page

To see that the device is functioning properly, navigate to the Visibility > Telemetry page.



The screenshot shows the XEDGE Telemetry page. On the left, a sidebar lists navigation options: Home, Topology, Visibility (selected), Assets, Walk Test Report, Active Test Report, Walk Test Summary, Walk Test Detailed Report, Telemetry (selected), GPS Report, Intelligence, Actionability, Administration, and Version 2.2.26. The main content area has tabs for Device Info, Base Module Info, Modem01 (868371051634463), Modem02 (868371050099106), Modem03 (868371051651152), and Modem04 (868371051636328). The Device Info tab is selected, showing basic device info like Name (tche_pilot), Device Status (Online), XEDGE Module SN (868371051634463), and Modem details. The Telemetry tab is also visible. To the right is a GPS Location Info section with a map showing the device's location at 40th St. The map includes a compass rose, zoom controls, and a 'Report a map error' link. A status bar at the top right shows 'Start Date: 04-12-2024 09:50' and 'End Date: 04-12-2024 10:05'.

Select a device from dropdown to view the various parameters of the device.



This screenshot is similar to the previous one, but a dropdown menu is open over the map area. The dropdown is titled 'Modem' and contains a list of device entries: 868371051634463 (tche_pilot) (selected), 868371051630020 (2che), 868371051127310 (3che), 8EDG0014830041 (4che), and WMTAD014830069 (6che). An orange arrow points to the '868371051634463 (tche_pilot)' entry in the list. The rest of the page layout is identical to the first screenshot.

Device information is displayed once the device selection is made in accordance with the time selected.

Telemetry

Device Info Base Module Info Modem01 Modem02 Modem03 Modem04

Modem01: B6B371051634463 Modem02: B6B371050099106 Modem03: B6B371051651152 Modem04: B6B371051636328

BASIC DEVICE INFO

Device Status: Green XEDGE Module SN: B6B371051634463 Base Module SN: WM1K0014830013 Device Type: NXE-DEVICE-4M Admin Status: Green XEDGE Module Connection: Active Temperature: 41.90 C Wireless: Enabled Data LED: Green Power LED: Green Up Time: 1d 22hr 45min 30sec No of Modems: 4/4 IPERF Acceleration: Enabled Active Image Slot: 1 Last Seen: 04 Dec 2024 10:07:27 Primary Battery: Green Compliance Mode: FCC

GPS LOCATION INFO

LAST LOCATION UPDATED ON 04 DEC 2024 10:06:24

Map Satellite

40th St 40th St

Google Keyboard shortcuts Report a map error

VERSION INFO

FPGA Version: f9004256 16:09:2024 Base Firmware SW V...: 4.3.3 XEDGE Application V...: 2.0.26 XEDGE OS Version: 5.10.0-xilinx-v2021.2 XEDGE BSP Version: x1.11_v26_mgmt_patch

INTERFACE IP INFO

Active Management IP: 10.92.4.21 (eth0) Ethernet IPV4: 10.92.4.23 WLAN IPV4: - WLAN SSID: - WLAN Frequency: - WiFi Signal Strength: -

GPS INFO

No Of Satellites: 13 Latitude: 12.9699883333333335 Longitude: 80.24323 Altitude: -4.2 Position Fix: - Default GPS: Modem01

FAN SPEED

Auto Fan Speed: 3227 rpm (25%)

DEVICE SYSTEM INFO

Device Temperature: 41.70 C Fan Status: ON CPU Load: 5.9% RAM: 7.76 GB CPU ARM: Cortex-A53 Flash: 59.8 GB

REGULATORY CERTIFICATION INFO

Model: NXE-DEVICE-4M Contains FCC ID: WUW-SXPCEAC2 Contains FCC ID: WUW-RM520NGL HMN: NXE-DEVICE-4M Contains IC: 9613A-SXPCEAC2 HVIN: SX-PCEAC2 Contains IC: 9613A-RM520NGL HVIN: RM520N-GL CAN ICES(A)/NMB(A)

SENSOR INFO

Accelerometer: Yes GPS Sensor: Yes Magnetometer: Yes Altimeter: Yes Temperature: Yes

DEVICE SYSTEM STATUS

Temperature (°C): 41.70 C CPU Load: 5.9% Fan Status: ON

DEVICE SENSOR DATA

Time: 12:27:00 12:30:00 12:33:00 12:36:00 12:39:00 12:42:00

Value: 4000 3000 2000 1000 -1000

Time: 23 Oct 2024 23 Oct 2024

Time: 12:27:00 12:30:00 12:33:00 12:36:00 12:39:00 12:42:00

Value: 4000 3000 2000 1000 -1000

Time: 23 Oct 2024 23 Oct 2024

Time: 12:27:00 12:30:00 12:33:00 12:36:00 12:39:00 12:42:00

Value: 9000 6000 3000 0

Time: 23 Oct 2024 23 Oct 2024

Time: 12:27:00 12:30:00 12:33:00 12:36:00 12:39:00 12:42:00

Value: 9000 6000 3000 0

Time: 23 Oct 2024 23 Oct 2024

MEMORY USAGE INFO

Time: 12:27:00 12:30:00 12:33:00 12:36:00 12:39:00 12:42:00

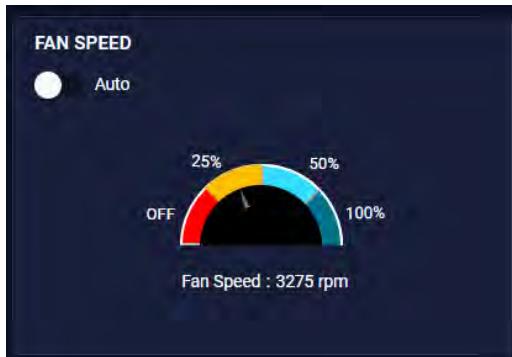
Total Memory (MiB): 9000 Free Memory (MiB): 6000 Used Memory (MiB): 3000 Cache Memory (MiB): 0

Time: 23 Oct 2024 23 Oct 2024

Regulating Fan speed

The Fan speed can be regulated by placing it on Auto mode or on Manual mode.

In manual mode the Fan speed can be regulated by changing the speed in the dial to different percentages as shown below.



The Auto mode can be enabled by moving the toggle button. Enabling the Auto Fan speed mode showcases the fan rpm instead of Fan speed percentage.



Changes in any of these setting displays a message saying "Changes applied successfully, please wait for it to reflect on UI"

The screenshot shows the 'FAN SPEED' section of the XEDGE UI. A toggle switch is set to 'Auto'. Below it is a circular dial with markers at 25%, 50%, and 100%. The dial is currently at 46%. The text 'Fan Speed : 6060 rpm (46%)' is displayed at the bottom. A green message bar in the top right corner says 'Change applied successfully. Please wait for it to reflect on UI'.

VERSION INFO		INTERFACE IP INFO		GPS INFO		FAN SPEED	
FPGA Version	19004256 16/09/2024	Active Management	19004256 (6mb)	No Of Satellites	15	Modem01	OFF
Base Firmware SW V...	4.3.3	Ethernet IPv4	10.92.4.23	Latitude	12.969985000000001	Modem02	25%
XEDGE Application V...	2.0.26	WLAN IPv4	-	Longitude	80.24323166666666	Modem03	50%
XEDGE OS Version	5.10.0-xilinx-v2021.2	WLAN SSID	-	Altitude	-4.1	Modem04	100%
XEDGE BSP Version	x1.11_v26_mngt_patch	WLAN Frequency	-	Position Fix	-	Default GPS	Modem01
		WiFi Signal Strength	-				

DEVICE SYSTEM INFO		REGULATORY CERTIFICATION INFO		SENSOR INFO	
Device Temperature	41.30 C	Model	NXE-DEVICE-4M	Accelerometer	Yes
Fan Status	ON	Contains FCC ID	WUW-SXPEAC2	GPS Sensor	Yes
CPU Load	4.5%	Contains FCC ID	WUW-RM520NGL	Magnetometer	Yes
RAM	7.76 GB	HMN	NXE-DEVICE-4M	Altimeter	Yes
CPU ARM	Cortex A53	Contains IC	9613A-SXPEAC2	Temperature	Yes
Flash	59.8 GB	HVIN	SX-PCEAC2		
		Contains IC	9613A-RM520NGL		
		HVIN	RM520N-GL		
		CAN ICES(A)/NMB(A)			

Base Module information

Click on Base module information to view the base module information.

Telemetry

8683/1051634463 (tche_pilot) Start Date : 04-12-2024 14:28 End Date : 04-12-2024 14:41

Device Info Base Module Info Modem01 Modem02 Modem03 Modem04

8683/1051634463 8683/1051634463 8683/1051634463 8683/1051634463

BASE MODULE INFO

Reboot Config Telemetry

Device Name : tche_pilot
Base Module Status : Online
Base Module SN : WMTK0014830013
XEdge Module SN : 8683/1051634463
Up Time : 2d 3hr 24min 16sec
Software Version : V2.0.26 - 26-Nov-2024
Connection Status : OK
Connection Message : Connected to Peer
Last Seen : 04 Dec 2024 14:41:33

BASE MODULE INFO

Device Type : XEDGE-Artier
LCD Model : WMSX0054430200 005
Model : ONA800
PoE Endpoints : 6
Platform Temp : 27.1 C
FPGA Temp : 41.6 C
CPU Load : 43%
Last Received : 04 Dec 2024 14:41:33

ACCESS INFO

Active Management Interface : 192.168.1.1 (eth0)
Ethernet IPv4 : 192.168.1.1
Ethernet IPv6 : fe80::201:6ff:fea0:964c
Ethernet MAC : 00:80:16:a0:96:4c
Mode : IPv4
Tun0 : 10.0.0.1
Tun0 MAC : -
Tun1 : 10.1.0.1
Tun1 MAC : -
WiFi IP : -
Last Received : 04 Dec 2024 14:41:33

WIFI INFO

WiFi Channel RSSI : -
SSID : -
Authentication : -
Connection : -

BASE SYSTEM STATUS

Value

0 60
14:40:15 14:40:30 14:40:45 14:41:00 14:41:15 14:41:30
04 Dec 2024 04 Dec 2024

MEMORY USAGE INFO

Memory Usage (MB)

0 2500
14:40:15 14:40:30 14:40:45 14:41:00 14:41:15 14:41:30
04 Dec 2024 04 Dec 2024

Click on Reboot config to configure the health status interval based reboot of XEDGE.

Telemetry

8683/1051634463 (tche_pilot) Start Date : 04-12-2024 14:28 End Date : 04-12-2024 14:41

Device Info Base Module Info Modem01 Modem02 Modem03 Modem04

8683/1051634463 8683/1051634463 8683/1051634463 8683/1051634463

BASE MODULE INFO

Reboot Config Telemetry

Device Name : tche_pilot
Base Module Status : Online
Base Module SN : WMTK0014830013
XEdge Module SN : 8683/1051634463
Up Time : 2d 3hr 24min 16sec
Software Version : V2.0.29 - 26-Nov-2024
Connection Status : OK
Connection Message : Connected to Peer
Last Seen : 04 Dec 2024 14:41:33

BASE MODULE INFO

Device Type : XEDGE-Artier
LCD Model : WMSX0054430200 005
Model : ONA800
PoE Endpoints : 6
Platform Temp : 27.1 C
FPGA Temp : 41.6 C
CPU Load : 43%
Last Received : 04 Dec 2024 14:41:33

ACCESS INFO

Active Management Interface : 192.168.1.1 (eth0)
Ethernet IPv4 : 192.168.1.1
Ethernet IPv6 : fe80::201:6ff:fea0:964c
Ethernet MAC : 00:80:16:a0:96:4c
Mode : IPv4
Tun0 : 10.0.0.1
Tun0 MAC : -
Tun1 : 10.1.0.1
Tun1 MAC : -
WiFi IP : -
Last Received : 04 Dec 2024 14:41:33

WIFI INFO

WiFi Channel RSSI : -
SSID : -
Authentication : -
Connection : -

BASE SYSTEM STATUS

Value

0 60
14:40:15 14:40:30 14:40:45 14:41:00 14:41:15 14:41:30
04 Dec 2024 04 Dec 2024

MEMORY USAGE INFO

Memory Usage (MB)

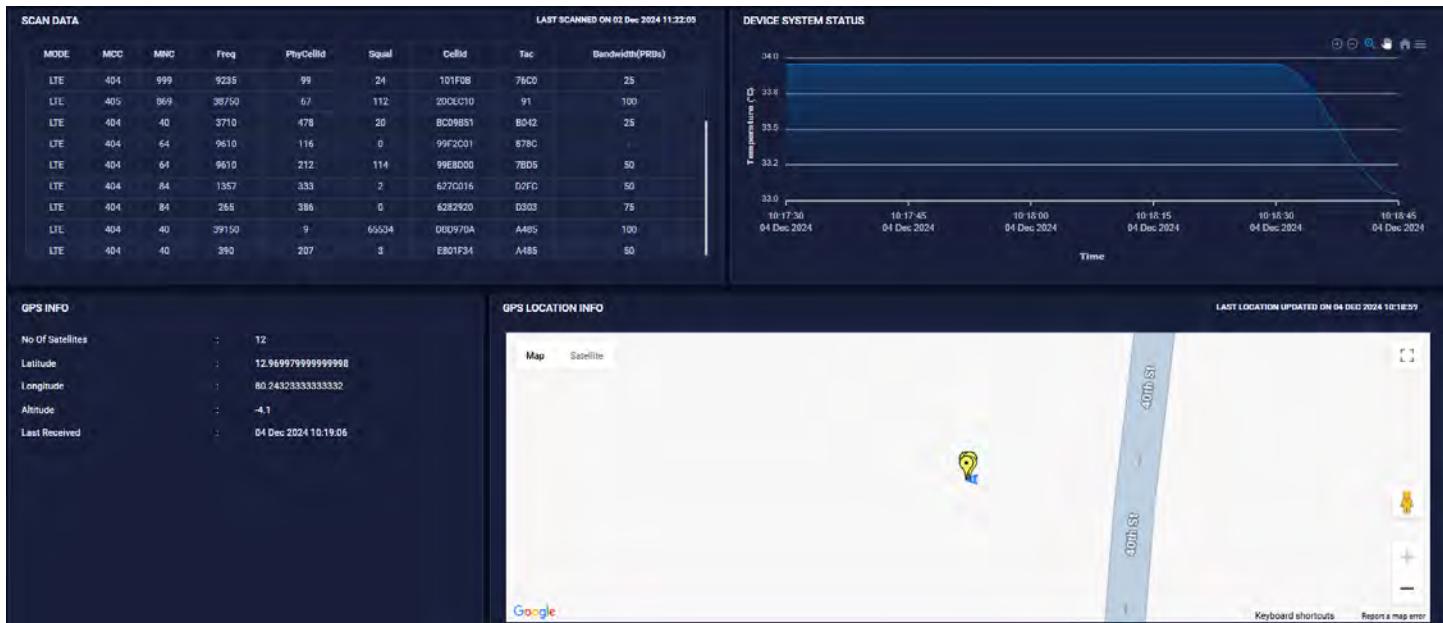
0 2500
14:40:15 14:40:30 14:40:45 14:41:00 14:41:15 14:41:30
04 Dec 2024 04 Dec 2024

