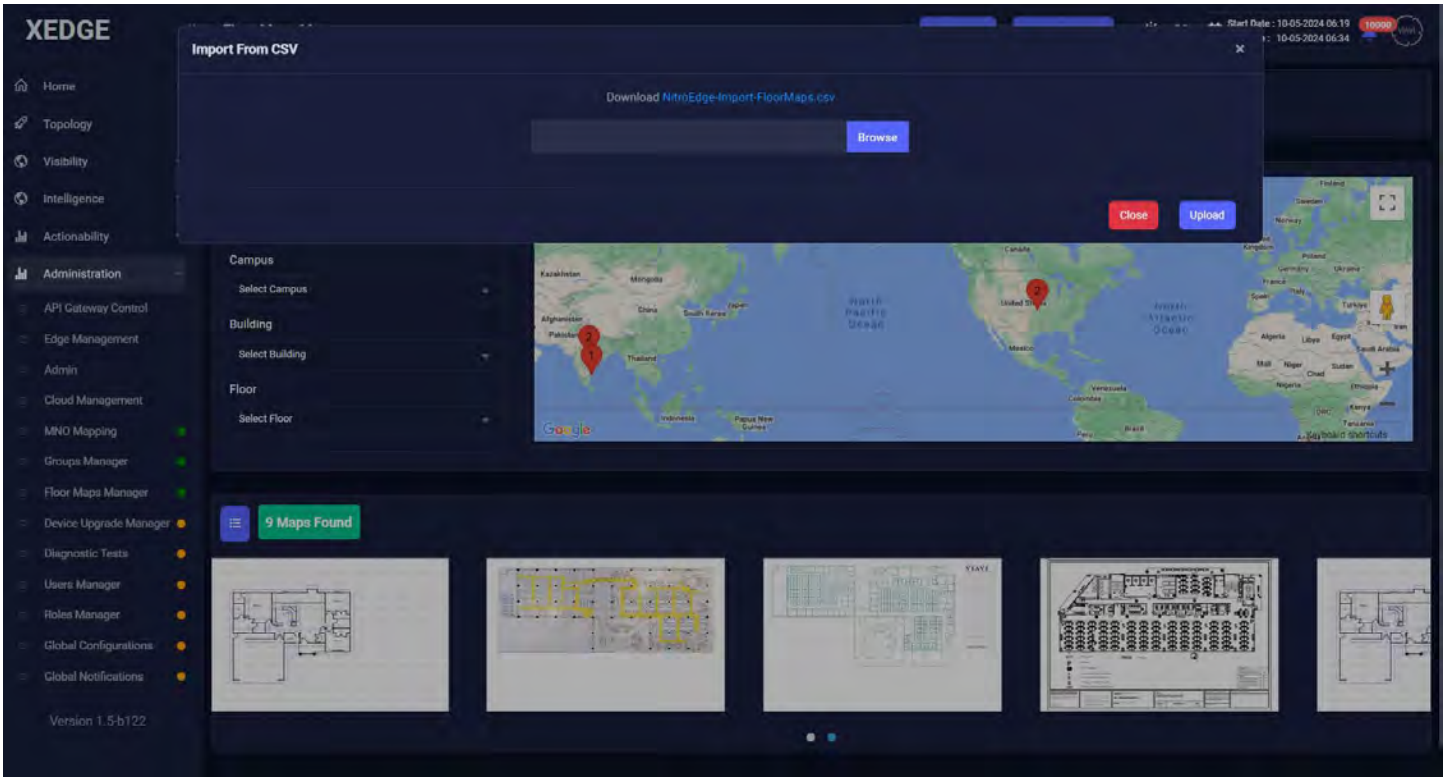
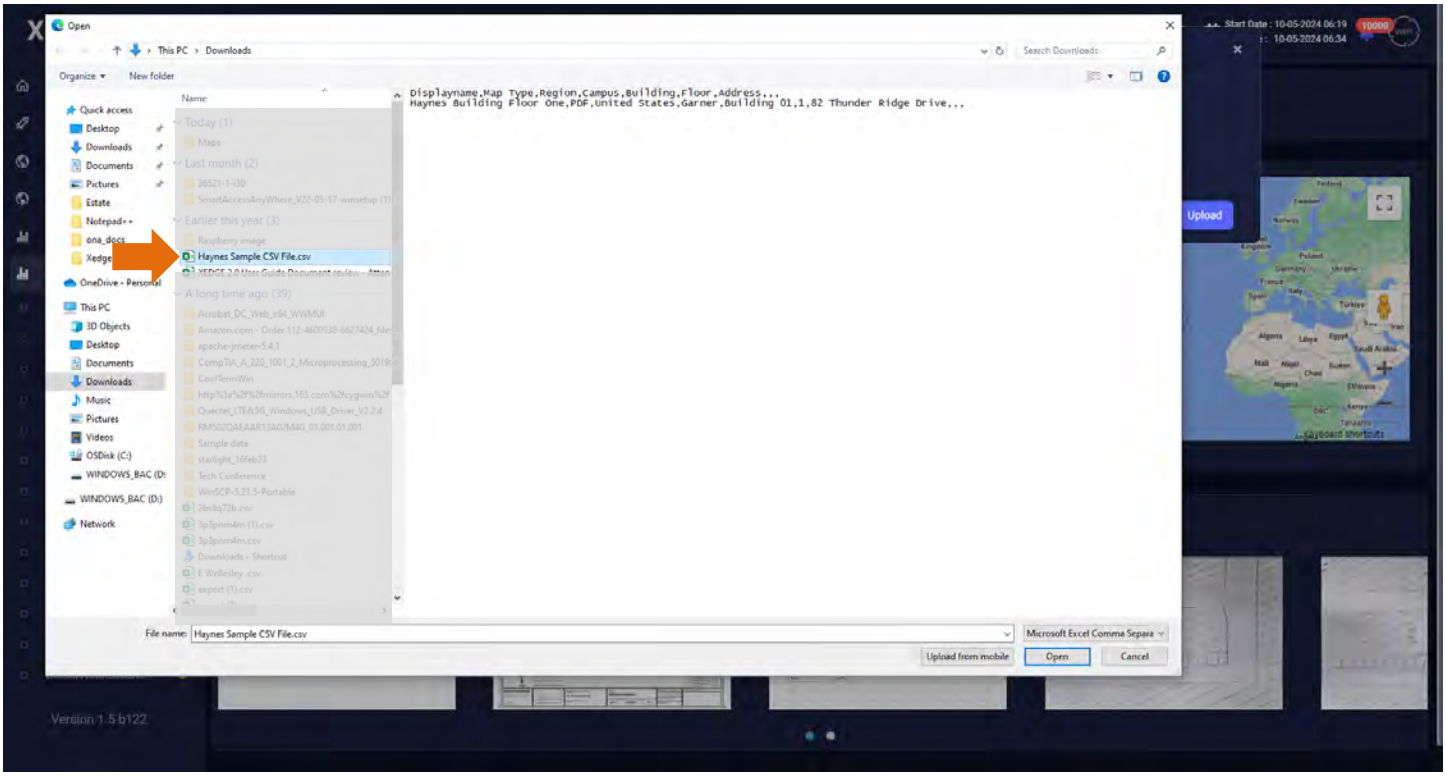
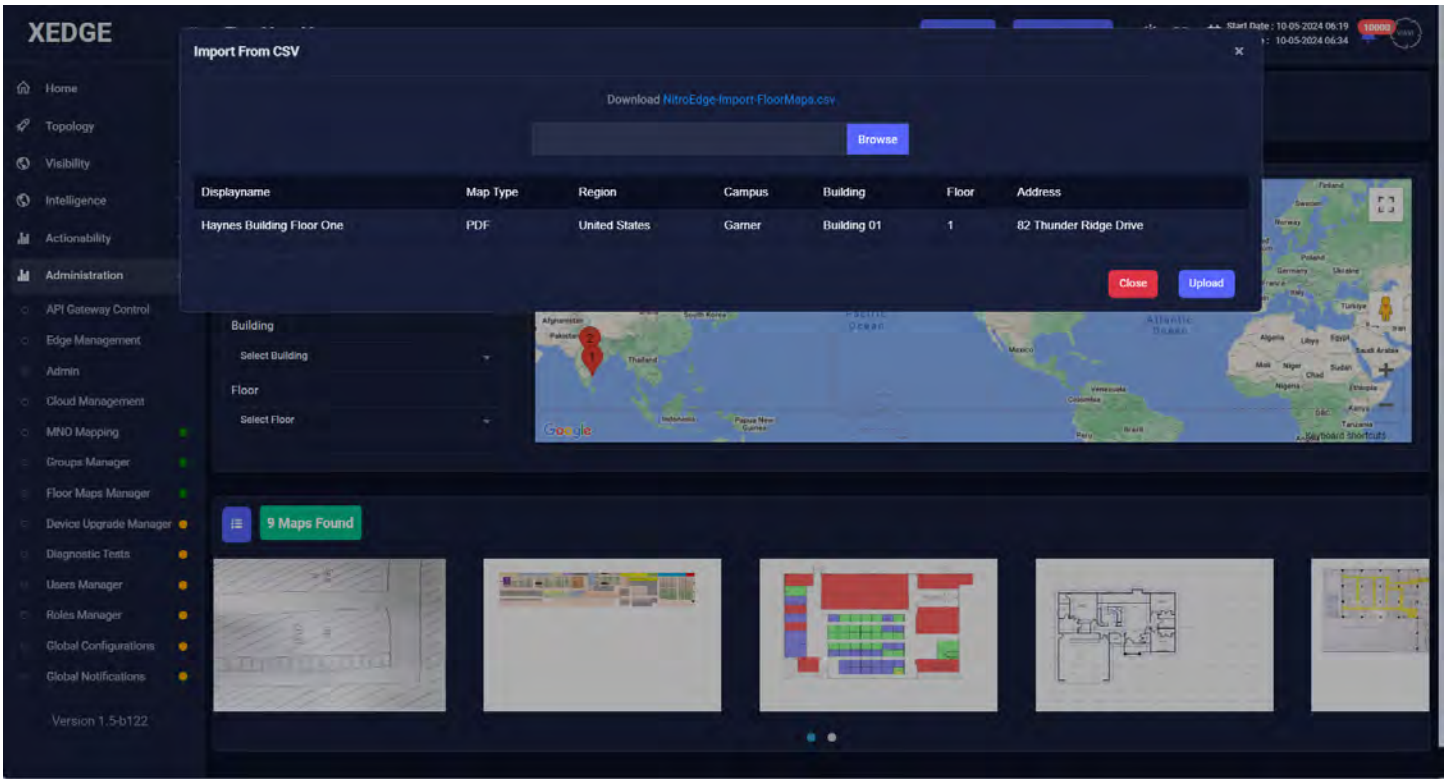
Click “Browse”



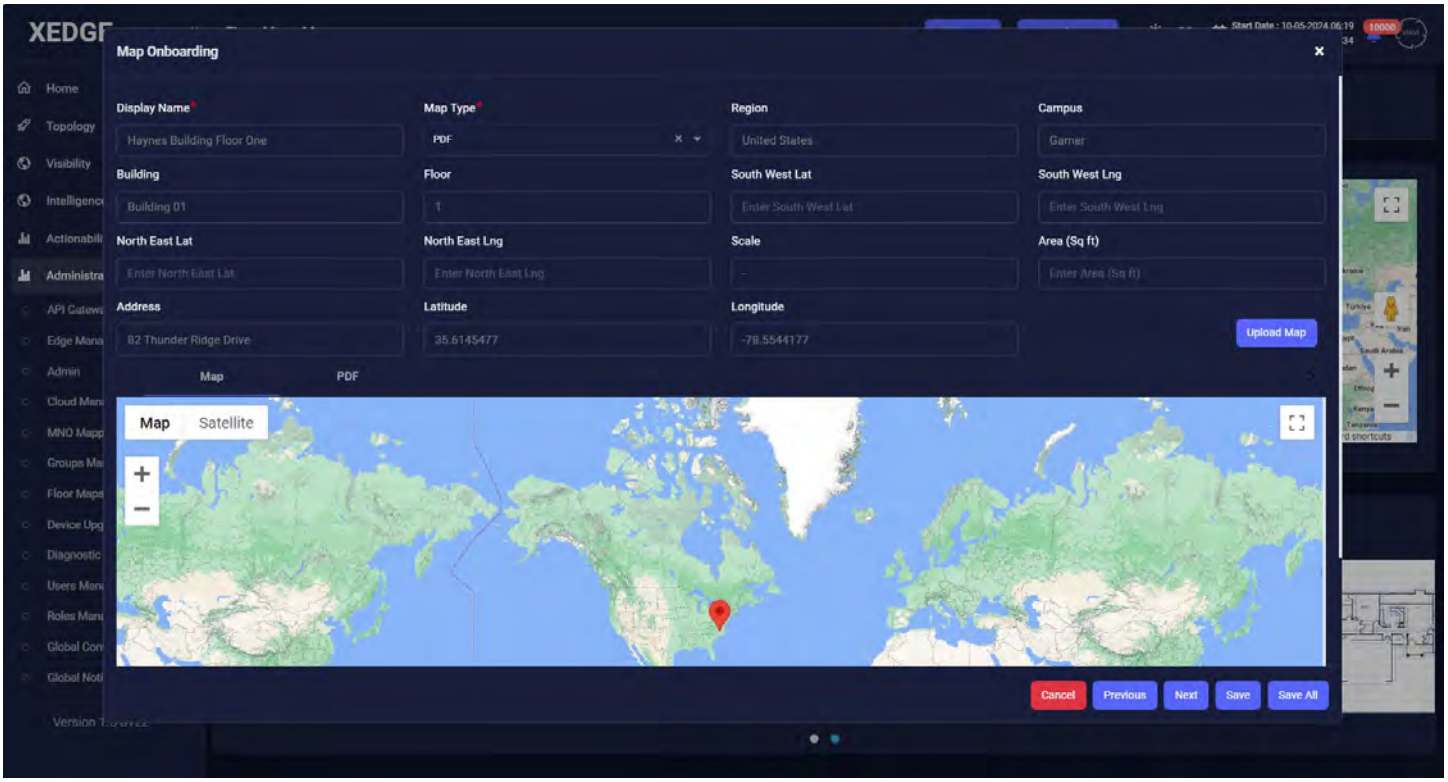
Click **Open** to load the desired .csv file.

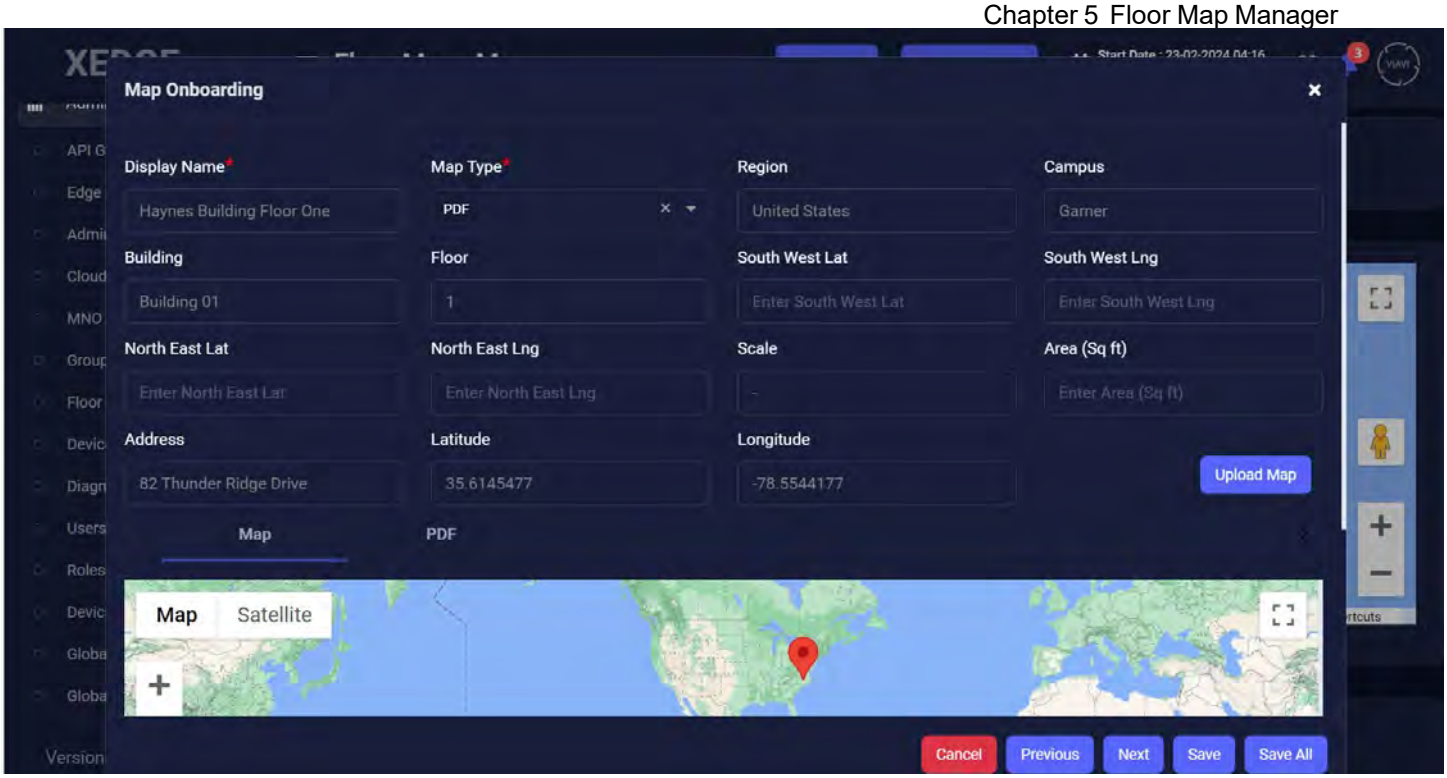


16. Click “Upload”

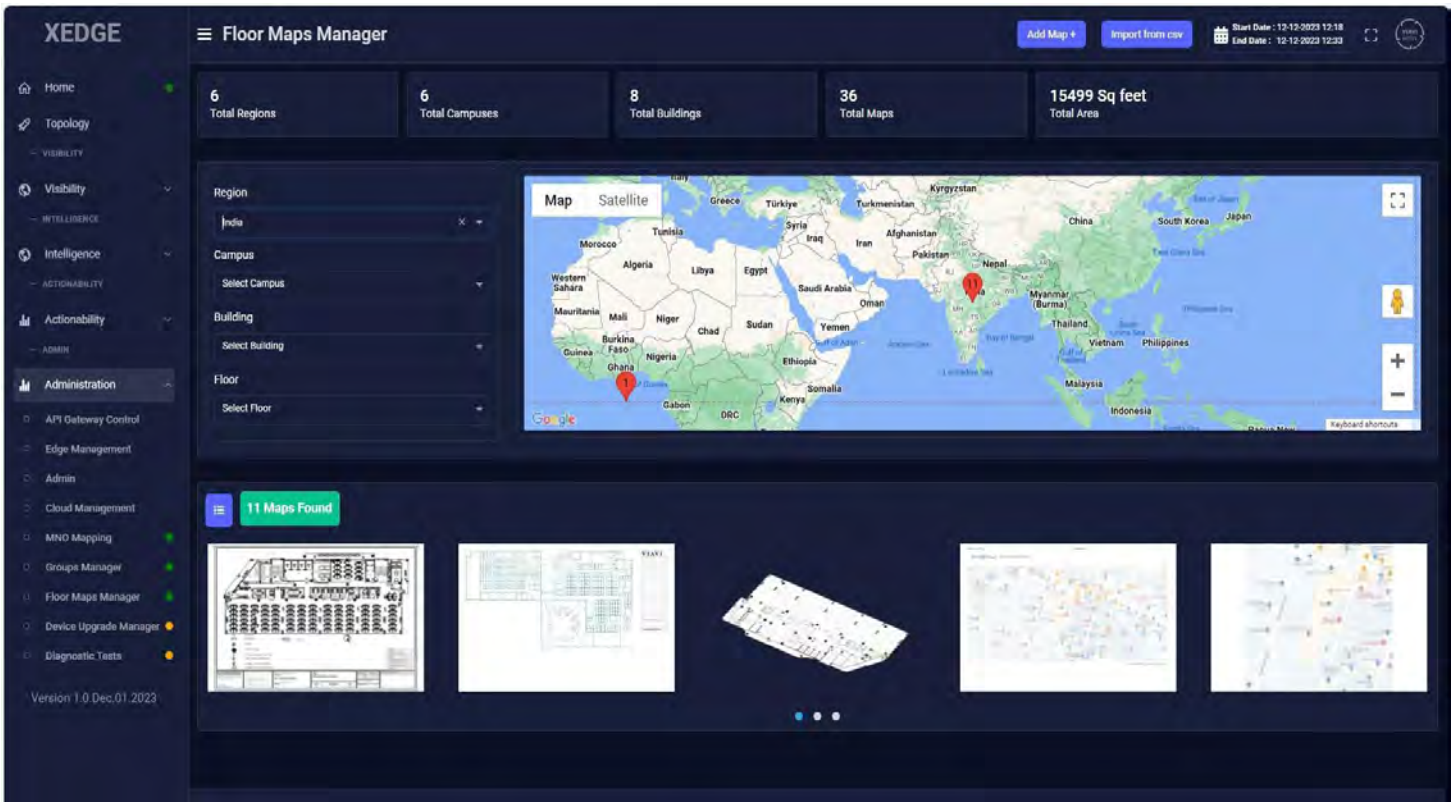


17. Click “**Save All**”





18. View results.



6

Chapter 6 Orchestrating Walk Test

This section describes orchestrating walk tests on one or more devices deployed around the world using a centralized Controller. This feature allows you to run a walk test in multiple modems in a device together.

This feature supports four types of tests in two categories.

1) **Continuous**: - This category allows to run tests continuously on the trigger until the user stops it. Under this category, we have two types of tests,

   a) RF test

   b) IPERF test

2) **Pin drop test**: - This category allows triggering a test at each pin drop. Under this category, we have the same two types of tests

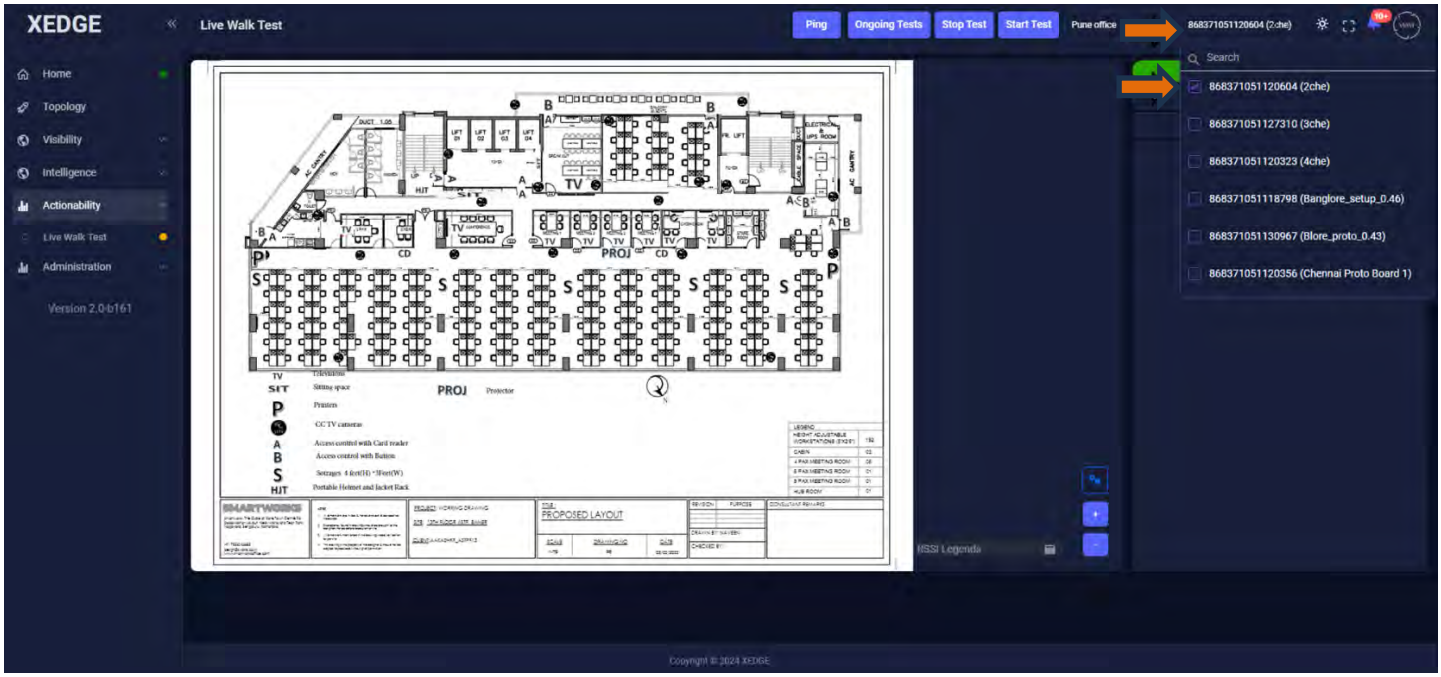
   a) RF test

   b) IPERF test

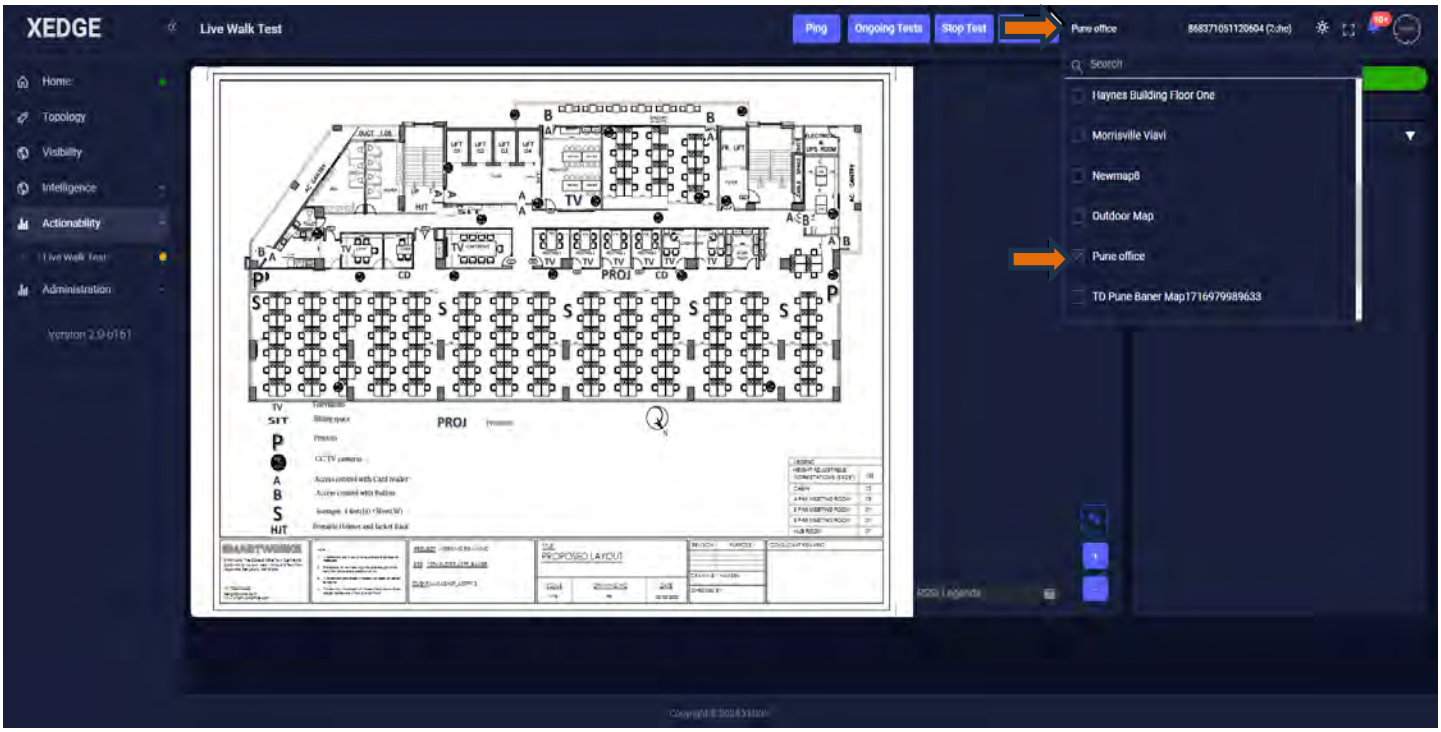
To initiate the walk tests, you must complete the following steps:

1. Navigate to Actionability > Live Walk Test page.

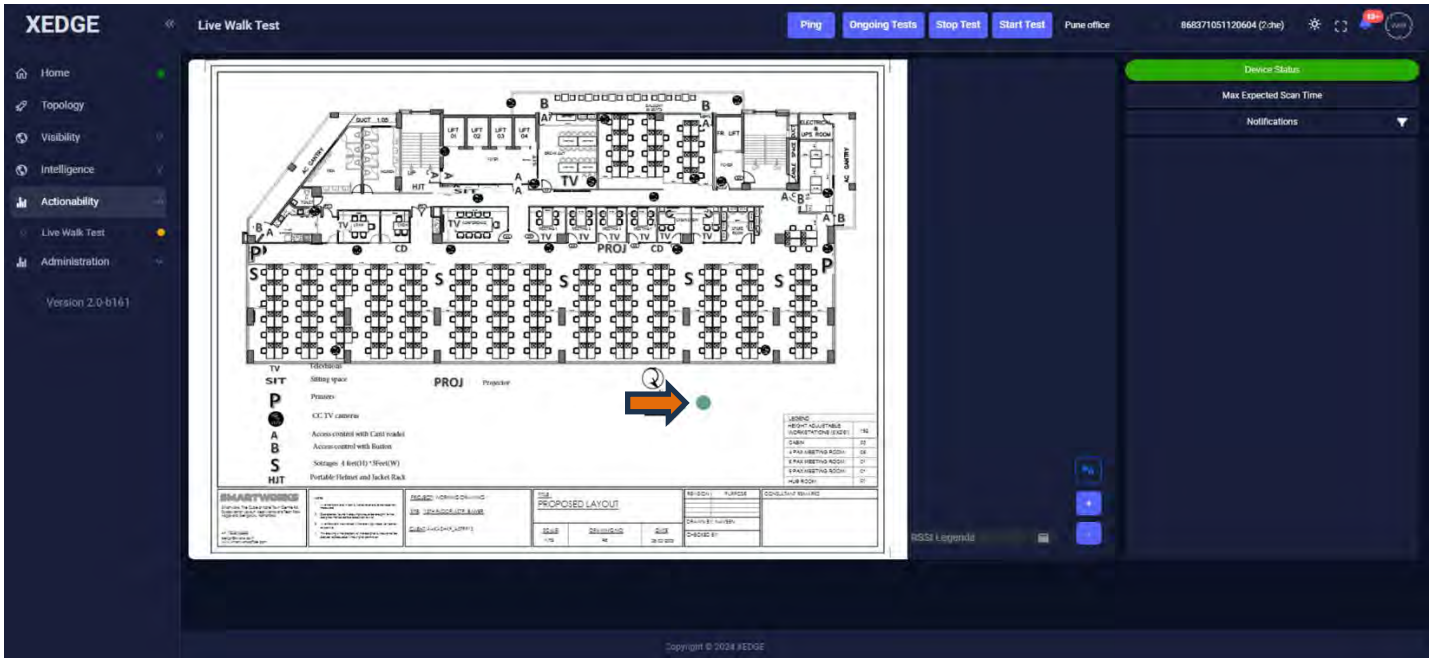
2. Select the serial number dropdown and choose a device.



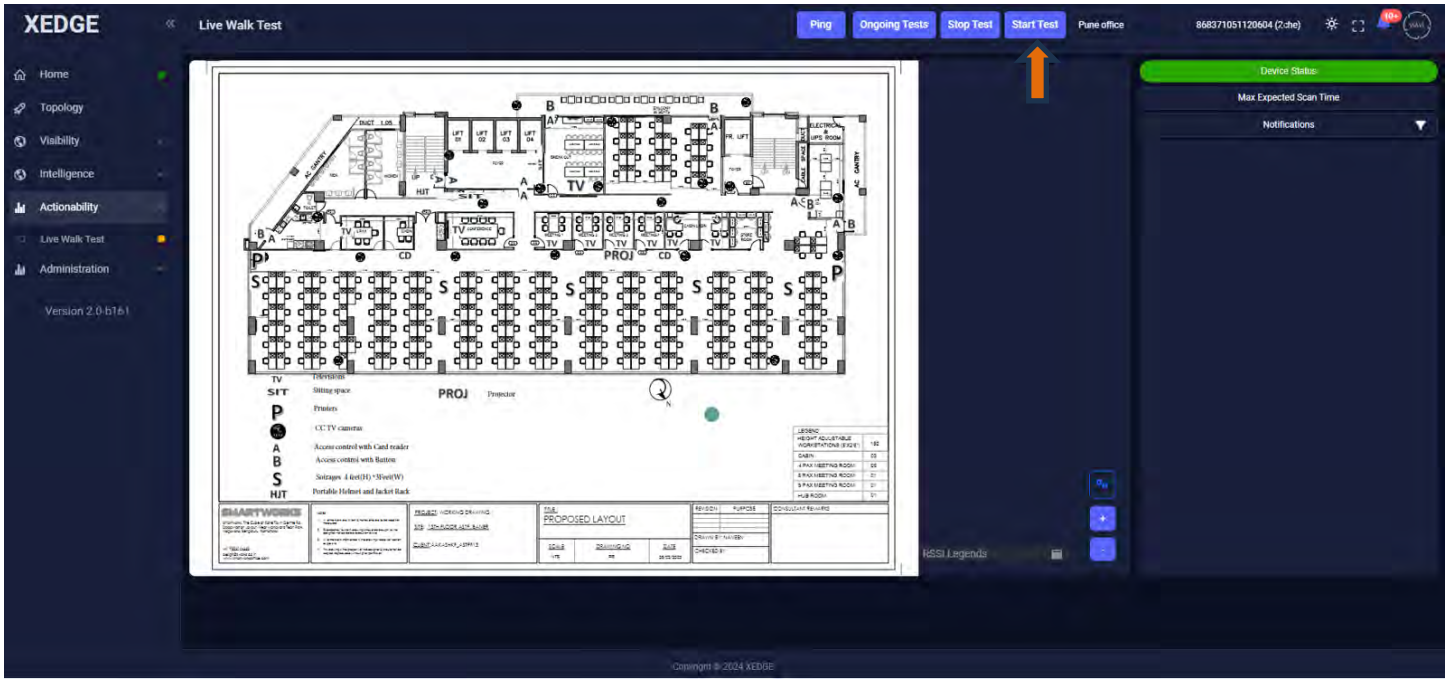
3. Next click on the map dropdown. Choose a map. If the map is too small you may have to enlarge by clicking on the + sign.



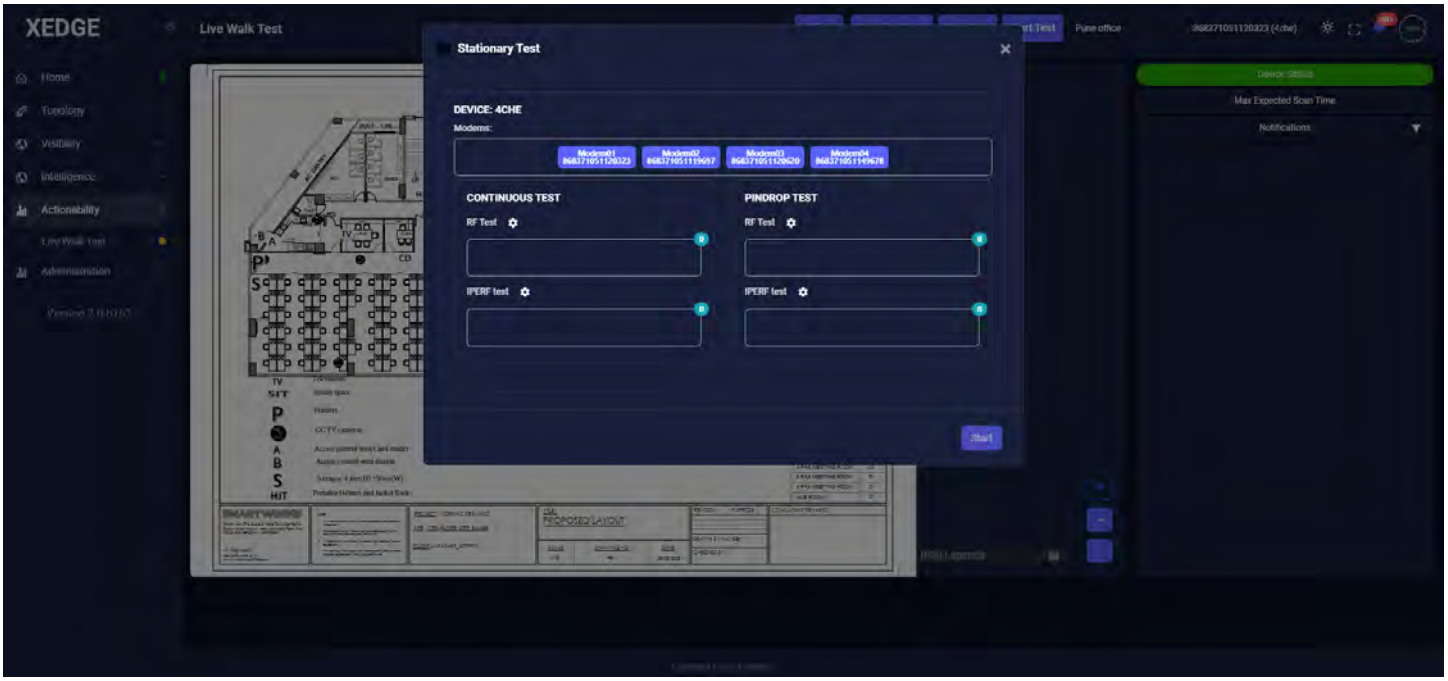
4. Next drop a pin on the map. This is a mandatory part of the test to let you know what the starting point is.



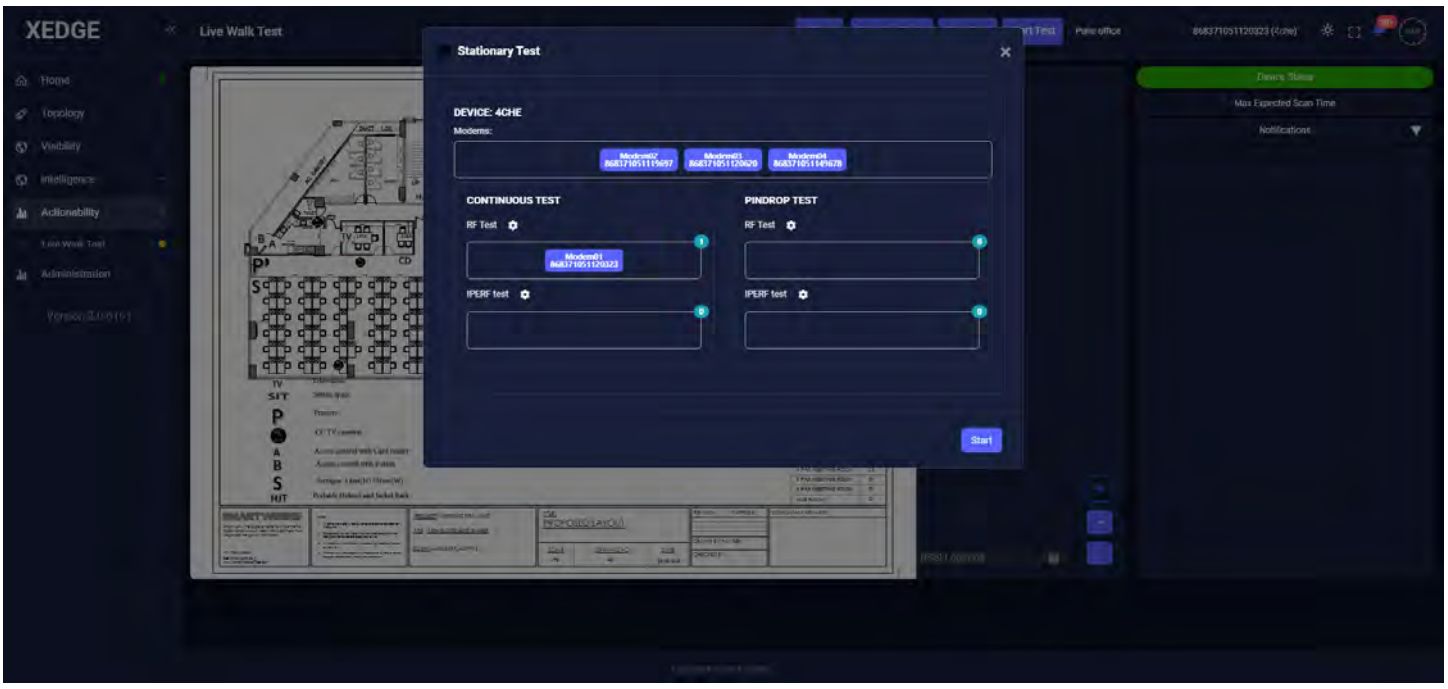
5. Click **Start Test**.



6. This brings up a pop-up window

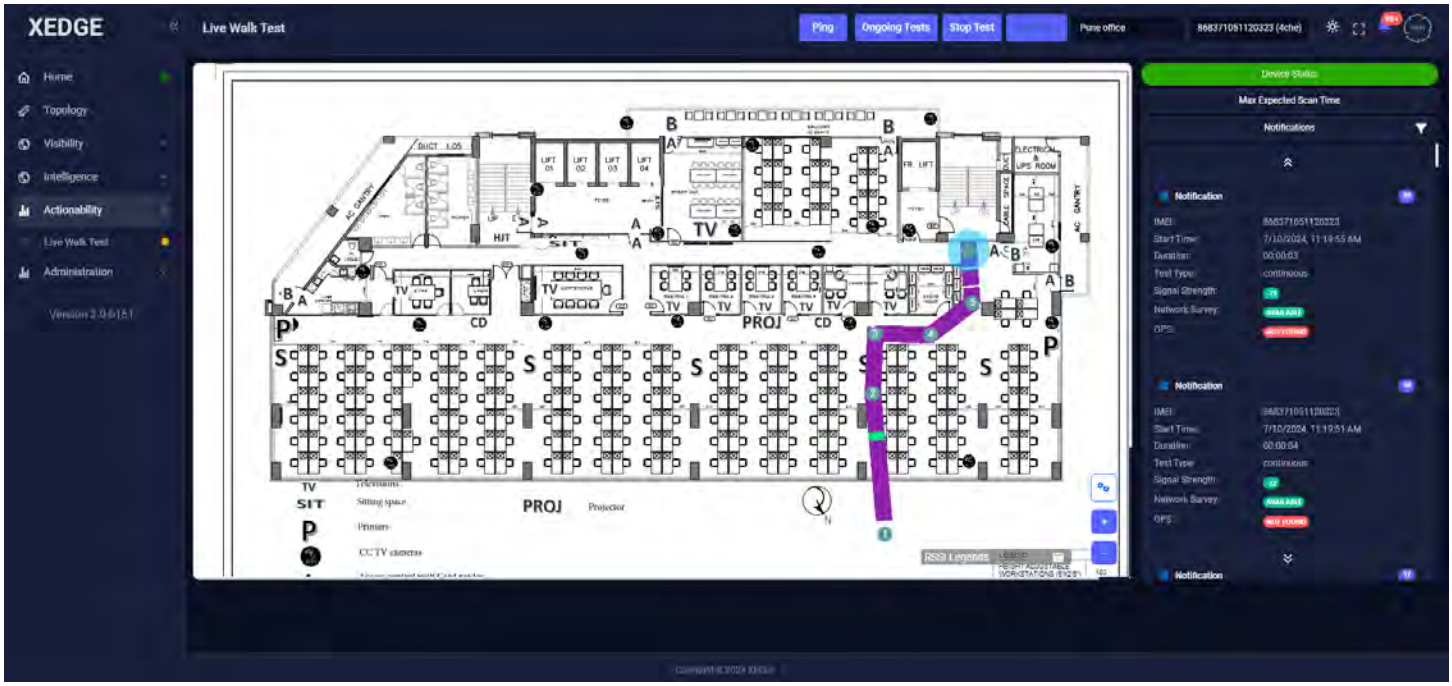


7. Next click and drag Modem01 to "CONTINUOUS TEST" RF Test

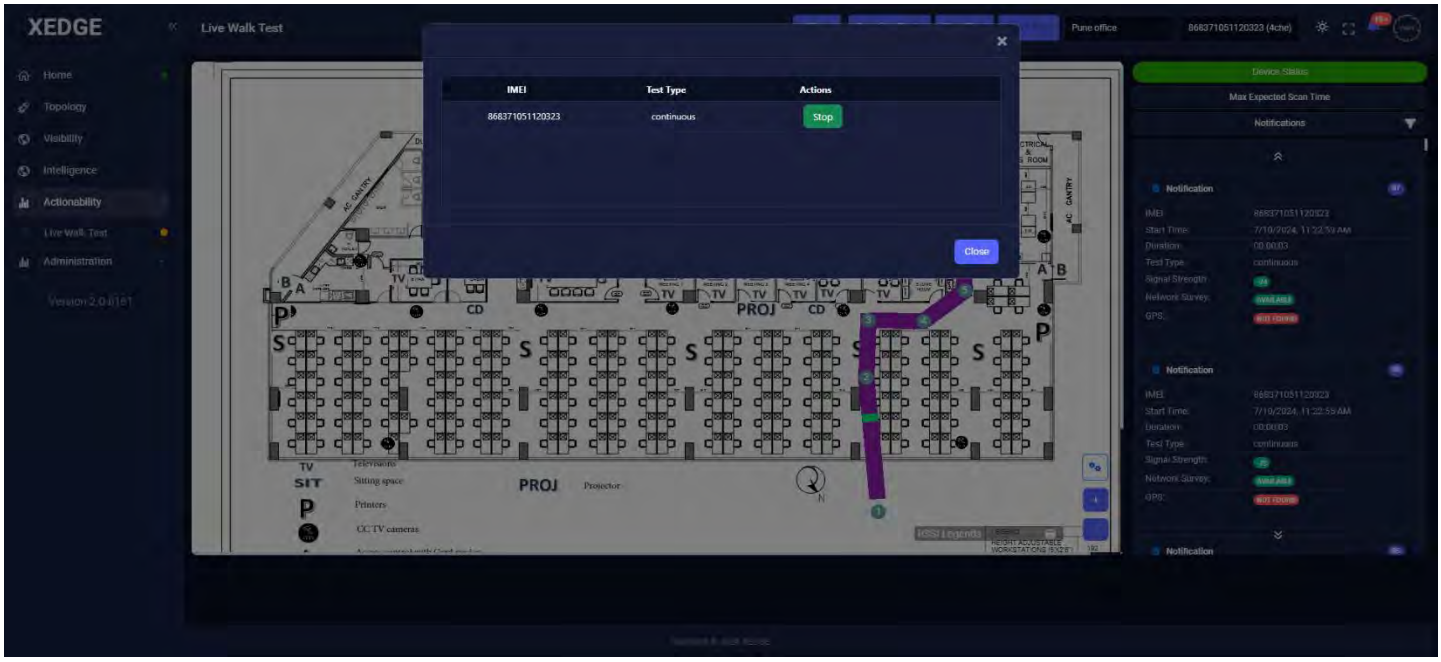


7 Click Start

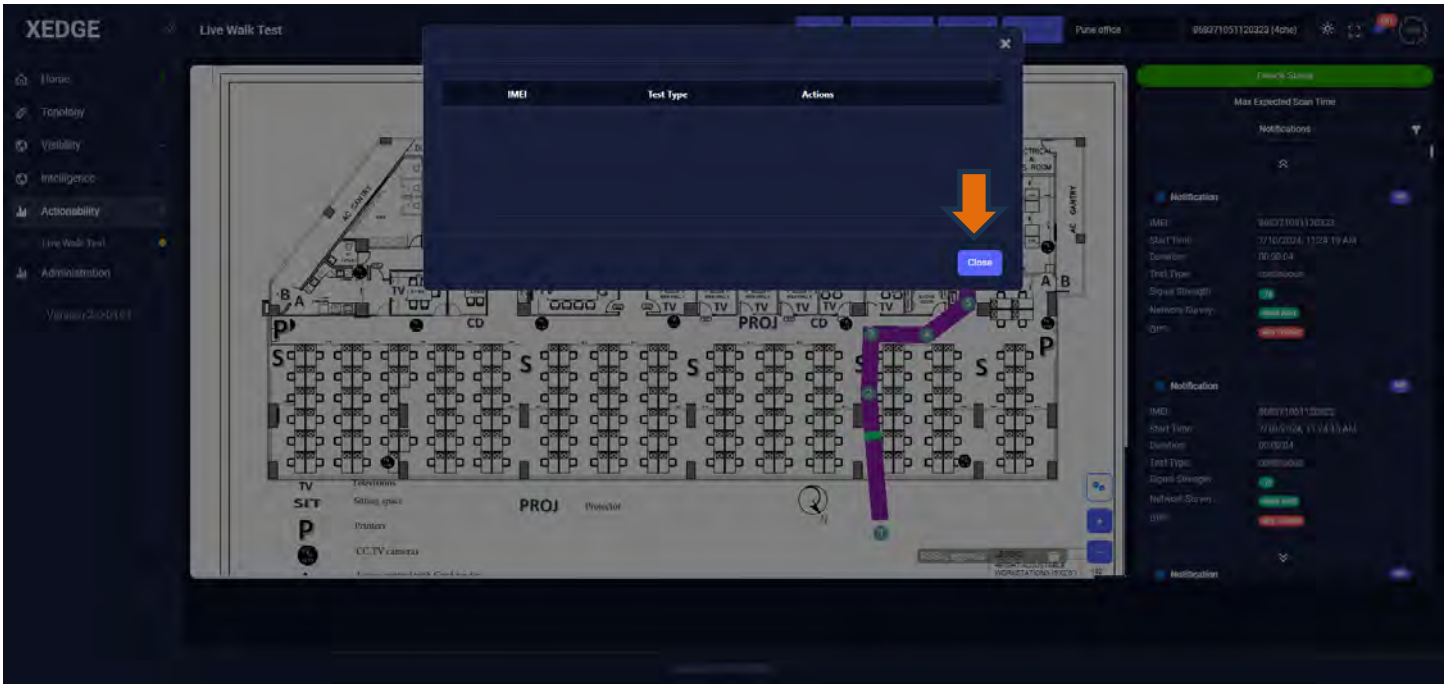
8. For continuous survey conducted indoors, walk inside the building area with a XEDGE device and drop pins (by clicking on the map UI in iPad, or laptop). It is recommended that the user continue dropping pins when there is a change in direction. Notifications can be visualized on the right panel as you walk around with the XEDGE device.



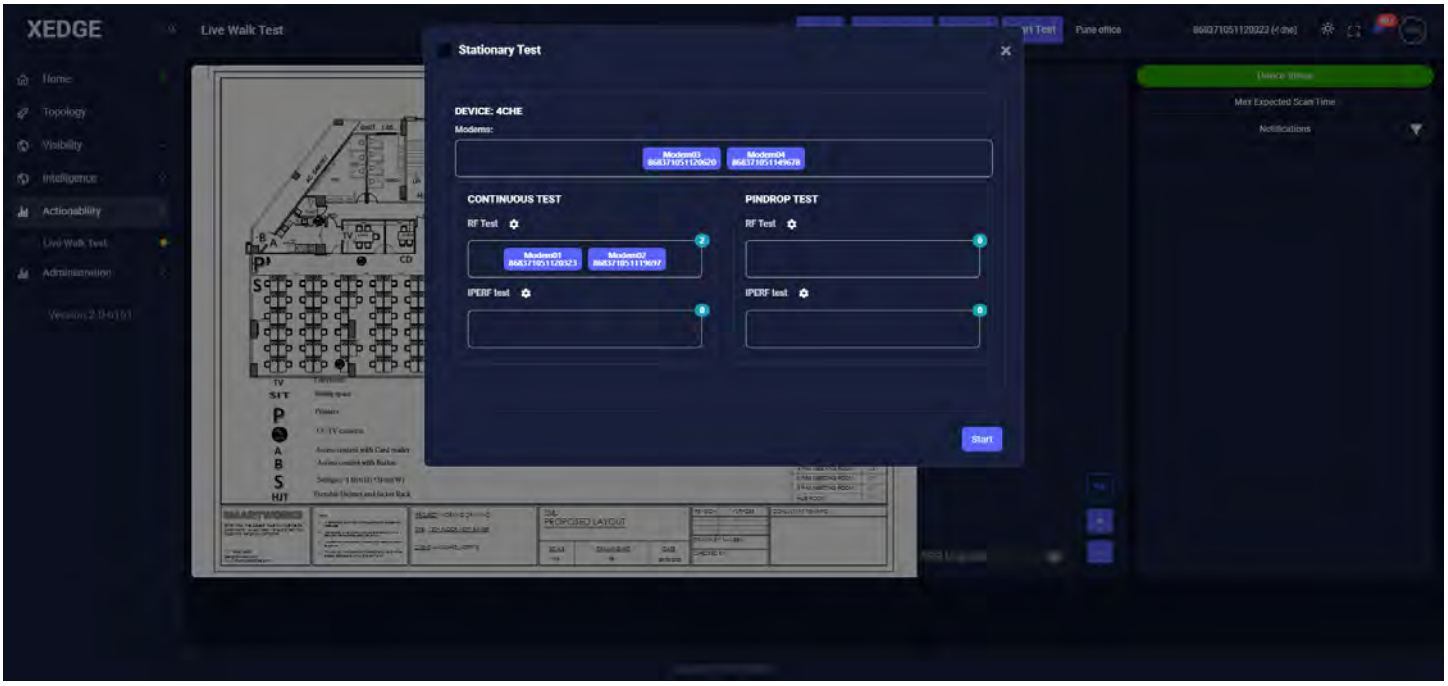
9. Click on the **Stop test** button to end the continuous survey.



10. Next press “Close”

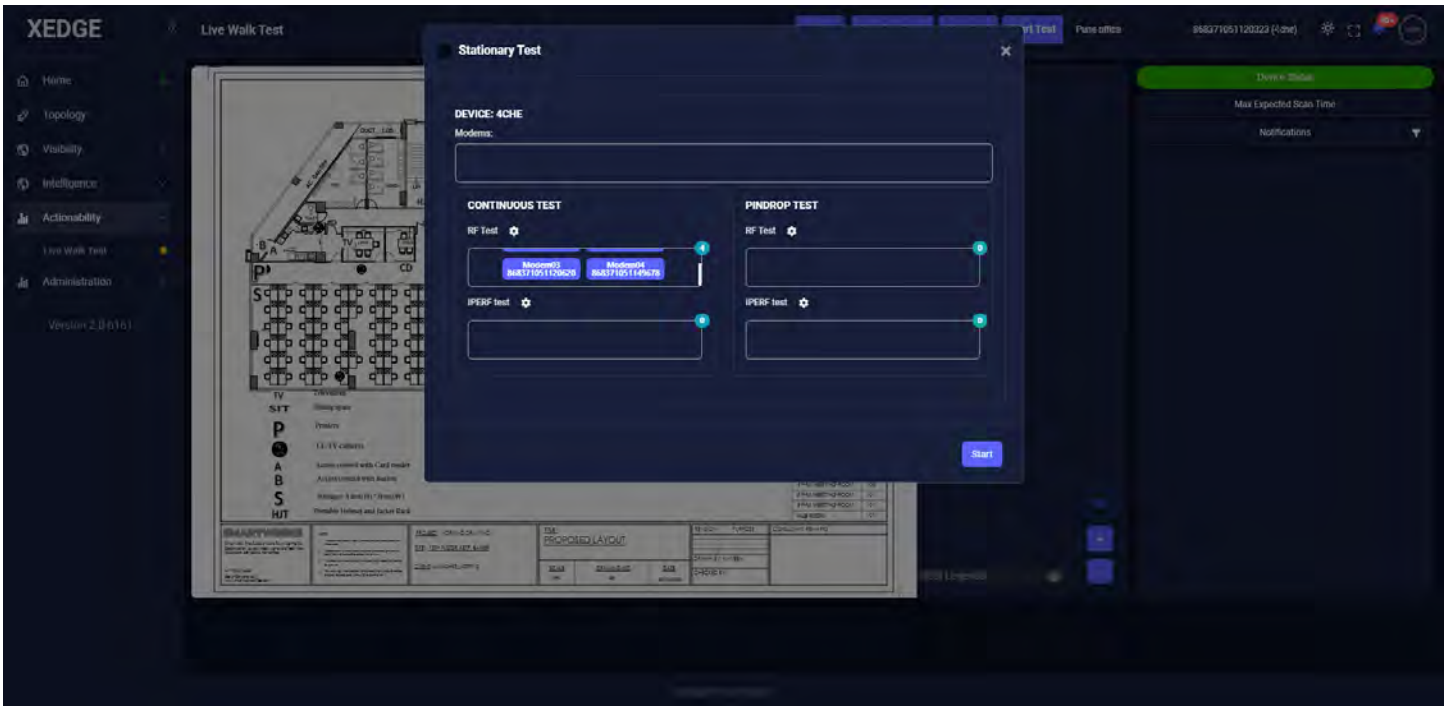


11. Repeat steps 1 – 10 with 2 modems. (Modem01 and Modem02)



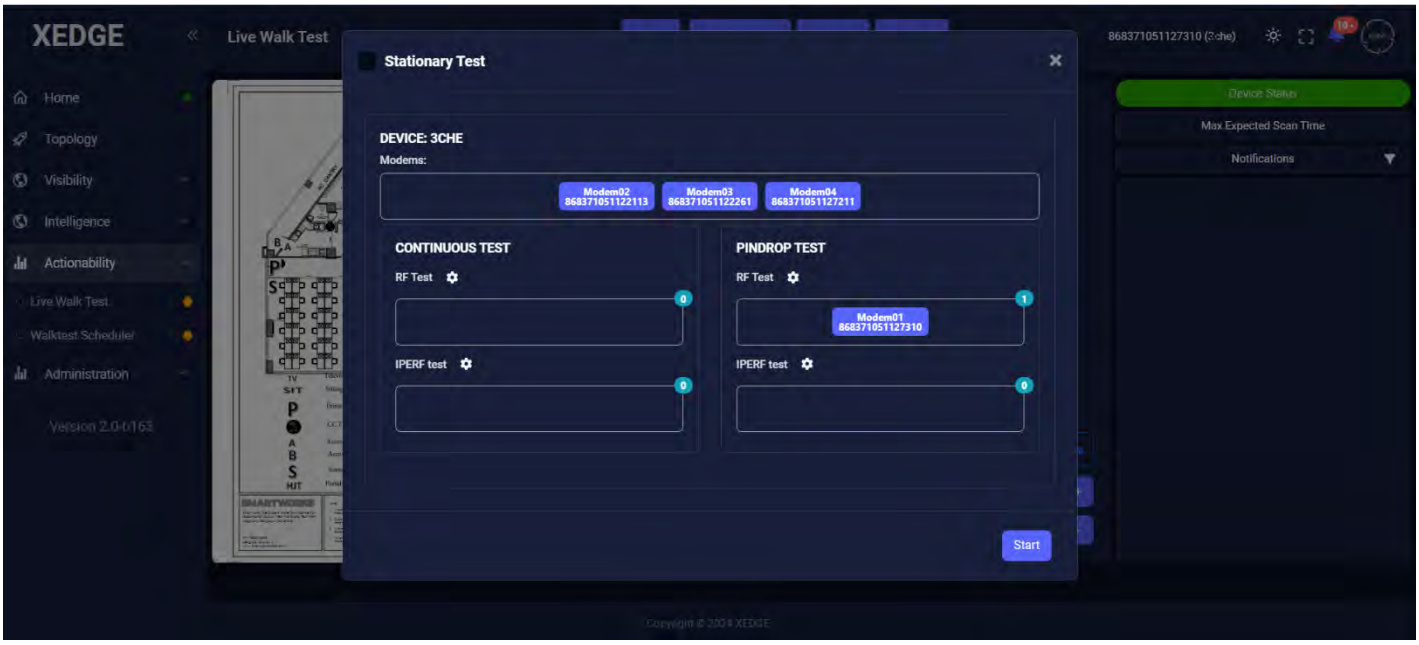
12. Repeat steps 1-10 with 3 modems. (Modem01 and Modem03)

13. Repeat steps 1-10 with 4 modems. (Modem01 to Modem04) to perform the test

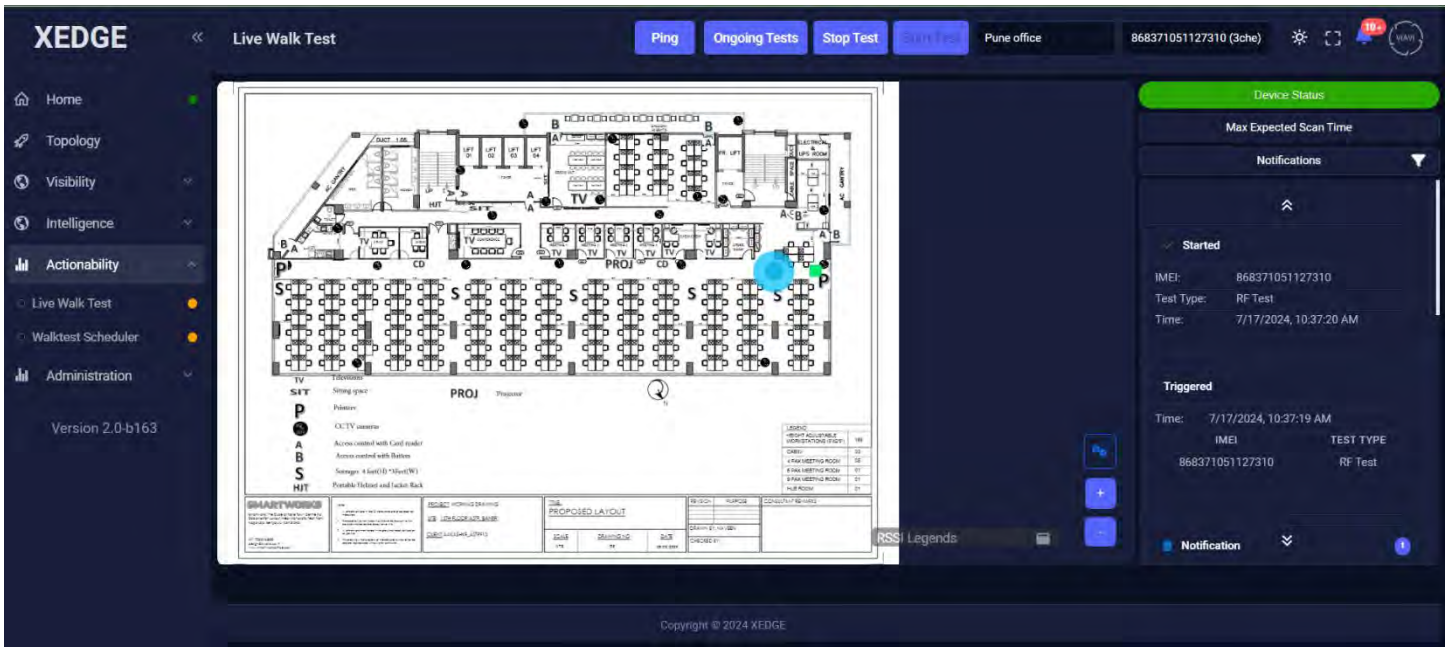


14. To perform a pin drop test, continue steps till step 5 and then Next click and drag Modem01 to "PINDROP TEST" RF Test

15. Click on start button

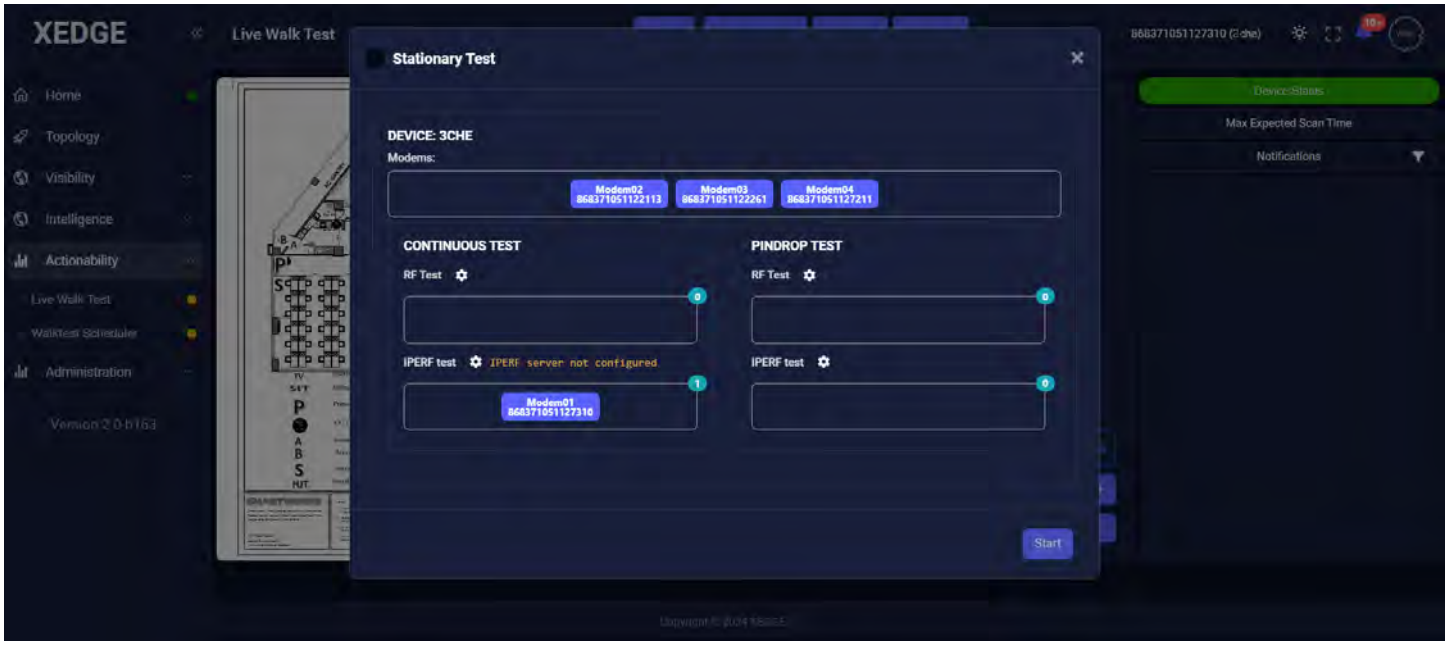


16. For Pindrop test survey, drop a pin (click on the map UI in iPad, or laptop). The test will stop after receiving the notification for the first Pin drop. Notifications can be visualized on the right panel. The user can drop a pin to start the test again which will then stop upon receiving the notification.



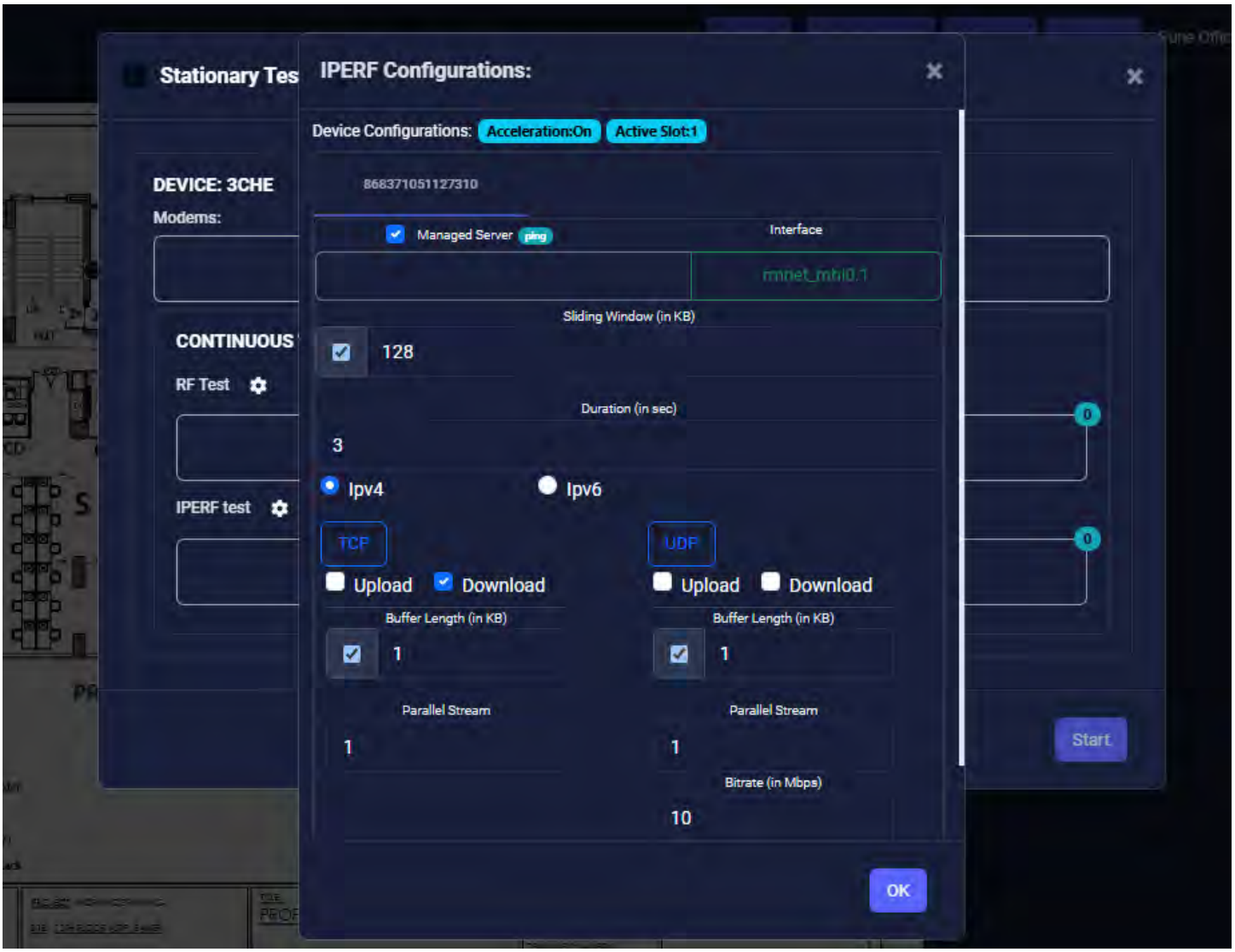
17. Try performing steps from 9-13 similar to Continuous RF test for the Pin Drop RF test as well.

18. To perform the IPERF Continuous test, complete the following steps from 1-5 and drag the modem 1 to CONTINOUS TEST IPERF test

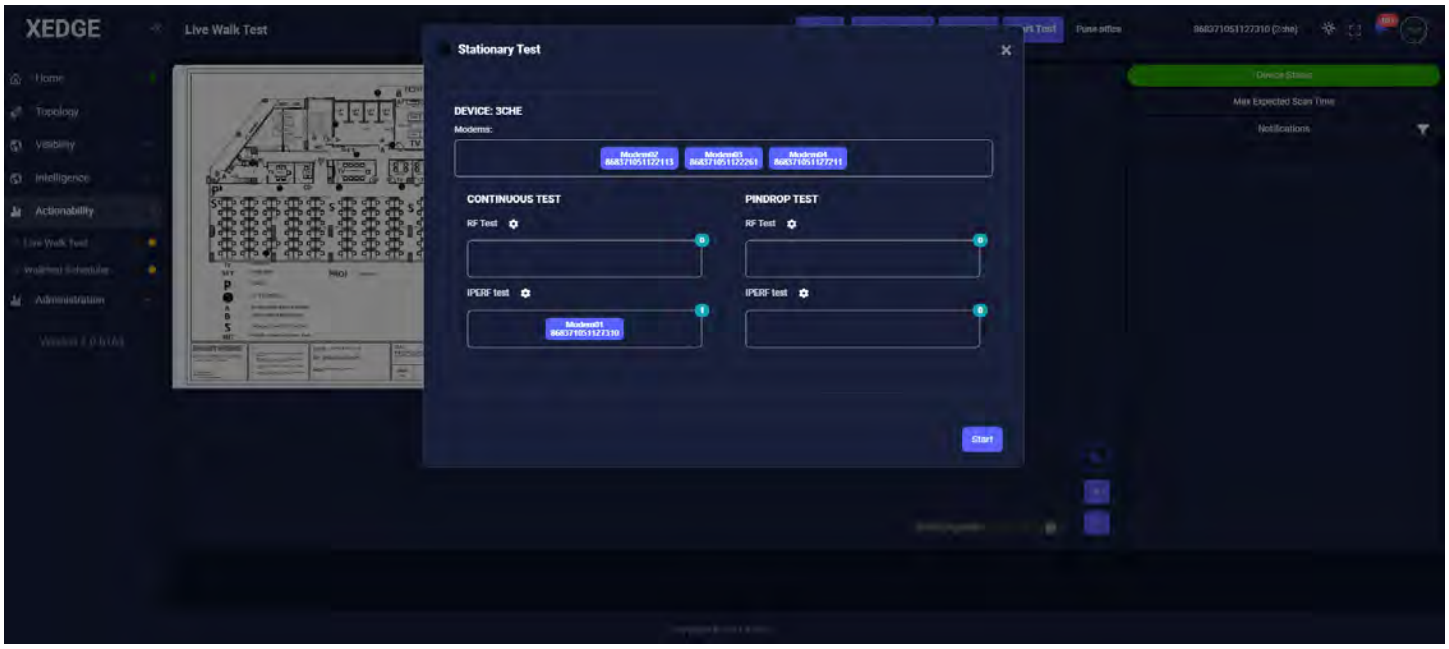


19. To configure the server, click on the setting icon next to “IPERF test” text

20. Clicking on setting icon brings up a pop-up window showcasing the IPERF configurations, the user can provide the server details, window parameters, version, displaying the type of IPERF, selecting between either TCP or UDP or both and provide the parameters for TCP and UDP for configuring. After selecting and entering the required parameters for IPERF the user can click on “OK“ button to configure the IPERF server.



21. Once the IPERF server is configured the user can click on Start button to start the IPERF test.



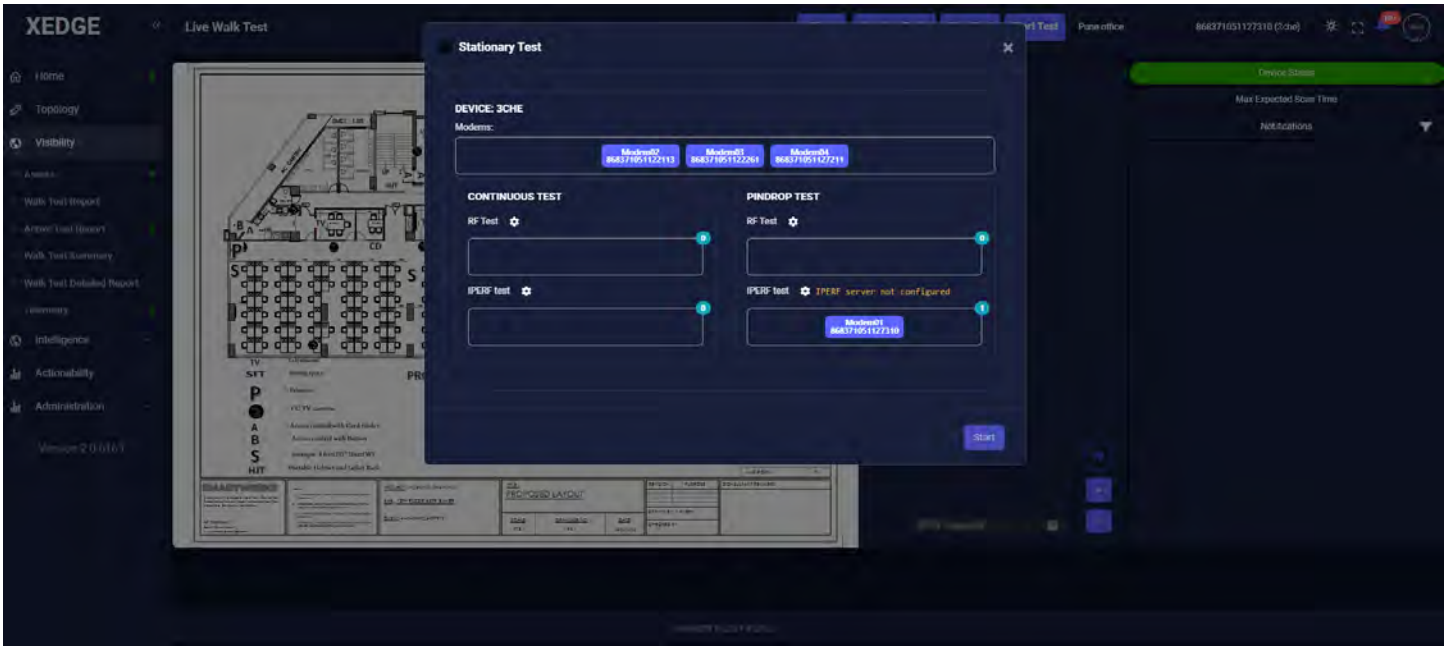
22. Clicking on start will showcase a message stating “configuring IPERF server”

23. Continue dropping the pins similar to continuous RF indoor test, walk inside the building area with a XEDGE device and drop pins (by clicking on the map UI in iPad, or laptop). It is recommended that the user continue dropping pins when there is a change in direction. Notifications can be visualized on the right panel as you walk around with the XEDGE device.