Modem level information

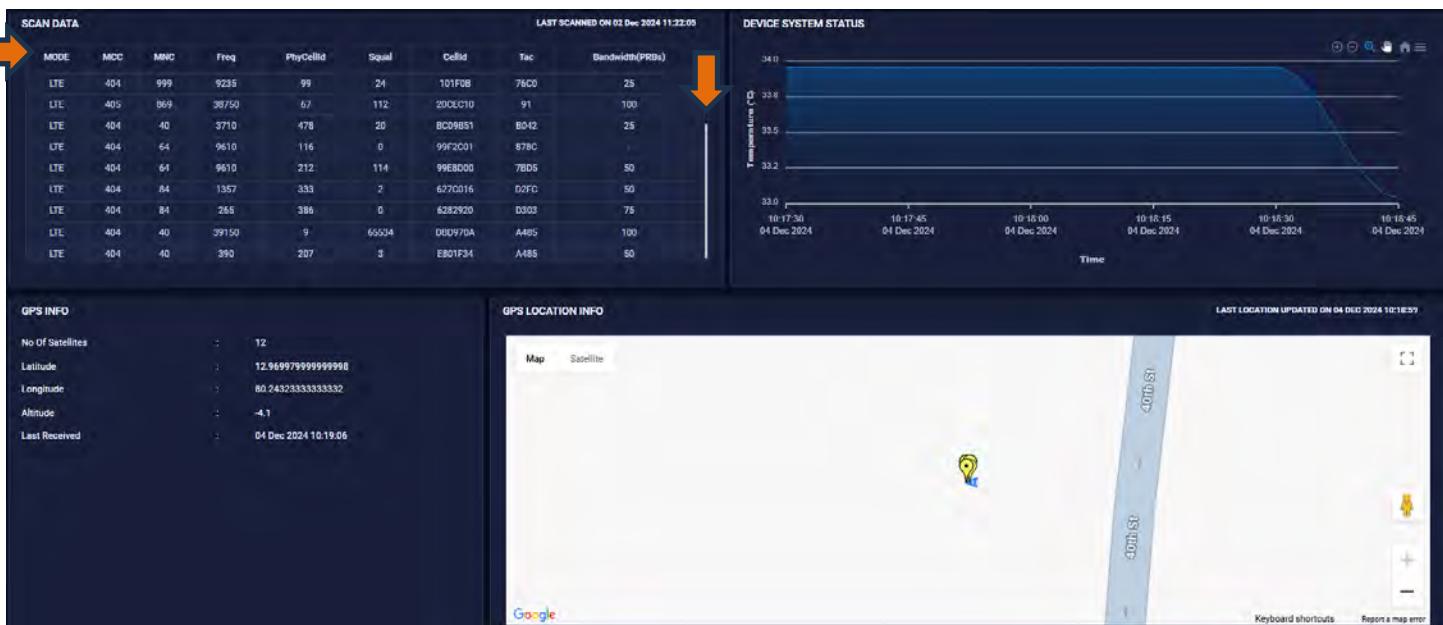
Click on Modem01.

View results. Graphs for RSSI, RSRP, RSRQ, and other device information are displayed.

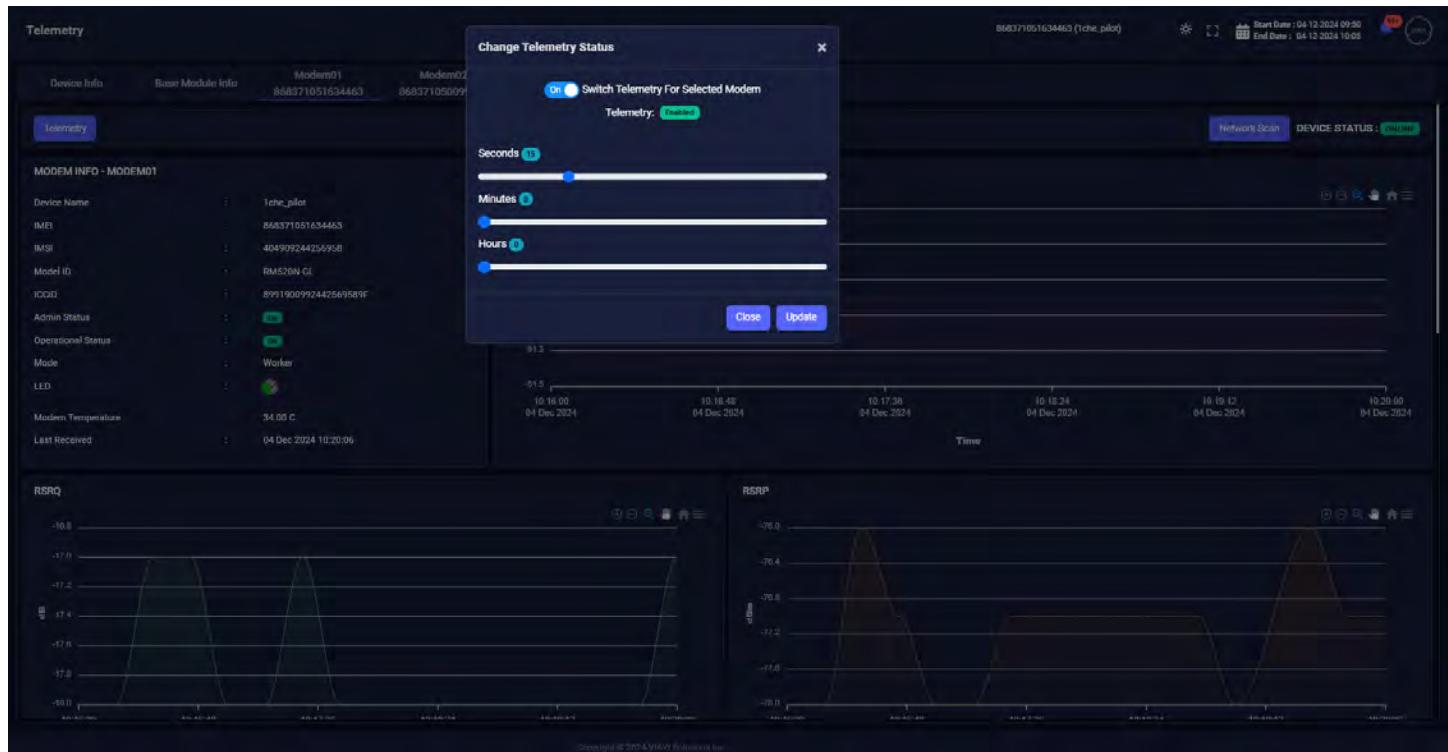




To see the rest of the scan data information hover over with the mouse pointer and use the vertical slide bar.



Click on telemetry to Enable / Disable telemetry and to configure telemetry frequency



Repeat steps above steps for retrieving data from Modem02 to Modem04 to configure and visualize the data for the respective modems.

Chapter 3 MNO Mapping

This section describes the procedure for Mobile Network Operator (MNO) Mapping. This feature is for creating templates with bands, which will be linked to modems for locking the modems to the bands in the template.

Creating an MNO map

Complete the following steps to create a new MNO map:

1. Navigate to Administration > MNO mapping page.

The screenshot shows the XEDGE Controller User Interface with the following details:

- Left Sidebar (Administration):**
 - Home
 - Topology
 - Visibility
 - Intelligence
 - Actionability
 - MNO Mapping** (selected)
 - Help
 - Admin
 - Cloud Management
 - MNO Mapping
 - Groups Manager
 - Floor Maps Manager
 - Device Locator
 - Device Upgrade Manager
 - Diagnostics
 - Global Configurations
 - Global Notifications
- Middle Section:**
 - MNO Map:** A world map showing red markers for various MNO locations.
 - Total MNO (23):** A table listing 23 MNO maps with the following columns:
 - MNO Maps
 - Regions
 - MNOs
 - 4G Bands
 - 5G Bands
 - NSA 5G bands
 - # Groups
 - Actions
- Table Data:**

MNO Maps	Regions	MNOs	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions
AIRCEL MNO	India	AIRCEL	2	-	-	0	
Airtel 5G Bands	India	Airtel	-	1 2 3 78 258	-	0	
Airtel All Bands	India	Airtel	1 40 5 8 1	1 3 4 78 258	-	4	
Australia MNO	Australia	Airt&T	7	-	-	0	
Austria metl1	Austria	metl1	5	-	-	0	
Belgium Telenet Proximus	Belgium	Proximus	-	89	-	0	
Canada SaskTel	Canada	SaskTel	4	6	7	0	

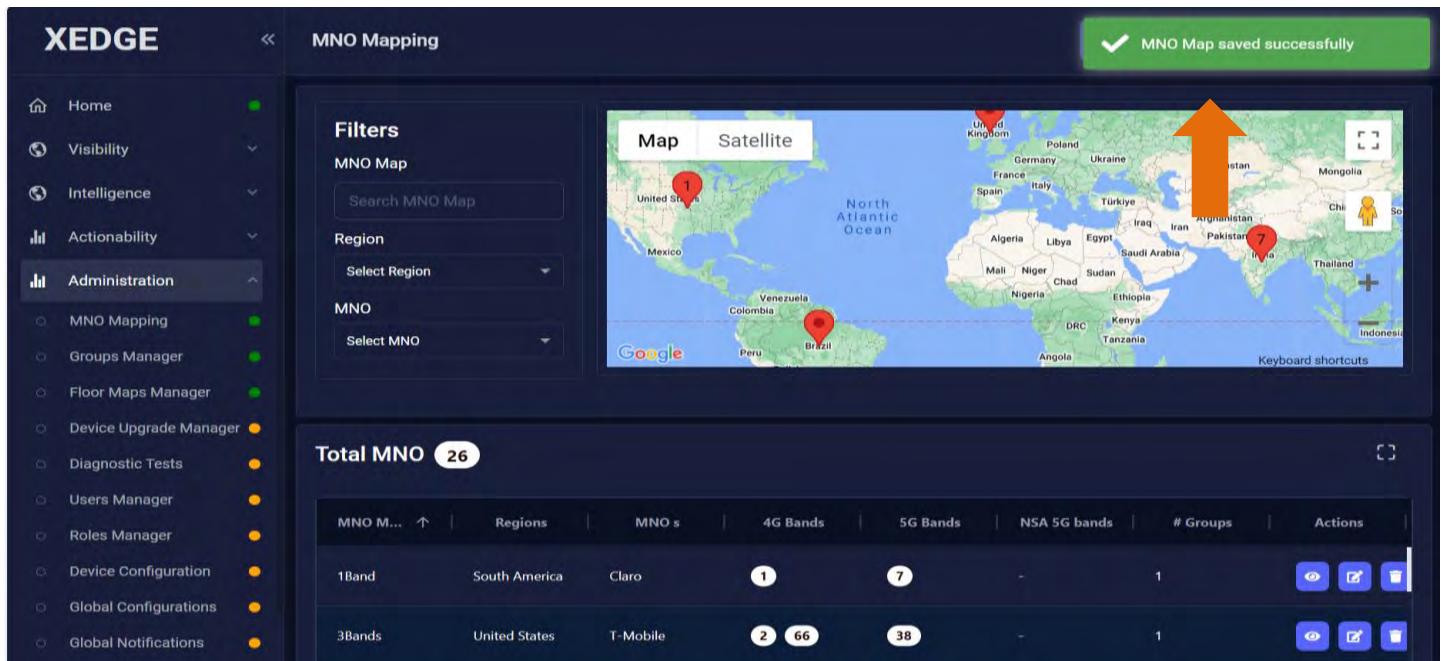
2. Click New MNO Map.

The screenshot shows the XEDGE MNO Mapping interface. On the left is a navigation sidebar with various options like Home, Topology, Visibility, Intelligence, Actionability, Administration, Help, Admin, Cloud Management, MNO Mapping, Groups Manager, Floor Maps Manager, Device Locator, Device Upgrade Manager, Diagnostics, Global Configurations, and Global Notifications. The main area has a title 'MNO Mapping' and a 'Filters' section with 'MNO Map', 'Region', and 'MNO' dropdowns. Below is a table titled 'Total MNO' with 23 entries. The table columns are MNO Maps, Regions, MNOs, 4G Bands, 5G Bands, NSA 5G bands, # Groups, and Actions. The table shows data for various MNOs like AIRCEL, Airtel, At&T, Meta1, Proximus, SaskTel, etc., across different regions and with varying band counts. At the bottom is a pagination bar showing '1 to 20 of 23' and 'Page 1 of 2'.

The screenshot shows the 'New Mno' dialog box. It has a sidebar with the same navigation options as the main interface. The main area has fields for 'MNO Map' (with placeholder 'Enter MNO Map'), 'Region' (with placeholder 'Select Region'), 'MNO' (with placeholder 'Select MNO'), '4G Bands' (with placeholder 'Select 4G Bands'), '5G Bands' (with placeholder 'Select 5G Bands'), and 'NSA 5G Bands' (with placeholder 'Select NSA 5G Bands'). Below these fields is a world map with red location markers. To the right is a sidebar with 'Actions' buttons and a preview map of the selected region.

- Click in the 'MNO Map' box and enter a new map name.
- Click in the 'Region' dropdown box and select a region.
- Click in the 'MNO' dropdown box and select an MNO.
- Click in the '4G Bands' dropdown and select bands.

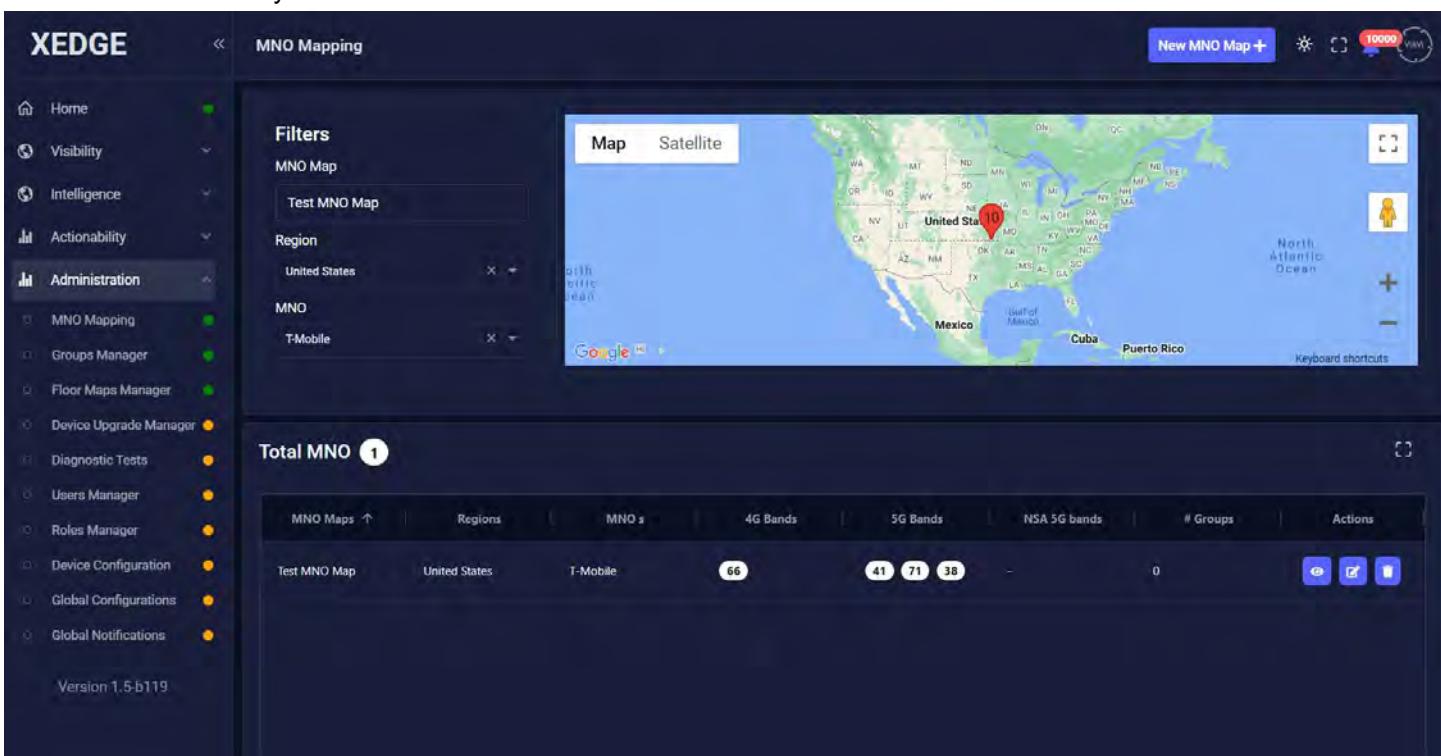
7. Click in the '5G Bands' dropdown and select bands.
8. Click in the 'NSA 5G Bands' dropdown and select bands.
9. Click **Save**.
10. If successful, the following message appears:



The screenshot shows the XEDGE MNO Mapping interface. At the top right, a green success message box displays "MNO Map saved successfully" with a checkmark icon. Below the message is a world map with several red location markers. One marker is in the United States (labeled 1), another is in Brazil (labeled 2), and a third is in India (labeled 7). The map includes labels for countries like Mexico, Venezuela, Colombia, Peru, Spain, France, Italy, Poland, Germany, Ukraine, Turkey, Saudi Arabia, and Indonesia. The interface has a sidebar with "Administration" selected, and a main panel with "Filters" for "MNO Map", "Region", and "MNO". Below the map is a table titled "Total MNO 26" showing two entries:

MNO M...	Regions	MNO s	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions		
1Band	South America	Claro	1	7	-	1			
3Bands	United States	T-Mobile	2 66	38	-	1			

11. View the MNO that you created.

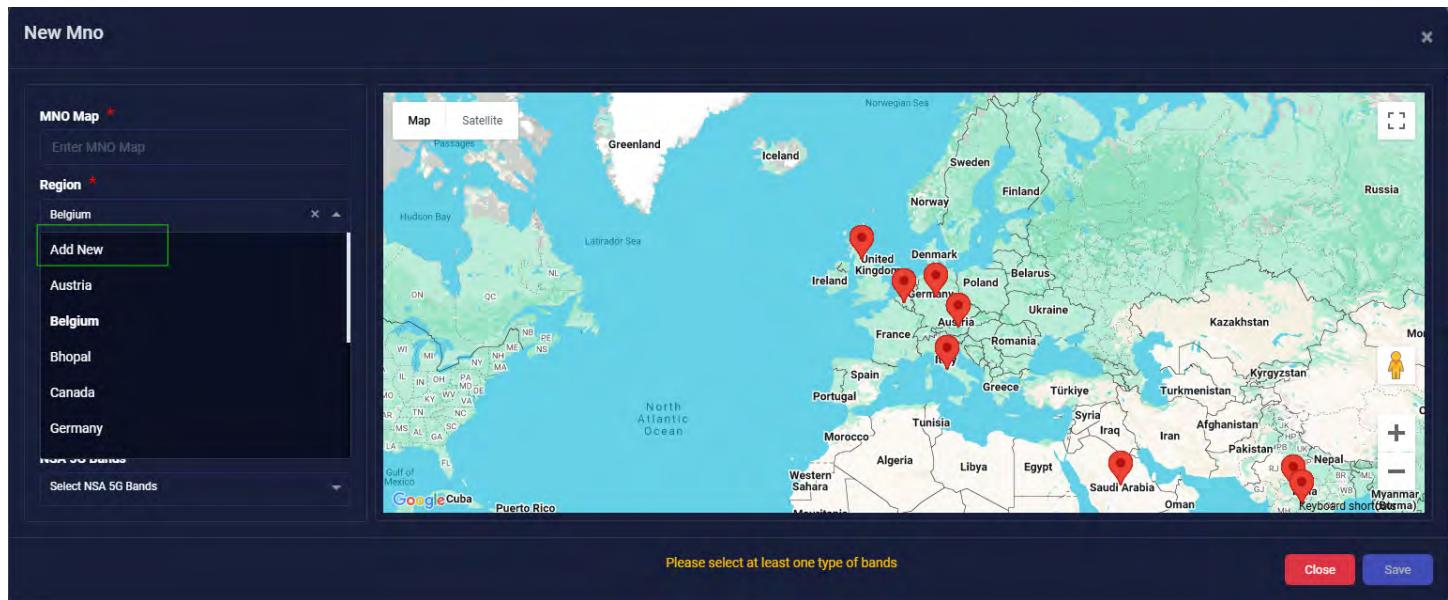


The screenshot shows the XEDGE MNO Mapping interface. At the top right, a blue button labeled "New MNO Map +" is visible. Below the map, a table titled "Total MNO 1" shows one entry:

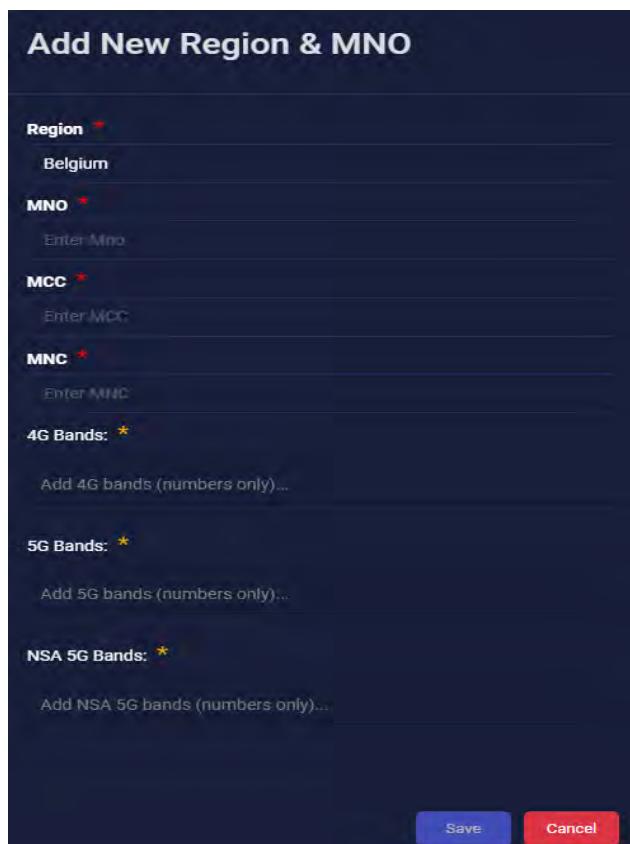
MNO Maps	Regions	MNO s	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions		
Test MNO Map	United States	T-Mobile	66	41 71 38	-	0			

The sidebar on the left shows the "Administration" section selected, with "MNO Mapping" also highlighted. The map on the right shows the United States with a red marker labeled 10, indicating the location of the created MNO. The map includes state abbreviations like WA, MT, SD, ND, MN, WI, MI, OH, PA, NY, NJ, CT, RI, MA, VT, NH, ME, and PR.

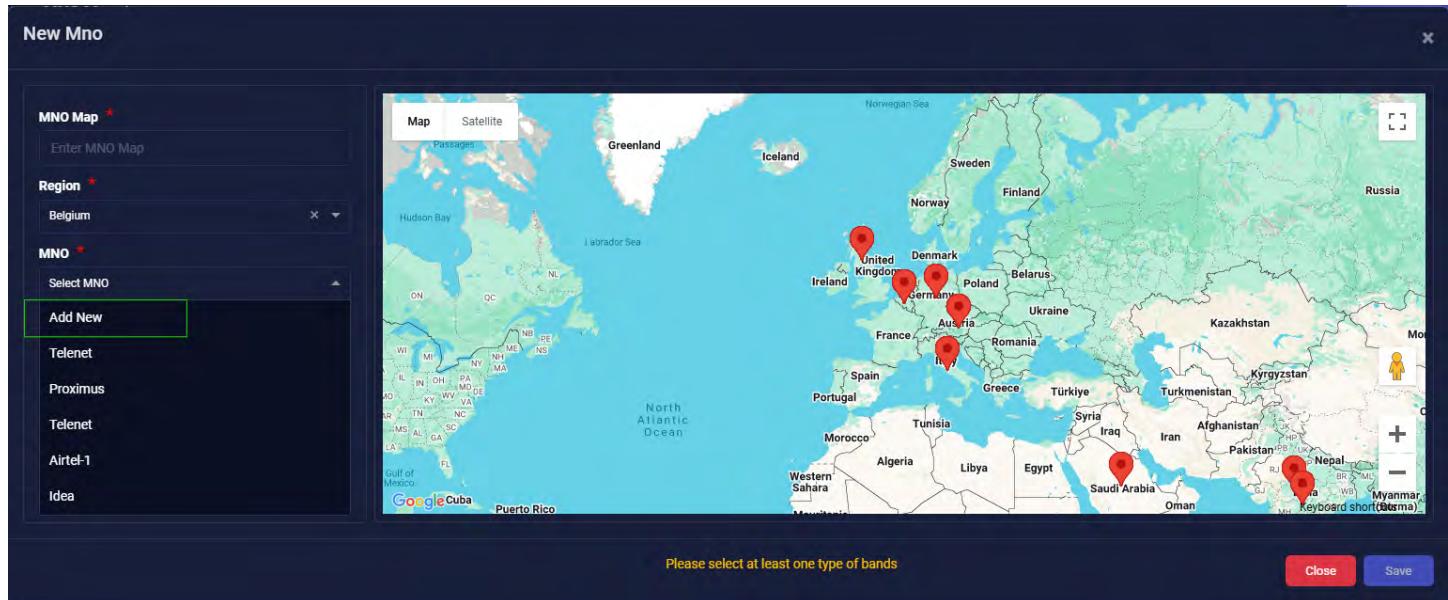
12. The user can Add a new MNO for a particular region by selecting “Add New” under region drop down



13. When the User selects "Add New" a new pop-up window will be displayed where the user can configure the Region, MNO, MCC, MNC and the respective bands on 4G,5G and NSA 5G. To save the MNO the user must click on Save button



14. The user can also configure a new MNO for a region by clicking on “Add New” under MNO dropdown



15. When the User selects “Add New” a new pop-up window will be displayed where the user can configure the MNO under the already selected region, MCC, MNC and the respective bands on 4G,5G and NSA 5G. To save the MNO the user must click on Save button

Add New MNO

Region *
Belgium

MNO *
Enter Mno
MNO is required.

MCC *
Enter MCC

MNC *
Enter MNC

4G Bands: *
Add 4G bands (numbers only)...

5G Bands: *
Add 5G bands (numbers only)...

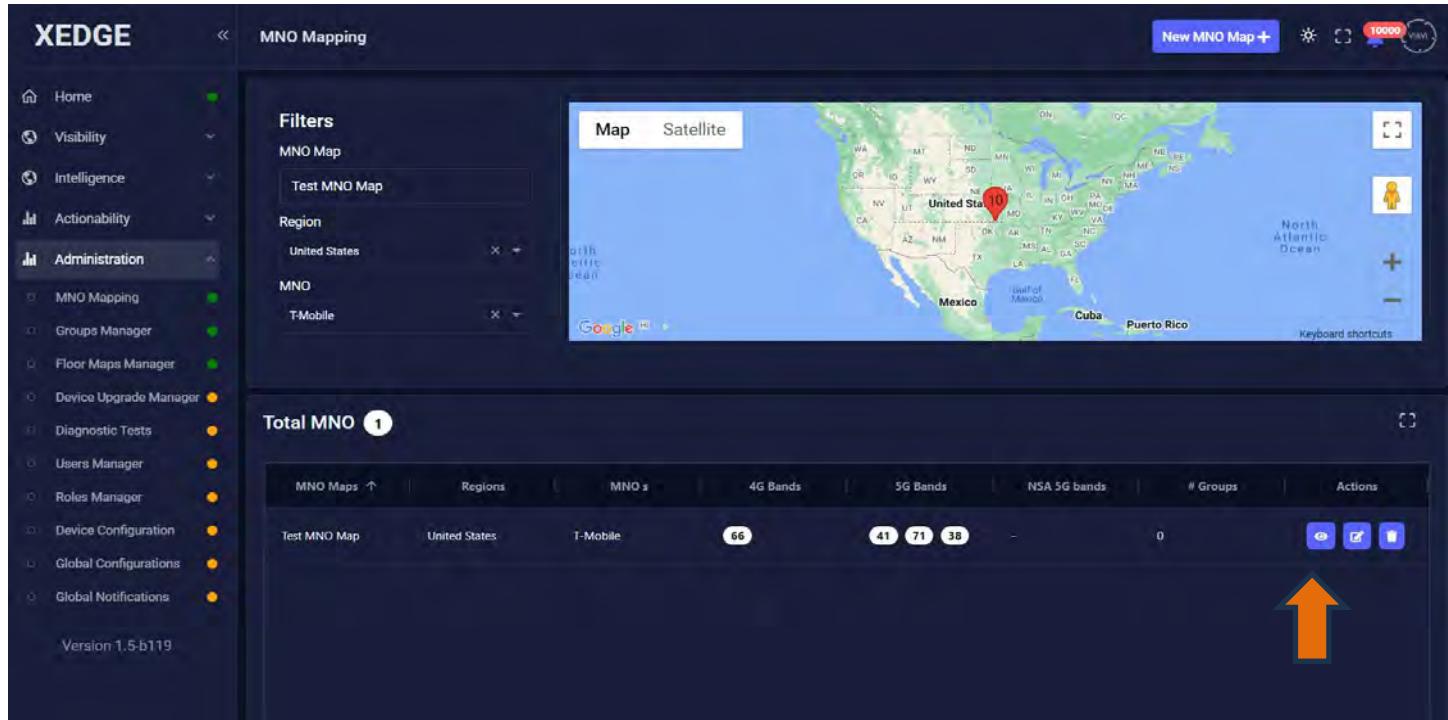
NSA 5G Bands: *
Add NSA 5G bands (numbers only)...

Save **Cancel**

Editing an MNO map

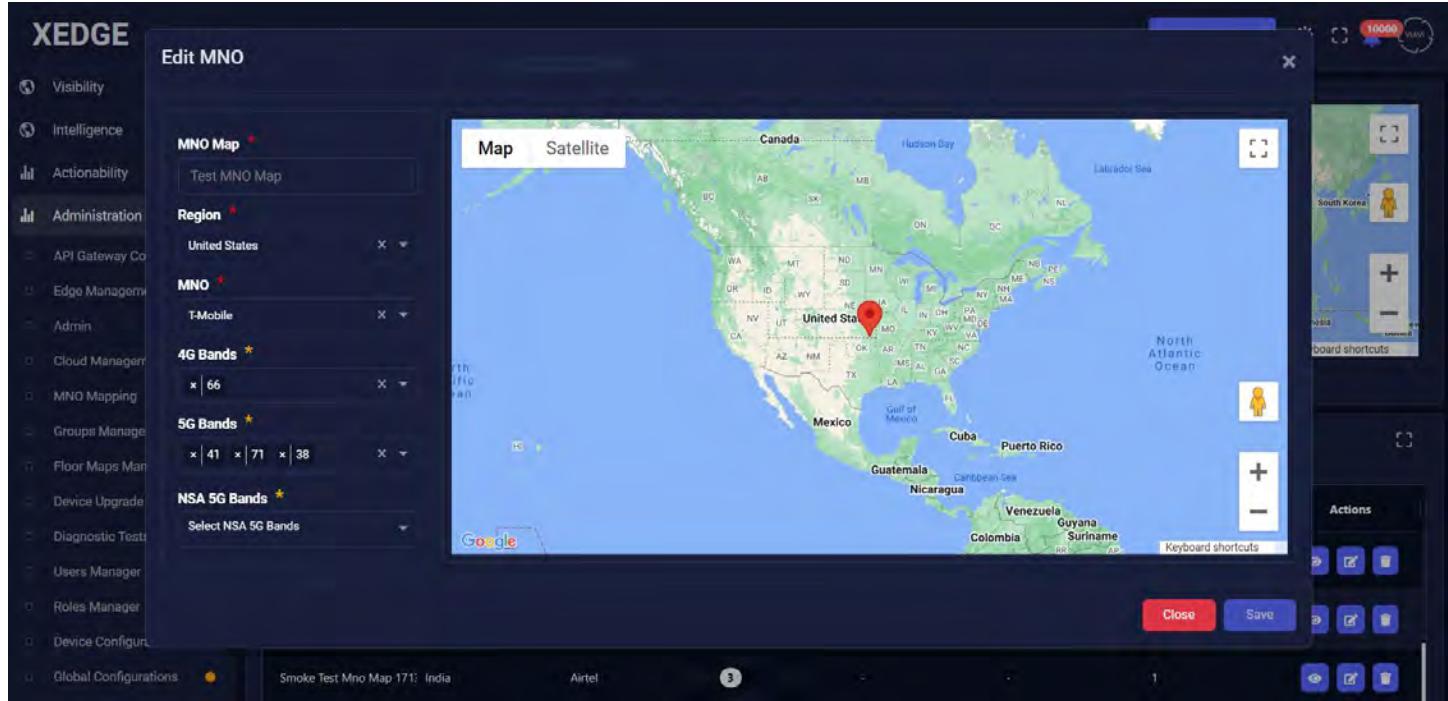
Complete the following steps to edit an existing MNO map:

1. Navigate to the Administration > MNO mapping page.
2. View the list of all existing MNOs. Use the Filters to find your MNO map.
3. Select the MNO map that you need to edit and click the **Edit** icon.



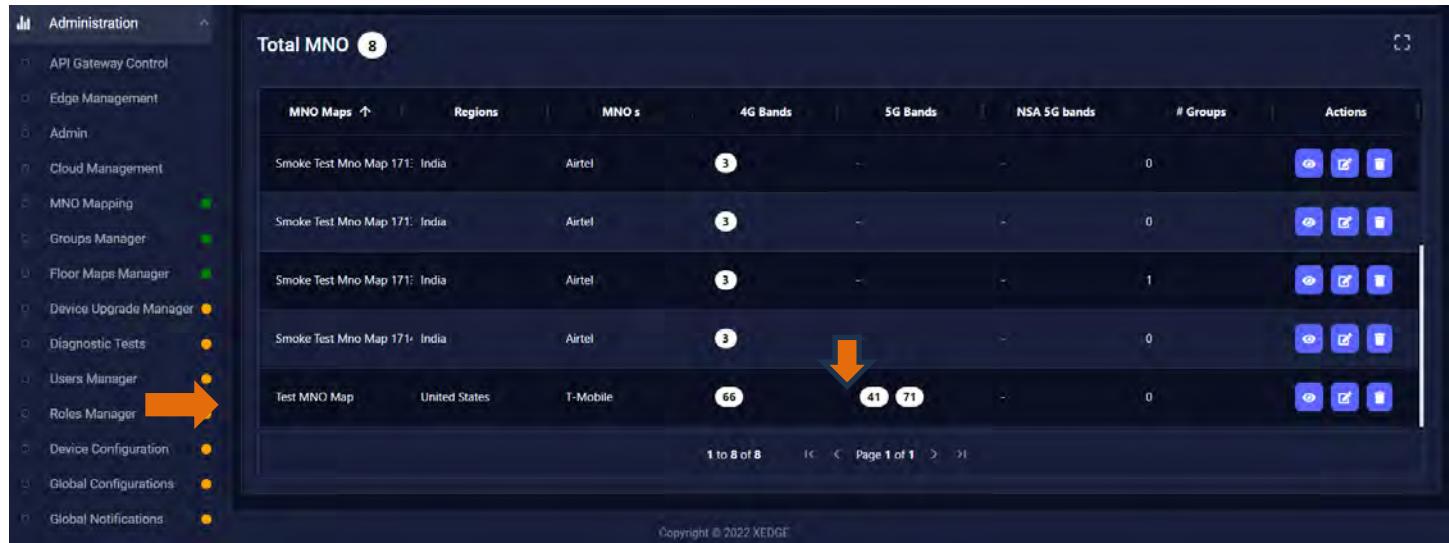
The screenshot shows the XEDGE MNO Mapping interface. On the left, a sidebar lists various administration modules. The main area displays a map of the United States with a red dot indicating a specific location. Below the map is a table titled 'Total MNO' with one entry. The table includes columns for MNO Maps, Regions, MNOs, 4G Bands, 5G Bands, NSA 5G bands, # Groups, and Actions. The 'Actions' column contains three icons: a blue square, a green square, and a red square. An orange arrow points to the red square icon. The top right corner of the interface shows a '10000' value and a 'View' button.

4. Edit the page by removing one of the 5G bands and click “Save.”



The screenshot shows the 'Edit MNO' dialog box. It includes fields for MNO Map (Test MNO Map), Region (United States), MNO (T-Mobile), 4G Bands (66), 5G Bands (41, 71, 38), and NSA 5G Bands (Select NSA 5G Bands). The bottom right of the dialog has 'Close' and 'Save' buttons. An orange arrow points to the 'Save' button. The background shows the XEDGE interface with a map of the United States and a sidebar with various administration modules.

5. View results.



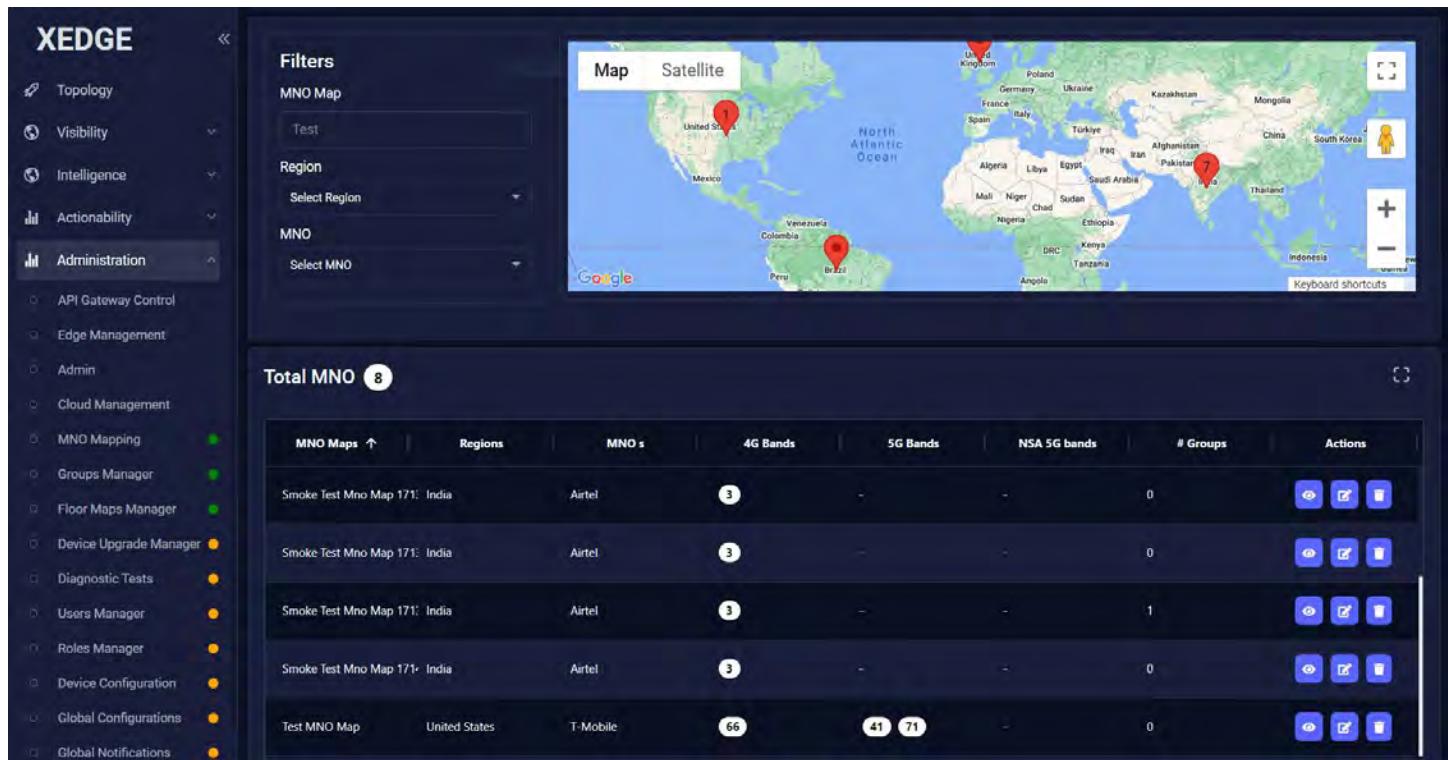
The screenshot shows the XEDGE Controller User Guide interface. The left sidebar is titled 'Administration' and lists various management modules: API Gateway Control, Edge Management, Admin, Cloud Management, MNO Mapping, Groups Manager, Floor Maps Manager, Device Upgrade Manager, Diagnostic Tests, Users Manager, Roles Manager (highlighted with an orange arrow), Device Configuration, Global Configurations, and Global Notifications. The main content area is titled 'Total MNO 8' and displays a table of MNOs. The table columns are: MNO Maps (sorted by name), Regions, MNOs, 4G Bands, 5G Bands, NSA 5G bands, # Groups, and Actions. The data rows are: 'Smoke Test Mno Map 171: India' (Airtel, 3, 0, 0, 0, 0, 0, Actions), 'Smoke Test Mno Map 171: India' (Airtel, 3, 0, 0, 0, 0, 0, Actions), 'Smoke Test Mno Map 171: India' (Airtel, 3, 0, 0, 1, 0, 0, Actions), 'Smoke Test Mno Map 171: India' (Airtel, 3, 0, 0, 0, 0, 0, Actions), and 'Test MNO Map' (United States, T-Mobile, 66, 41, 71, 0, 0, Actions). The '4G Bands' column for the 'Test MNO Map' row is highlighted with an orange arrow. The bottom of the page includes a footer with the text 'Copyright © 2022 XEDGE'.

MNO Maps	Regions	MNOs	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions		
Smoke Test Mno Map 171: India		Airtel	3	0	0	0			
Smoke Test Mno Map 171: India		Airtel	3	0	0	0			
Smoke Test Mno Map 171: India		Airtel	3	0	1	0			
Smoke Test Mno Map 171: India		Airtel	3	0	0	0			
Test MNO Map	United States	T-Mobile	66	41	71	0			

Deleting an MNO map

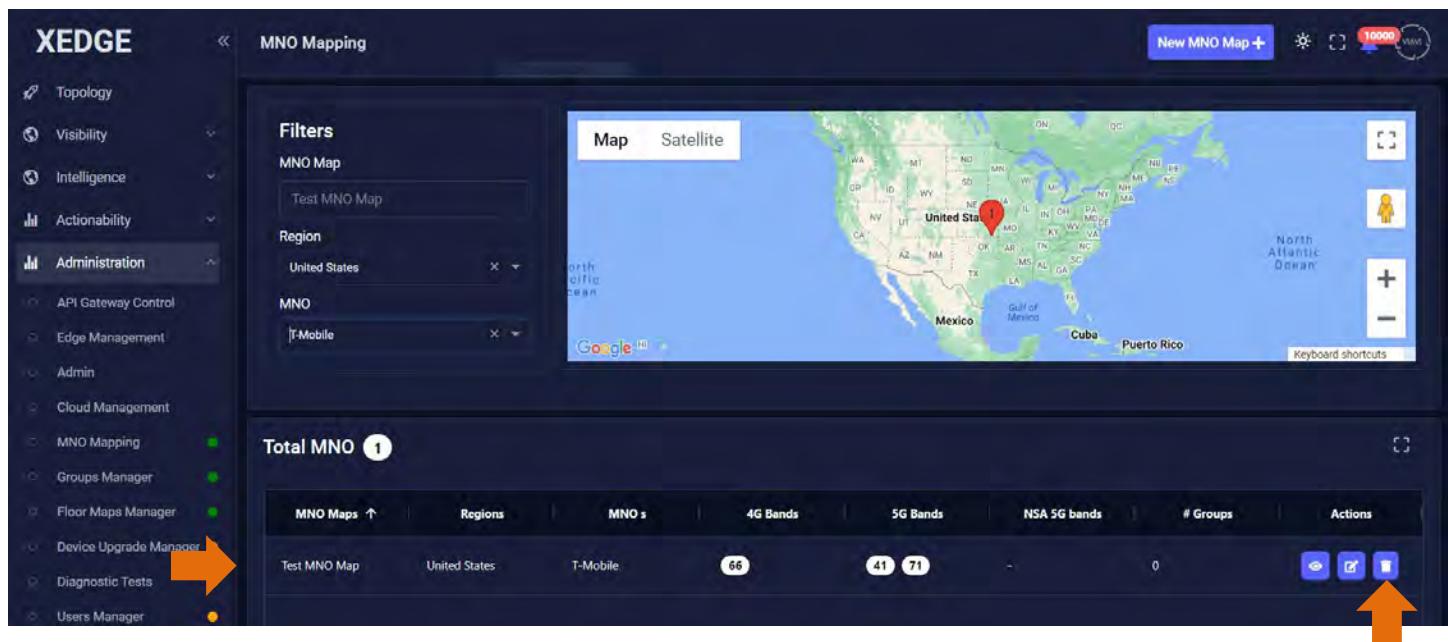
Complete the following steps to delete an existing MNO map:

1. Navigate to the Administration | MNO mapping page.
2. View the list of all existing MNOs.
3. Use the search function to find your MNO.



MNO Maps	Regions	MNOs	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions
Smoke Test Mno Map 171: India		Airtel	3	-	-	0	  
Smoke Test Mno Map 171: India		Airtel	3	-	-	0	  
Smoke Test Mno Map 171: India		Airtel	3	-	-	1	  
Smoke Test Mno Map 171: India		Airtel	3	-	-	0	  
Test MNO Map	United States	T-Mobile	66	41 71	-	0	  

4. Select the MNO map that you need to remove and click the **Delete** icon.



MNO Maps	Regions	MNOs	4G Bands	5G Bands	NSA 5G bands	# Groups	Actions
Test MNO Map	United States	T-Mobile	66	41 71	-	0	  

5. You should see this message displayed.

The screenshot shows the XEDGE Controller's MNO Mapping interface. On the left is a navigation sidebar with various management options. The main area displays a map of the United States with a red dot indicating a location. A confirmation dialog box is overlaid on the interface, asking "Do you want to delete 'Test MNO Map'?". The dialog has two buttons: "Cancel" (red) and "Delete" (blue). The map interface includes tabs for "Map" and "Satellite", and various controls like "New MNO Map +", "Keyboard shortcuts", and zoom buttons.

6. Click "Delete".
7. View the results.

The screenshot shows the XEDGE Controller's MNO Mapping interface after the deletion. The navigation sidebar is visible on the left. The main area now shows a map of the United States with a red dot. The confirmation dialog is no longer present. The "Total MNO" count is now 0. Below the map, a table header is visible with columns for "MNO Maps", "Regions", "MNOs", "4G Bands", "5G Bands", "NSA 5G bands", "# Groups", and "Actions". A message "No Records Found" is displayed in the center of the table area.