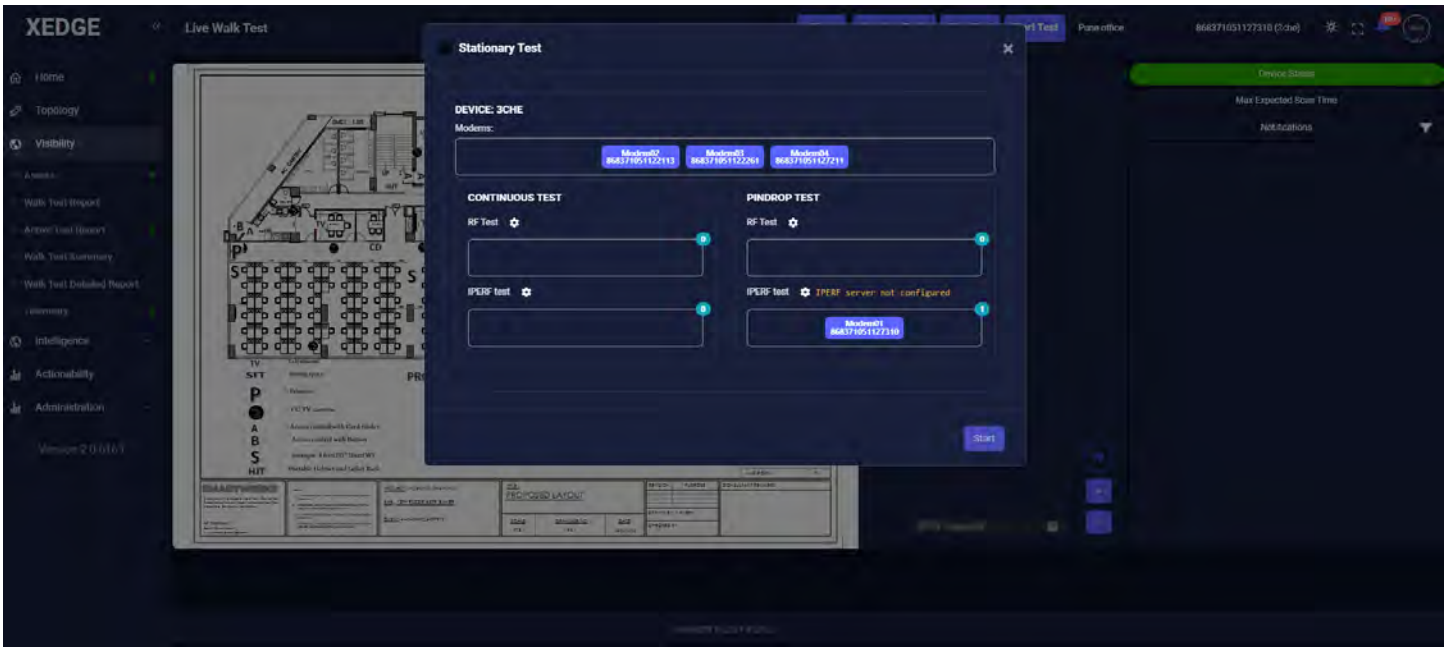
24. Clicking on Filters above notification on the right panel will populate a selection list to show the tiles on map with respect to the parameter selected.

25. Repeat the steps similar to 11-13

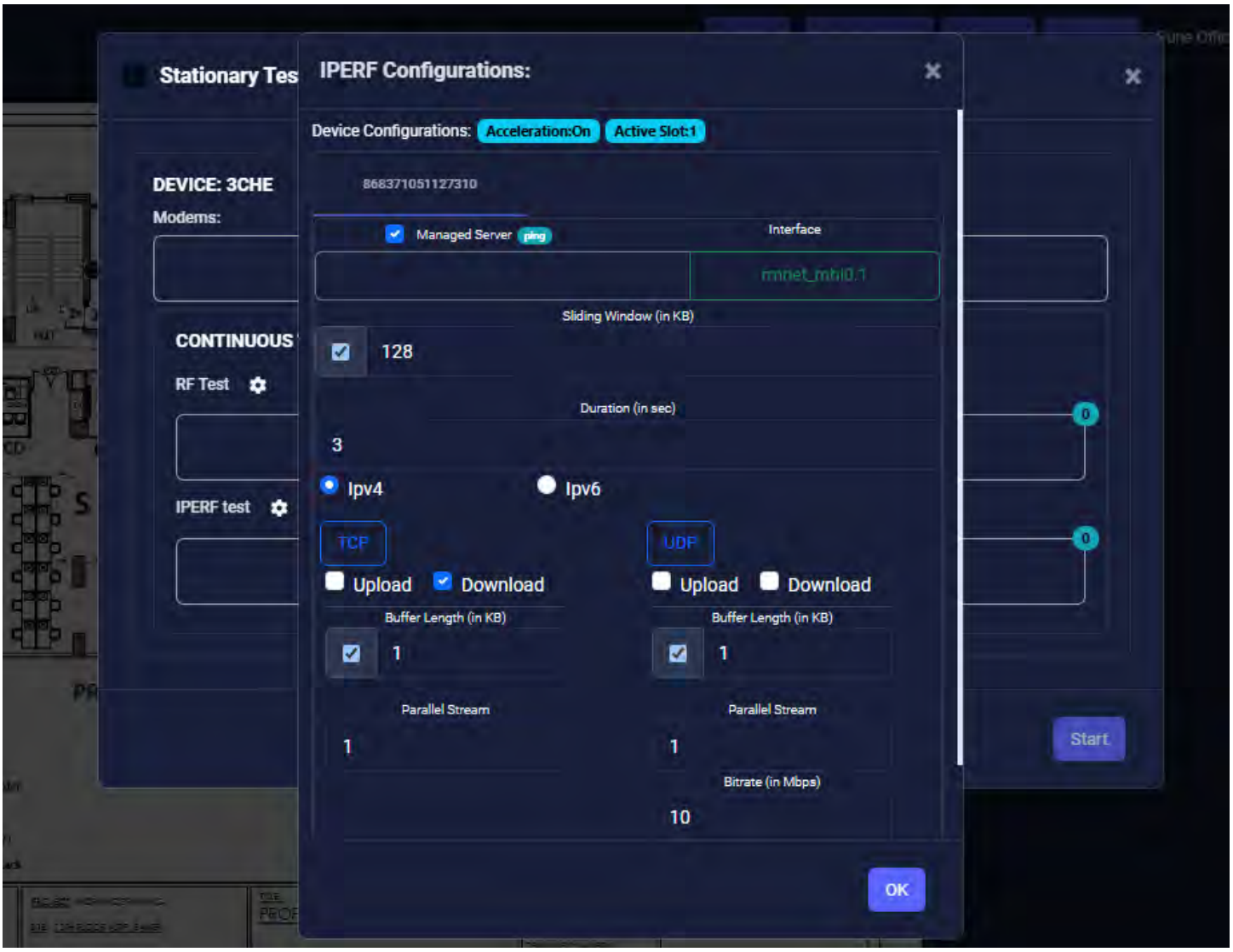
26. To perform IPERF Pin drop test, complete the following steps from 1-5 and drag the modem 1 to Pin Drop IPERF test



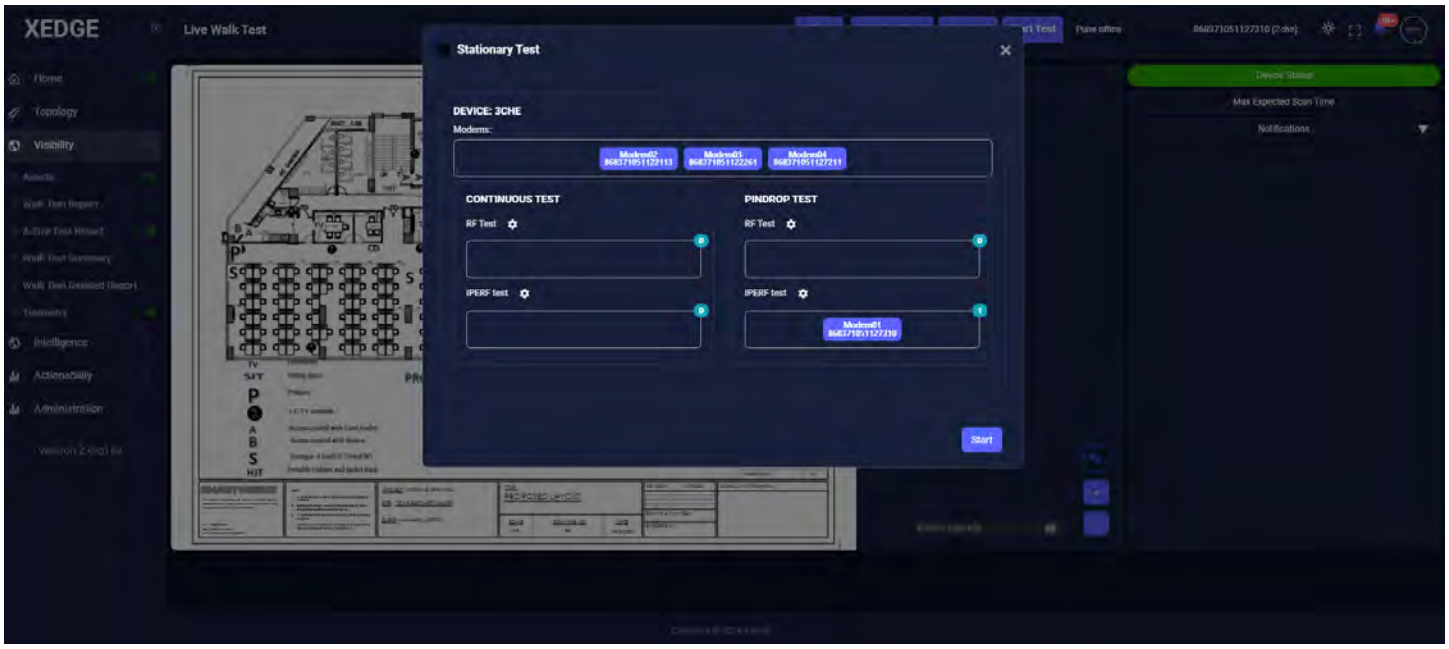
27. To configure the server, click on the setting icon next to “IPERF test” text



28. Clicking on setting icon brings up a pop-up window showcasing the IPERF configurations, the user can provide the server details, window parameters, version, display the type of IPERF whether Accelerated or not, selecting between either TCP or UDP or both and also provide the parameters for TCP and UDP for configuring. After selecting and entering required parameters for IPERF the user can click on “OK“ button to configure the IPERF server

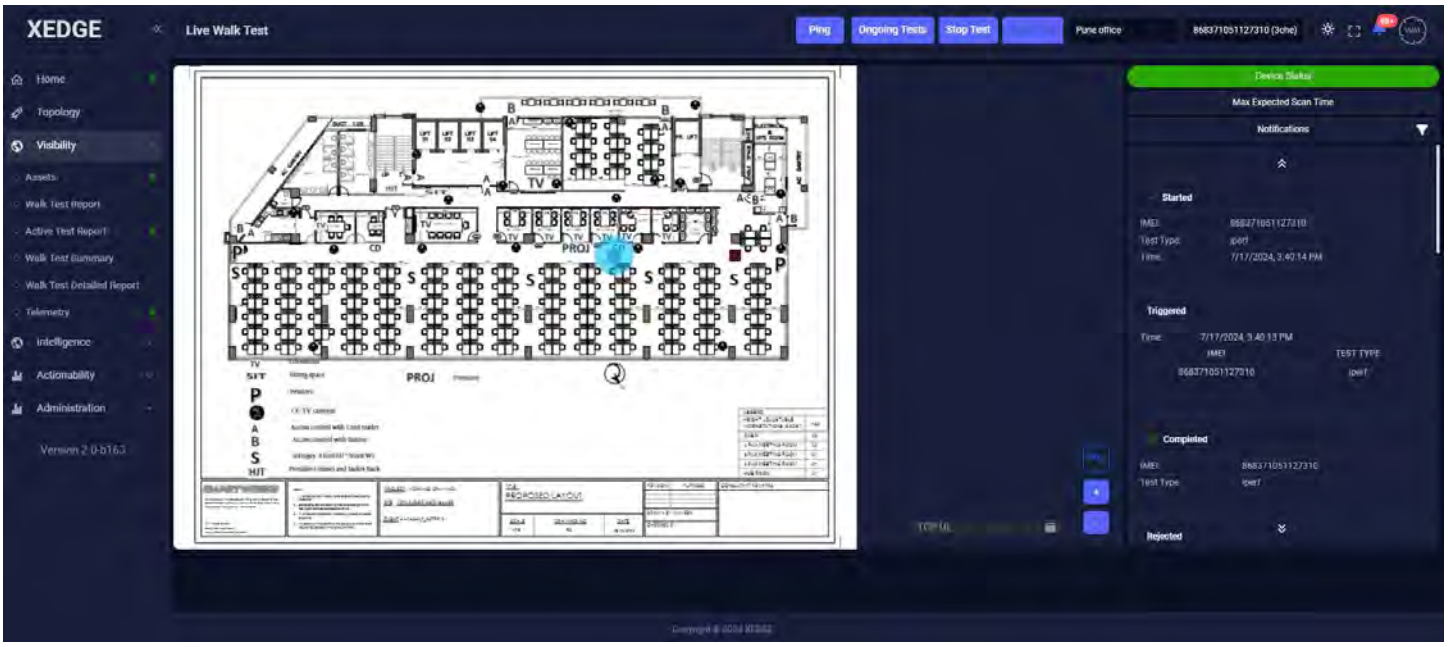


29. Once the IPERF server is configured, click on Start button to start the IPERF Pin Drop test.



30. Click on start. A message stating “configuring IPERF server” is displayed.

31. For Pindrop IPERF test survey, drop a pin (click on the map UI in iPad, or laptop). The test will stop after receiving the notification for the first Pin drop. Notifications can be visualized on the right panel. The user can drop a pin to start the test again which will then stop upon receiving the notification.



32. Repeat steps 11-13

33. Both IPERF and RF test can be done outdoors by selecting outdoor maps. The user must drop pin anywhere on the map and then start walking with the device. The GPS unit within the device, once it gets locked, will transverse the path on which the user moves and will plot the measurement tiles on the map. The whole procedure remains the same for starting and stopping the test.

Chapter 7 Reviewing the Walk Test Report Page

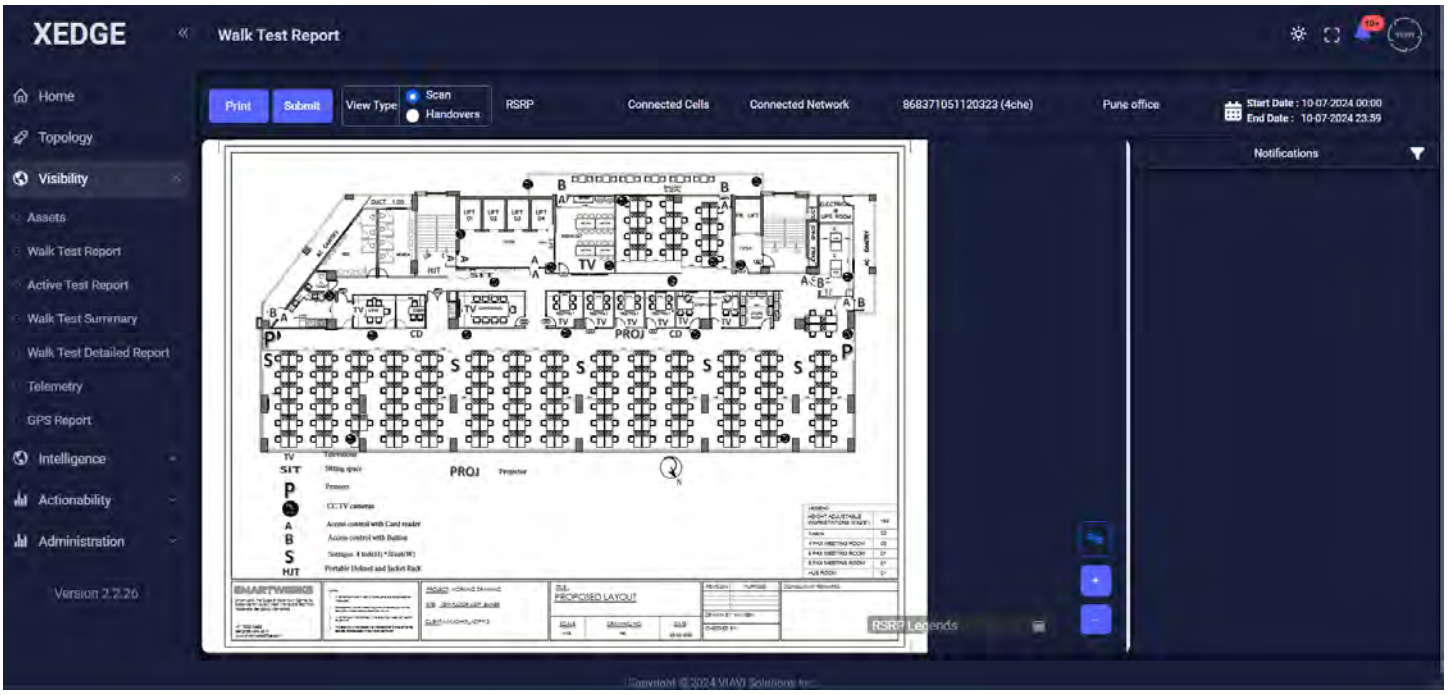
This feature lets the user view test results.

To prevent the user from selecting random parameters without getting any test results on the map, an order of selections must be followed:

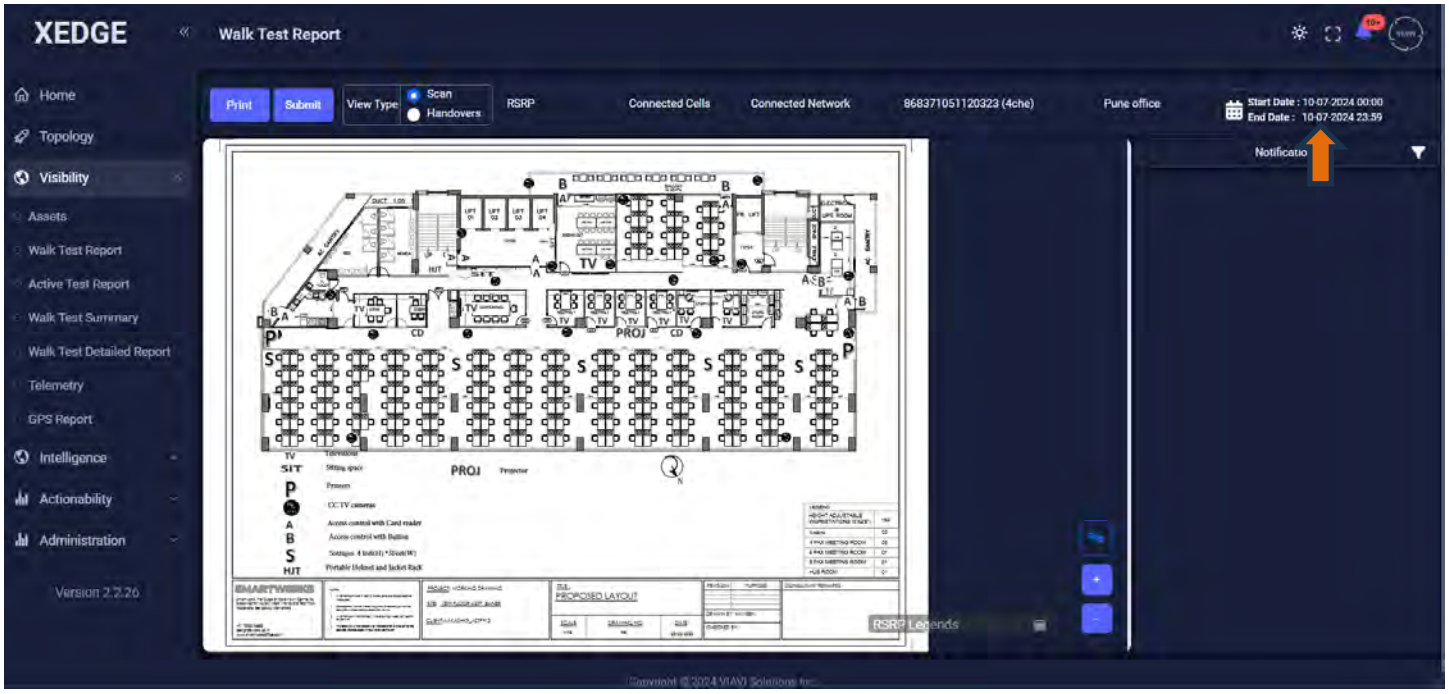
1. Select date range- this will populate all the maps on which any test has been conducted in the selected date range.
2. Select a map- this will populate a list of all the devices on which any test has been conducted on the selected map.
3. Select a device- this is optional, not selecting any device will populate results from all the devices with the selected map and the date range. Selecting a device from this dropdown will refine the results to the selected device only.
4. Submit- Submit will fetch and process the data for the selected combinations and populate it on the UI.

To review the walk test results, complete the following steps:

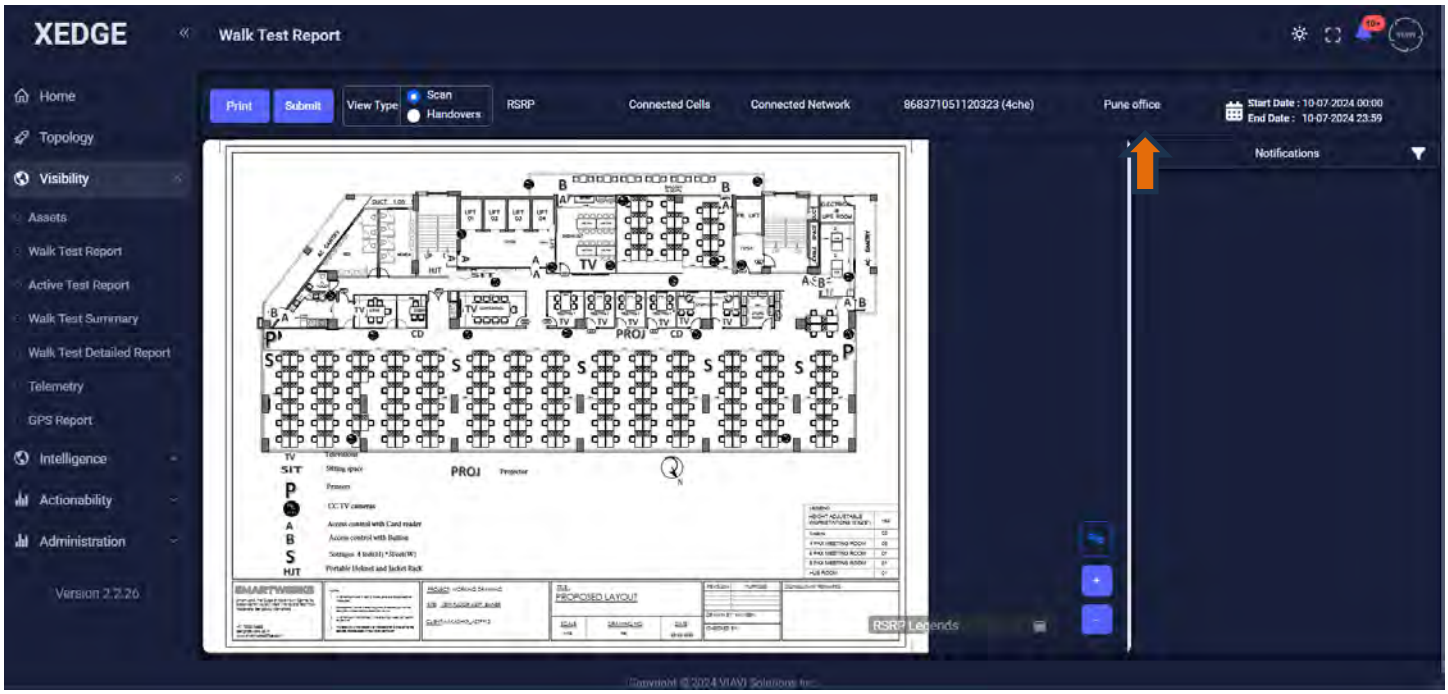
1. Navigate to Visibility > Walk Test Report page



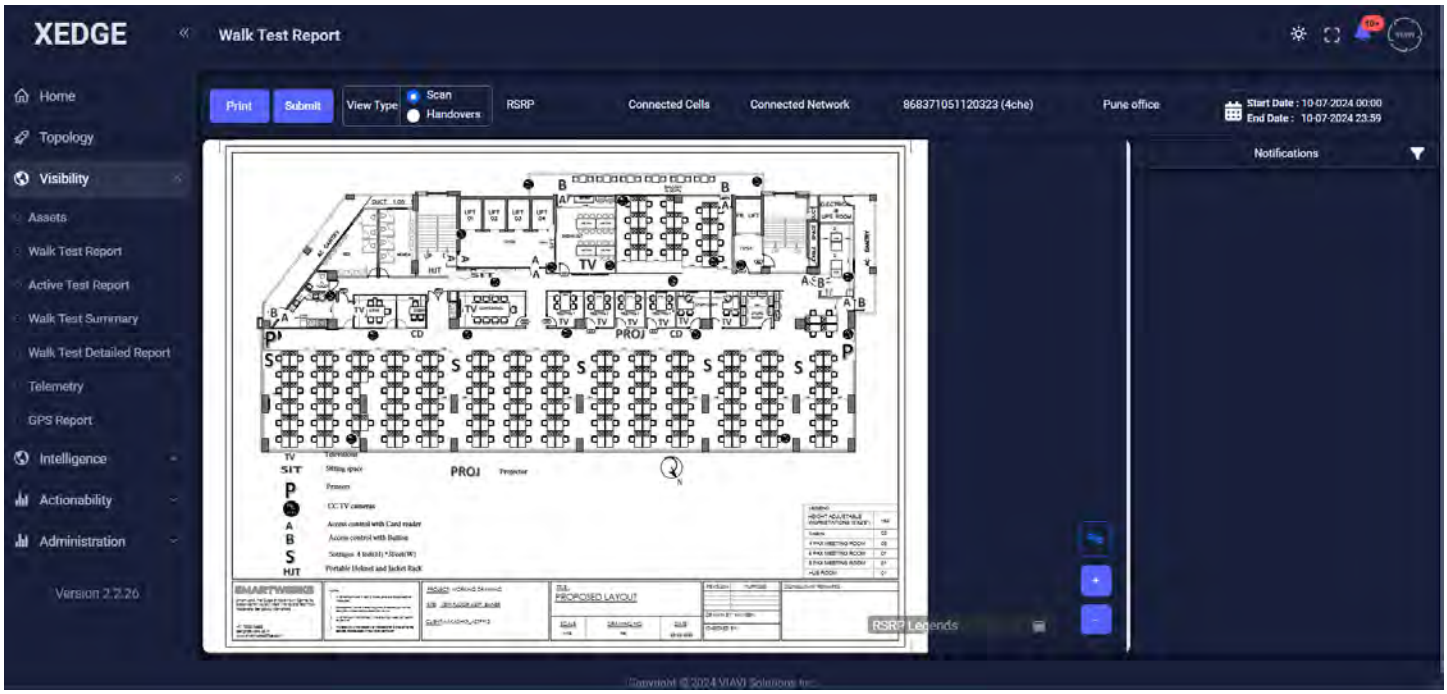
2. Click on the calendar and select the date and time you ran the walk test.



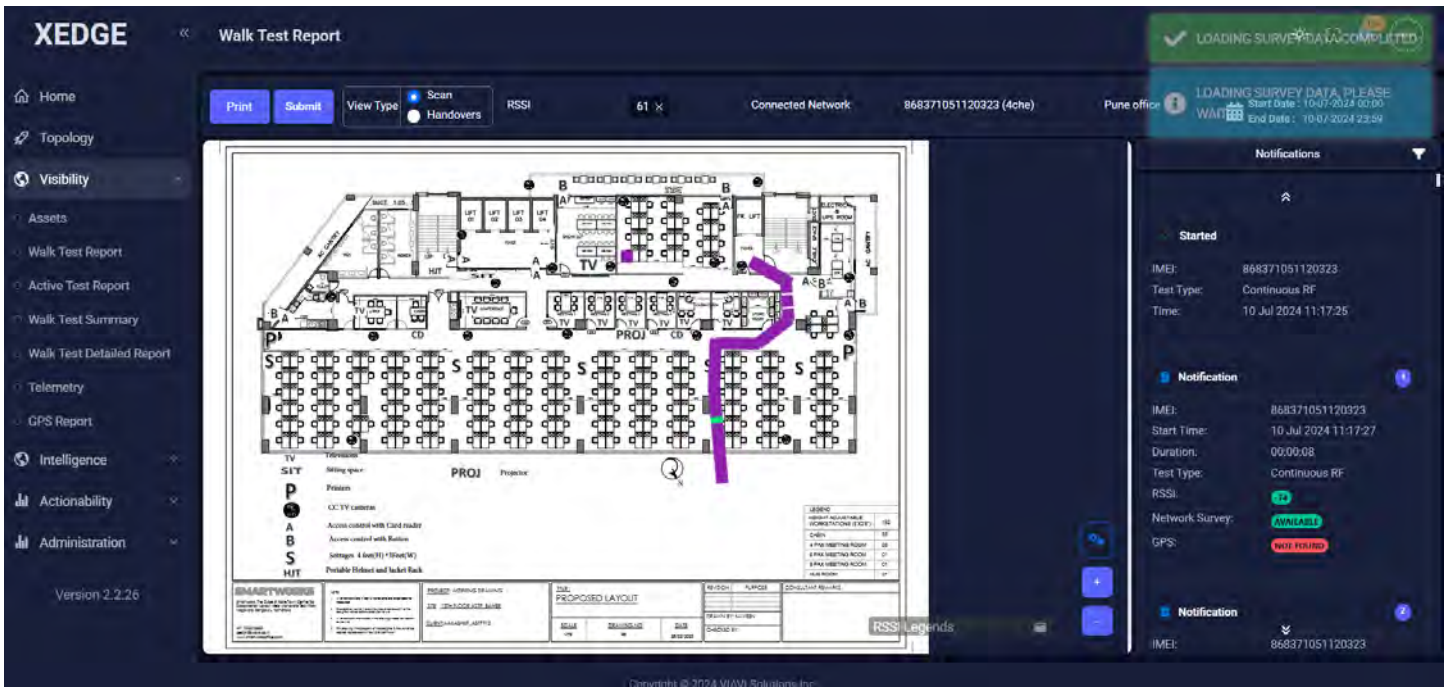
3. Select a map from the dropdown menu.



4. Select the device from the "Serial Number" dropdown menu you just tested with.

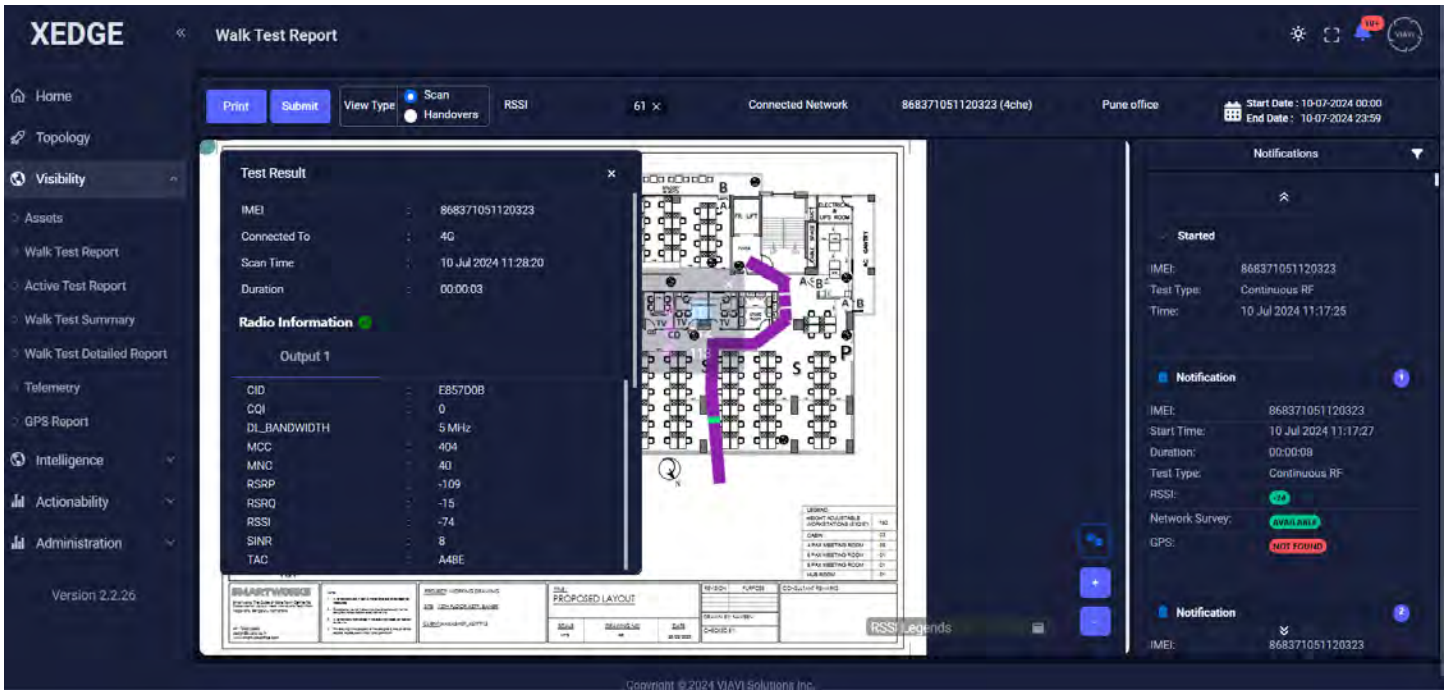


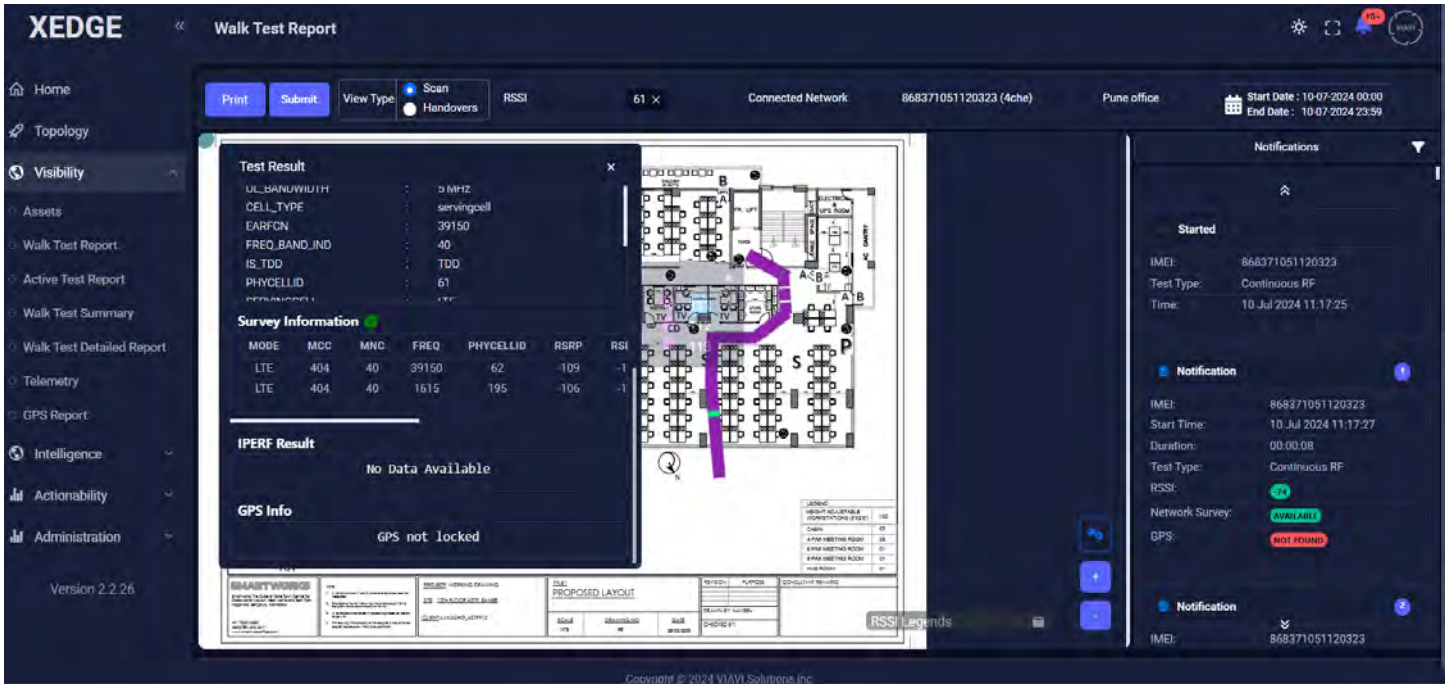
5. Click **Submit**.
6. View results.



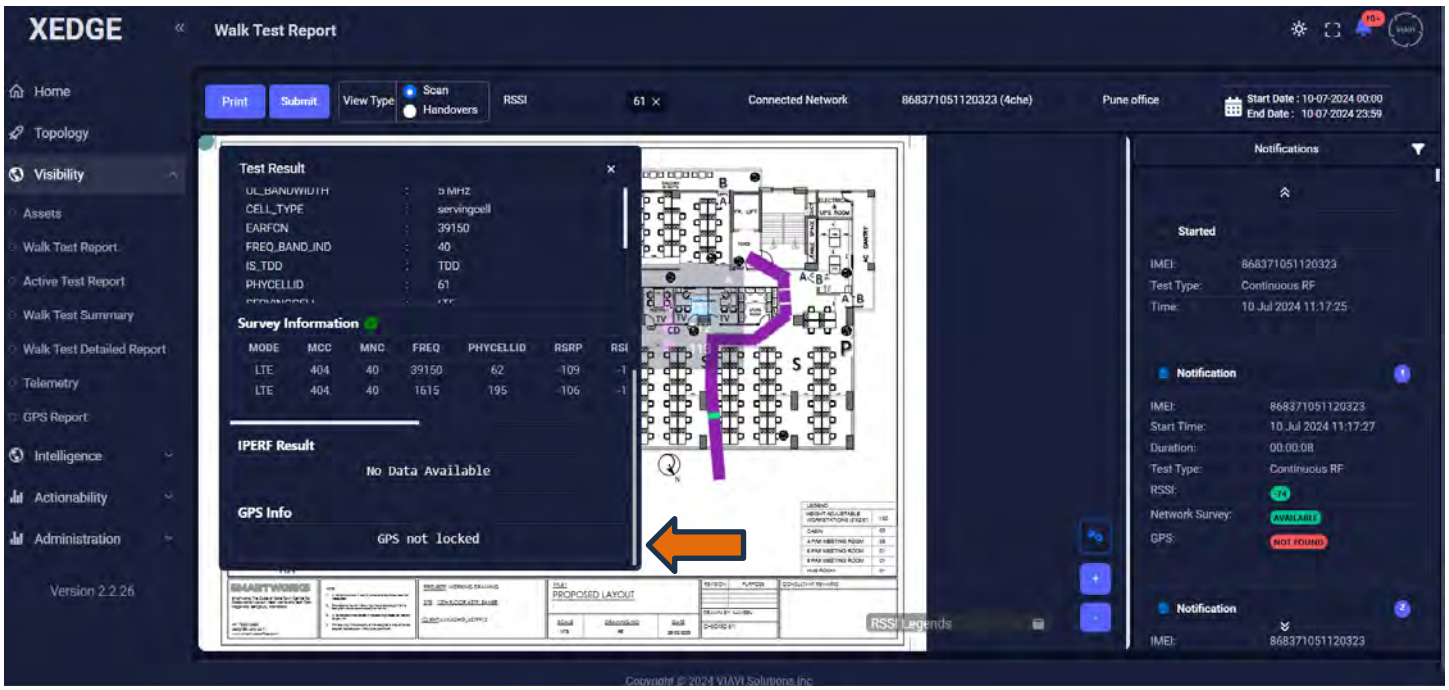
Single-click on one of the tiles or notifications on the right to see test results.