Chapter 4 Group Manager

This chapter explains the procedure to access the Group Manager.

Group Manager is the feature that acts as a middle layer for making connections between modems and templates.

A group consists of modems and a template.

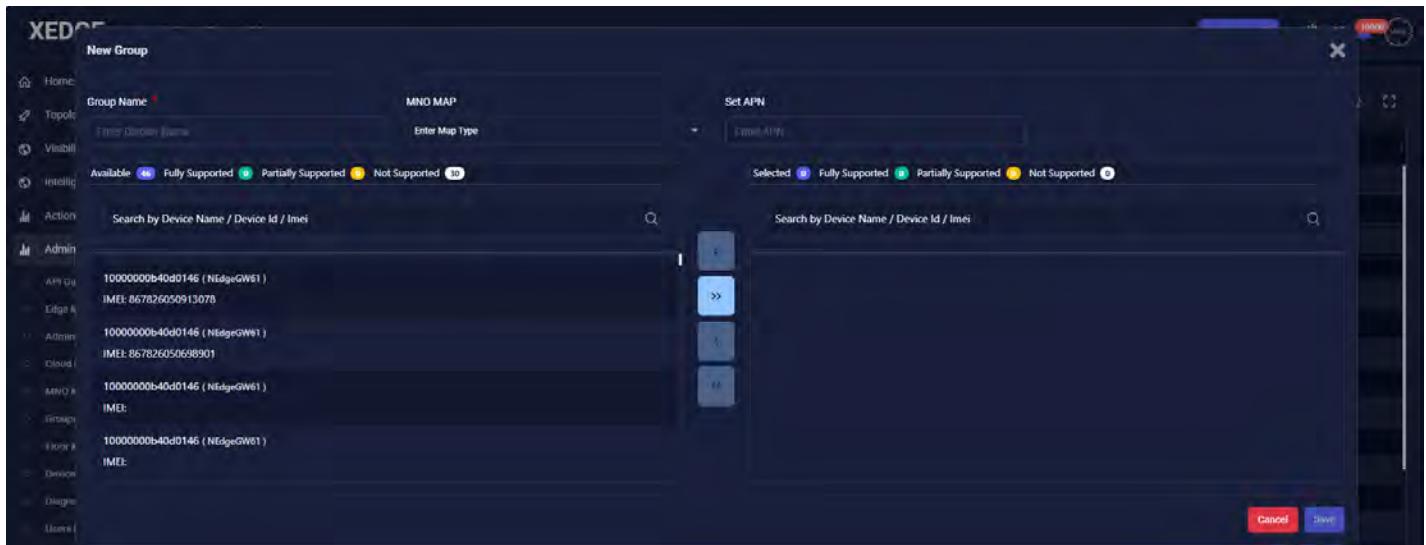
Modems that are not in any of the groups would be allowed to map with templates through a group.

Complete the following steps to create a new group:

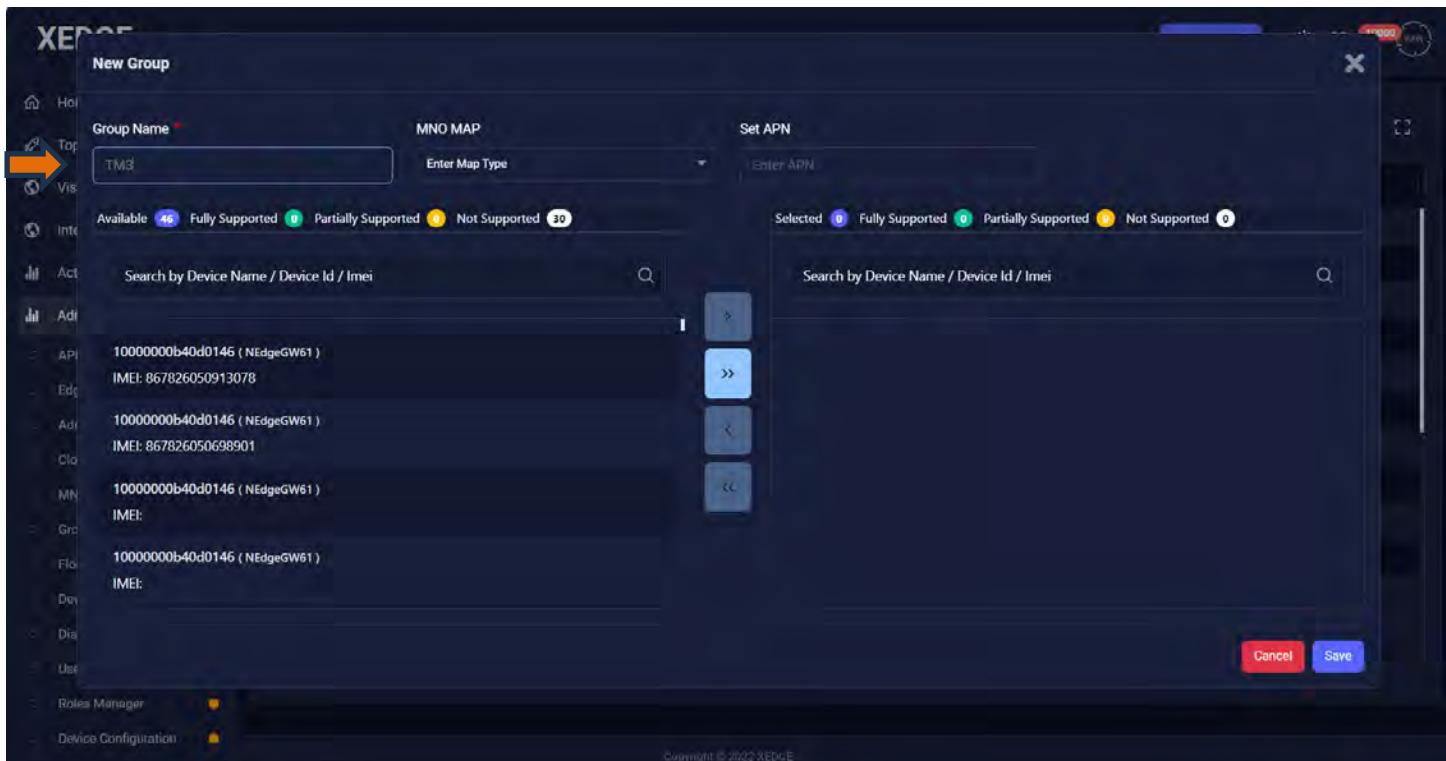
1. Navigate to Administration > Group Manager page.

Groups	Modems Count	Applied MNO Map	Actions
1chegiot	1	TD Mno Map 4G All Bands	[Actions]
8che	2	Airtel All Bands	[Actions]
8che 2	2	Airtel All Bands	[Actions]
Airtel All Bands_UCDCgcPc5Xf1732769194613	0	Airtel All Bands	[Actions]
Airtel All Bands_dCEba4SPf2k8t1732769178407	0	Airtel All Bands	[Actions]
Smoke Test Group 1704271533000	0	TD Mno Map 4G One Band	[Actions]
Smoke Test Group 1709531873814	0	TD Mno Map 4G One Band	[Actions]
Smoke Test Group 1709531957850	0	TD Mno Map 4G One Band	[Actions]
Smoke Test Mno Map 1730895091527_1Ngf64x0G06173271091557	0	Smoke Test Mno Map 1730895091527	[Actions]
Smoke Test Mno Map 1730898767680_290yL7MaD0N1732710509618	1	Smoke Test Mno Map 1730898767680	[Actions]
TD Mno Map 4G All Bands_B8kompFaNG84173199772439	1	TD Mno Map 4G All Bands	[Actions]
TD Mno Map 4G All Bands_9Wn58X0TpG2281732207639491	0	TD Mno Map 4G All Bands	[Actions]
TD Mno Map 4G All Bands_b3PbyseTQ8E173199781576	1	TD Mno Map 4G All Bands	[Actions]

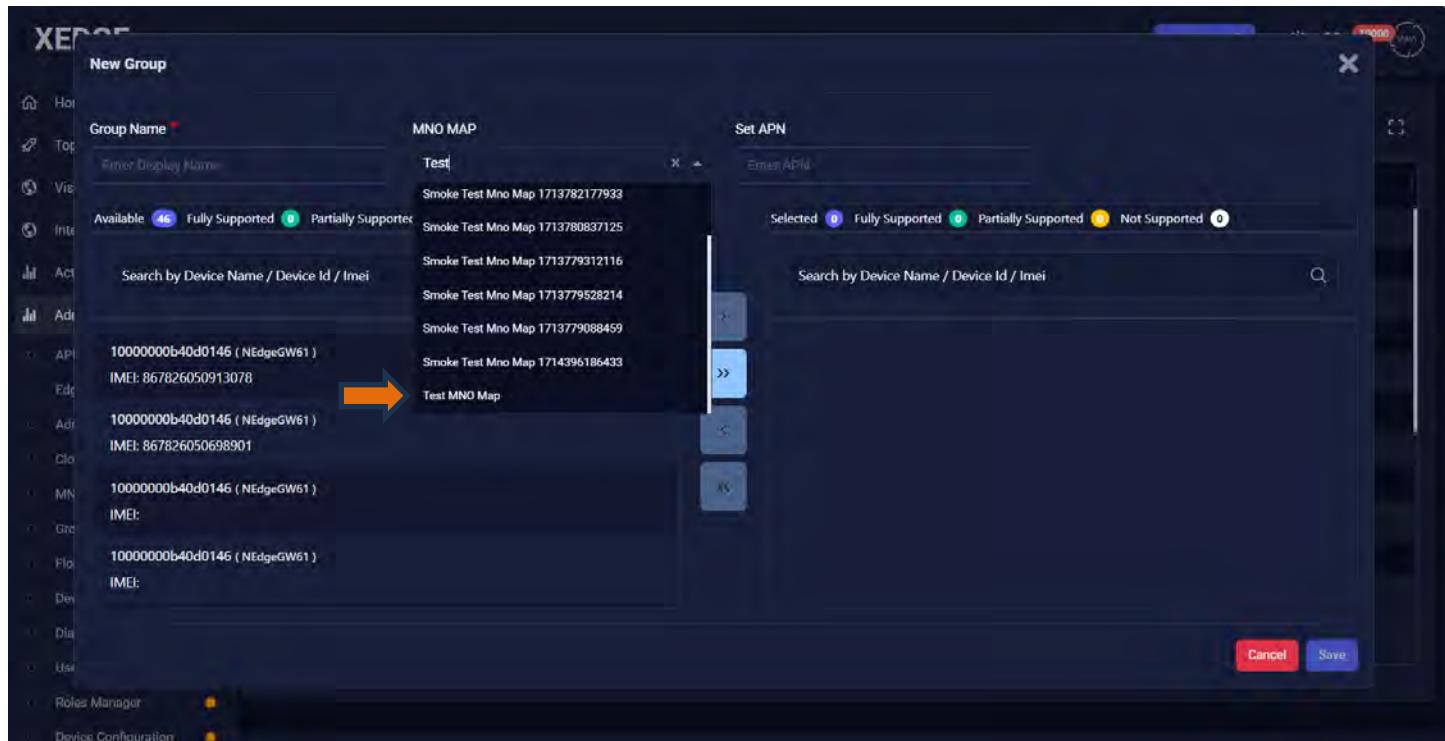
2. To create a new group, click on the **New Group** button at the top of the screen. This brings up a pop up window.



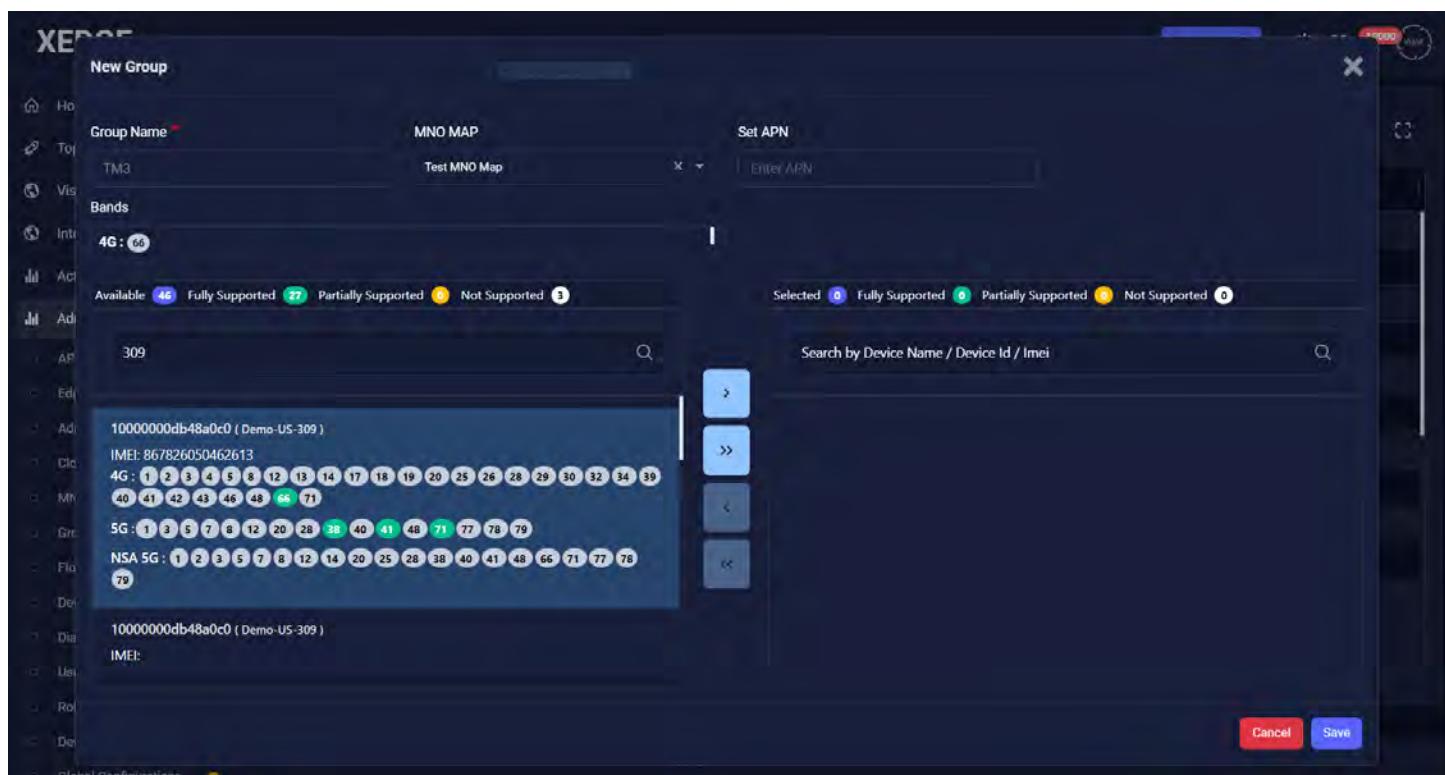
3. Click in the “Group name” box and enter a group name.



4. Click on the “MNO Map” dropdown menu and select the map created earlier.



Click in the ‘Search by name’ box to search for a device and select it.



Highlight the device and then click the '>>' button to move the selected modem to the right column.

New Group

Group Name *: TM3

MNO MAP: Test MNO Map

Set APN: Enter APN

Bands

4G: 66

Available: 47 Fully Supported 28 Partially Supported 0 Not Supported 3

Selected: 0 Fully Supported 0 Partially Supported 0 Not Supported 0

Search by Device Name / Device Id / Imei

309

10000000db48a0c0 (Demo-US-309)
IMEI: 867826050462613
4G: 1 2 3 4 5 8 12 13 14 17 18 19 20 25 26 28 29
30 32 34 39 40 41 42 43 46 48 66 71
5G: 1 3 5 7 8 12 20 28 38 40 41 48 71 77 78 79
NSA 5G: 1 2 3 5 7 8 12 14 20 25 28 38 40 41 48
66 71 77 78 79

10000000db48a0c0 (Demo-US-309)
IMEI:

TM3

Test MNO Map

Enter APN

Bands

4G: 66

Available: 46 Fully Supported 27 Partially Supported 0 Not Supported 3

Selected: 1 Fully Supported 1 Partially Supported 0 Not Supported 0

Search by Device Name / Device Id / Imei

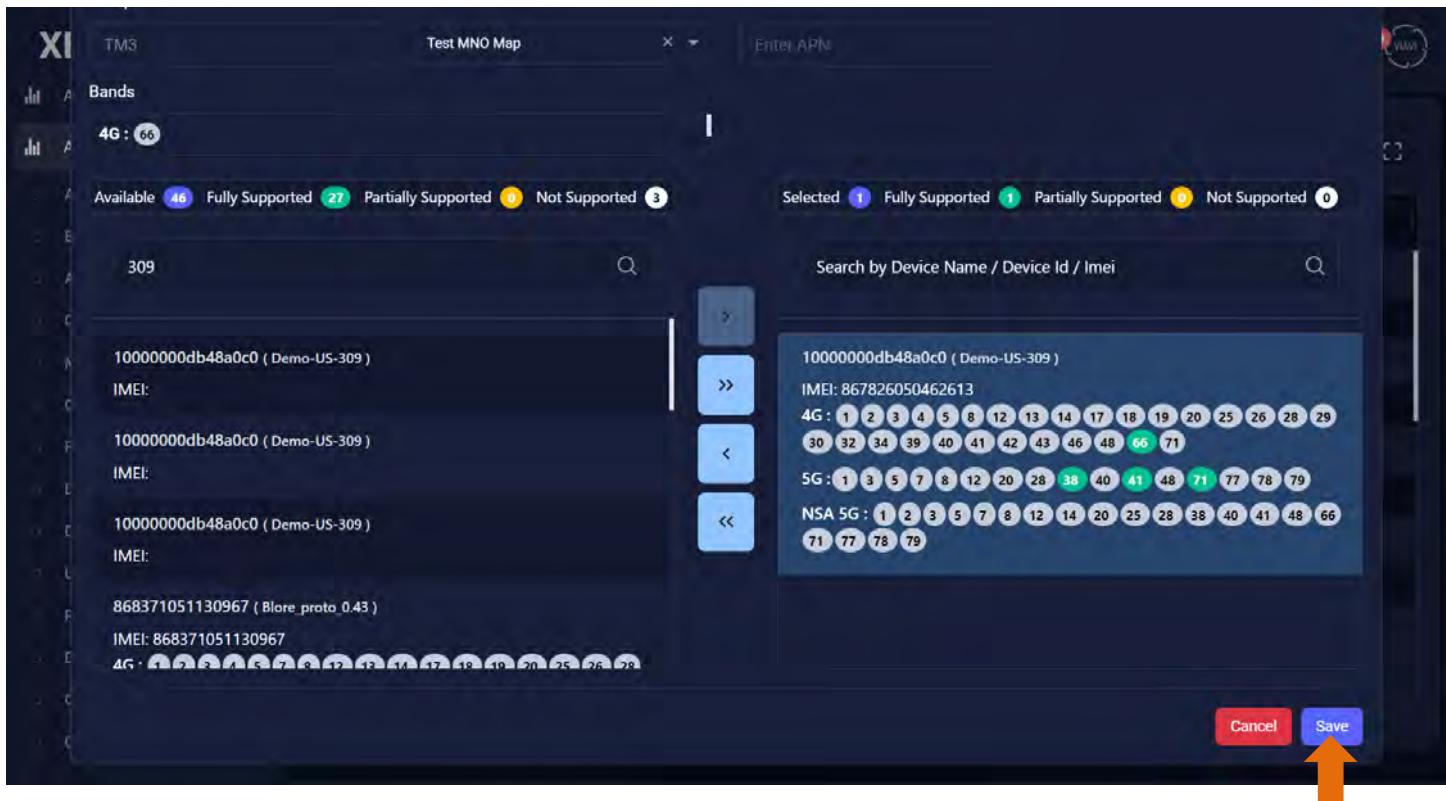
309

10000000db48a0c0 (Demo-US-309)
IMEI:
10000000db48a0c0 (Demo-US-309)
IMEI:
10000000db48a0c0 (Demo-US-309)
IMEI:
868371051130967 (Blore_proto_0.43)
IMEI: 868371051130967
4G: 1 2 3 4 5 7 8 12 13 14 17 18 19 20 25 26 28 29

10000000db48a0c0 (Demo-US-309)
IMEI: 867826050462613
4G: 1 2 3 4 5 8 12 13 14 17 18 19 20 25 26 28 29
30 32 34 39 40 41 42 43 46 48 66 71
5G: 1 3 5 7 8 12 20 28 38 40 41 48 71 77 78 79
NSA 5G: 1 2 3 5 7 8 12 14 20 25 28 38 40 41 48 66
71 77 78 79

Cancel Save

5. Click "Save"



6. View results.

The screenshot shows the 'Groups Manager' interface. At the top, there is a 'Groups Manager' title, a 'New Group +' button, and a search bar 'Search with Group or Mno M'. Below this is a table titled 'Total Groups 36'. The table has columns for 'Groups', 'Modems Count', 'Applied MNO Map', and 'Actions'. Each row contains a group name, its modem count, the applied MNO map, and a set of three icons for edit, delete, and other actions. An orange arrow points to the search bar at the top right of the table area.

Groups	Modems Count	Applied MNO Map	Actions
Smoke Test Group 1713166199305	0	-	eye edit trash
Smoke Test Group 1713166338014	0	TD Mno Map 4G One Band	eye edit trash
Smoke Test Mno Map 1713782177933_QTgjTXDa5A8m	0	Smoke Test Mno Map 1713782177933	eye edit trash
T41	0	T41	eye edit trash
TD Test Group 4G All Bands Lock	0	TD Mno Map 4G All Bands	eye edit trash
TD Test Group 4G One Band Lock	3	TD Mno Map 4G One Band	eye edit trash
TM3	1	Test MNO Map	eye edit trash
Test_q0WhLGbEloSa1712332732132	0	Test	eye edit trash
chennai proto 2	0	Airetl India Band 40	eye edit trash

7. View band locking results. Click on the view button.

Groups Manager

Total Groups 36

Groups ↑ **Modems Count** **Applied MNO Map** **Actions**

Groups	Modems Count	Applied MNO Map	Actions
Smoke Test Group 1713166199305	0	-	
Smoke Test Group 1713166338014	0	TD Mno Map 4G One Band	
Smoke Test Mno Map 1713782177933_QTgjTXDa5A8m	0	Smoke Test Mno Map 1713782177933	
T41	0	T41	
TD Test Group 4G All Bands Lock	0	TD Mno Map 4G All Bands	
TD Test Group 4G One Band Lock	3	TD Mno Map 4G One Band	
TM3	1	Test MNO Map	
Test_q0WhLGbEloSa1712332732132	0	Test	
chennai proto 2	0	Airetel India Band 40	

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XEDGE

New AT - Details

Visibility

Group Name : New AT

4G Bands : 66

MNO Map : AT2

5G Bands : 71

Region : United States

NSA 5G Bands :

Intelligence

MNO : AT&T

Actionability

Devices

Device Name ↑	IMEI	Status	Device 4G Bands	Device 5G Bands
Demo-UK-309	867826050462613	Applied	1 2 3 4 5 8 12 13 14 17 18 19 20 25 26 28 29 30 32 34 39 40 41 42 43 46 48 66 71	1 3 5 7 8 12 20 28 41 48 71 77 78 79

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Administration

- API Gateway
- Edge Manager
- Admin
- Cloud Manager
- MNO Mapping
- Groups Manager
- Floor Maps Manager
- Device Upgrade
- Diagnostic Test
- Users Manager
- Roles Manager

Close

8. Explanation of color codes on the “New Group” page:

- Blue means these are the available XEDGE modems that can be assigned to a group. In this case 44.

New Group

Group Name: MNO MAP: Set APN:

Available: 44 Fully Supported: 0 Partially Supported: 0 Not Supported: 43

Selected: 0 Fully Supported: 0 Partially Supported: 0 Not Supported: 0

Search by Device Name / Device Id / Imei:

Search by Device Name / Device Id / Imei:

Available Modems (44 total):

- 10000000fde7c122 (XEdge2.0 -Test device)
 - IMEI: 867826050652379
 - 4G: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 34, 38, 39, 40, 41, 42, 43, 46, 49, 66, 71
 - 5G: 1, 2, 3, 5, 7, 8, 12, 14, 20, 25, 28, 38, 40, 41, 48, 66, 71, 77, 78, 79
 - NSA 5G: 1, 2, 3, 5, 7, 8, 12, 14, 20, 25, 28, 38, 40, 41, 48, 66, 71, 77, 78, 79
- 10000000b55e6fac (NEdgeGW318)
 - IMEI: 867826050474931
 - 4G: 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 34, 38, 39, 40, 41, 42, 43, 46, 49, 66, 71

Selected Modems (0 total):

Cancel Save

- Green means Fully Supported". This means all bands are supported for the number of modems in this list. In this case, 4G band 66 is supported by the 28 XEDGE modems in the list.

New Group

Group Name: MNO MAP: Set APN:

Available: 47 Fully Supported: 28 Partially Supported: 0 Not Supported: 3

Selected: 0 Fully Supported: 0 Partially Supported: 0 Not Supported: 0

Search by Device Name / Device Id / Imei:

Available Modems (47 total):

- 309
 - IMEI: 867826050462613
 - 4G: 1, 2, 3, 4, 5, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 34, 39, 40, 41, 42, 43, 46, 48, 66, 71
 - 5G: 1, 3, 5, 7, 8, 12, 20, 28, 38, 40, 41, 48, 71, 77, 78, 79
 - NSA 5G: 1, 2, 3, 5, 7, 8, 12, 14, 20, 25, 28, 38, 40, 41, 48, 66, 71, 77, 78, 79
- 10000000db48a0c0 (Demo-US-309)
 - IMEI: 867826050462613
 - 4G: 1, 2, 3, 4, 5, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 29, 30, 32, 34, 39, 40, 41, 42, 43, 46, 48, 66, 71
 - 5G: 1, 3, 5, 7, 8, 12, 20, 28, 38, 40, 41, 48, 71, 77, 78, 79
 - NSA 5G: 1, 2, 3, 5, 7, 8, 12, 14, 20, 25, 28, 38, 40, 41, 48, 66, 71, 77, 78, 79

Selected Modems (0 total):

Cancel Save

Orange means “Partially Supported”. This means 5G bands 41 and 71 are supported, but bands 260 and 261 are not supported by the 23 XEDGE modems in the list.

Group Name:

MNO MAP: TM4

Set APN:

Bands:

Available: 61 Fully Supported, 8 Partially Supported, 23 Not Supported

Selected: 0 Fully Supported, 8 Partially Supported, 0 Not Supported

Search by Device Name / Device Id / Imei:

Buttons: Cancel, Save

- White means none of the 57 XEDGE modems in the list support 5G band 260.

Group Name:

MNO MAP: band260

Set APN:

Bands:

Available: 57 Fully Supported, 0 Partially Supported, 0 Not Supported

Selected: 0 Fully Supported, 0 Partially Supported, 0 Not Supported

Search by Device Name / Device Id / Imei:

Buttons: Cancel, Save

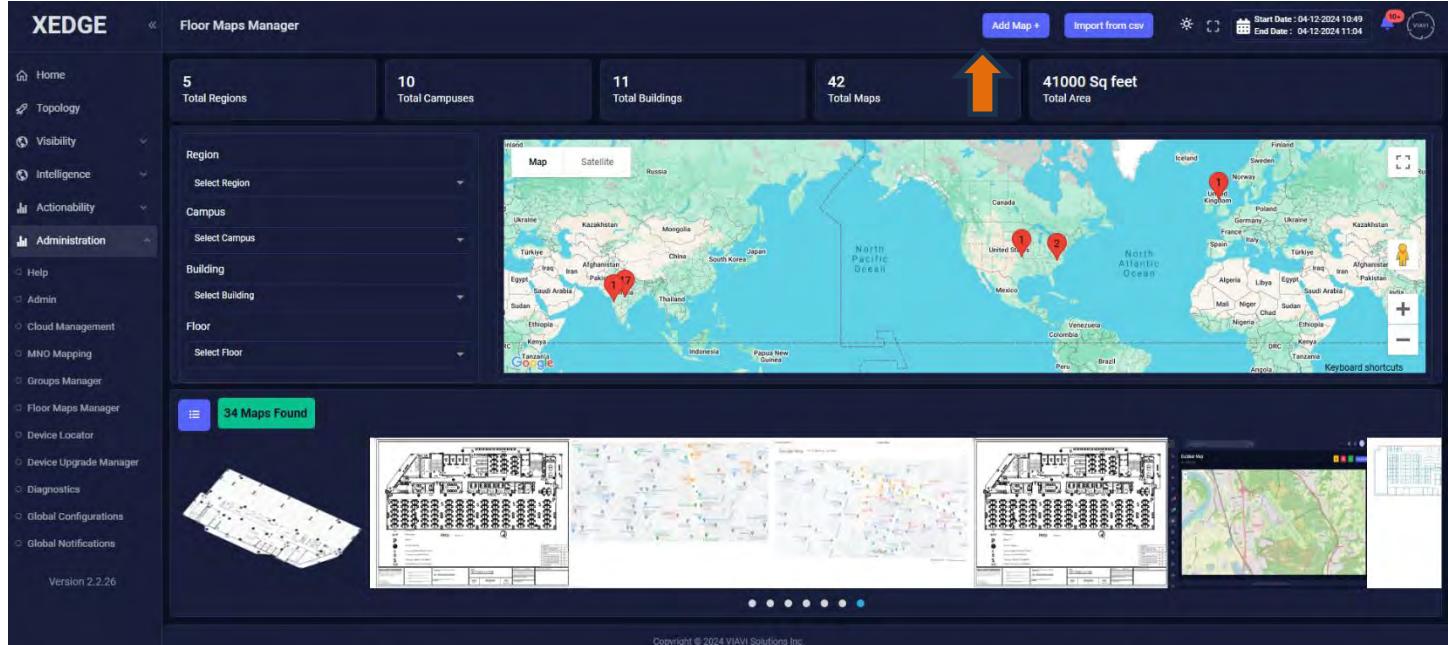
Chapter 5 Floor Map Manager

The “Floor Map Manager” is a feature that allows the user to upload a map of their building. This map will be used in conjunction with the “Live Walk Test” feature.