7. Hover over the results to see clearly.

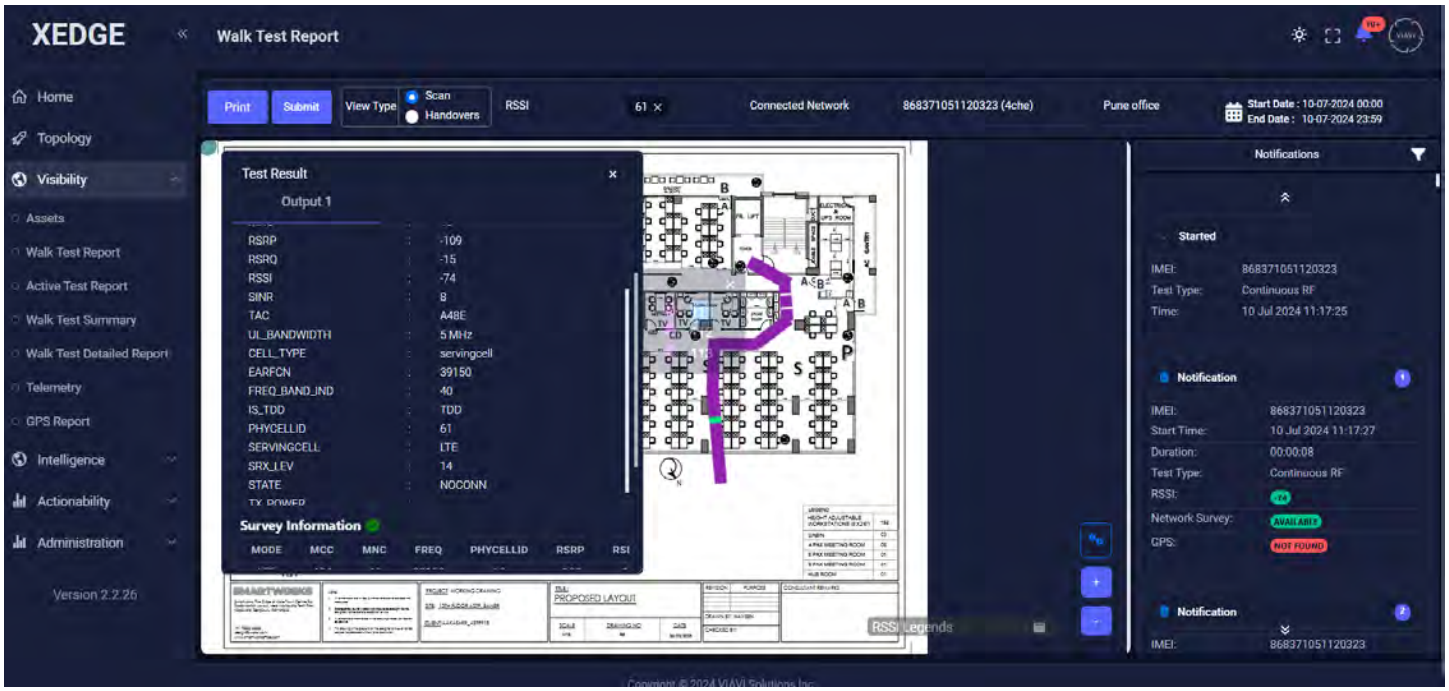




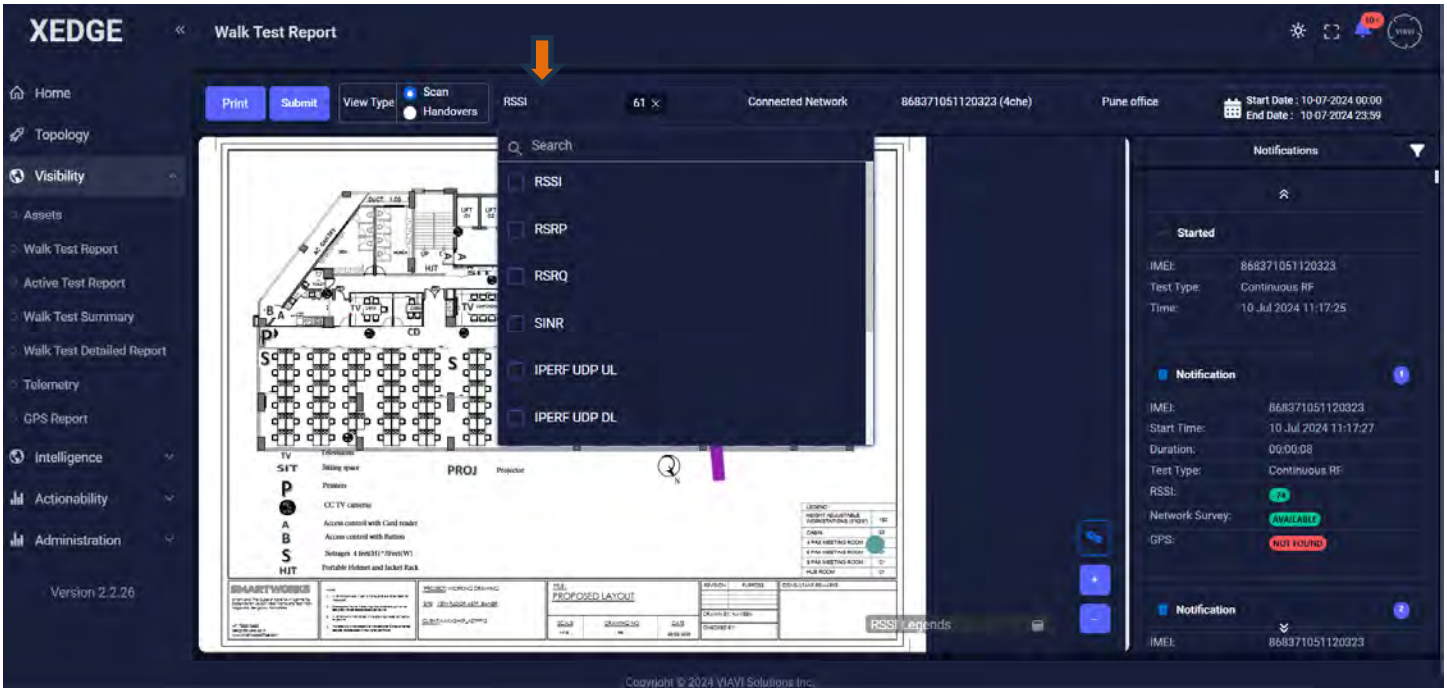
8. Expand results by grabbing corners and dragging.

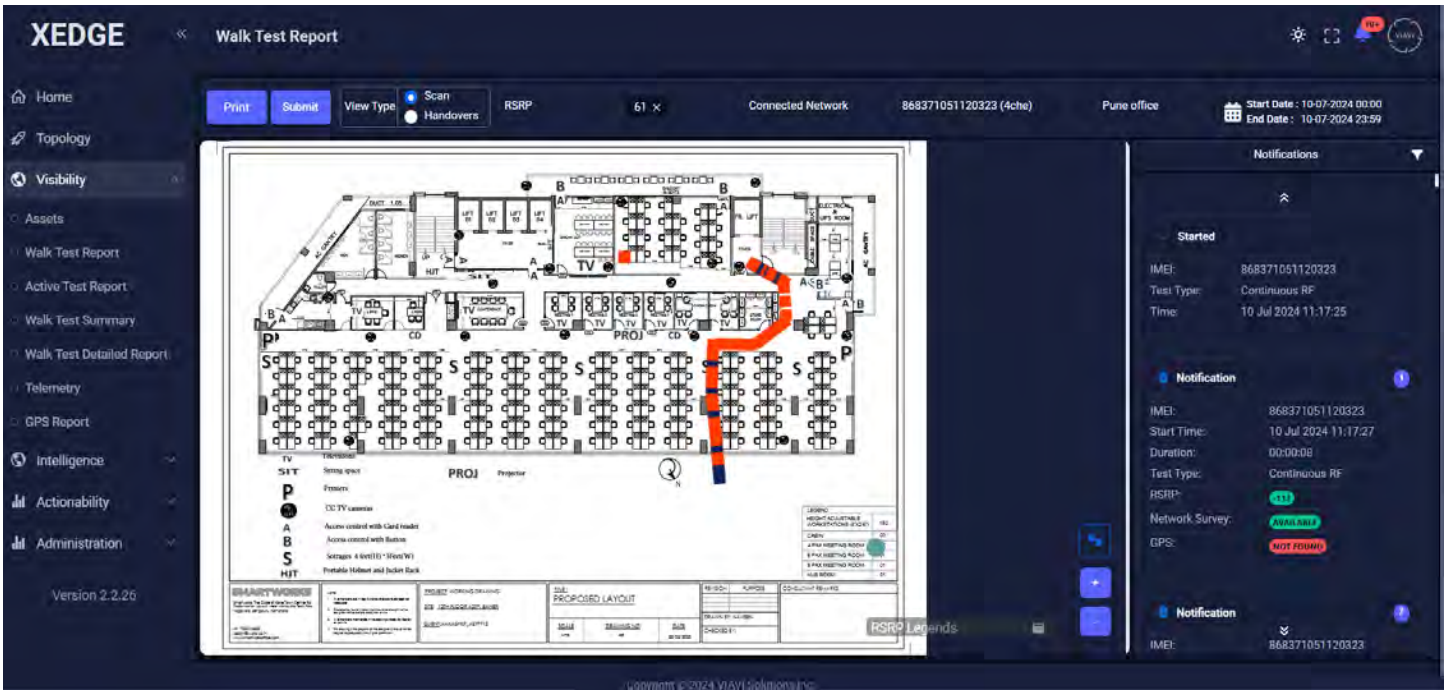


9. Use the scroll bar to see all the radio information.

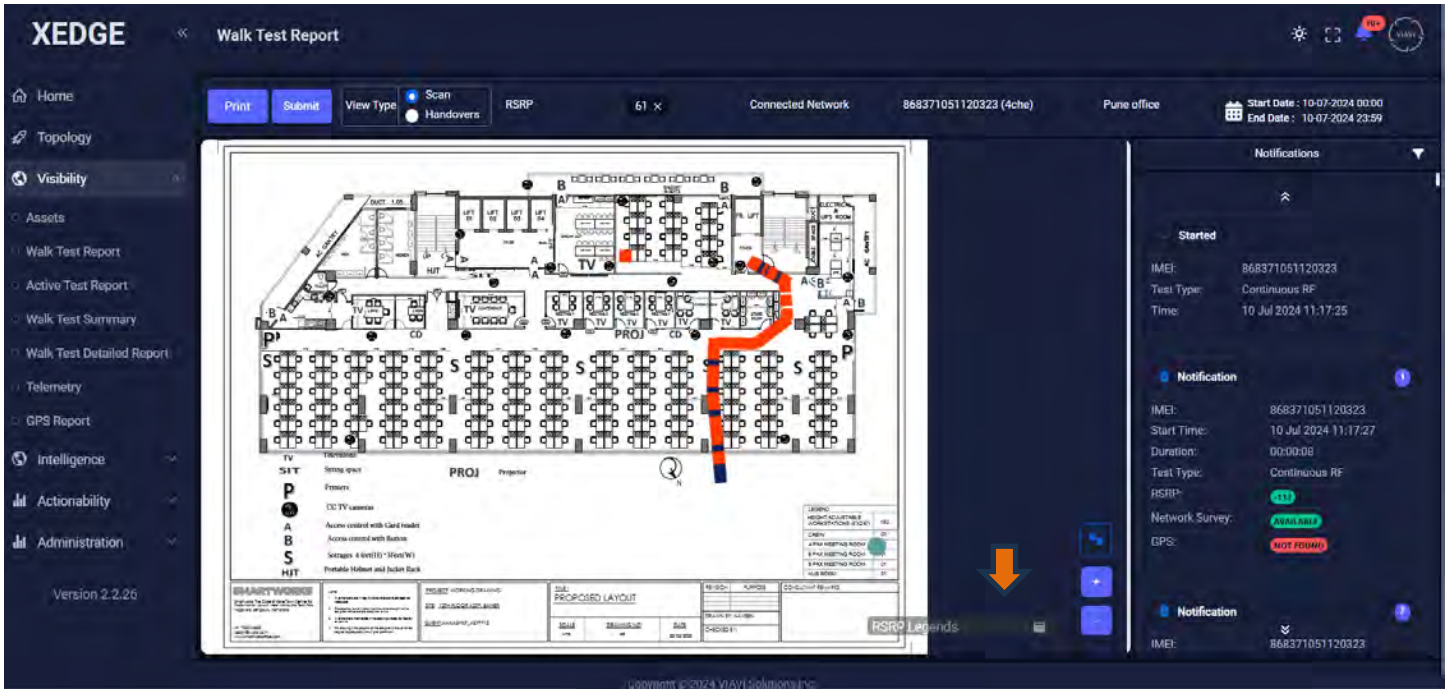


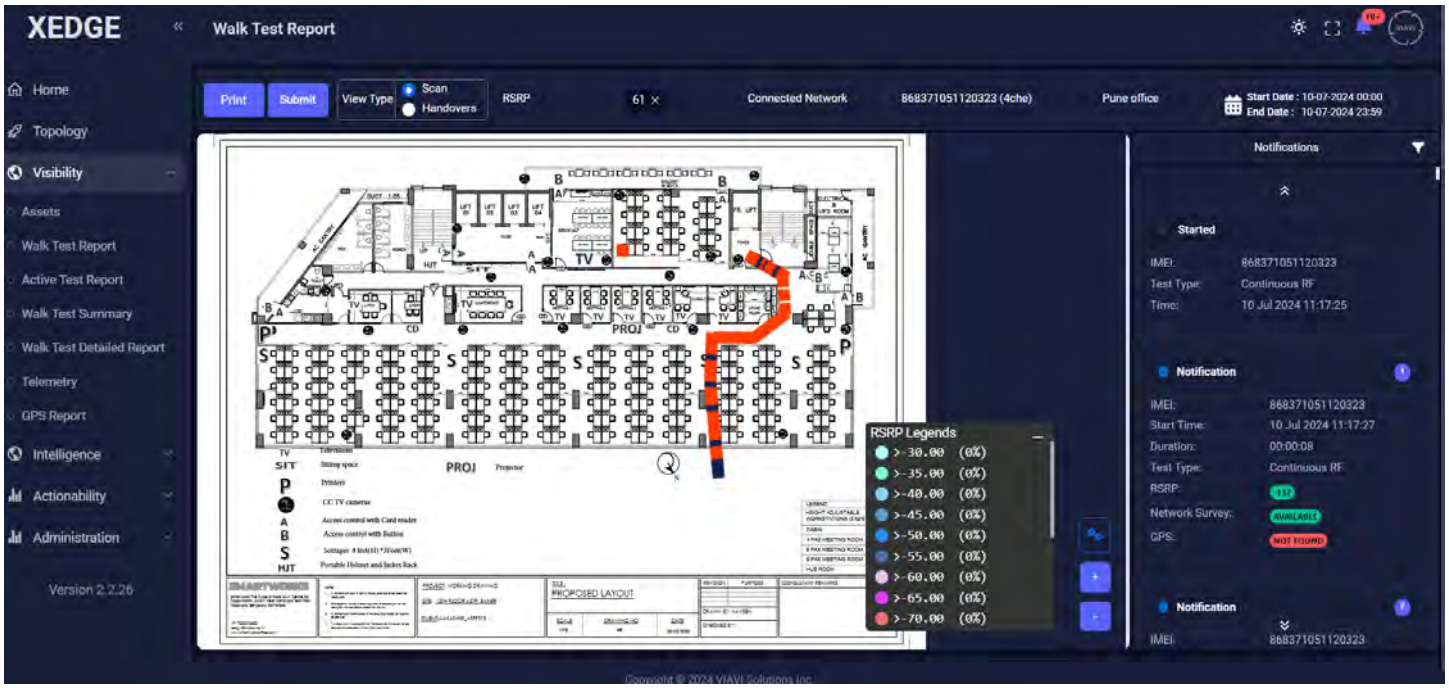
10. Review the filters. Click on the filter dropdown and choose RSRP .





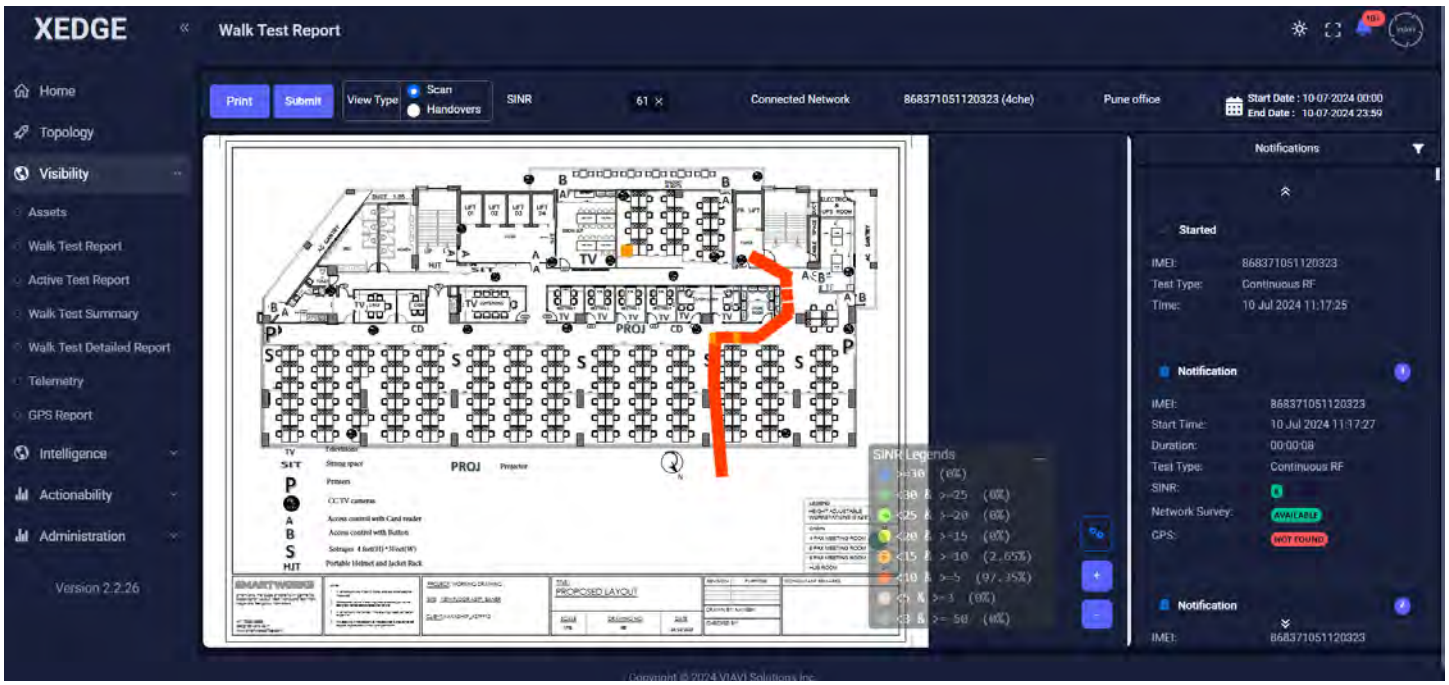
11. Click on the legend to see the signal strength values.



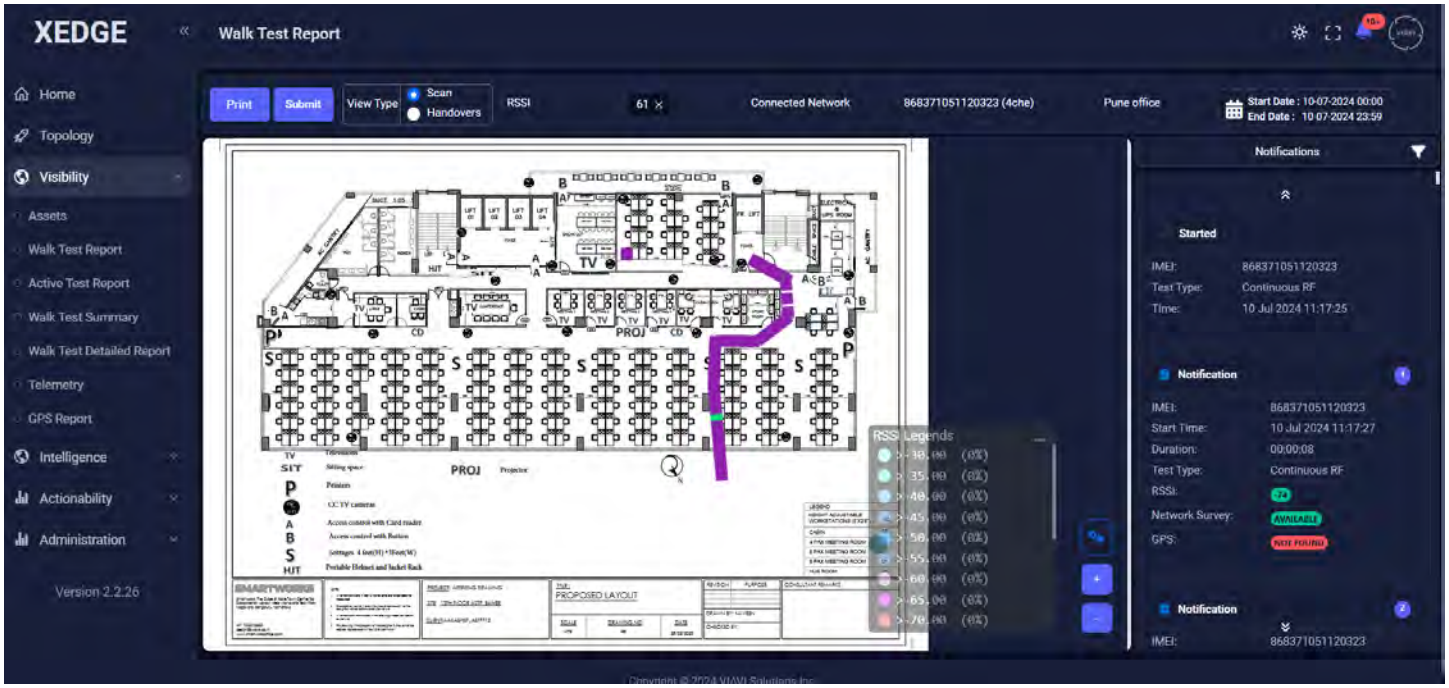


12. Click on the filter again and choose RSRQ.
13. Open signal legend.

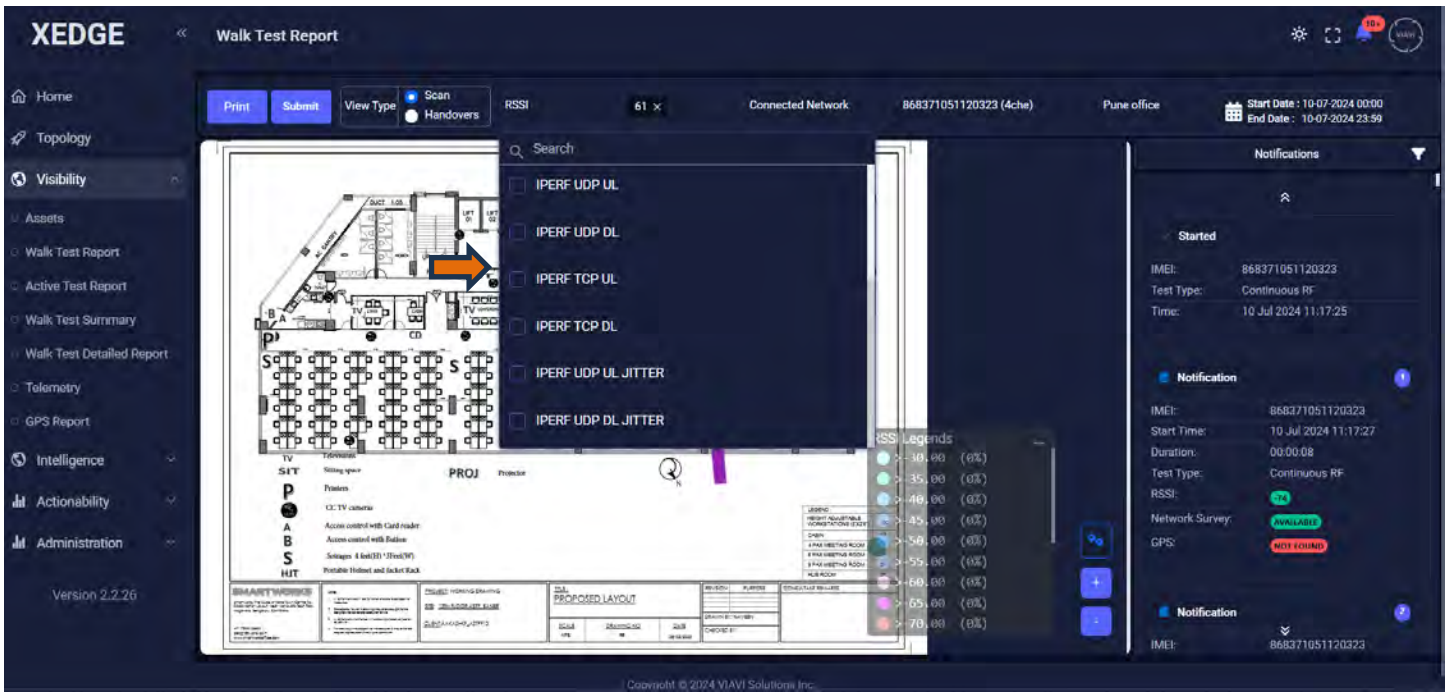
14. Click on the filter and choose SINR, then click on signal legend.



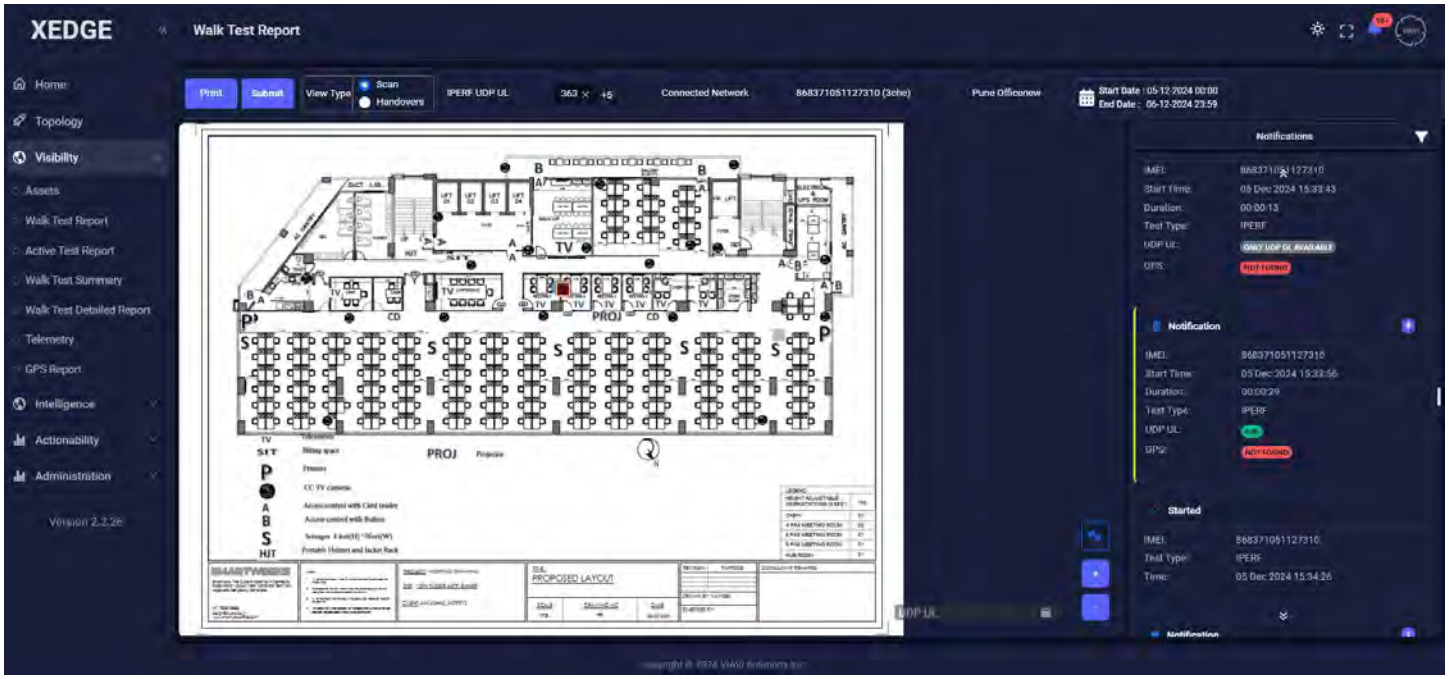
15. Click on the filter choose RSSI and then open the legend.



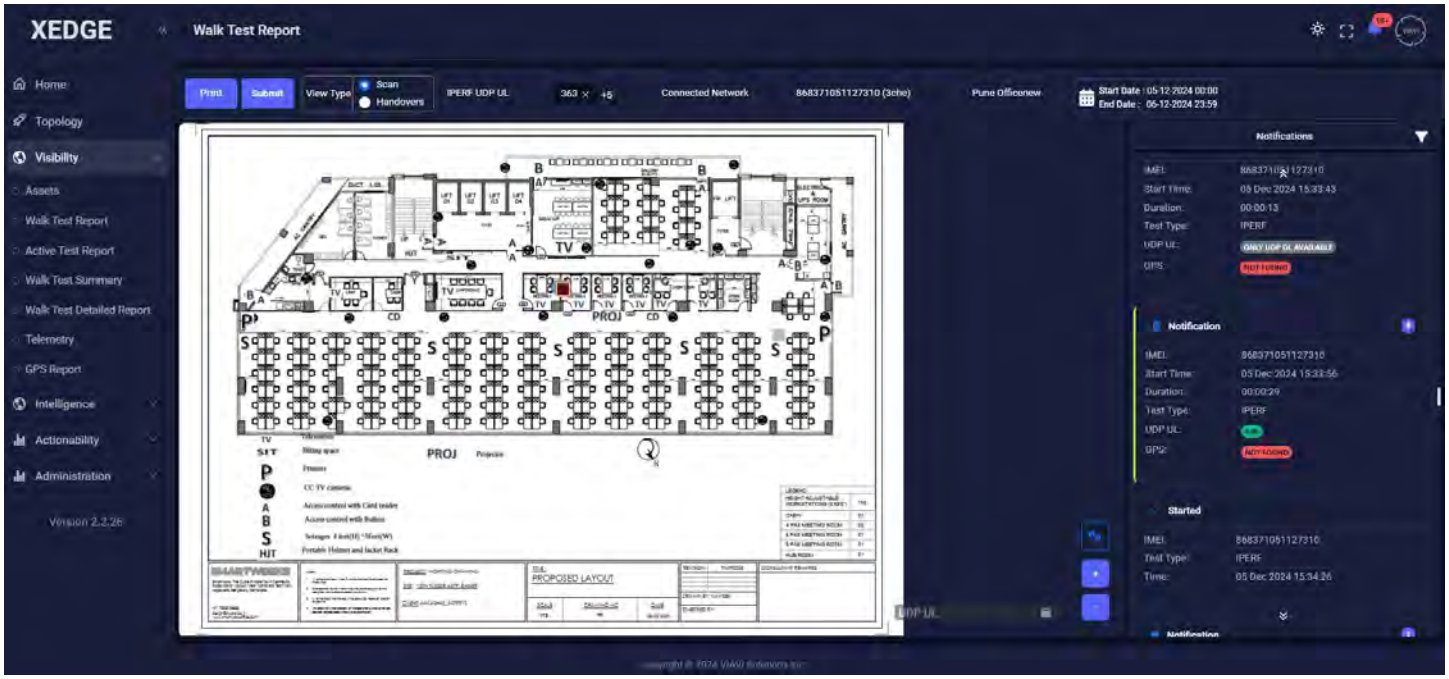
16. To see performance results, perform the above steps from 1-5.
17. Select the filter corresponding to IPERF test from the dropdown menu.



18. View results.



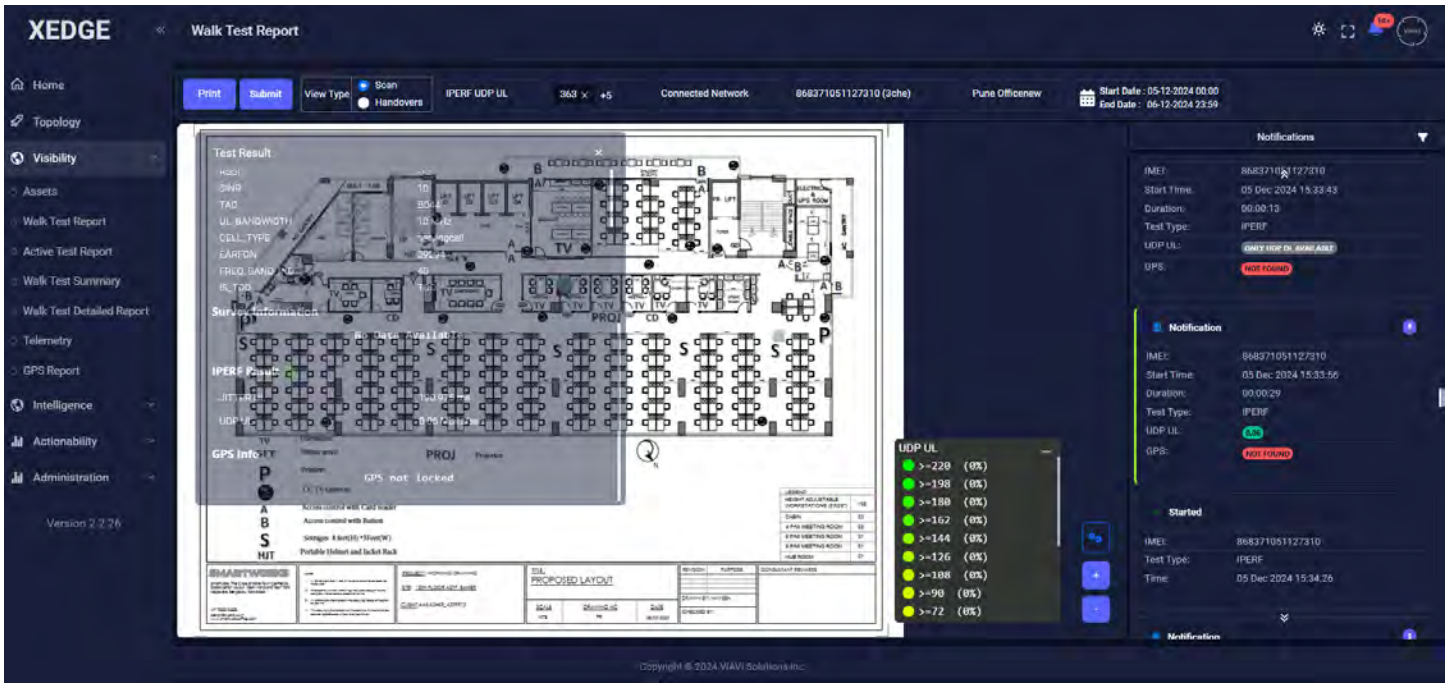
19. Click on the square or notifications on the right for performance results.



20. Click on the square or notifications on the right for performance results.

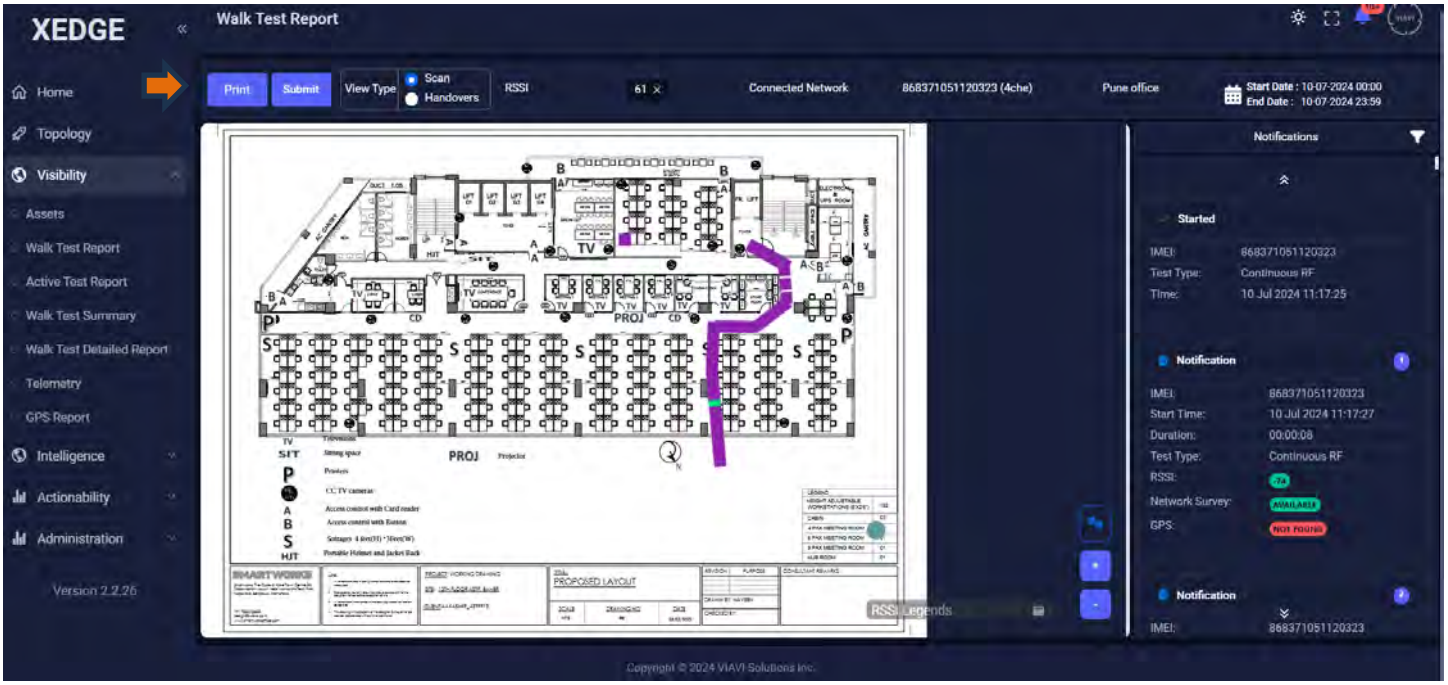
21. Click on the color legend for the selected IPERF filter.

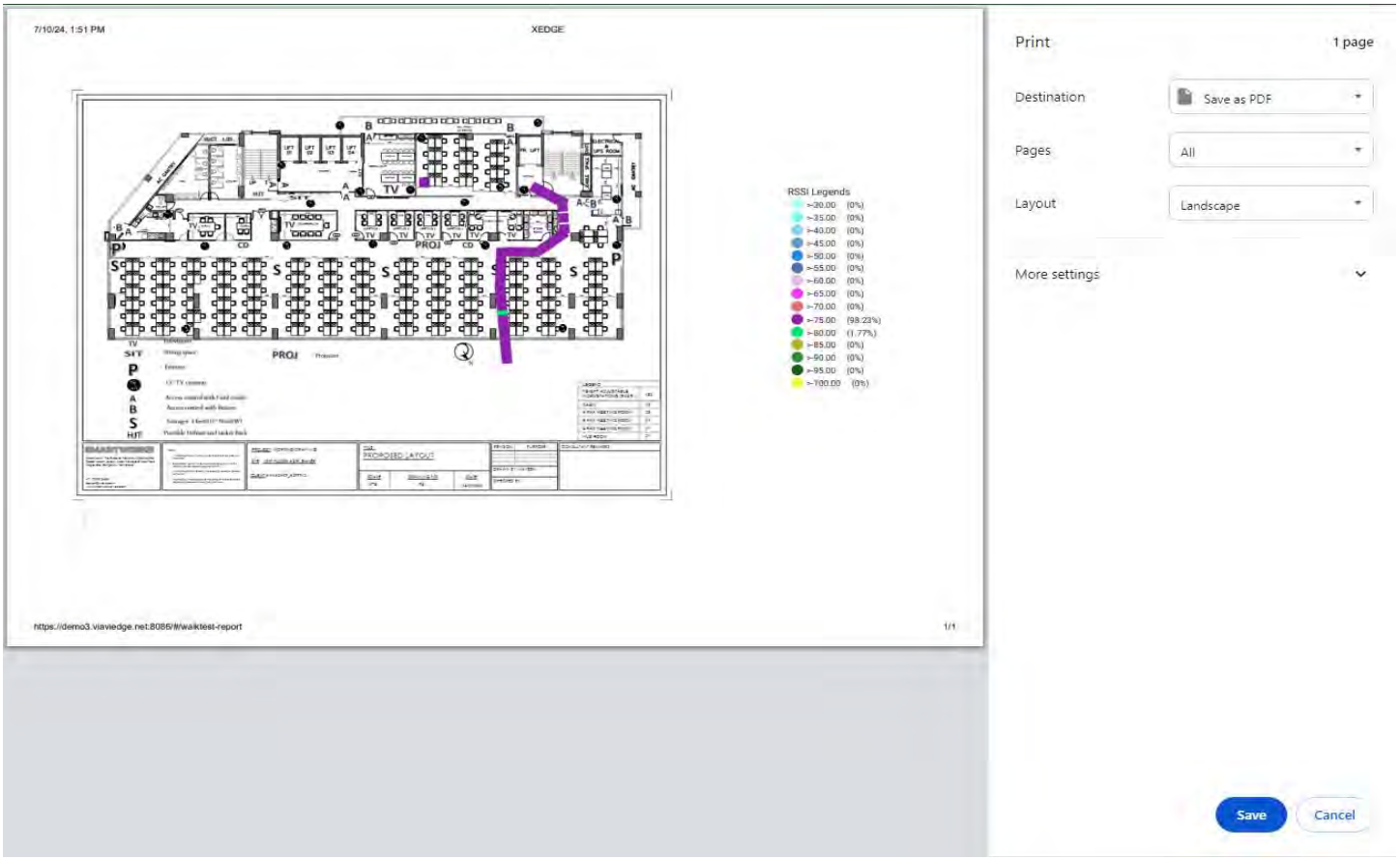
22. View Results.



23. The legend shows the bandwidth ranges according to each color. These ranges are in Mbps.
24. The same steps can be executed to view results for IPERF UDP DL, IPERF TCP DL, IPERF TCP UL, IPERF UDP DL JITTER, IPERF UDP UL JITTER.

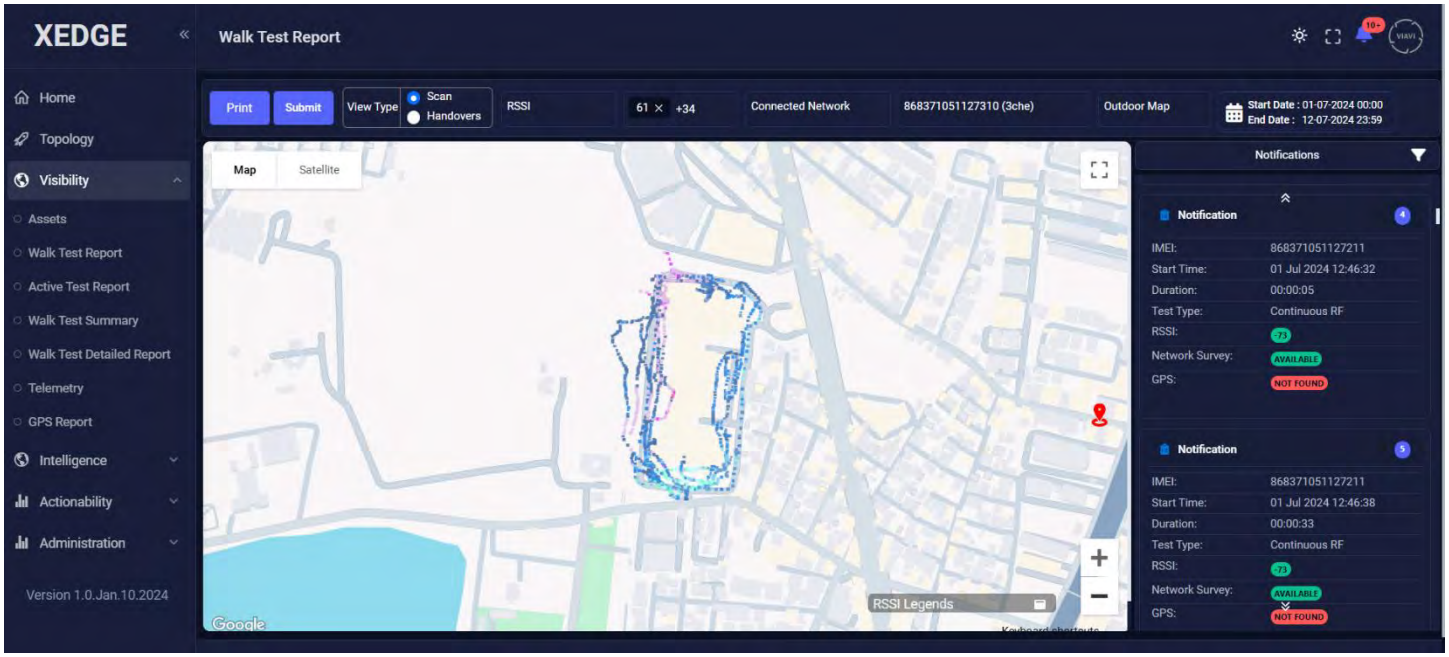
25. Click on Print button to print the report



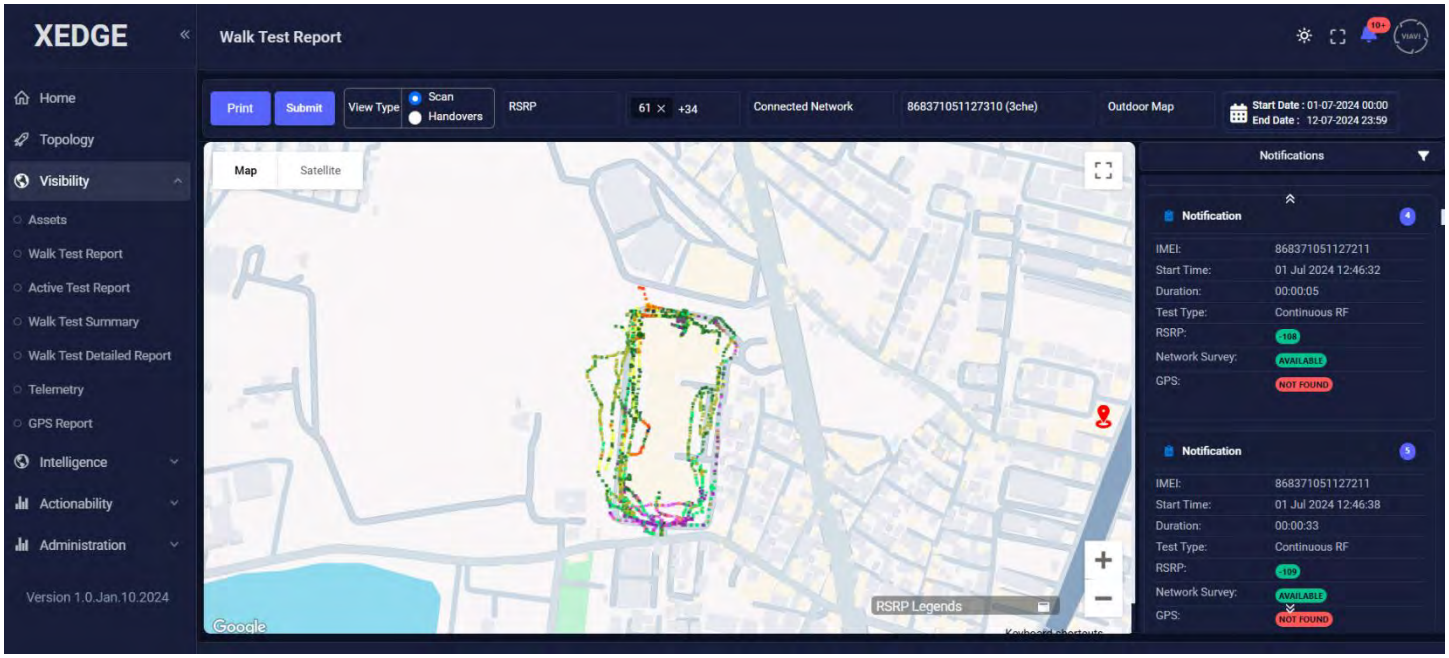


26. Similar to the reports shown above, the same can be employed in cases of outdoor maps. Wherein the user has to select the map as outdoor maps and its corresponding date and time followed by the device selection.

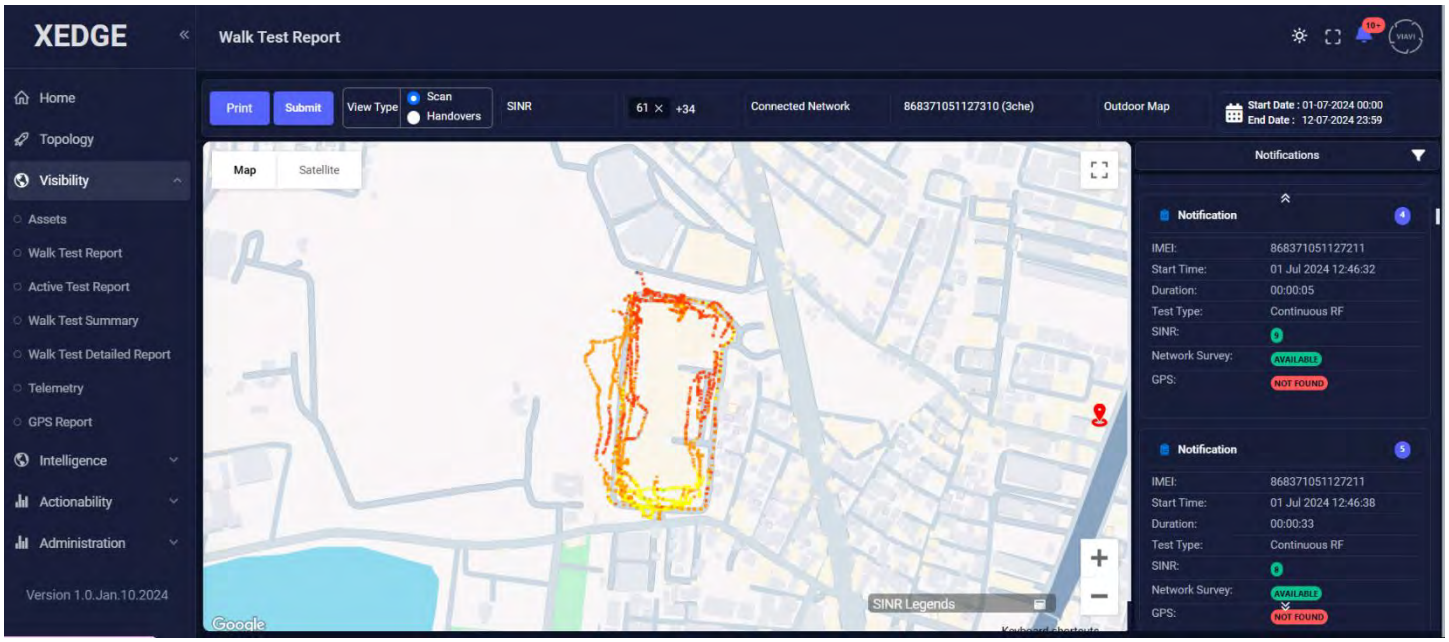
When RSSI filter is selected:



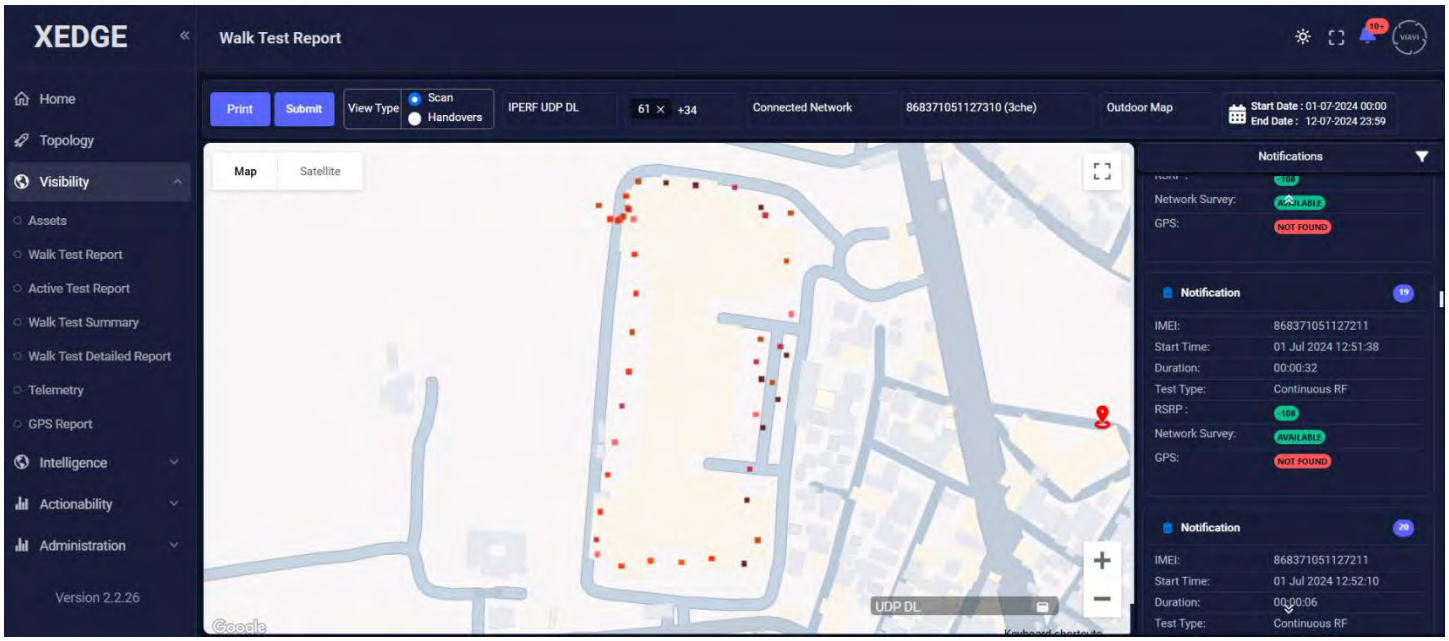
When RSRP filter is selected:



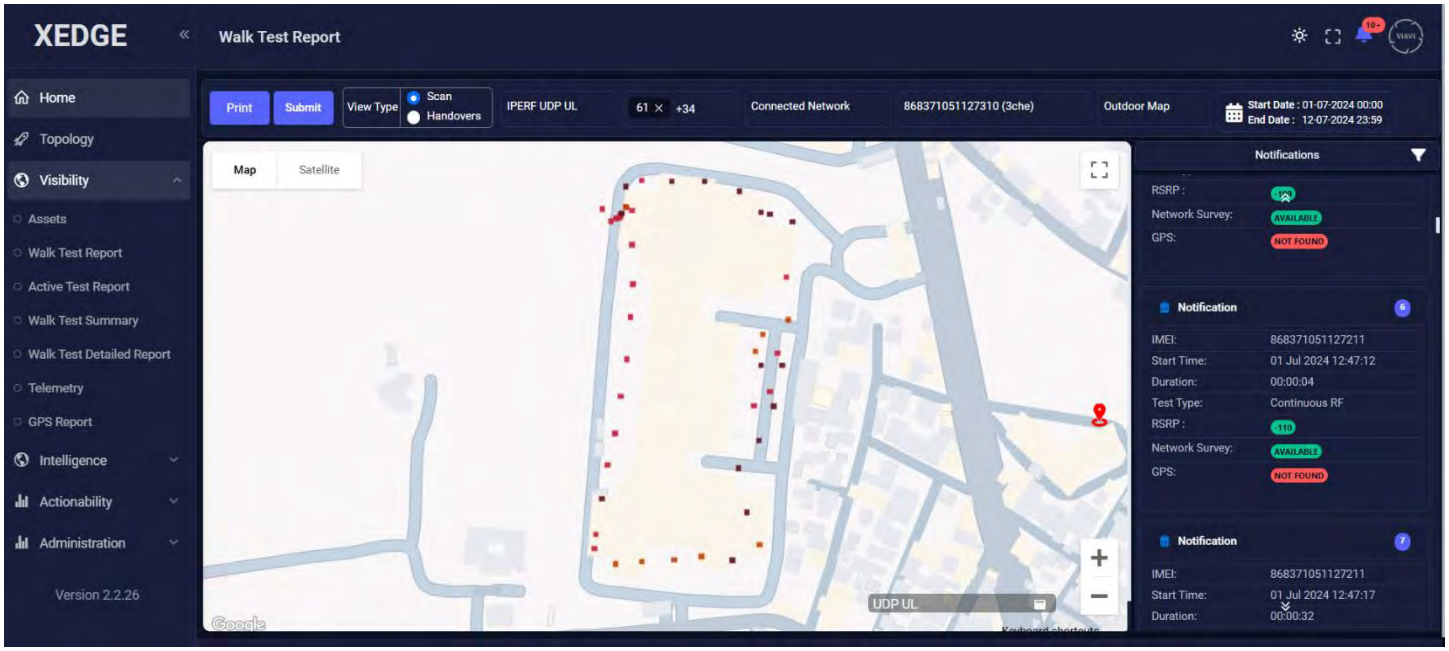
When SINR filter is selected:



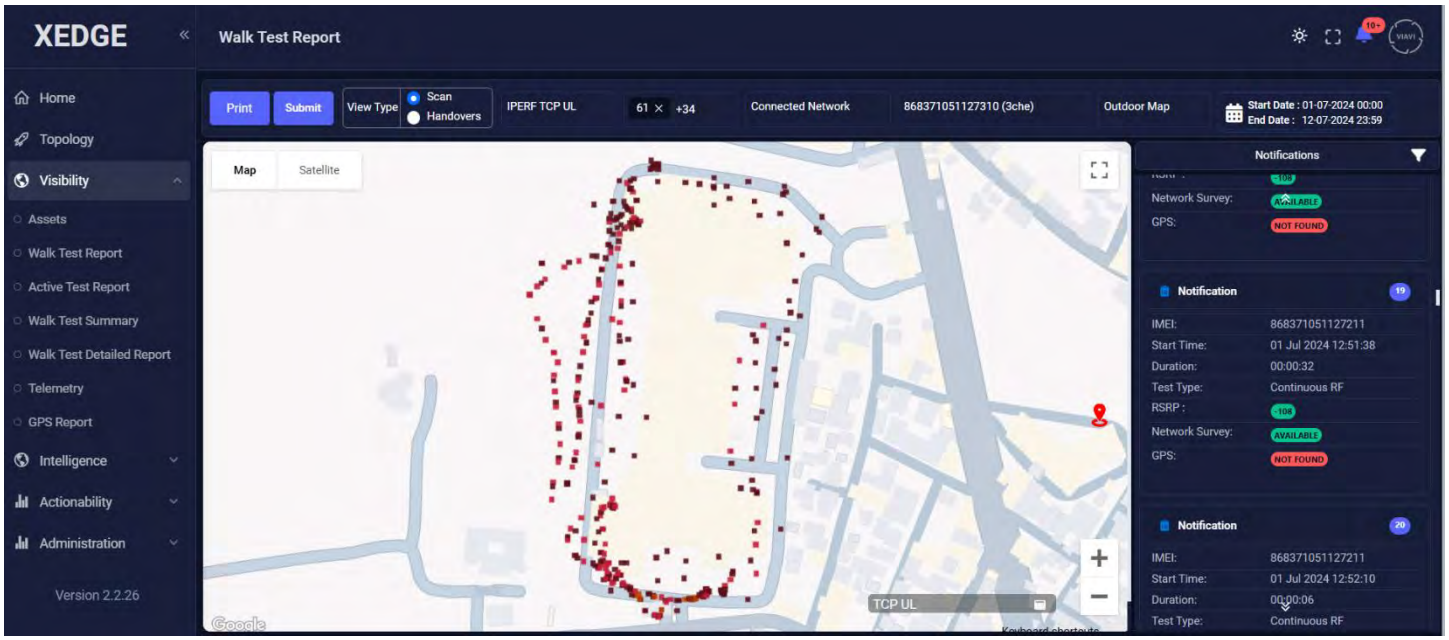
When IPERF UDP DL filter is selected:



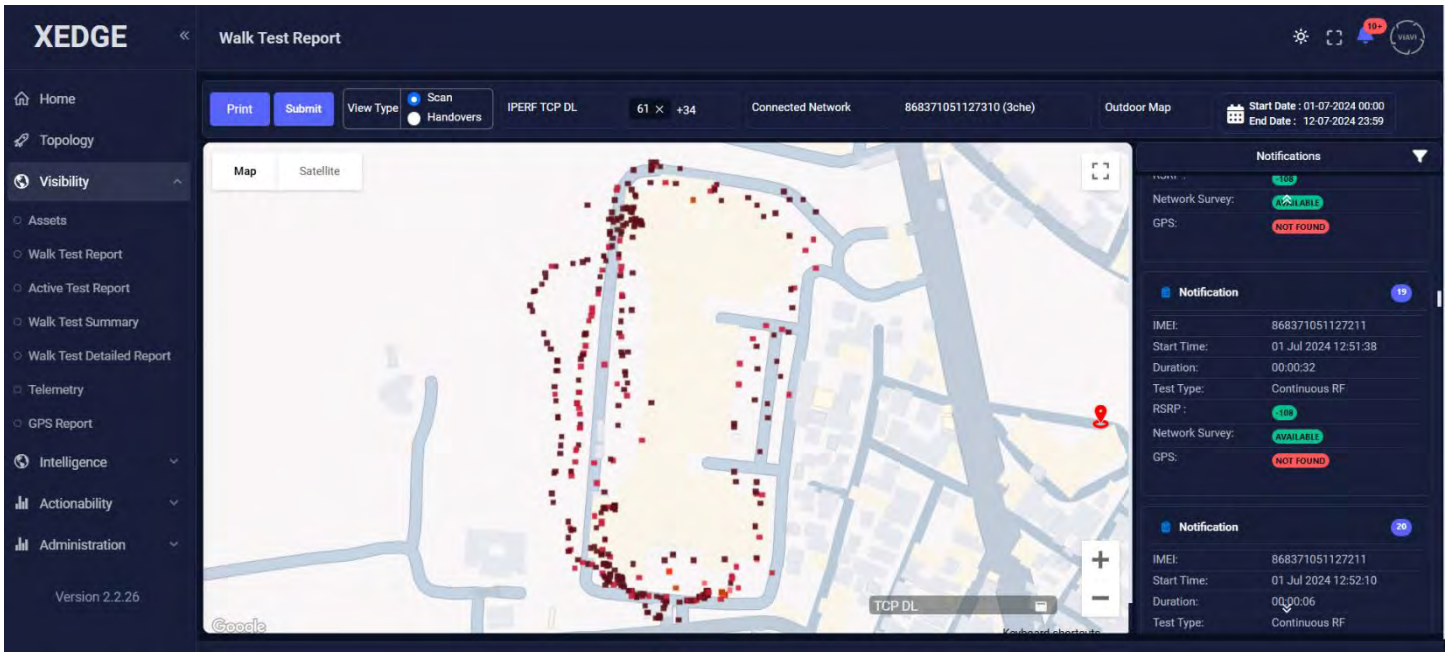
When IPERF UDP UL filter is selected:



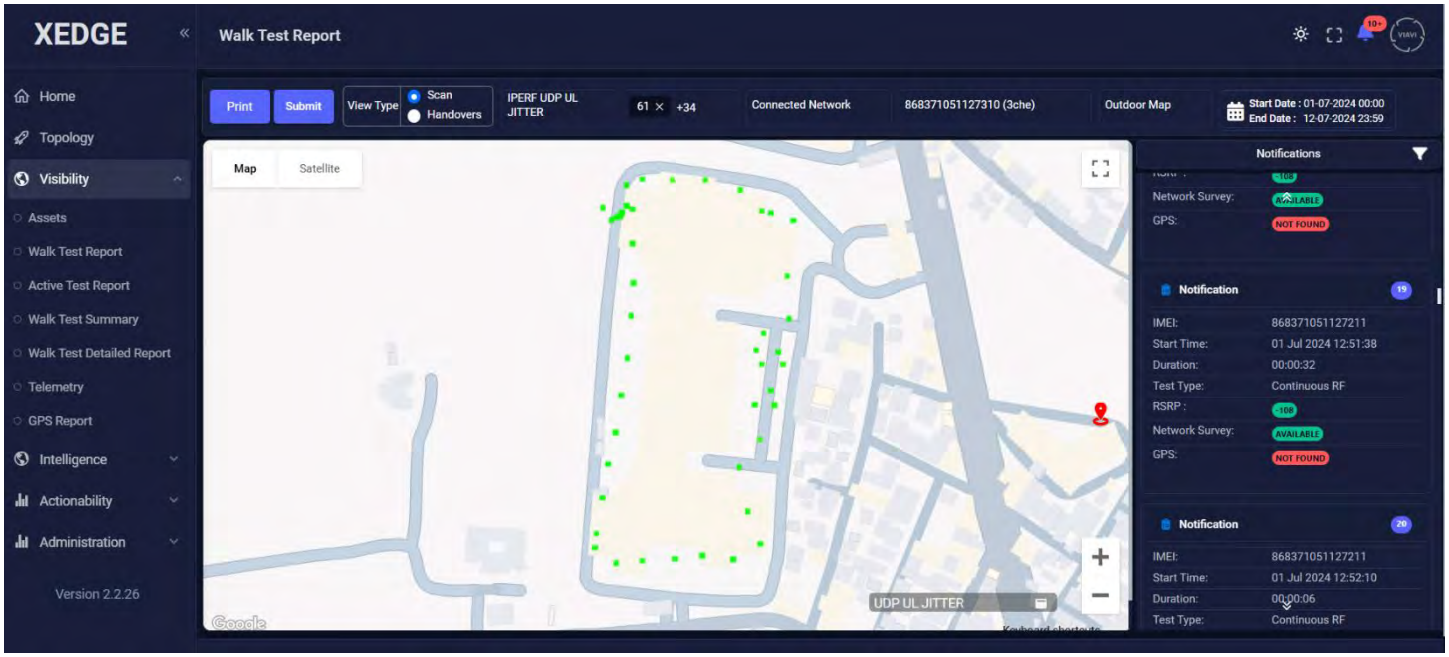
When IPERF TCP UL filter is selected:



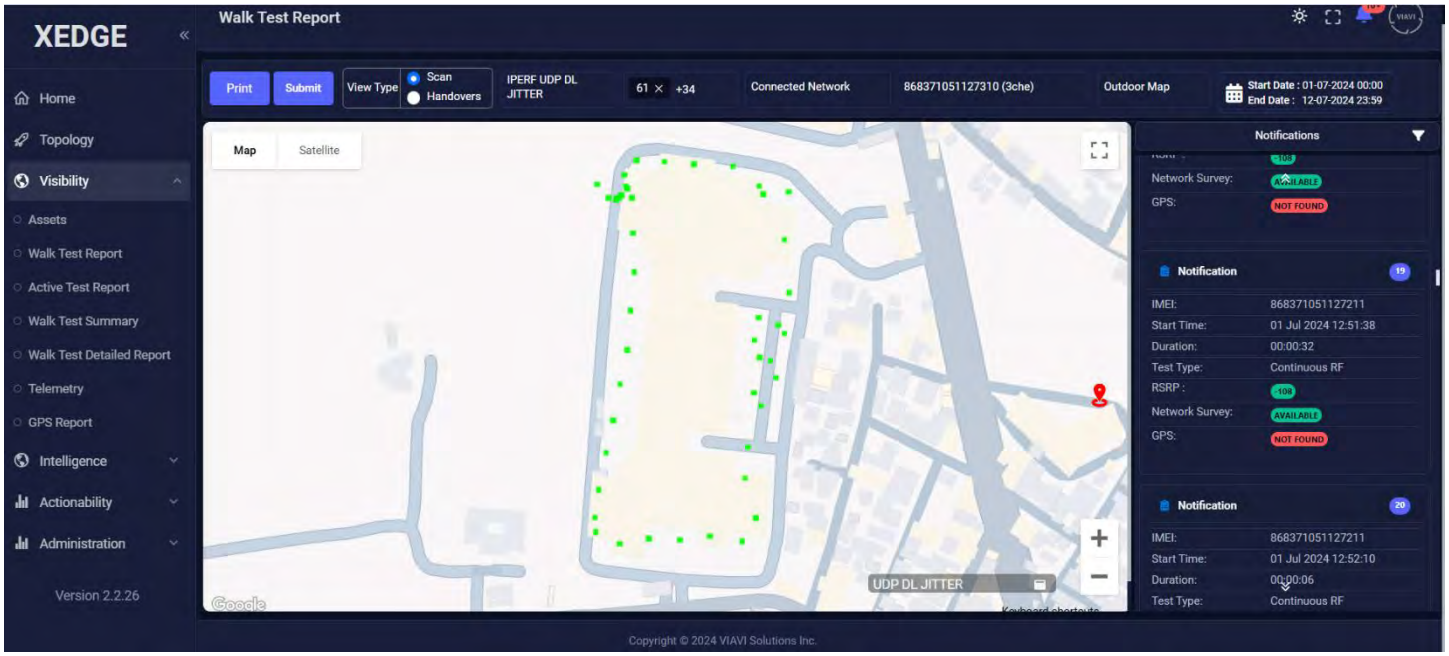
When IPERF TCP DL filter is selected:



When IPERF UDP UL JITTER filter is selected:

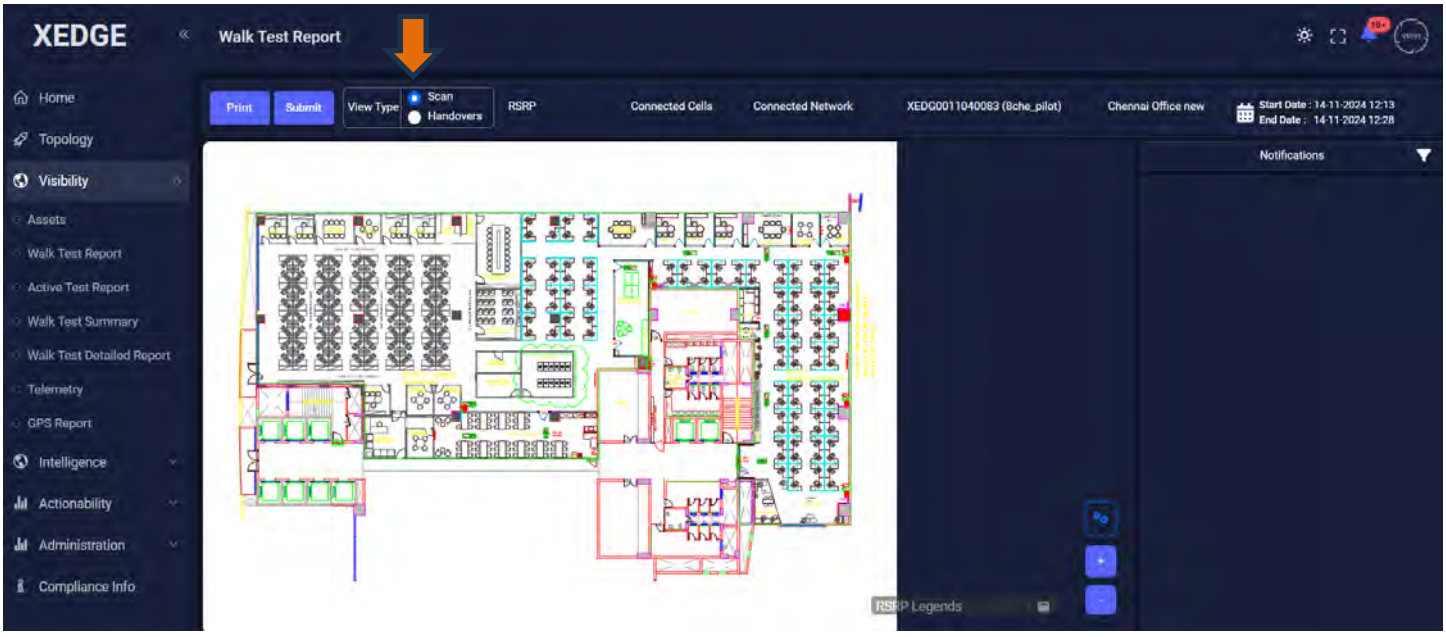


When IPERF UDP DL JITTER filter is selected:



Handover report

The user can view the cellId handover from the report page by checking on the handover options.