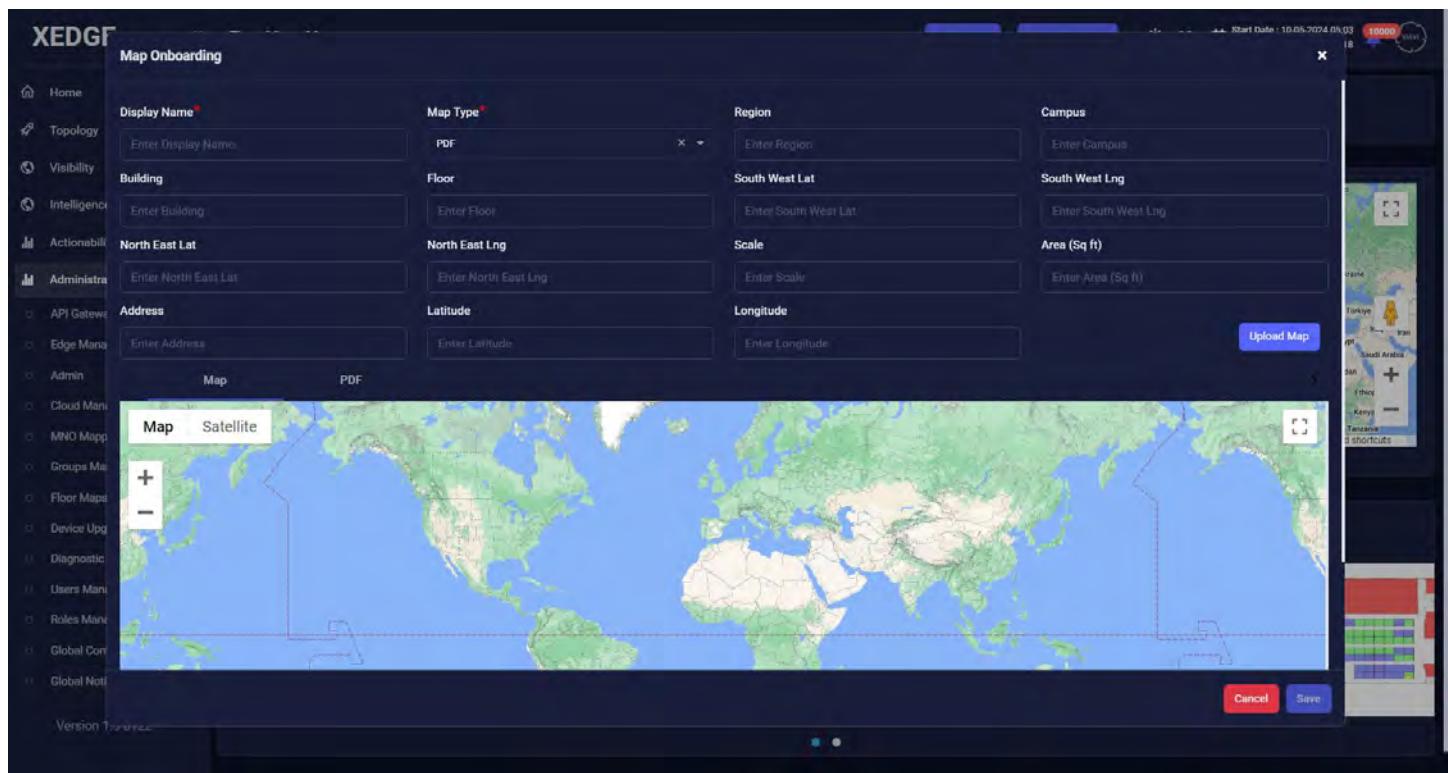
To access the floor map manager, Navigate to the “Floor Maps Manager” page under the Administration menu.

Perform the following steps to interact with maps.

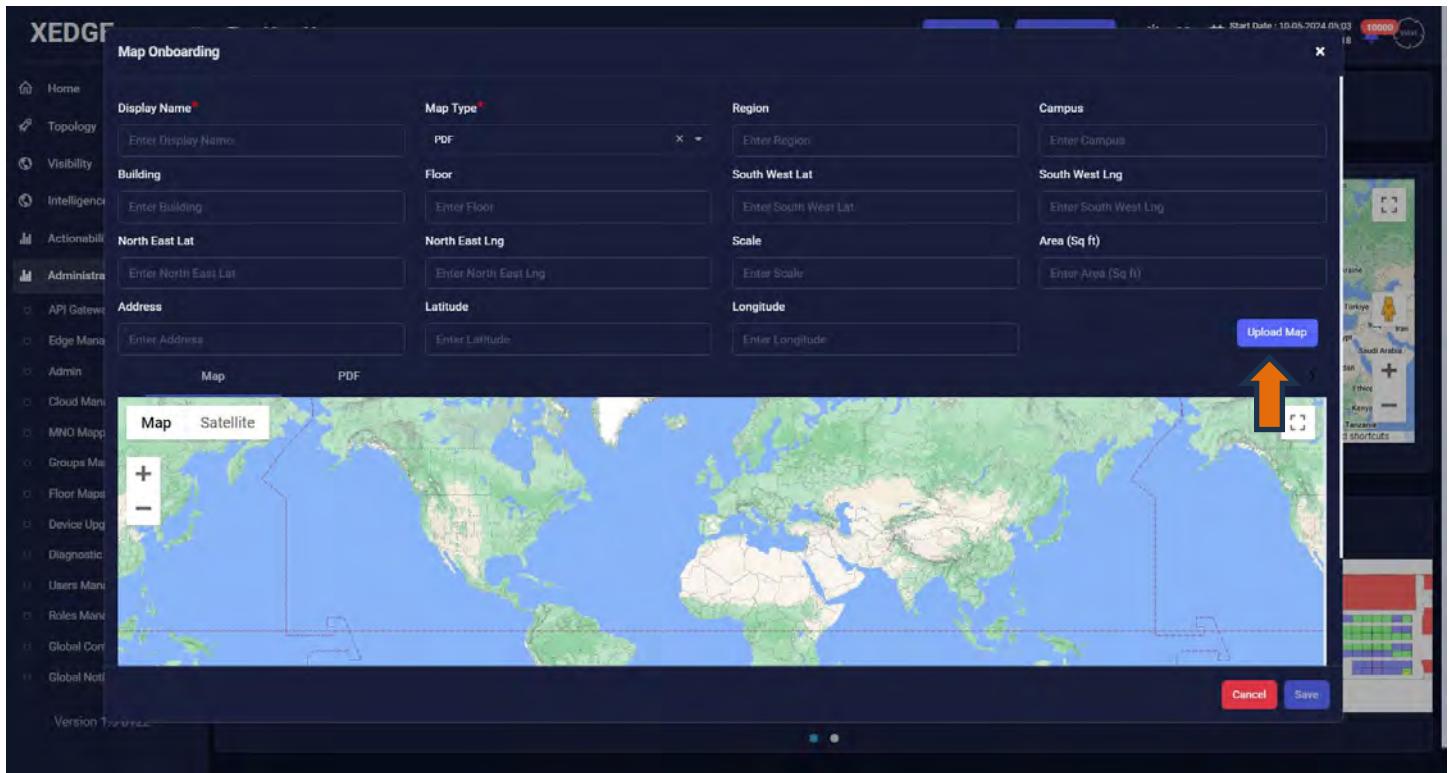
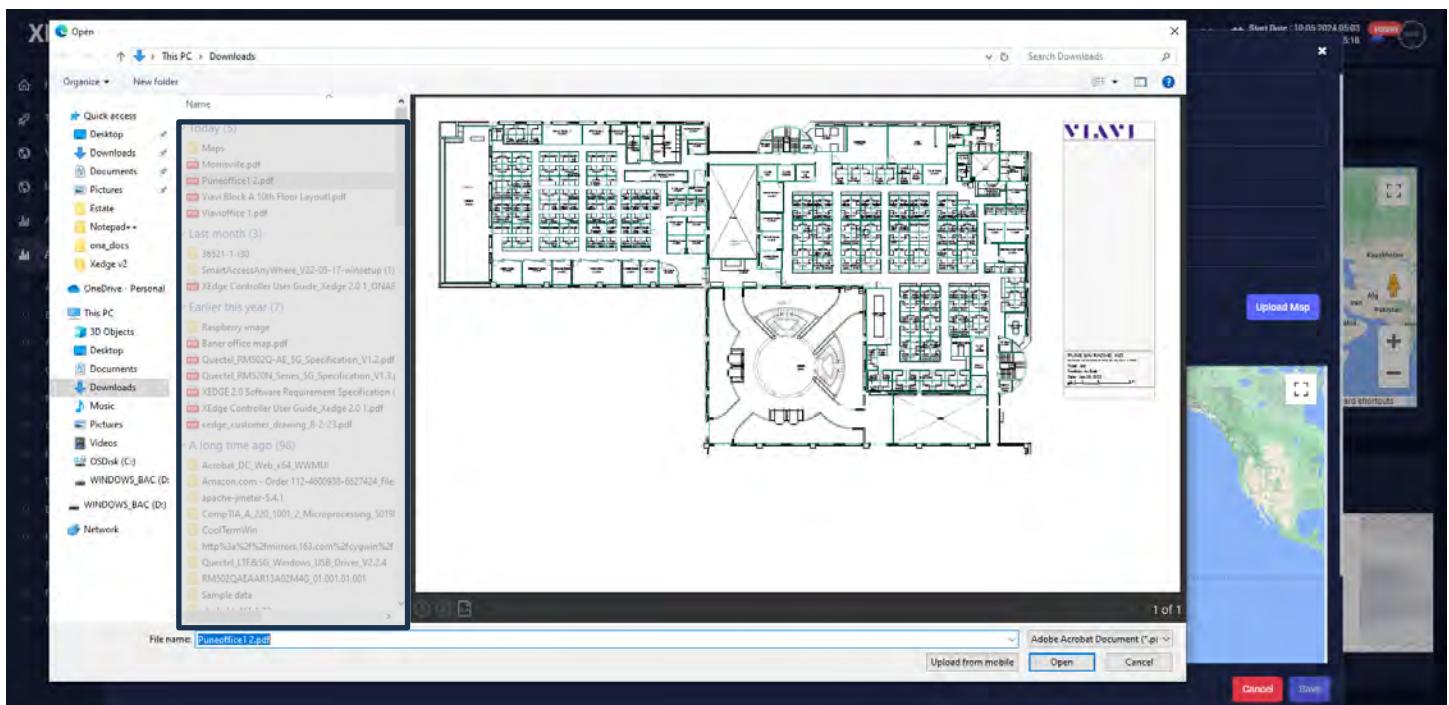
1. Click on the **Add Map** button.



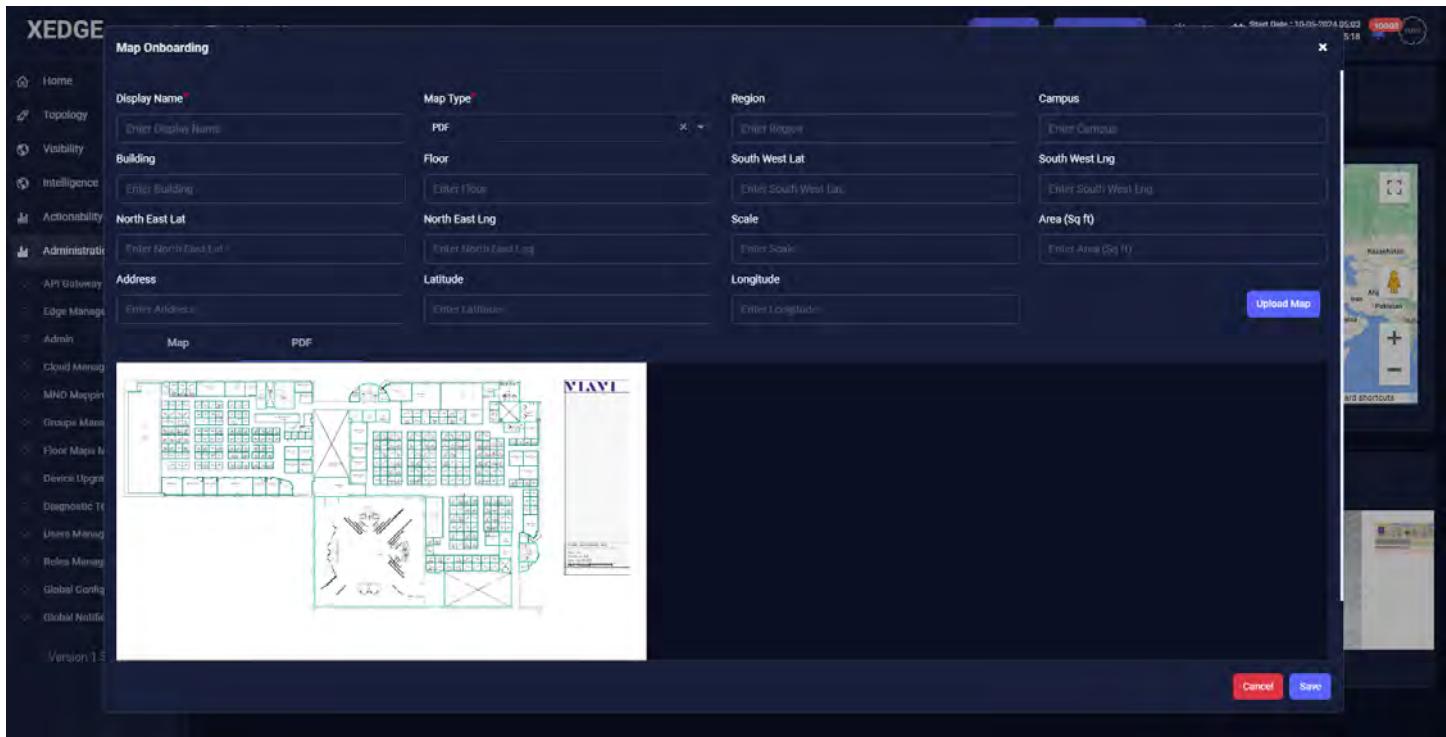
The screenshot shows the XEDGE Floor Maps Manager interface. The top navigation bar displays 'XEDGE' and 'Floor Maps Manager'. The header includes several statistics: 5 Total Regions, 10 Total Campuses, 11 Total Buildings, 42 Total Maps, and a total area of 41000 Sq feet. The main area features a world map with red location markers. Below the map, there are several thumbnail images of different floor plans and maps. On the left, a sidebar shows navigation links for Home, Topology, Visibility, Intelligence, Actionability, Administration, Help, Admin, Cloud Management, MNO Mapping, Groups Manager, Floor Maps Manager, Device Locator, Device Upgrade Manager, Diagnostics, Global Configurations, and Global Notifications. The sidebar also indicates 'Version 2.2.6'. The top right corner shows a timestamp: 'Start Date : 04-12-2024 10:49' and 'End Date : 04-12-2024 11:04'.