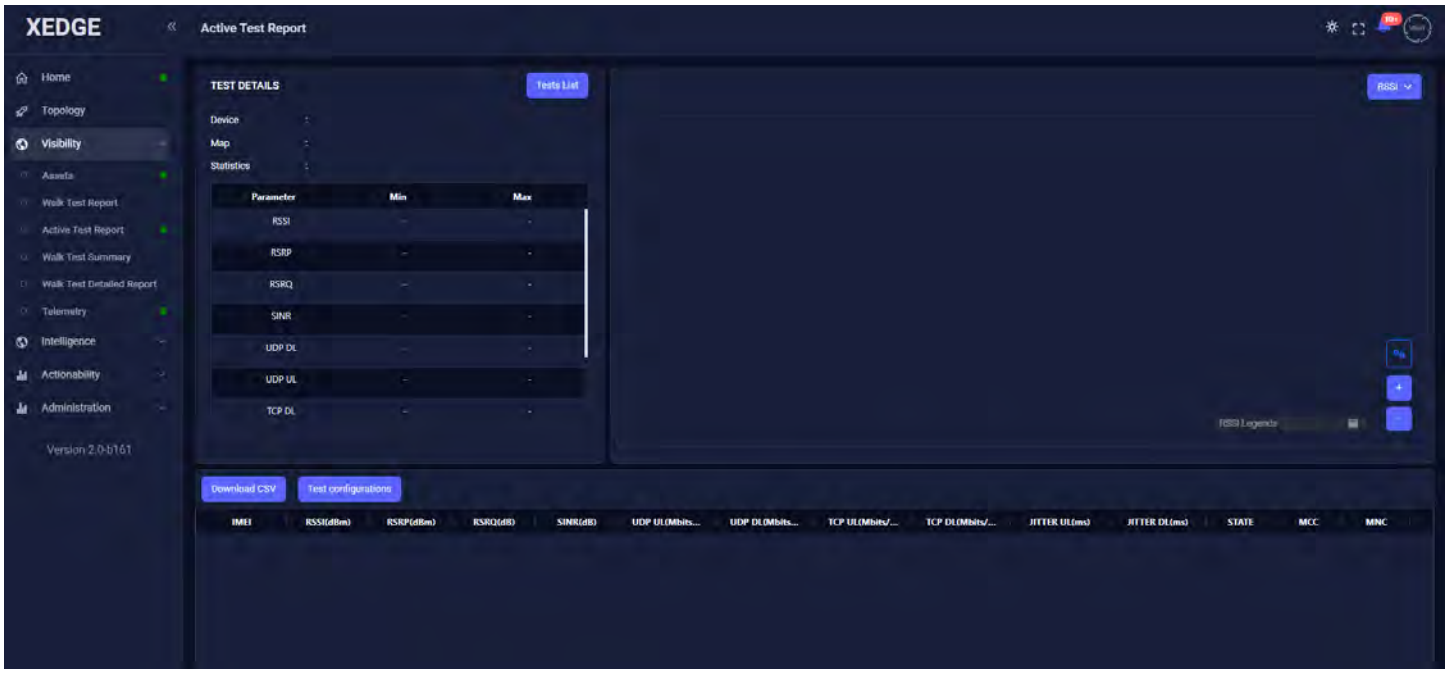


8

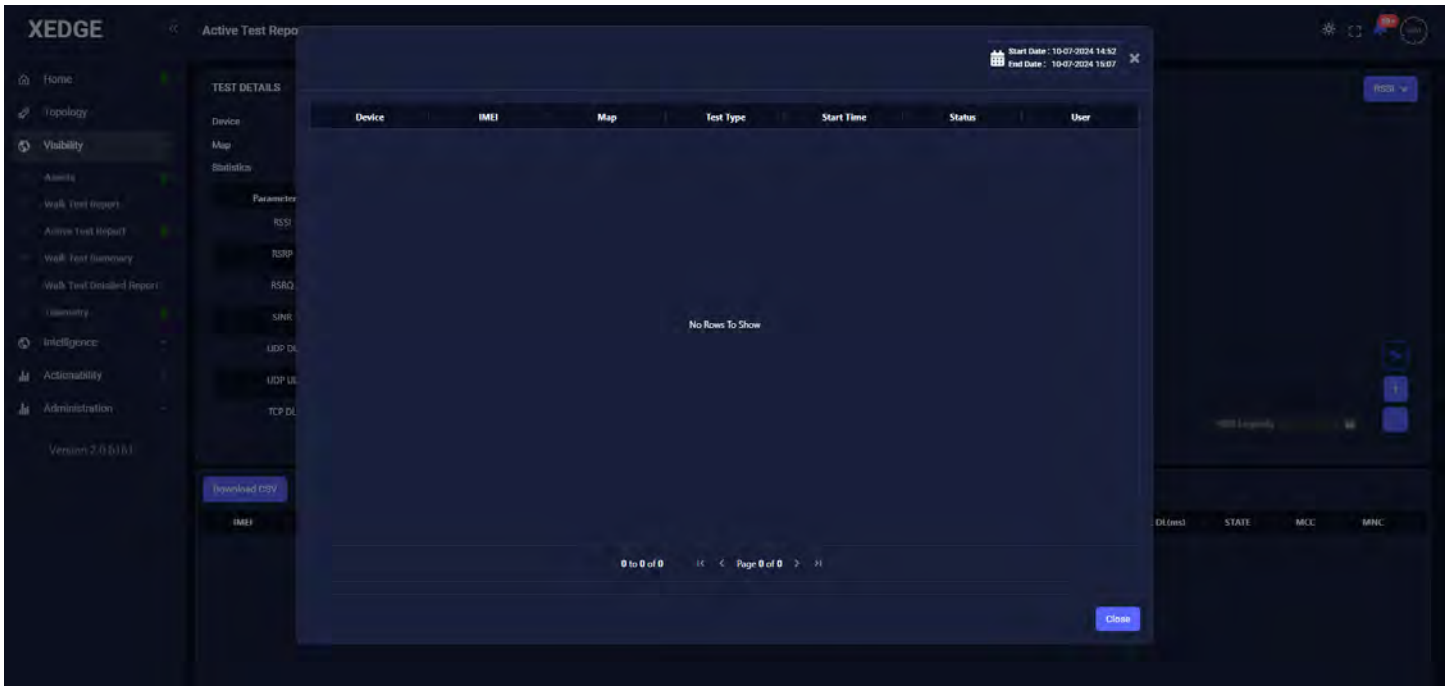
Chapter 8 Reviewing the Active Test Report Page

This feature lets the user view test result details based on date selection.
To review the Active test results, complete the following steps:

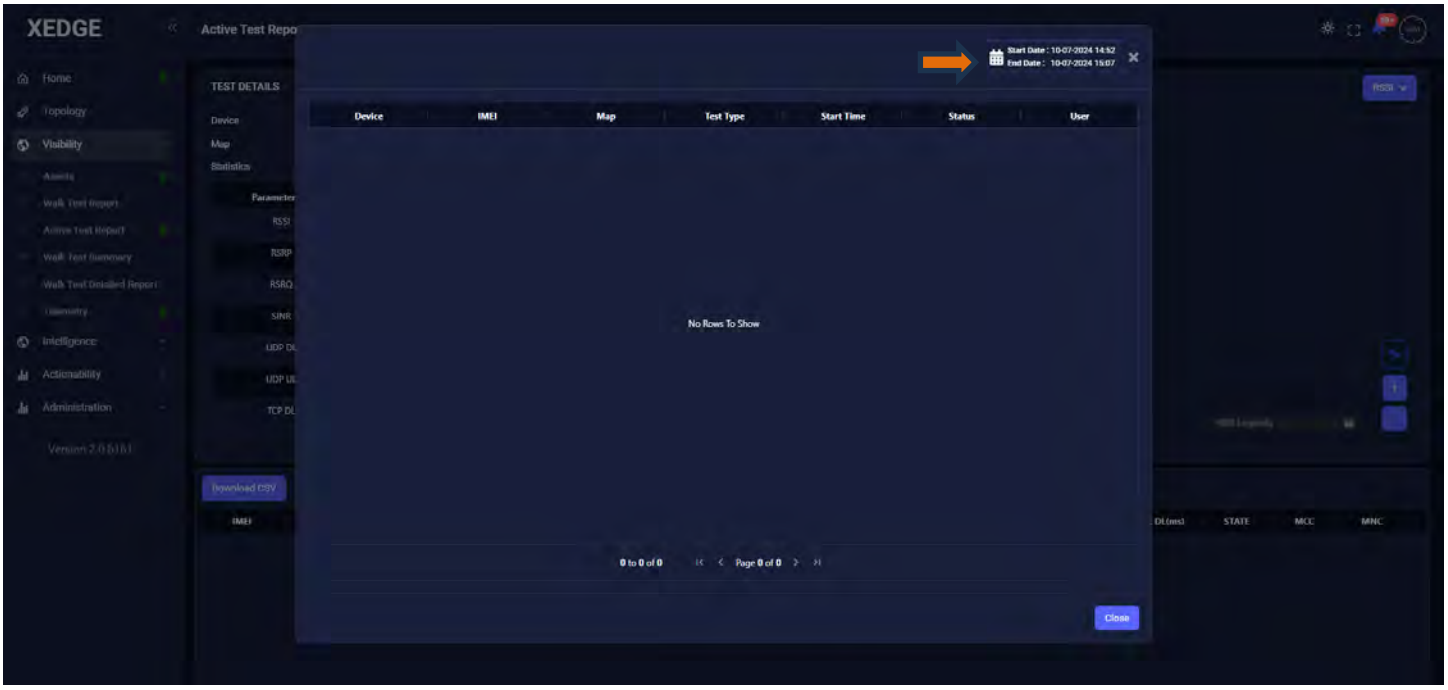
1. Navigate to Visibility > Active Test Report page



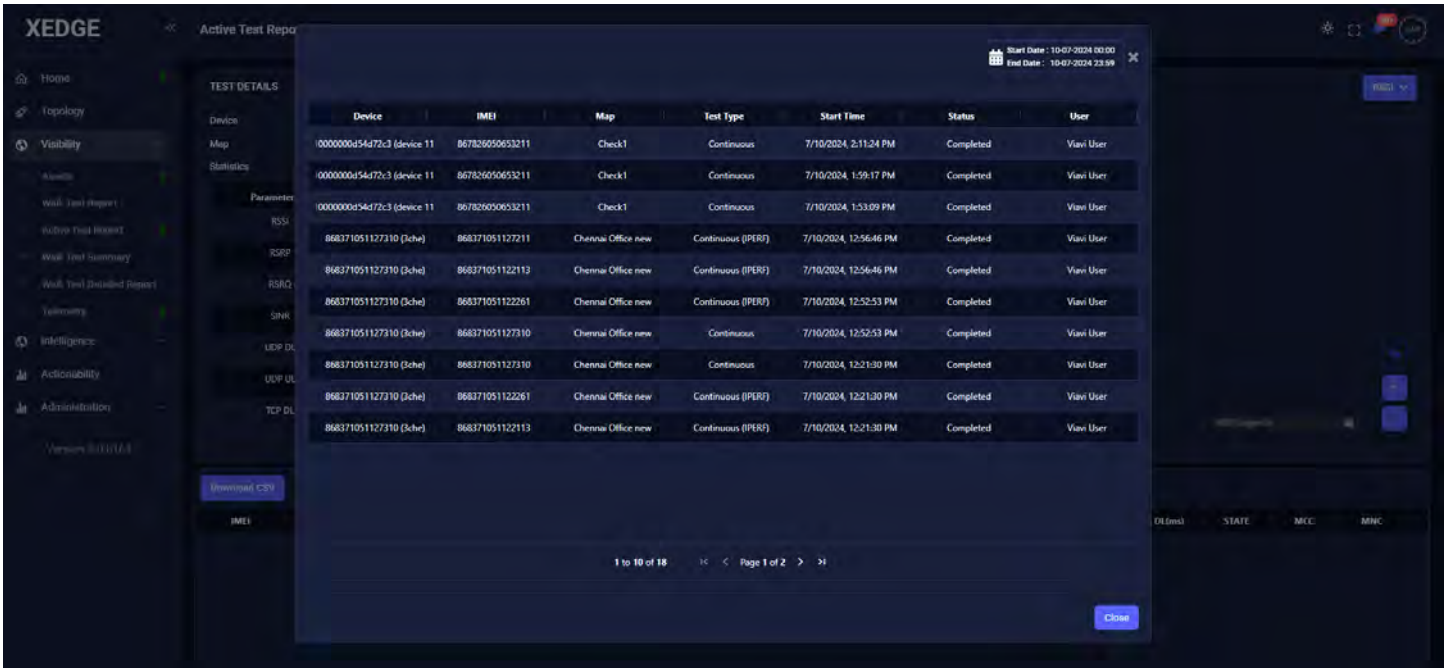
2. Click on the ‘Test list’. A pop-up will display the tests.



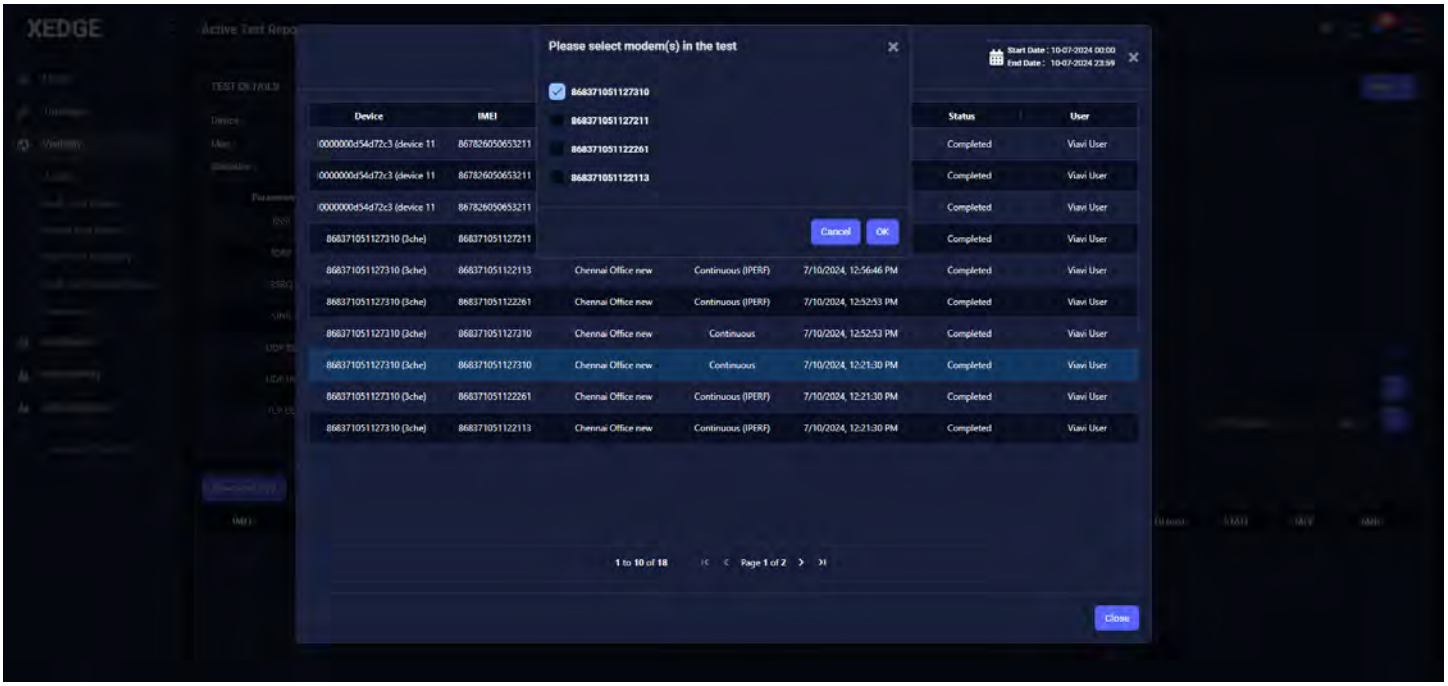
3. Select a date range to display the tests.



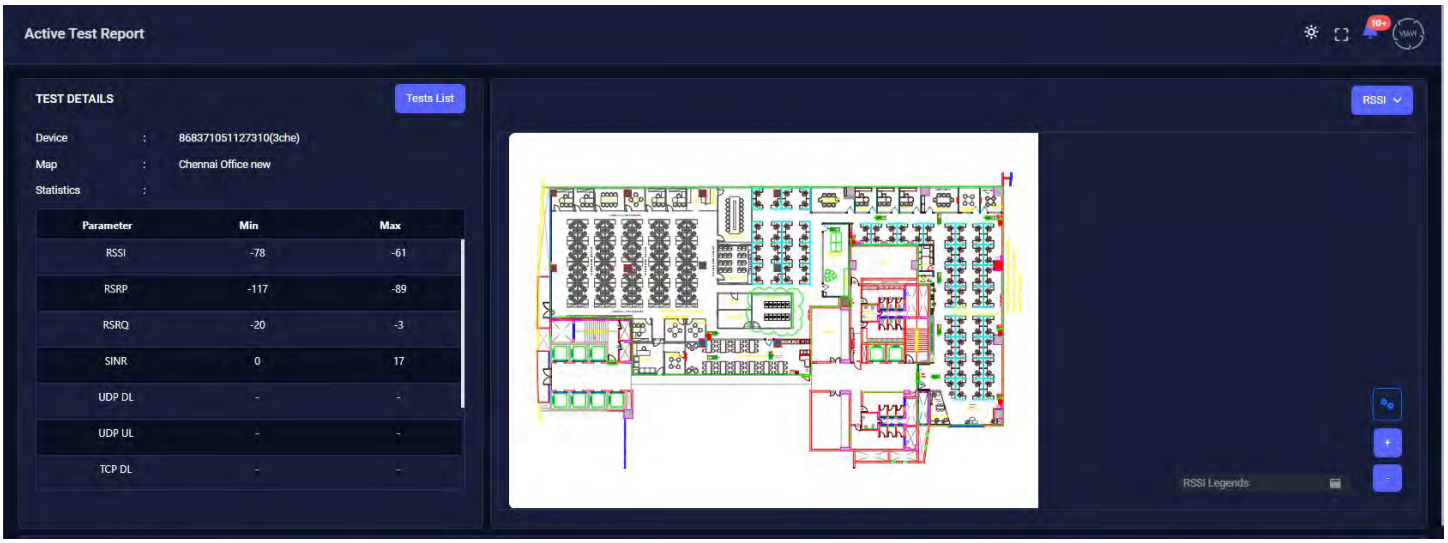
The pop up window will list all the details related to the tests conducted. This includes Device ID and Name, IMEI, Map, Test Type, Start Time, Status and name of the user who has started the test.



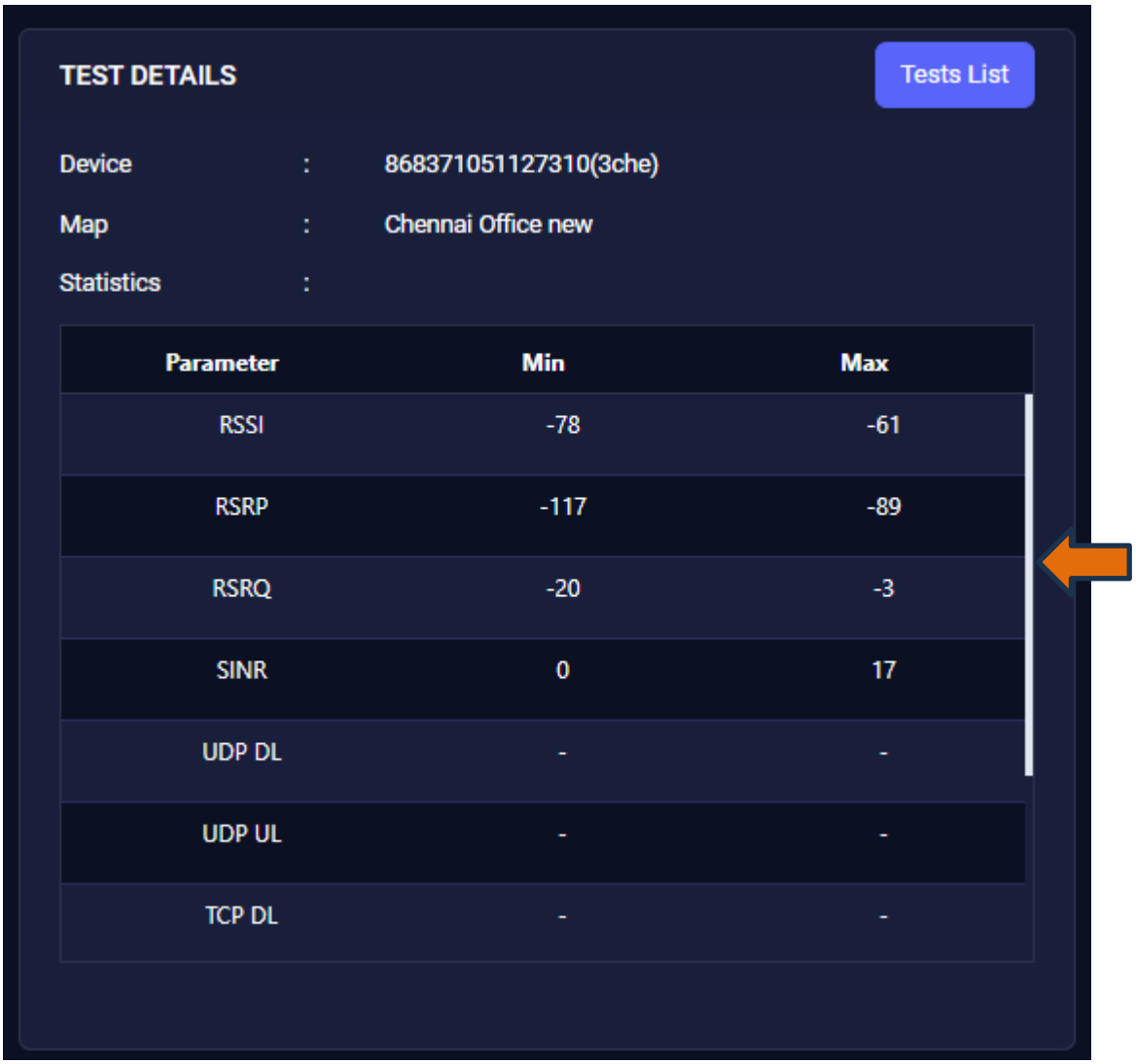
4. Select any of the listed test results to display the Modem selection pop-up window.



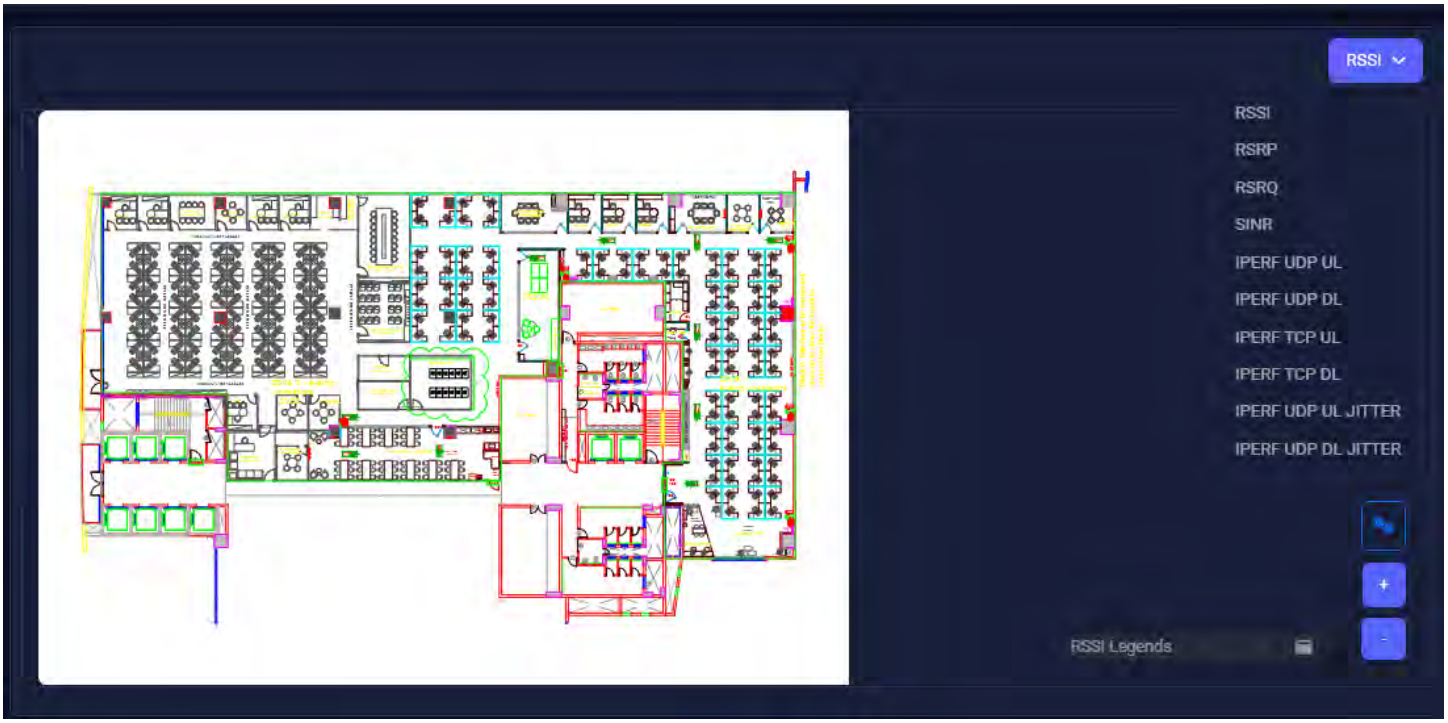
5. Click on OK after modem selection to display the main screen



6. Min Max details for each RF parameter is listed. Scroll can be used to view all the parameters.



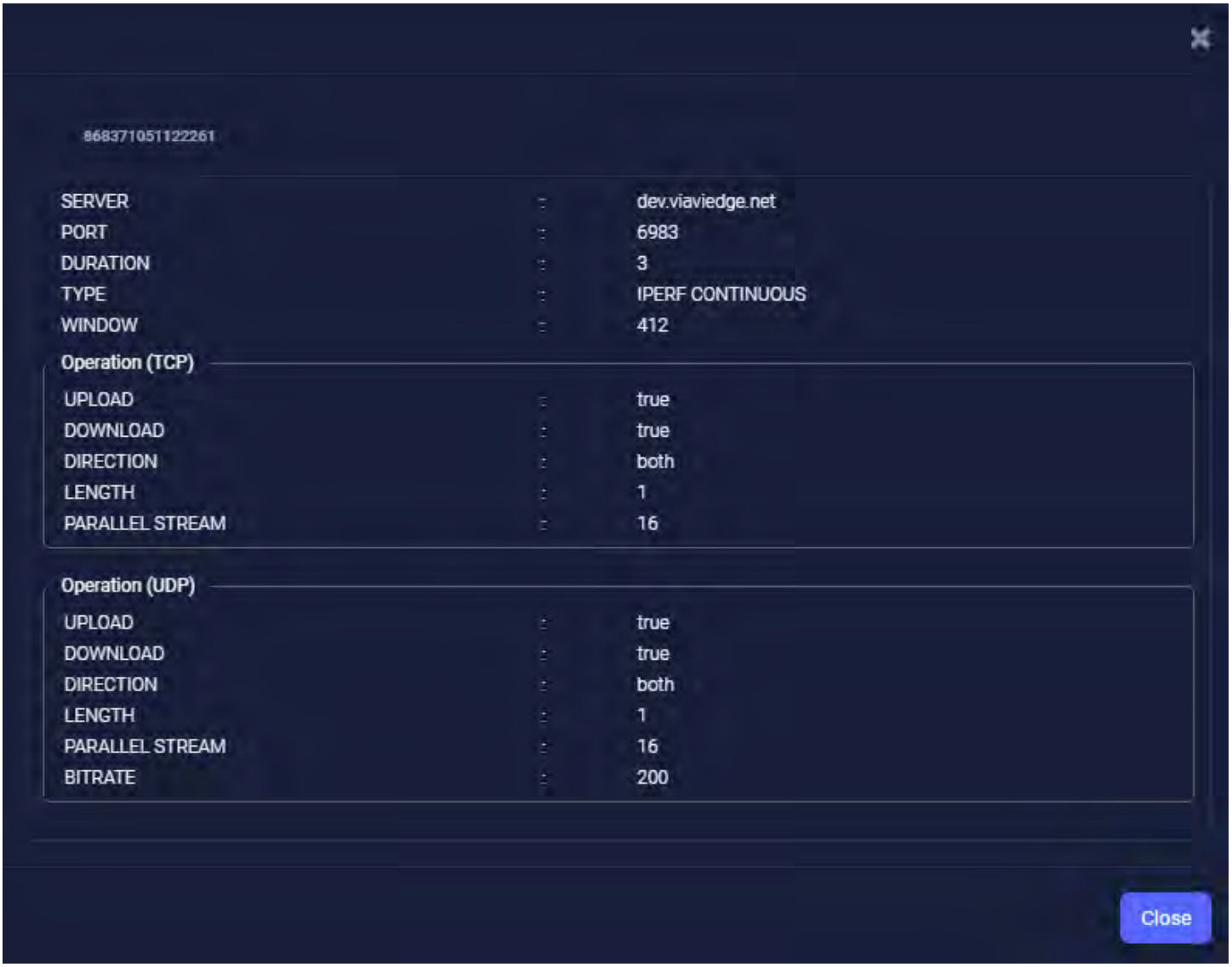
7. To select the RF Parameters, select the RF button. Select the value to view the map tile and show similar walk test reports



8. Select ‘Download CSV’ to download test details.

9. Select ‘Test configurations’ to display test configuration details to IPERF and Walktest.

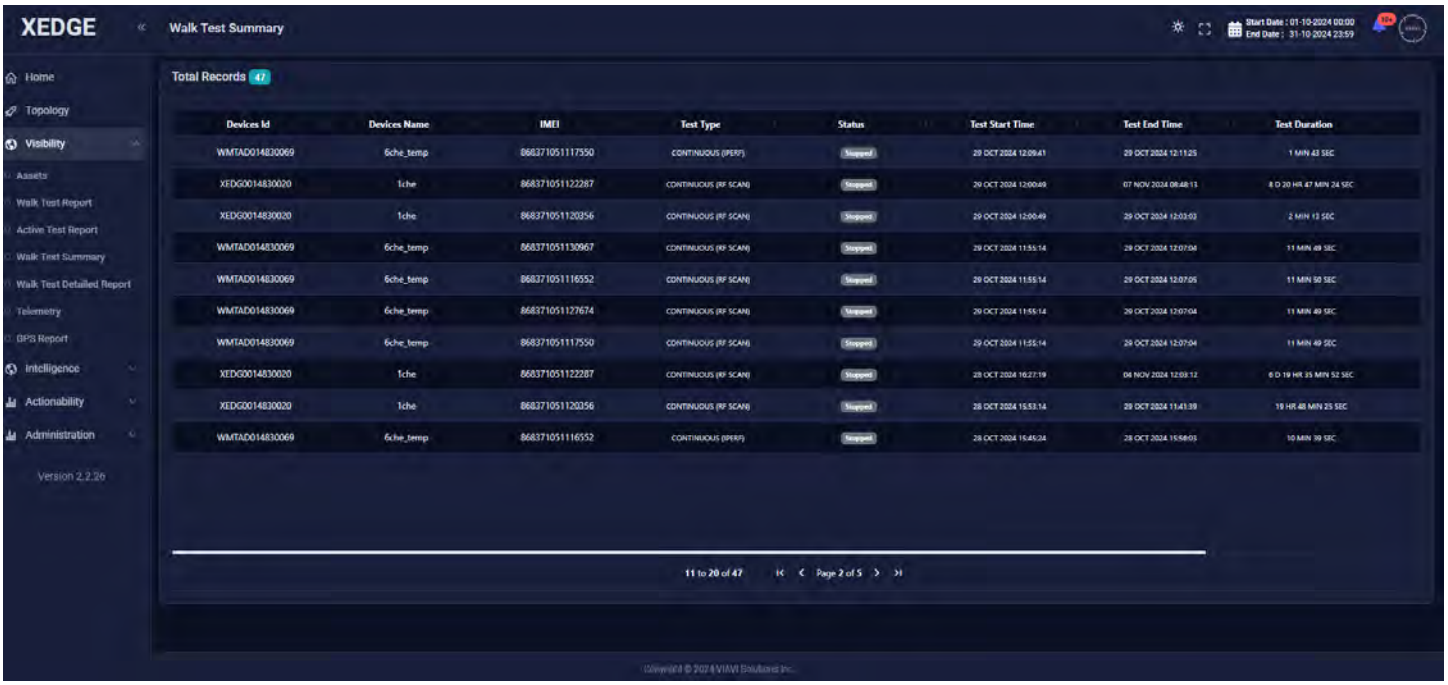

868371051127310
TYPE : continuous
RFSTS : true
SERVEINFO : true
Close


868371051122261
SERVER : dev.viaviedge.net
PORT : 6983
DURATION : 3
TYPE : IPERF CONTINUOUS
WINDOW : 412
Operation (TCP)
UPLOAD : true
DOWNLOAD : true
DIRECTION : both
LENGTH : 1
PARALLEL STREAM : 16
Operation (UDP)
UPLOAD : true
DOWNLOAD : true
DIRECTION : both
LENGTH : 1
PARALLEL STREAM : 16
BITRATE : 200
Close

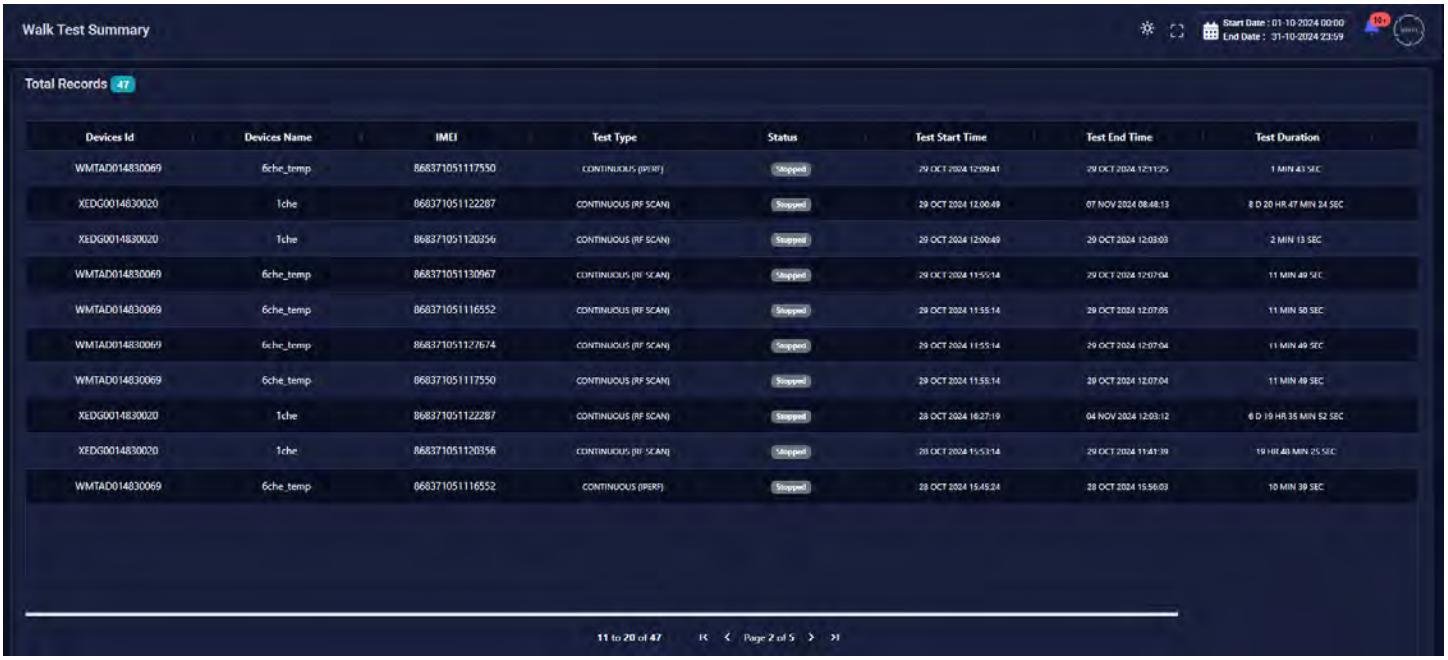
Chapter 9 Reviewing the Walktest Summary Page

This feature displays test summaries for the date range selected.
To review the Walktest Summary results, complete the following steps:

1. Navigate to Visibility > Walktest Summary page



2. Enter a date range on the date picker to display the summary of tests conducted.



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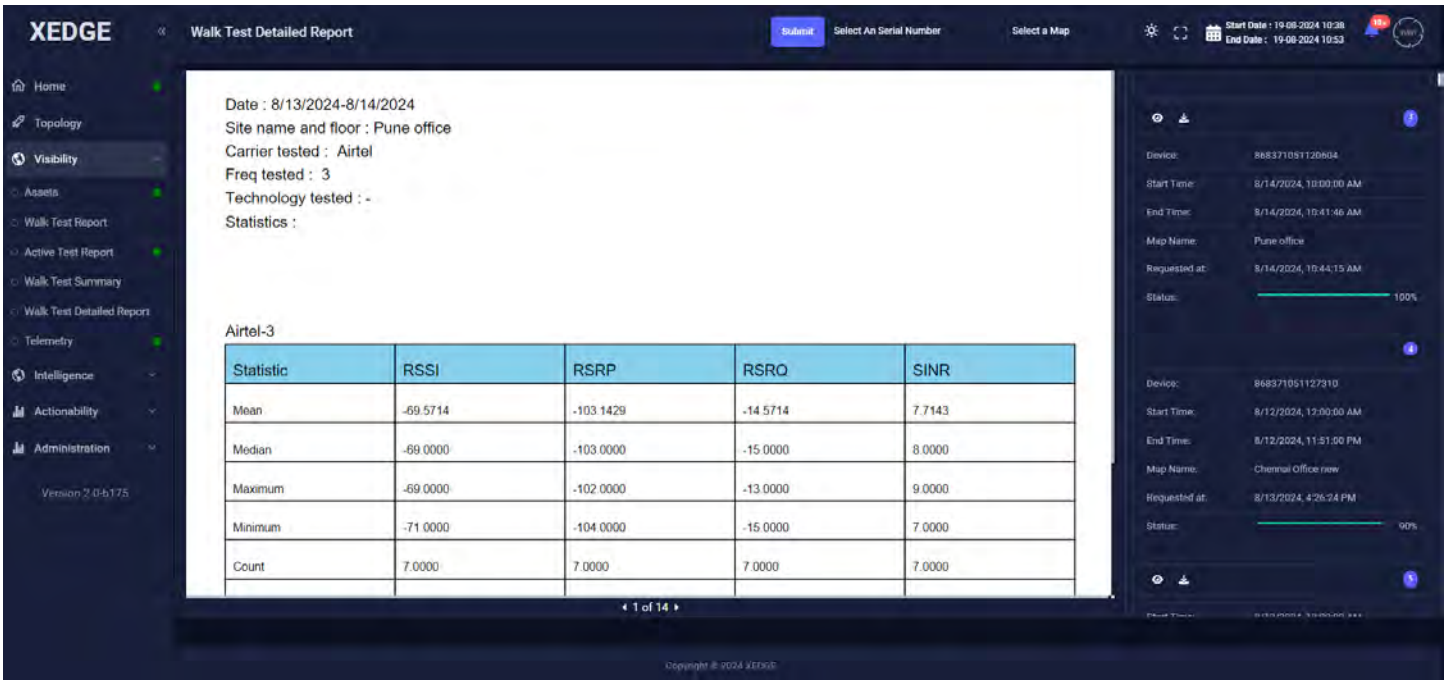
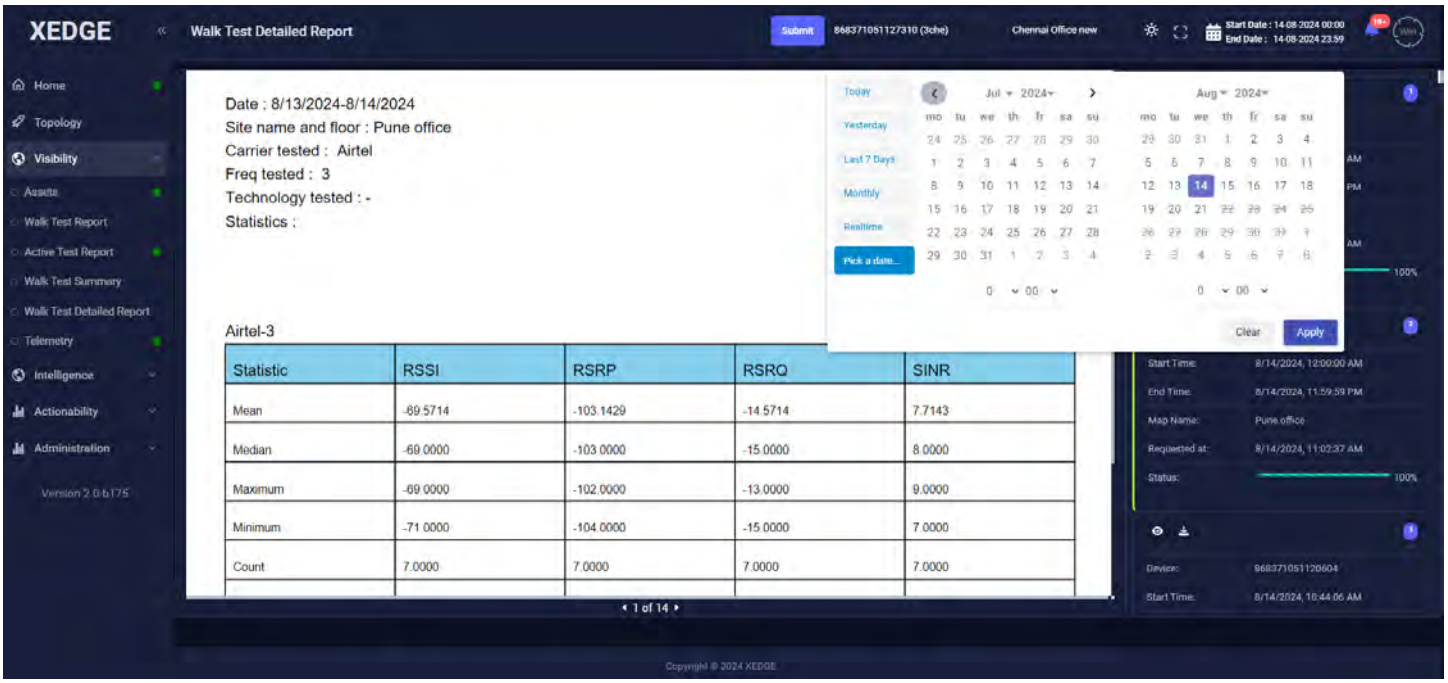
Chapter 10 Reviewing the Walktest Detailed Report Page

This feature lets the user view the details of tests conducted as per date selection.
To review the Walktest Detailed Report results, complete the following steps:

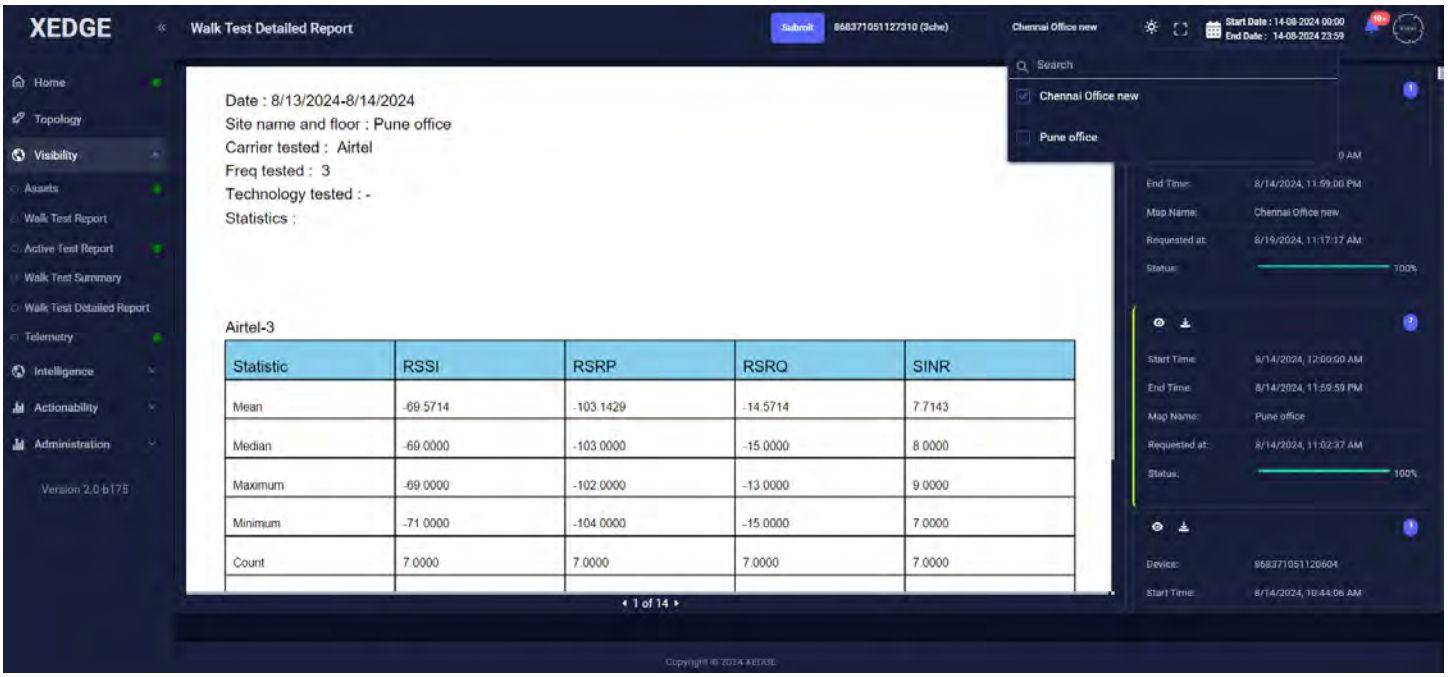
1. Navigate to Visibility > Walktest Detailed Report page



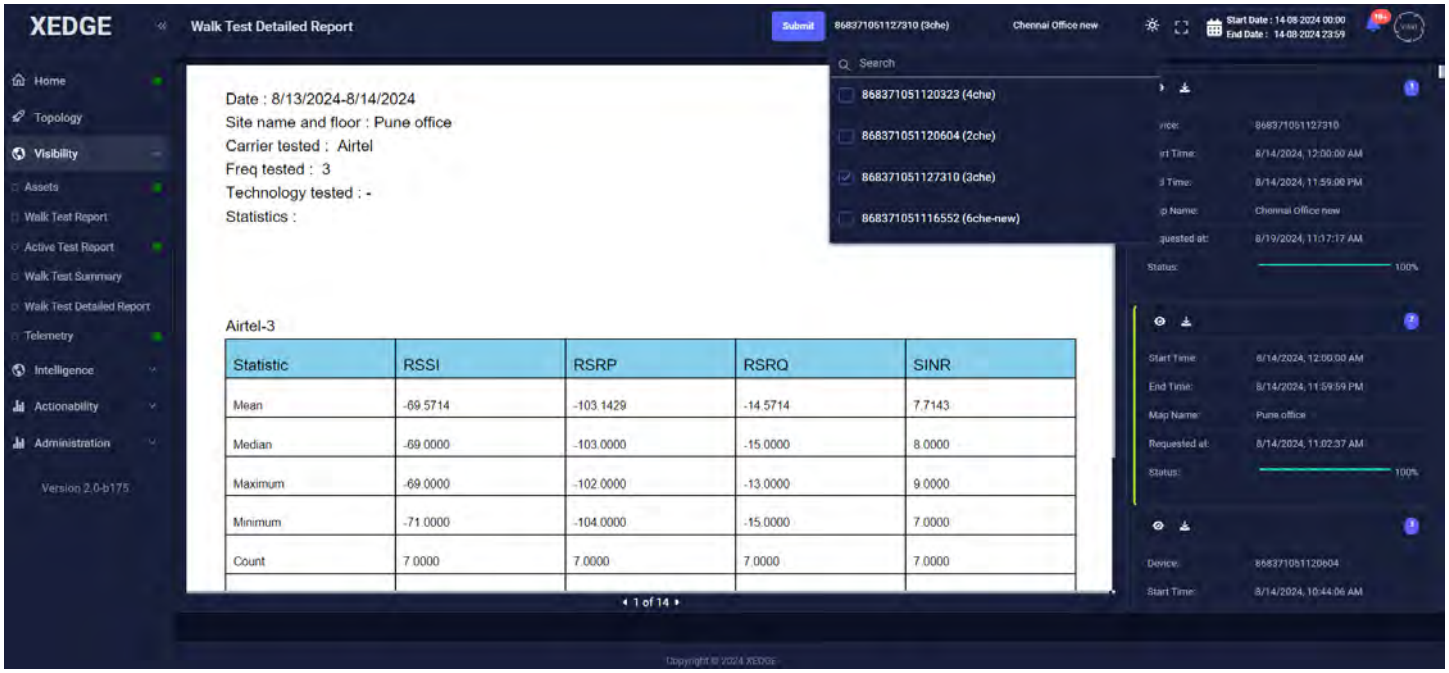
2. Select the date range on calendar to create the detailed report of tests conducted on the particular time frame



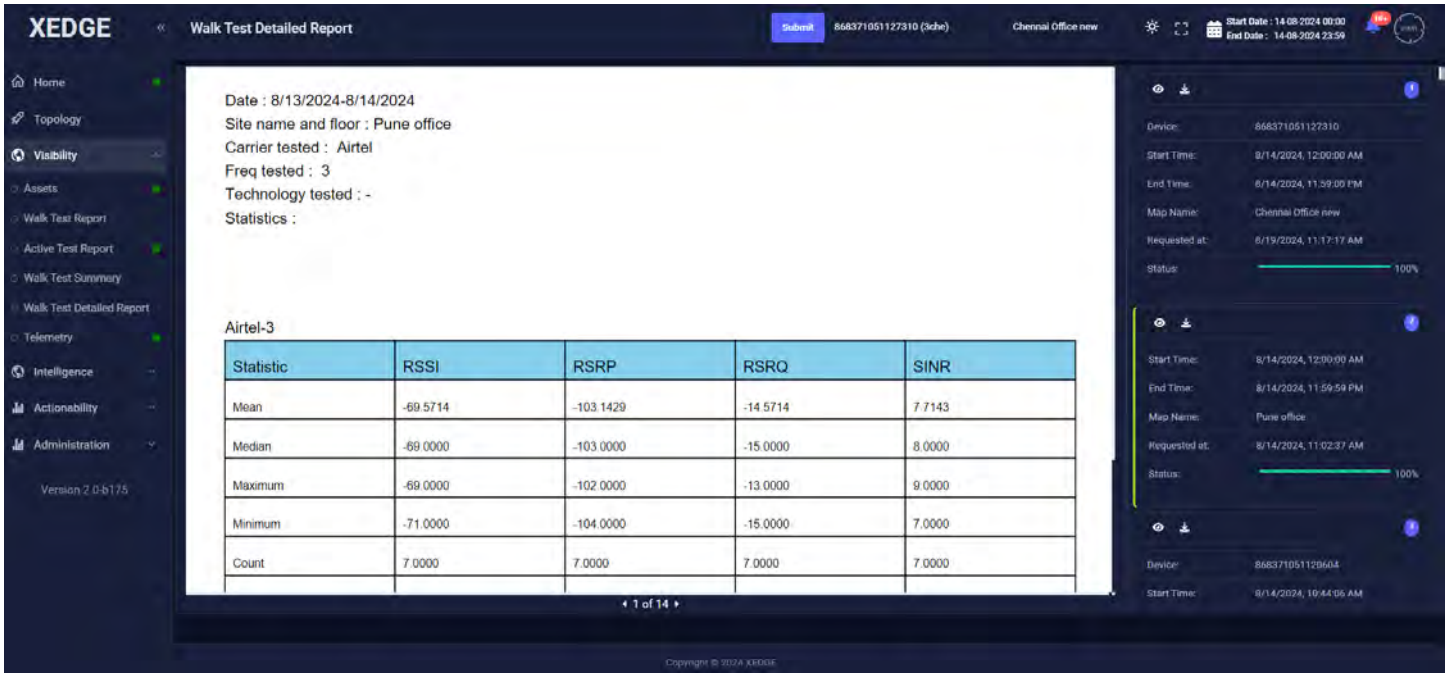
3. Select the Map on which the detailed report is to be formulated



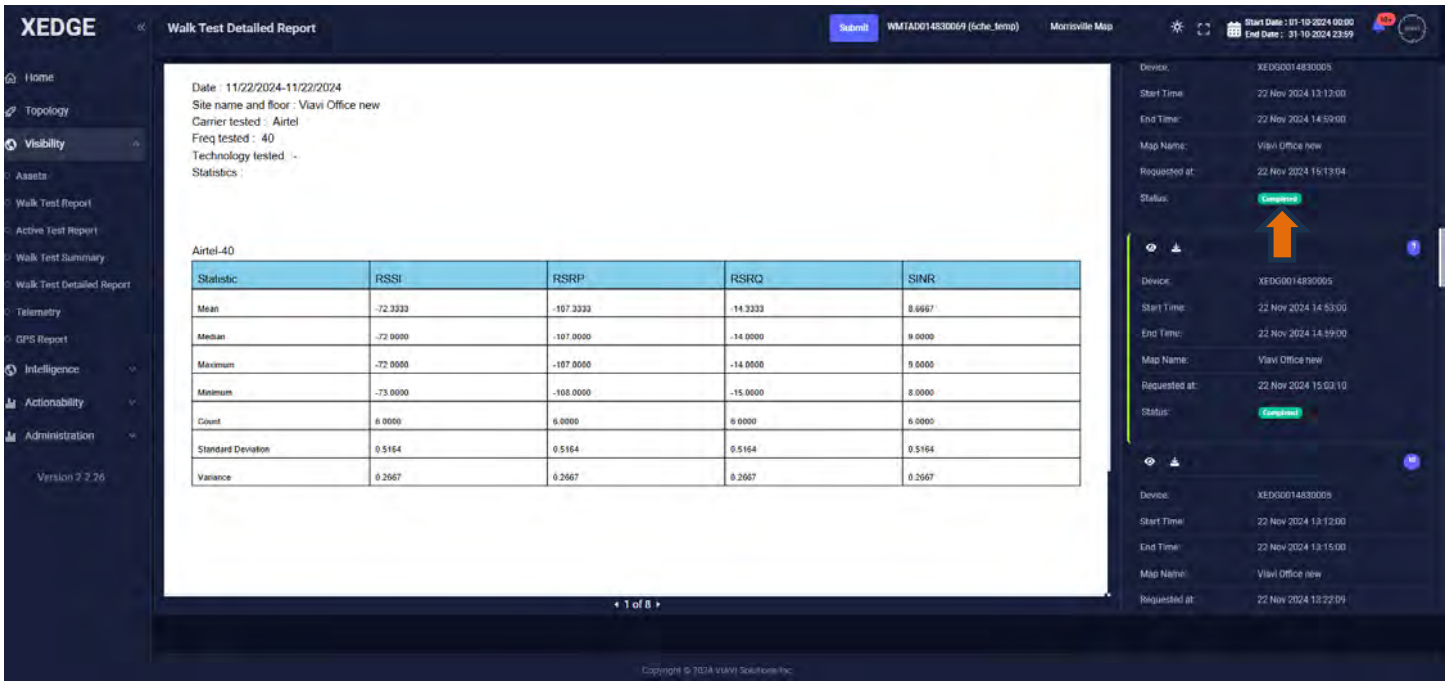
4. Select the device on which the detailed report is to be formulated



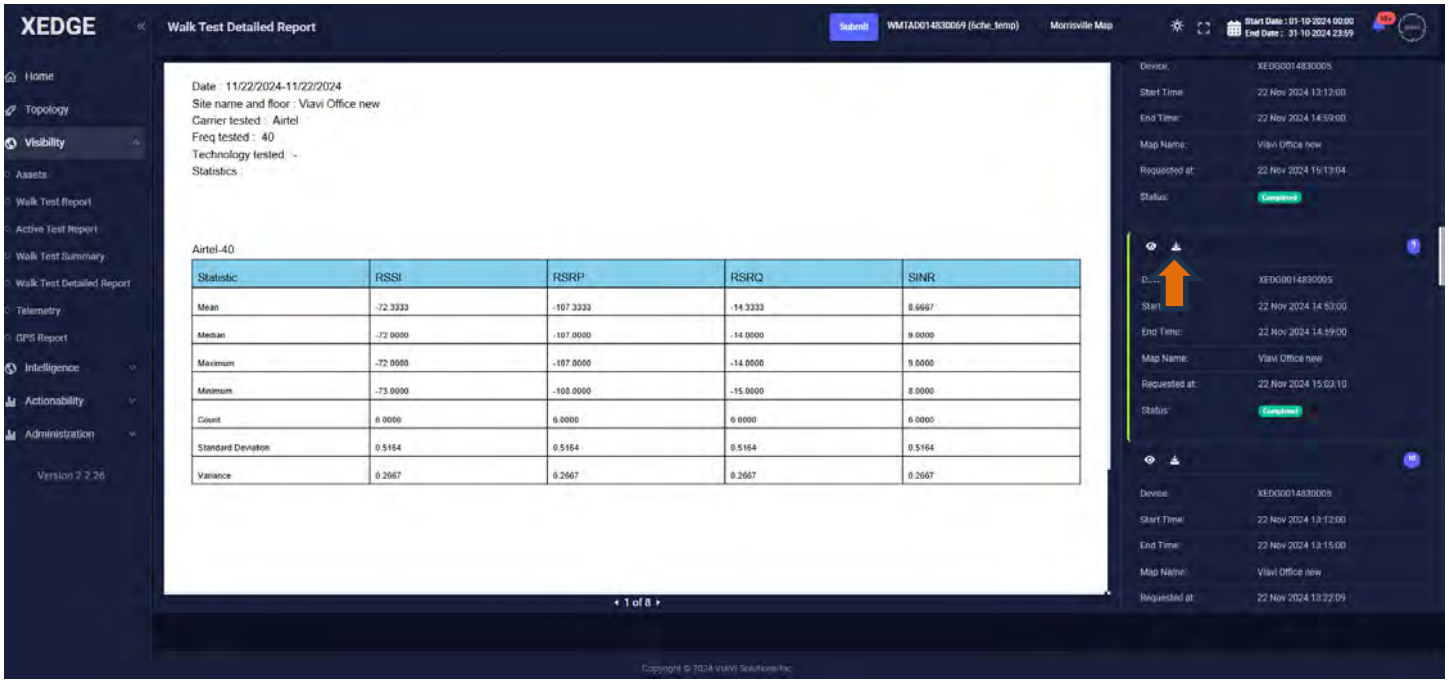
5. Click on Submit to create the detailed report

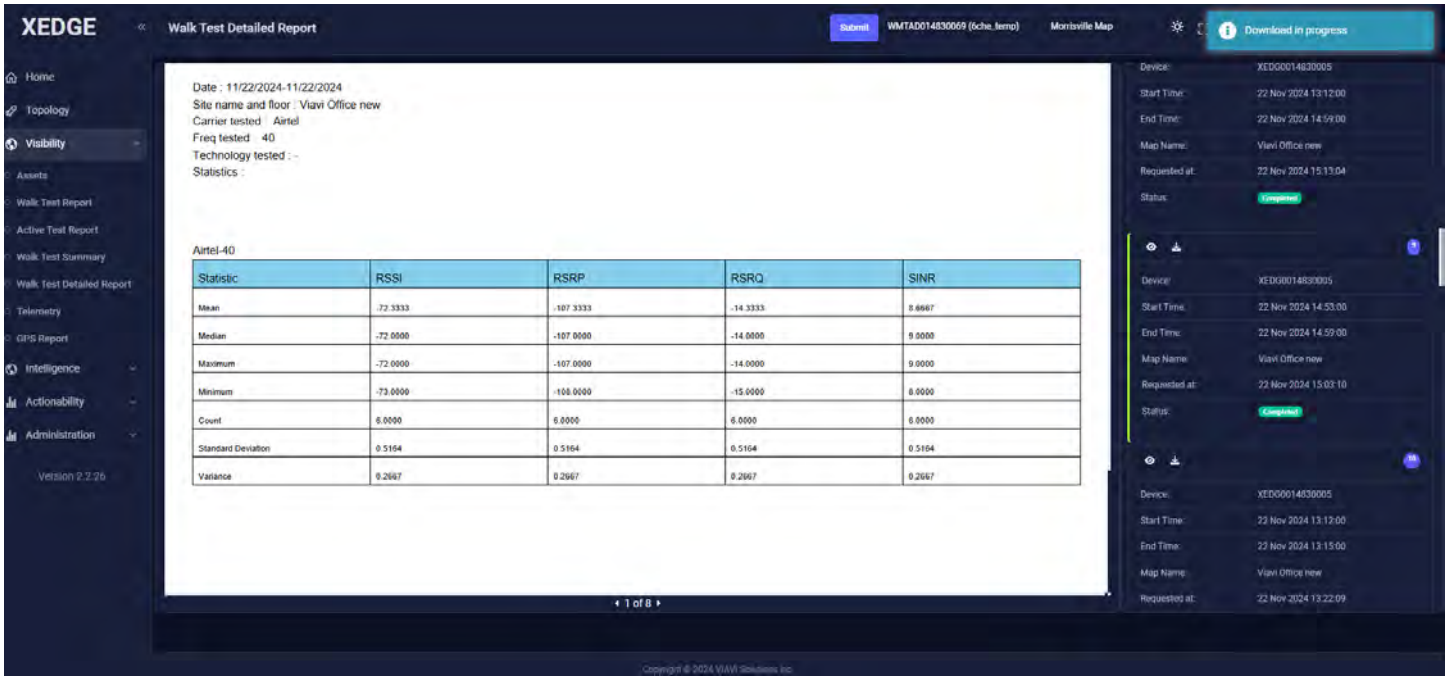


6. Once the report is created after clicking the submit button the progress bar changes from 0 to completed on the listed reports created on the notification bar. The user can either download the formulated report or can view the report from the UI itself.

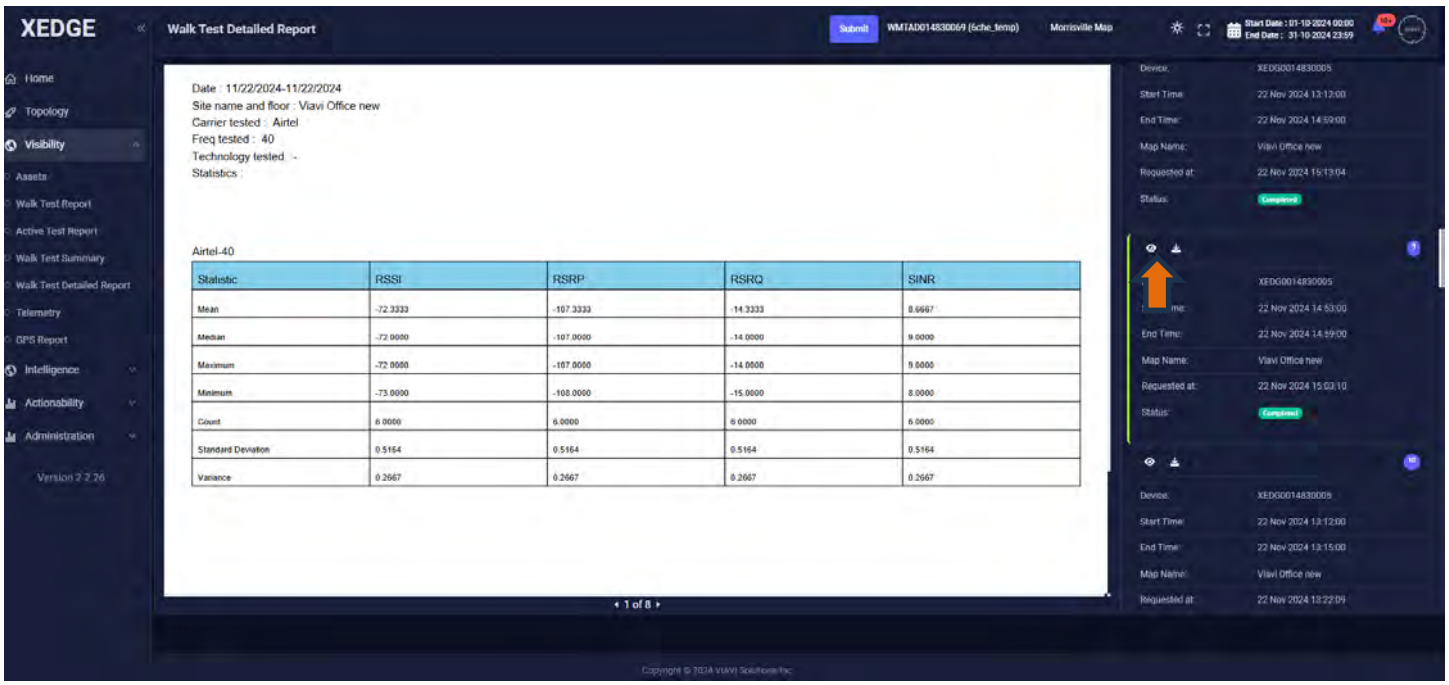


Click on the Download button to download the report.





To View the report, click on the Eye button.



The generated detailed report has 14 Pages which gives an insight into the test conducted. The first page gives the statistical details of the test conducted.

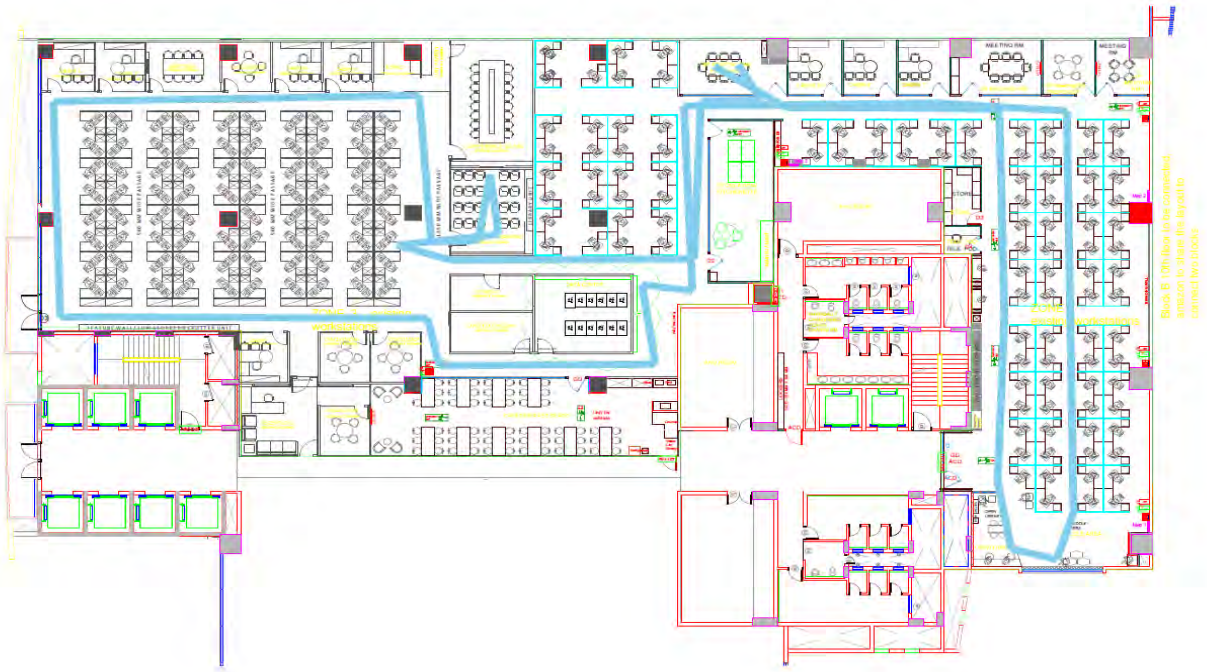
Date : 7/24/2024-7/26/2024
Site name and floor : Chennai Map real walktests
Carrier tested : Airtel
Freq tested : 3
Technology tested : -
Statistics :

Airtel-3

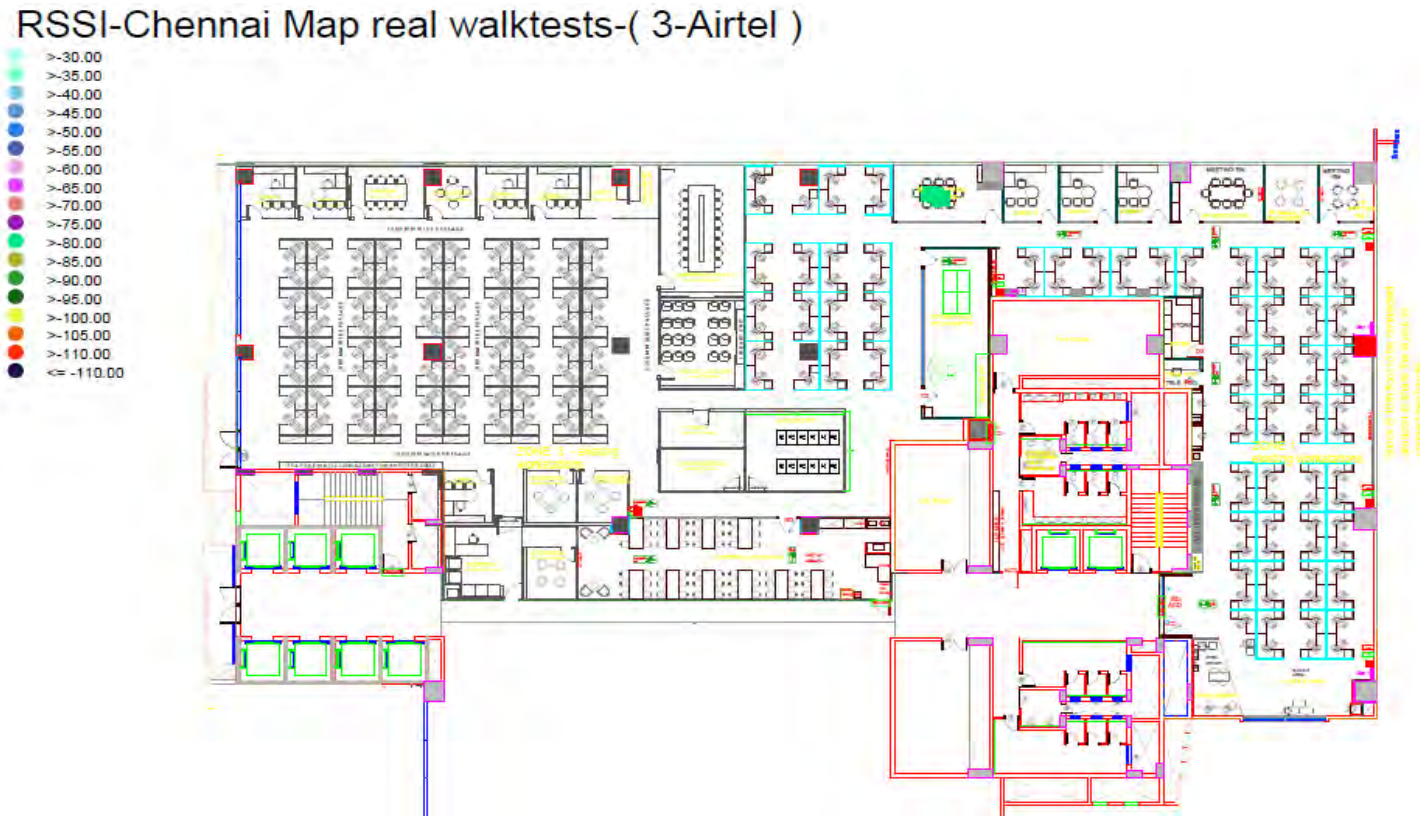
Statistic	RSSI	RSRP	RSRQ	SINR
Mean	-70.5031	-105.5367	-15.3711	7.9979
Median	-70.0000	-106.0000	-15.0000	8.0000
Maximum	-68.0000	-100.0000	-12.0000	11.0000
Minimum	-73.0000	-112.0000	-20.0000	0.0000
Count	477.0000	477.0000	477.0000	477.0000
Standard Deviation	1.1589	2.4821	1.8456	1.3682
Variance	1.3430	6.1609	3.4061	1.8718

The second page provides details of the walktest path transversed.

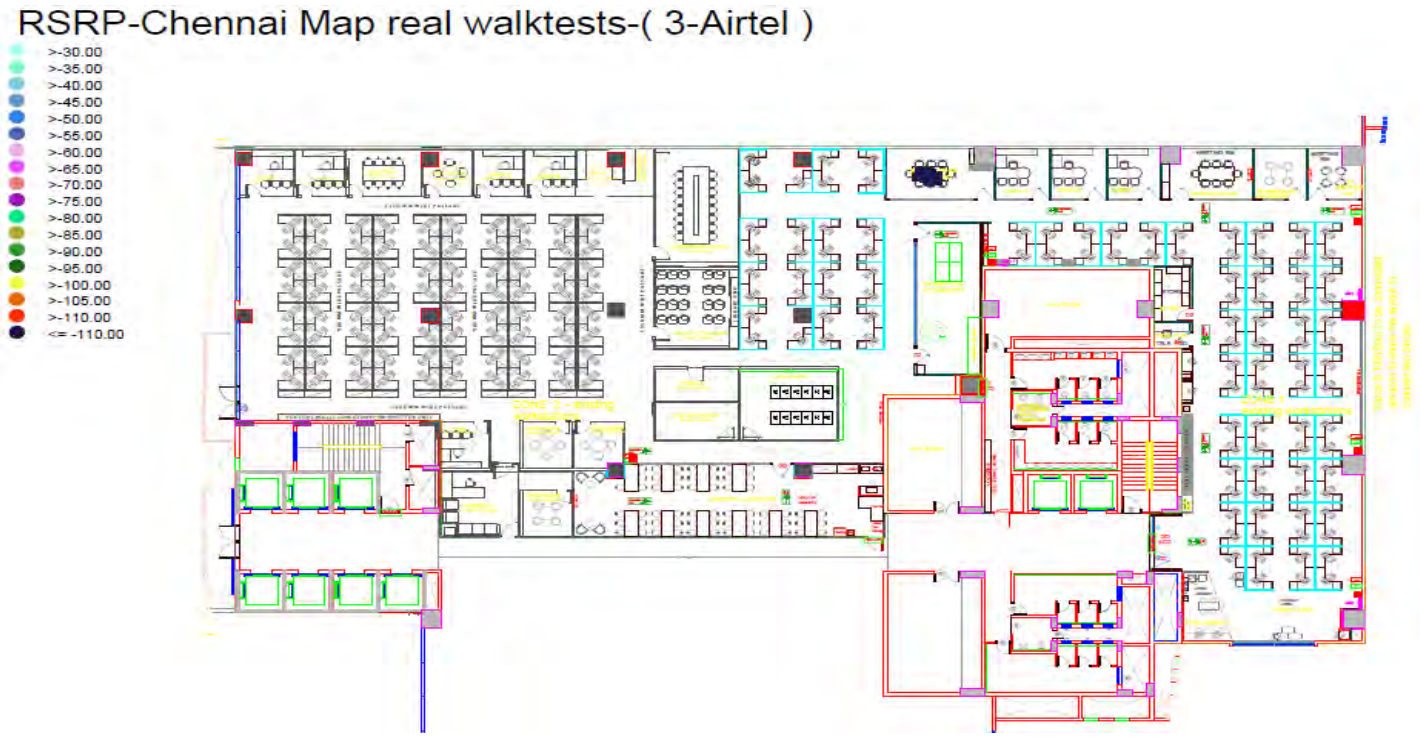
Walktest Path-Chennai Map real walktests



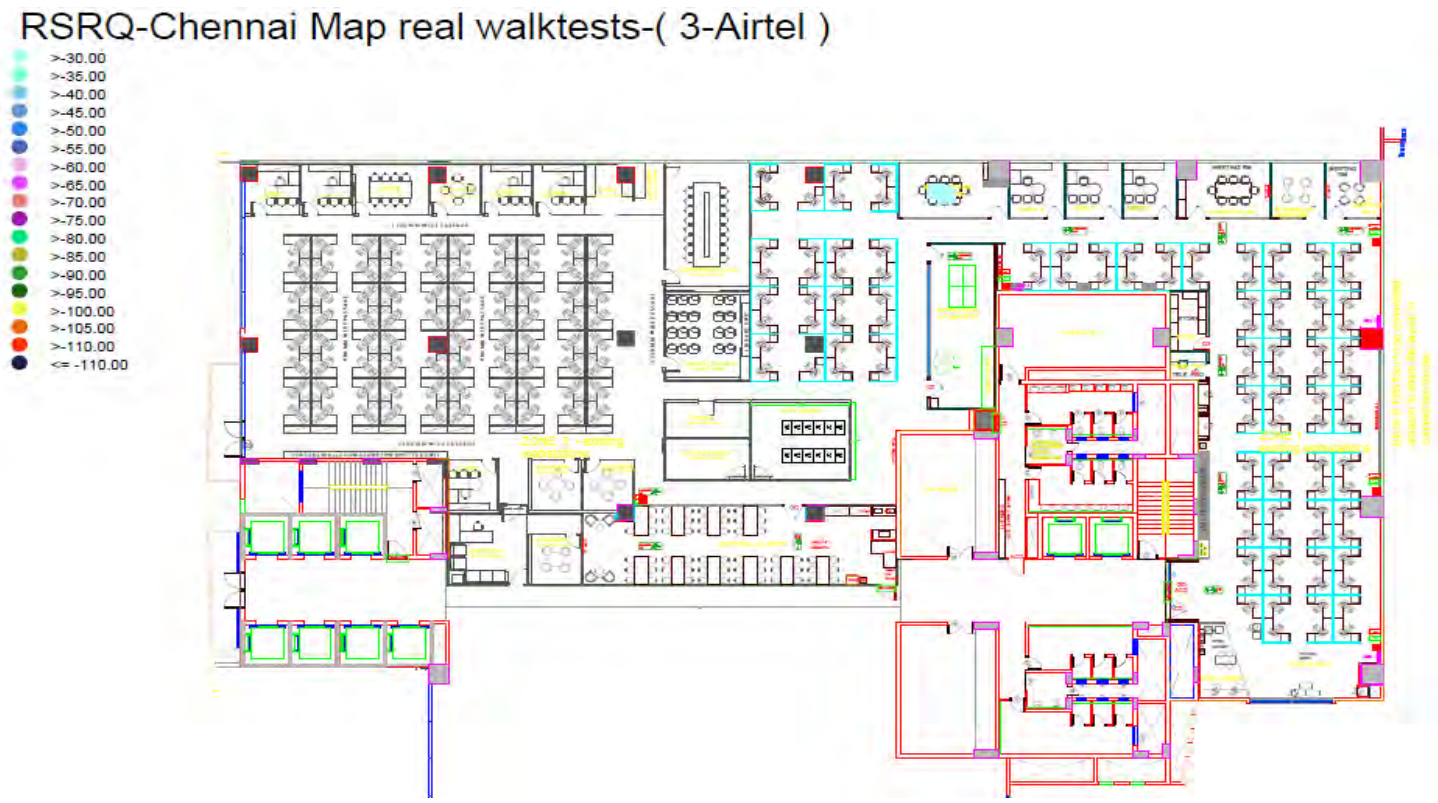
The third page gives details regarding the RSSI readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



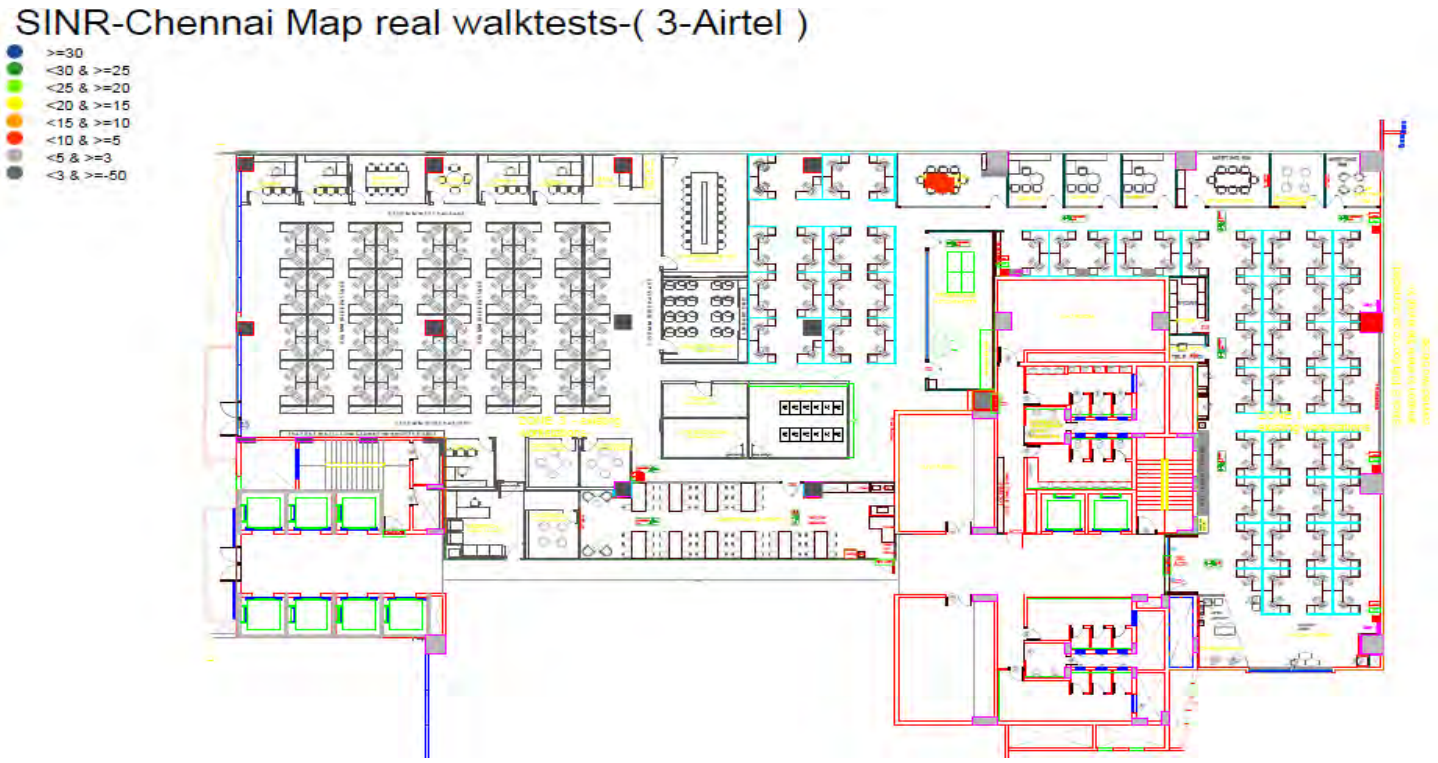
The fourth page gives details regarding the RSRP readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



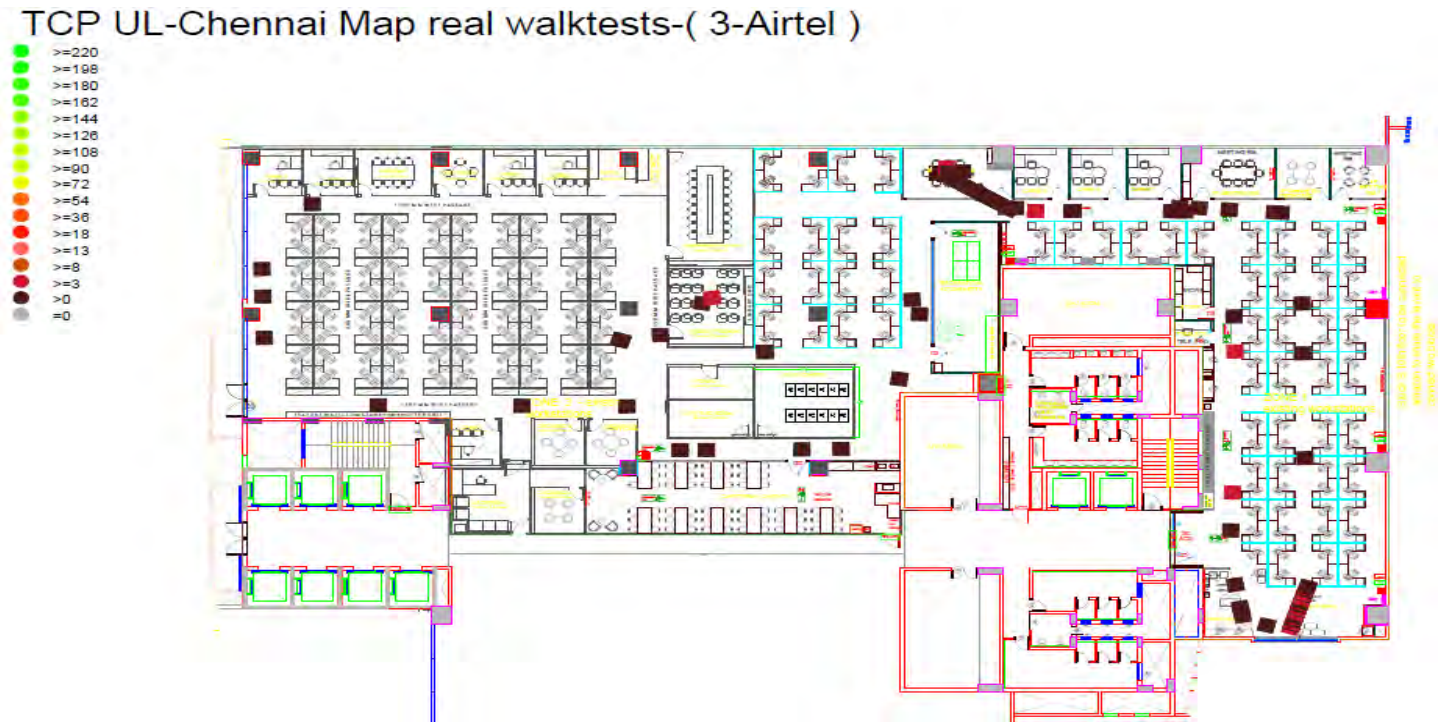
The fifth page gives details regarding the RSRQ readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range..