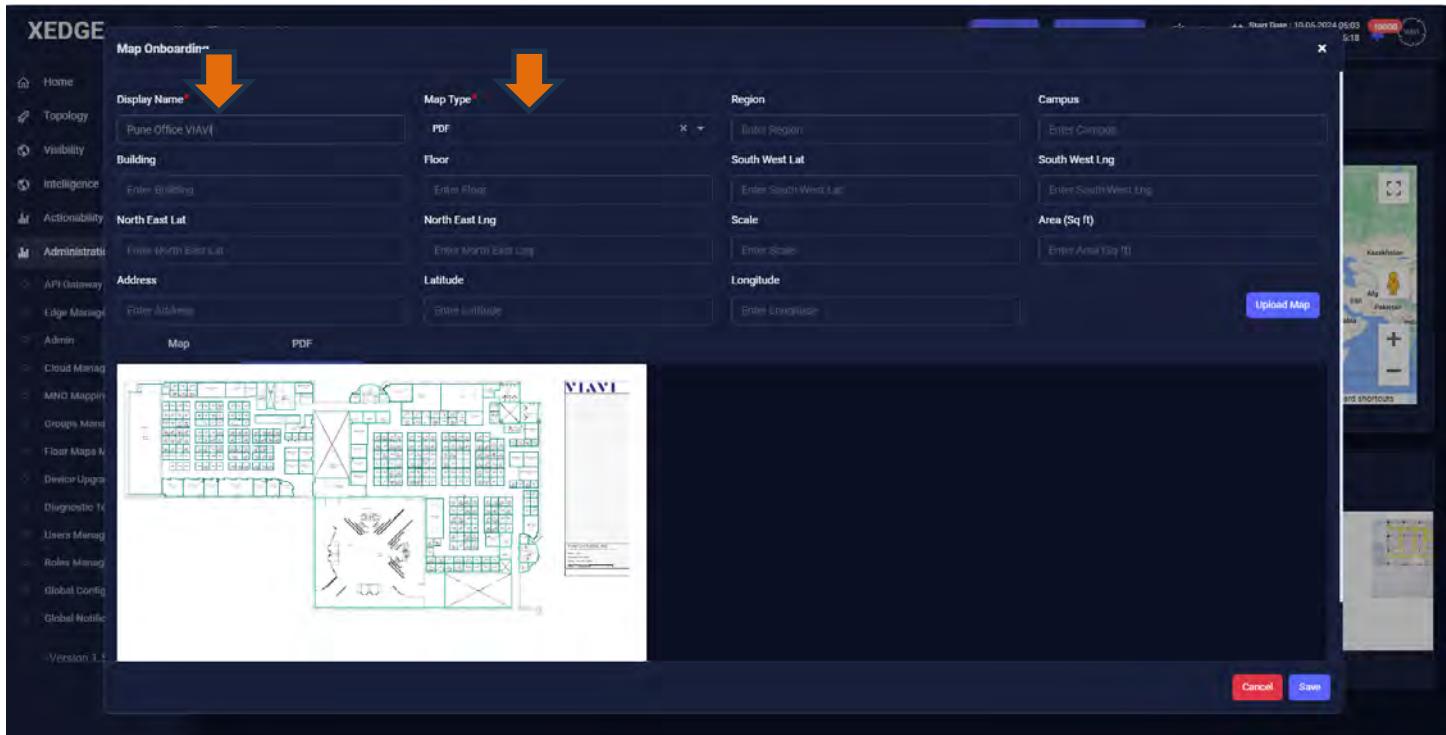
The screenshot shows the XEDGE Map Onboarding interface. The top navigation bar displays 'XEDGE' and 'Map Onboarding'. The form fields include 'Display Name' (with placeholder 'Enter Display Name'), 'Map Type' (set to 'PDF'), 'Region' (with placeholder 'Enter Region'), 'Campus' (with placeholder 'Enter Campus'), 'Building' (with placeholder 'Enter Building'), 'North East Lat' (with placeholder 'Enter North East Lat'), 'North East Lng' (with placeholder 'Enter North East Lng'), 'Scale' (with placeholder 'Enter Scale'), 'Area (Sq ft)' (with placeholder 'Enter Area (Sq ft)'), 'Address' (with placeholder 'Enter Address'), 'Latitude' (with placeholder 'Enter Latitude'), and 'Longitude' (with placeholder 'Enter Longitude'). Below the form is a world map with a red location marker. The bottom right of the form has 'Cancel' and 'Save' buttons. The left sidebar is identical to the one in the previous screenshot, showing the same navigation links and version information.

2. Click on **Upload Map**3. Select the map PDF that you want (for example, Pune office VIAVI) and click **Open**.

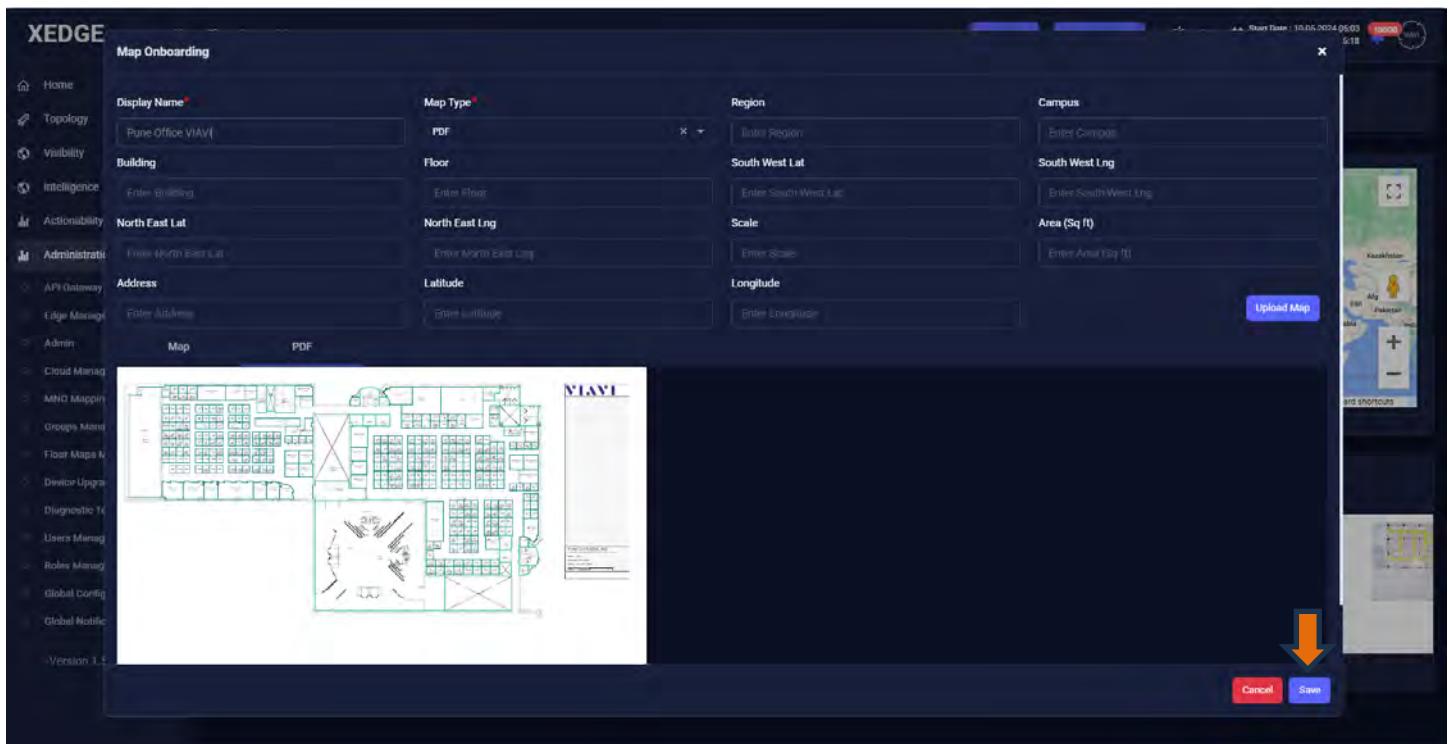
4. View results.



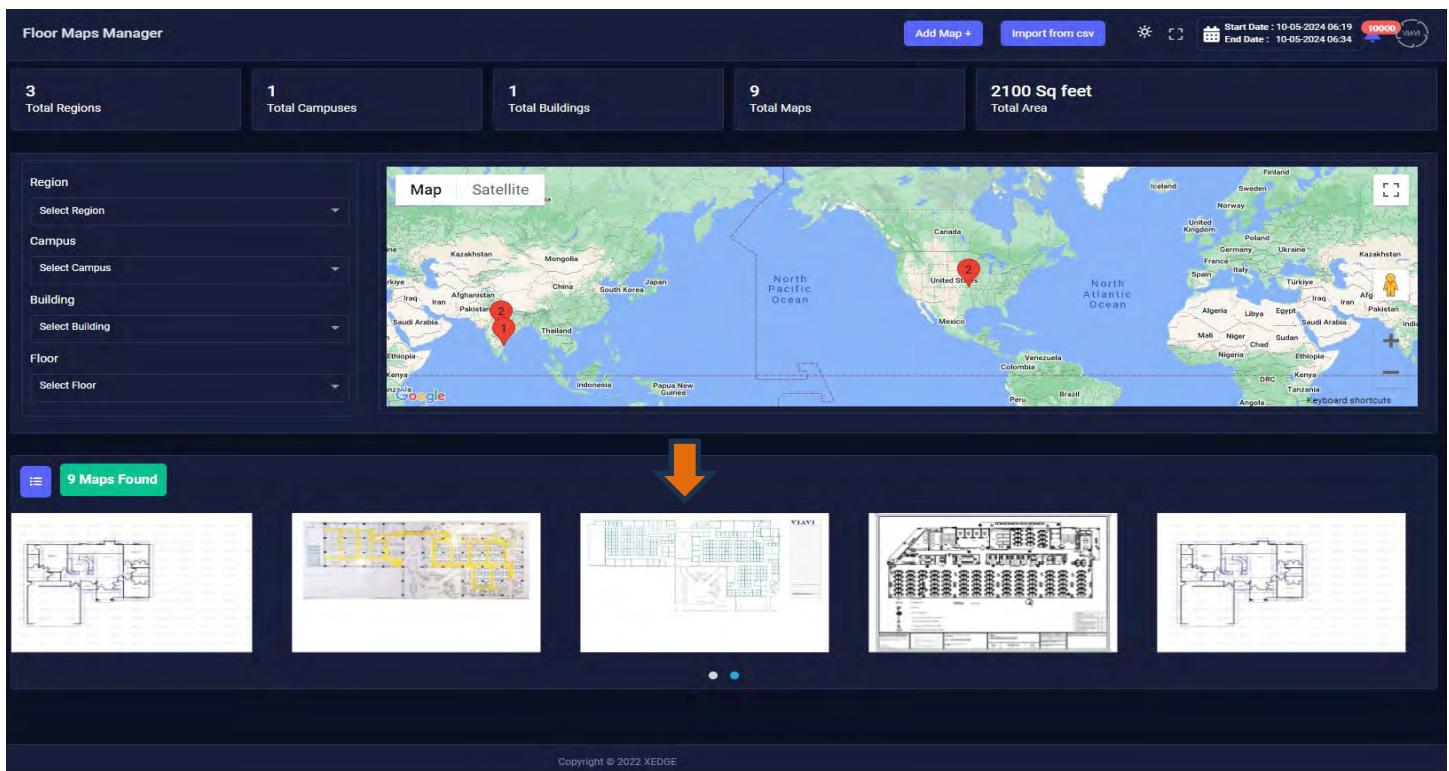
5. Fill out the required fields for the map you just uploaded.



6. Click "Save"



7. View results.



8. Click on the 'Inline view' button to see the detailed line-by-line maps.

The screenshot shows the 'Floor Maps Manager' interface. At the top, there are five summary boxes: '3 Total Regions', '1 Total Campuses', '1 Total Buildings', '9 Total Maps', and '2100 Sq feet Total Area'. Below these is a world map with two red markers labeled '1' and '2'. To the left of the map is a sidebar with dropdown menus for Region, Campus, Building, and Floor. An orange arrow points from the 'Floor' dropdown down to the '9 Maps Found' button. Below the button is a grid of five thumbnail images representing different floor plans.

9. View Results.

The screenshot shows the 'Maps Table' interface. The table lists nine maps with the following details:

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions
Pune office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>
test Map	United States	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>
CRT MAP		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>
CRT PDF		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>
Chennai office	Chennai	PDF	Global Infocity		Block A	10			Yes	<input type="checkbox"/> <input type="checkbox"/>
Morrisville Viavi	United States	PDF		1100 Penimeter Park Dr #					Yes	<input type="checkbox"/> <input type="checkbox"/>
Darrell's house		PDF					2100		Yes	<input type="checkbox"/> <input type="checkbox"/>
Viavi Office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>
Pune Office VIAVI		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/>

At the bottom of the interface, there are several small windows showing different map components and a 'Close' button.

10. Click on the trash icon for the map you want delete.

Maps Table

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions
Pune office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Test Map	United States	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CRT MAP		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CRT PDF		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Chennai office	Chennai	PDF	Global Infocity		Block A	10			Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Morrisville Viavi	United States	PDF		1100 Perimeter Park Dr #					Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Darrell's house		PDF					2100		Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Viavi Office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pune Office VIAVI		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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11. View results

Maps Table

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions
Pune office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Test Map	United States	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CRT MAP		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CRT PDF		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Chennai office	India	PDF	Global Infocity		Block A	10			Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Morrisville Viavi	United States	PDF		1100 Perimeter Park Dr #					Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Viavi Office	India	PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Darrell's house		PDF					2100		Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pune Office VIAVI		PDF							Yes	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Do you want to delete "Pune Office VIAVI"?
Cancel Delete

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12. Click the “Delete” button. The following message appears:

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions
Pune office	India	PDF							Yes	
Test Map	United States	PDF							Yes	
CRT MAP		PDF							Yes	
CRT PDF		PDF							Yes	
Chennai office	India	PDF	Global Infocity		Block A	10			Yes	
Morrisville Viavi	United States	PDF		1100 Perimeter Park D					Yes	
Viavi Office	India	PDF							Yes	
Darrell's house		PDF					2100		Yes	
Pune Office VIAVI		PDF							Yes	

13. View results. The map has been deleted.

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions
Pune office	India	PDF							Yes	
Test Map	United States	PDF							Yes	
CRT MAP		PDF							Yes	
CRT PDF		PDF							Yes	
Chennai office	India	PDF	Global Infocity		Block A	10			Yes	
Morrisville Viavi	United States	PDF		1100 Perimeter Park D					Yes	
Viavi Office	India	PDF							Yes	
Darrell's house		PDF					2100		Yes	
Haynes Building Floor	United States	PDF	Gamer	82 Thunder Ridge Driv	Building 01	1	4000	18	Yes	

14. Click **Close**.

The screenshot shows a table titled 'Maps Table' with columns for Name, Region, Map Type, Campus, Address, Building, Floor, Area (Sq Ft), Scale, Map Uploaded, and Actions. There are 9 rows of data. At the bottom right of the table, there is a blue 'Close' button with an orange arrow pointing to it.

Name	Region	Map Type	Campus	Address	Building	Floor	Area (Sq Ft)	Scale	Map Uploaded	Actions	
Pune office	India	PDF							Yes		
Test Map	United States	PDF							Yes		
CRT MAP		PDF							Yes		
CRT PDF		PDF							Yes		
Chennai office	Chennai	PDF	Global Infoty		Block A	10			Yes		
Morrisville Viva	United States	PDF		1100 Perimeter Park Dr #					Yes		
Darell's house		PDF					2100		Yes		
Vivvi Office	India	PDF							Yes		
Pune Office VIVI		PDF							Yes		

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Close

15. Click 'Import from CSV' to import the region/campus/building information from the CSV.

The screenshot shows the 'Floor Maps Manager' interface. At the top, there are four counts: 3 Total Regions, 1 Total Campuses, 1 Total Buildings, and 9 Total Maps. To the right of these counts is a blue 'Import from csv' button with an orange arrow pointing to it. Below the counts is a map showing the world with two red markers: one in Asia (labeled 1) and one in North America (labeled 2). Below the map, there is a section titled '9 Maps Found' displaying five floor plan images.

Floor Maps Manager

3 Total Regions 1 Total Campuses 1 Total Buildings 9 Total Maps

Import from csv

Start Date : 10-05-2024 06:19 End Date : 10-05-2024 06:34 10000 VIVI

Region: Select Region Campus: Select Campus Building: Select Building Floor: Select Floor

Map Satellite

9 Maps Found