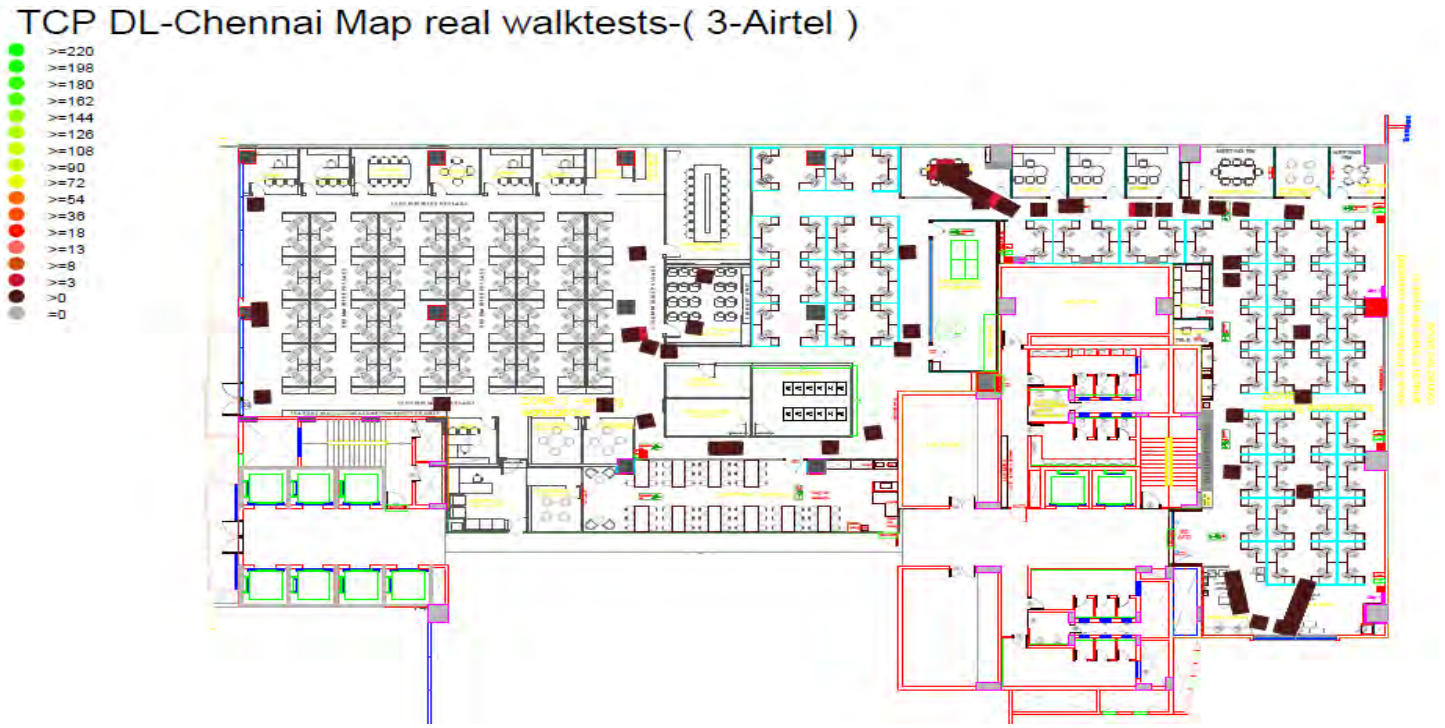
The sixth page gives details regarding the SINR readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



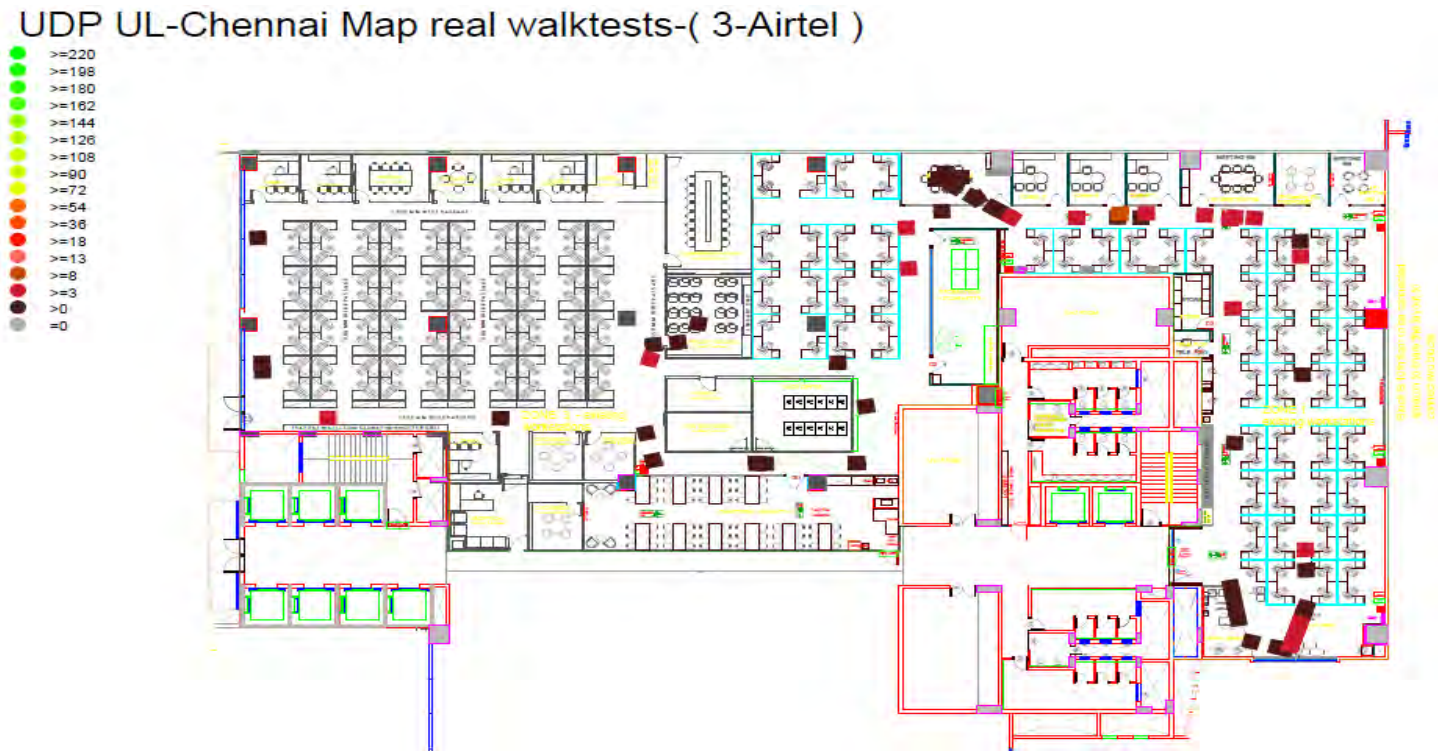
The seventh page gives details regarding the TCP UL readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



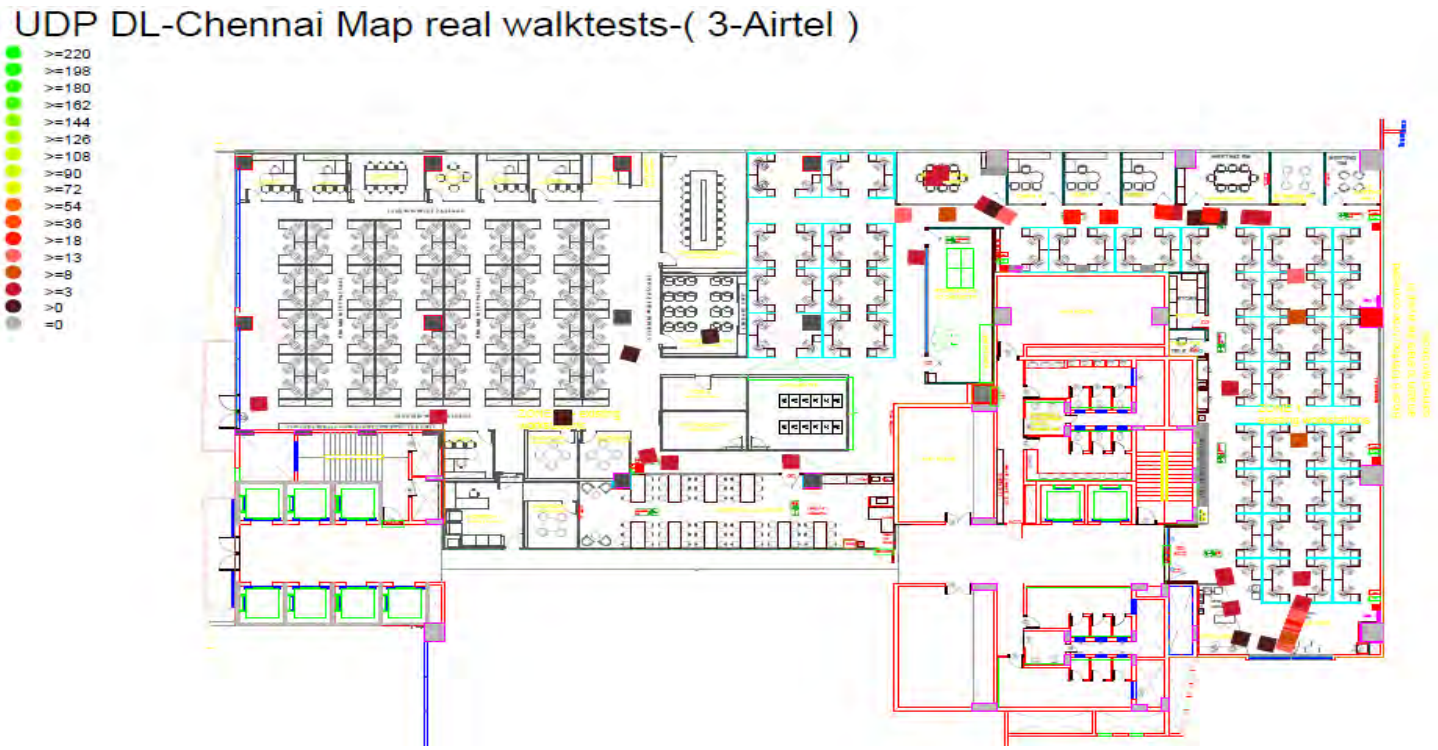
The eighth page gives details regarding the TCP DL readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



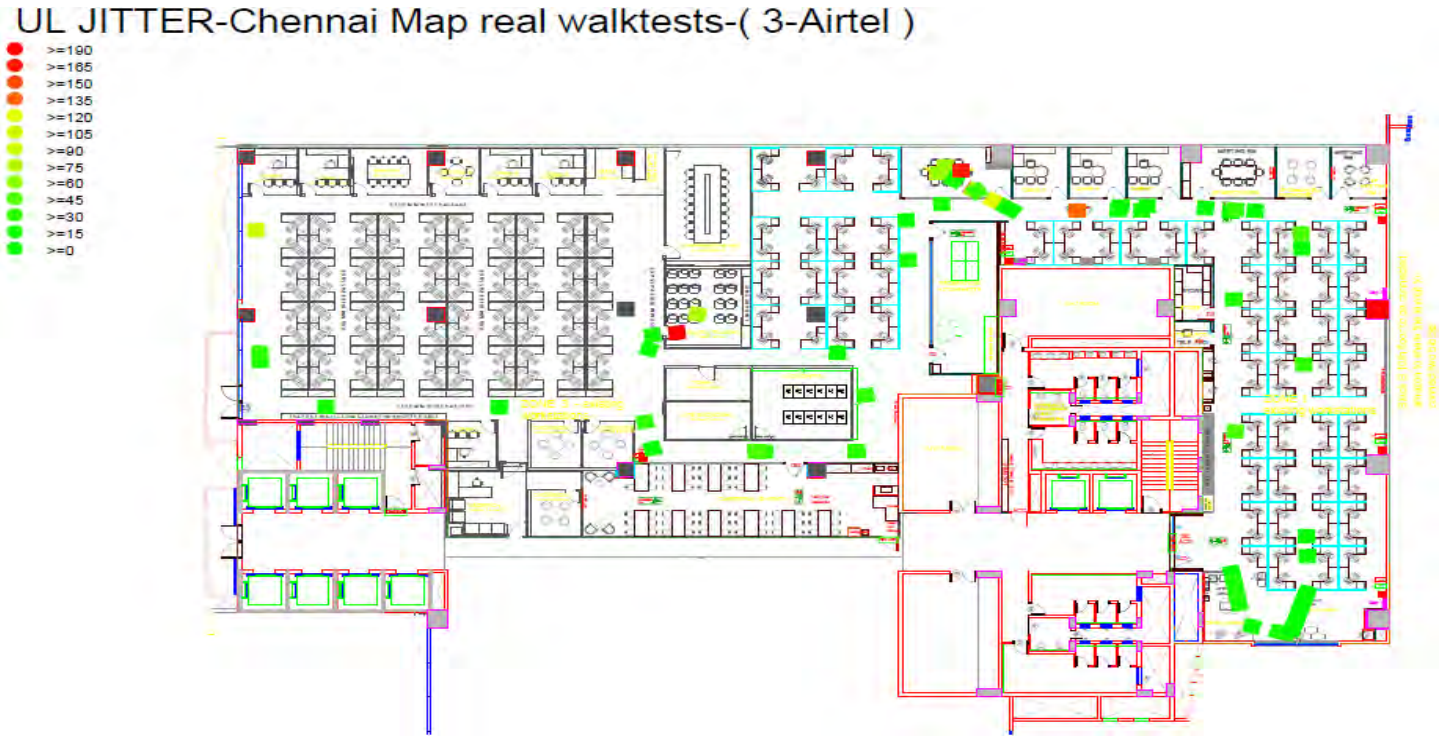
The ninth page gives details regarding the UDP UL readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



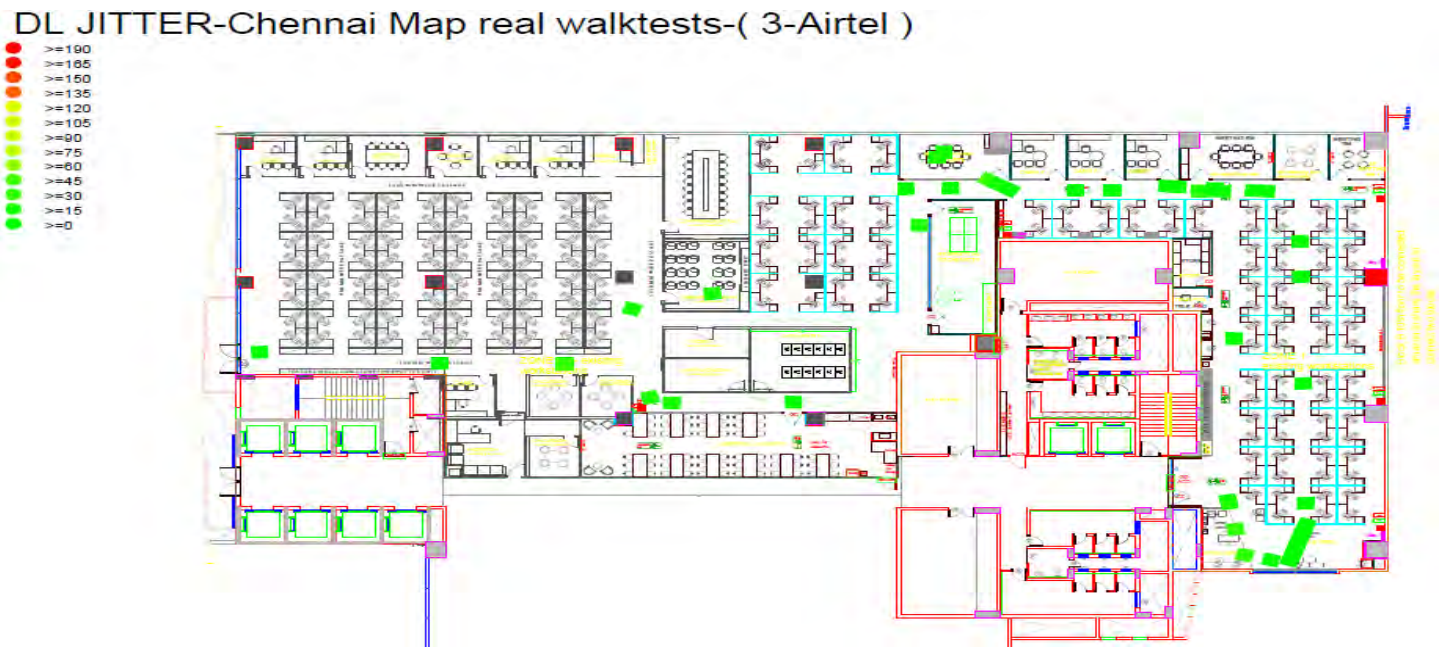
The tenth page gives details regarding the UDP DL readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



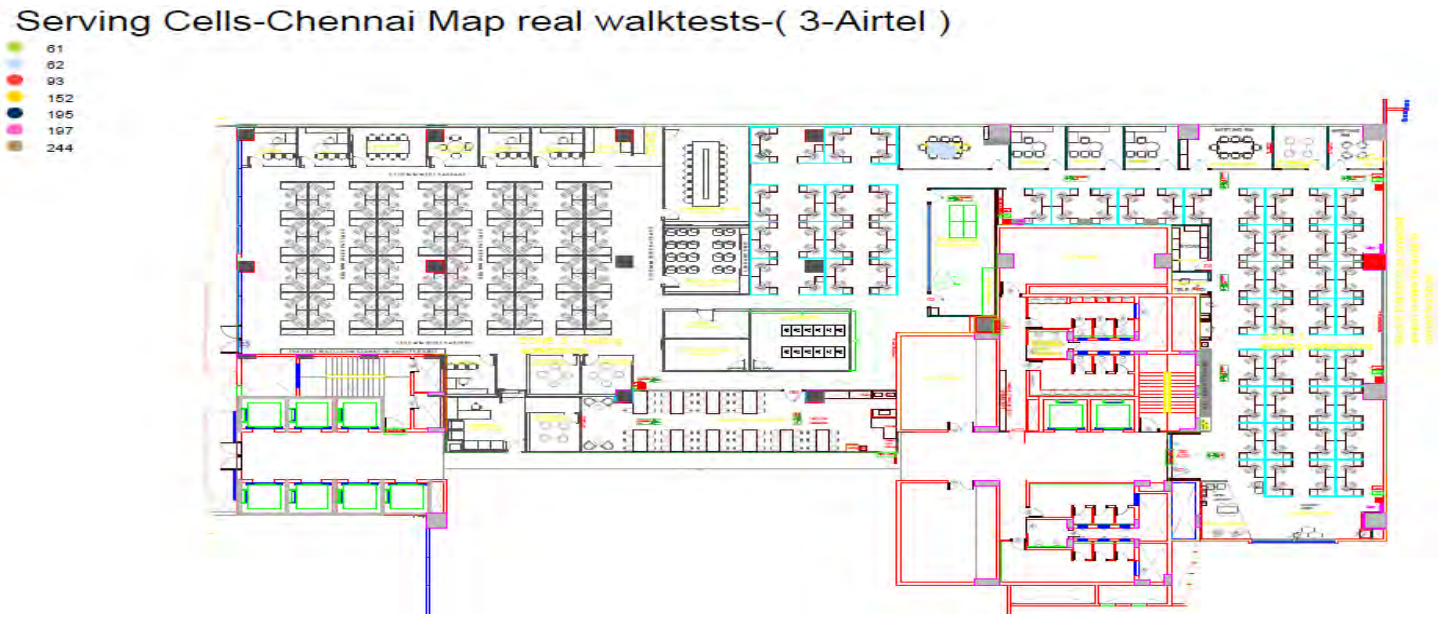
The eleventh page gives details regarding the UL JITTER readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



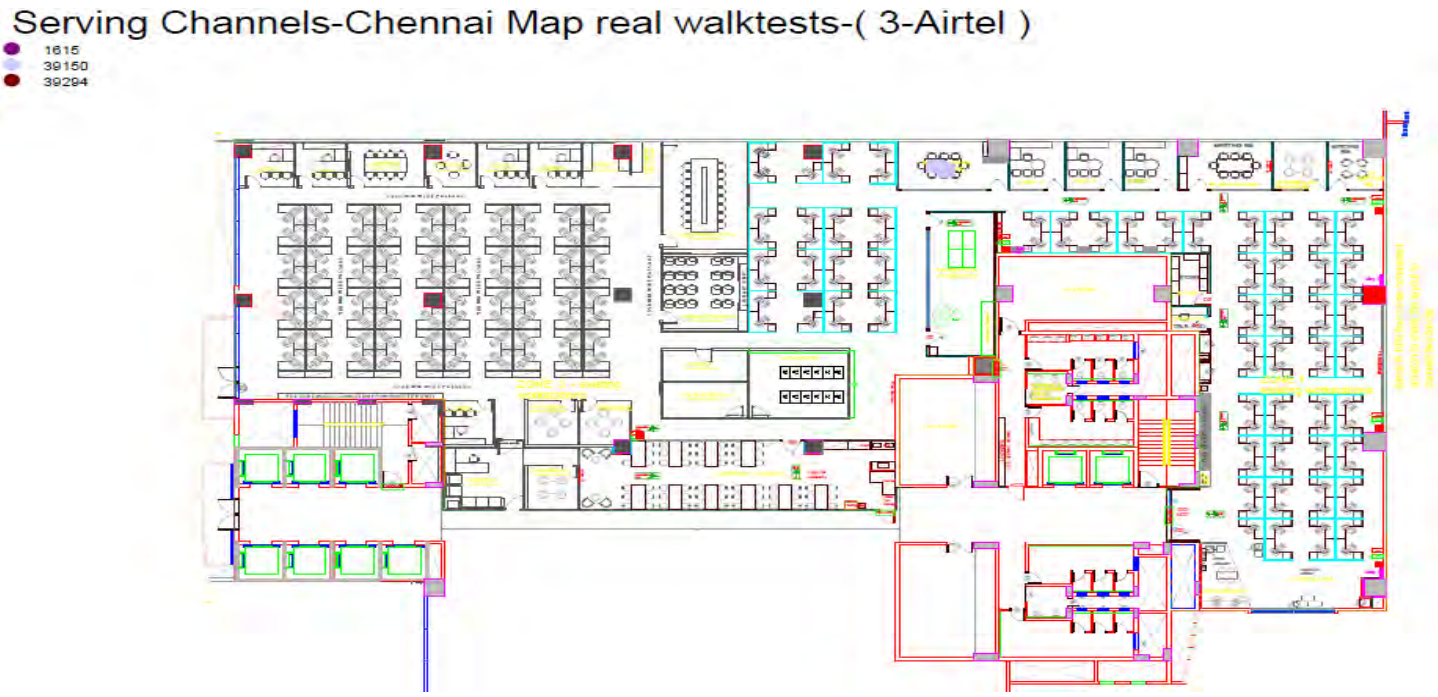
The twelfth page gives details regarding the DL JITTER readings during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



The thirteenth page gives details regarding the Serving Cells present during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



The fourteenth page gives details regarding the Serving channels present during the test conducted. The readings are represented as tiles and their corresponding legends are showcased to give info regarding the range.



Chapter 11 Reviewing Help Page

This feature lets the user download the user manual for getting an insight into the product.
To download the user manual, complete the following steps:

1. Navigate to Administration > Help Page

2. Click on Download Button to download the user manual

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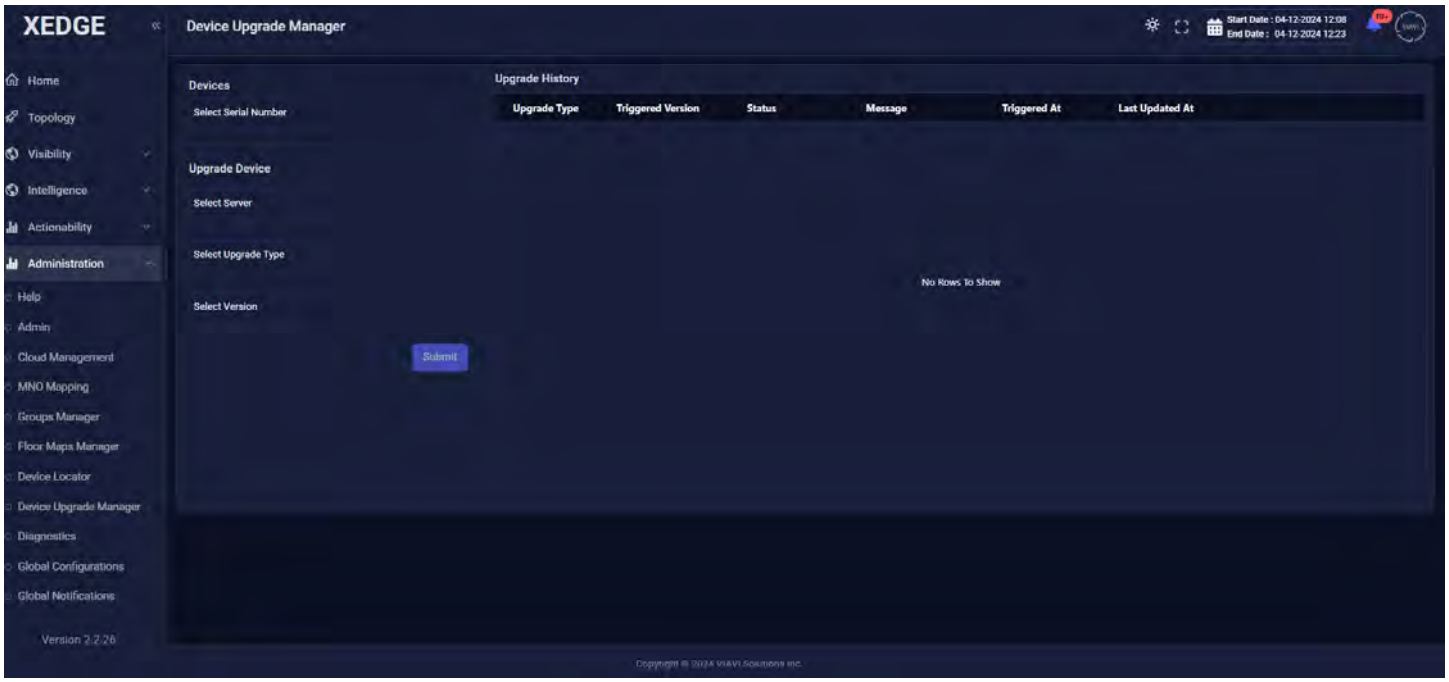
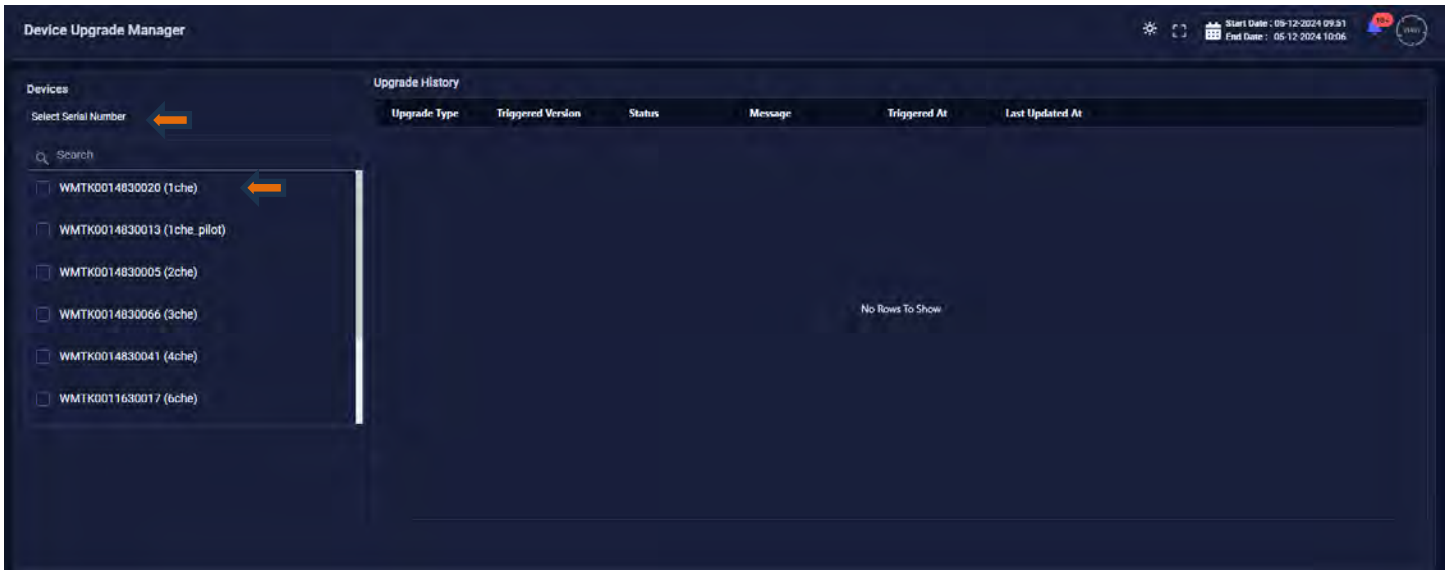
Chapter 12 Device Upgrade Manager

This section will show you how to upgrade an XEDGE device

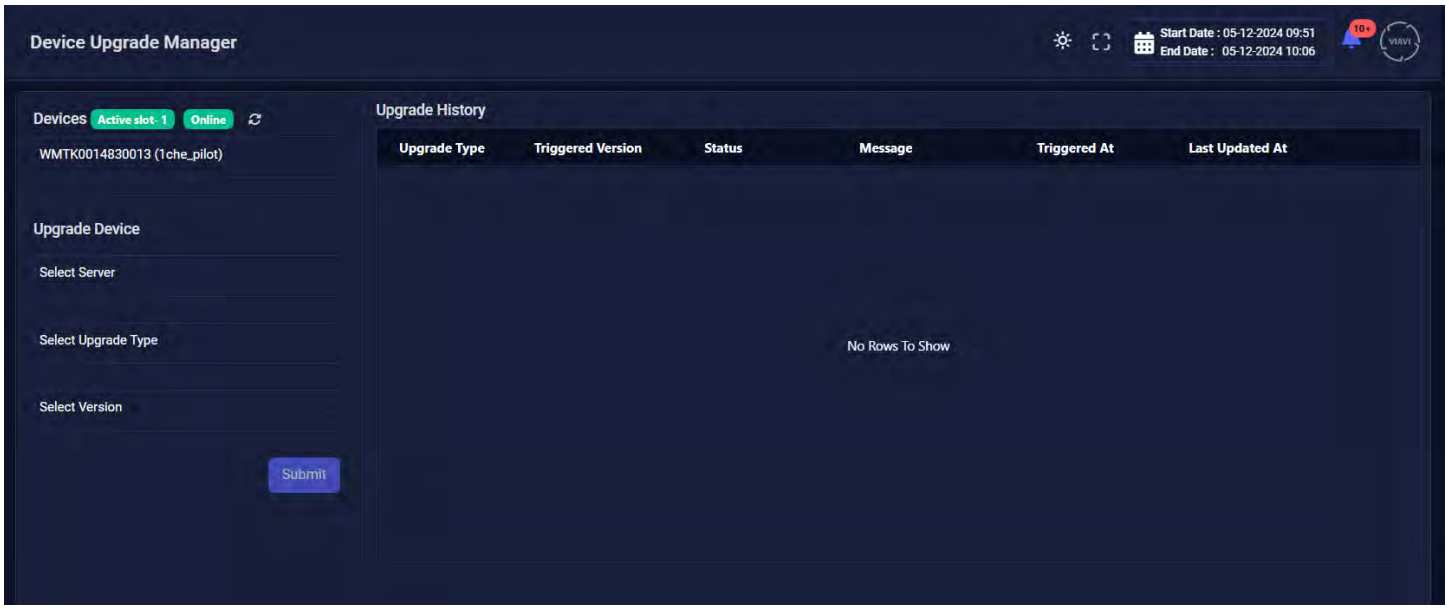
1. Navigate to Administration>Device Upgrade Manager page.



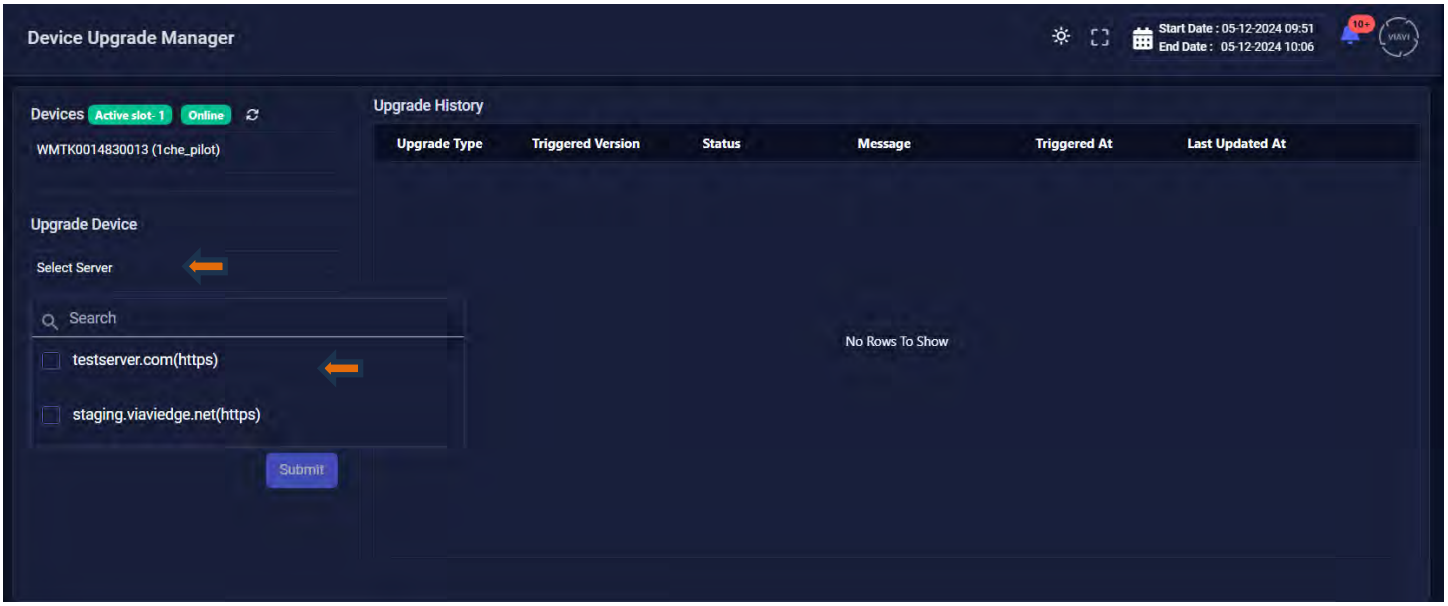
2. Select the “Devices” dropdown to select a device



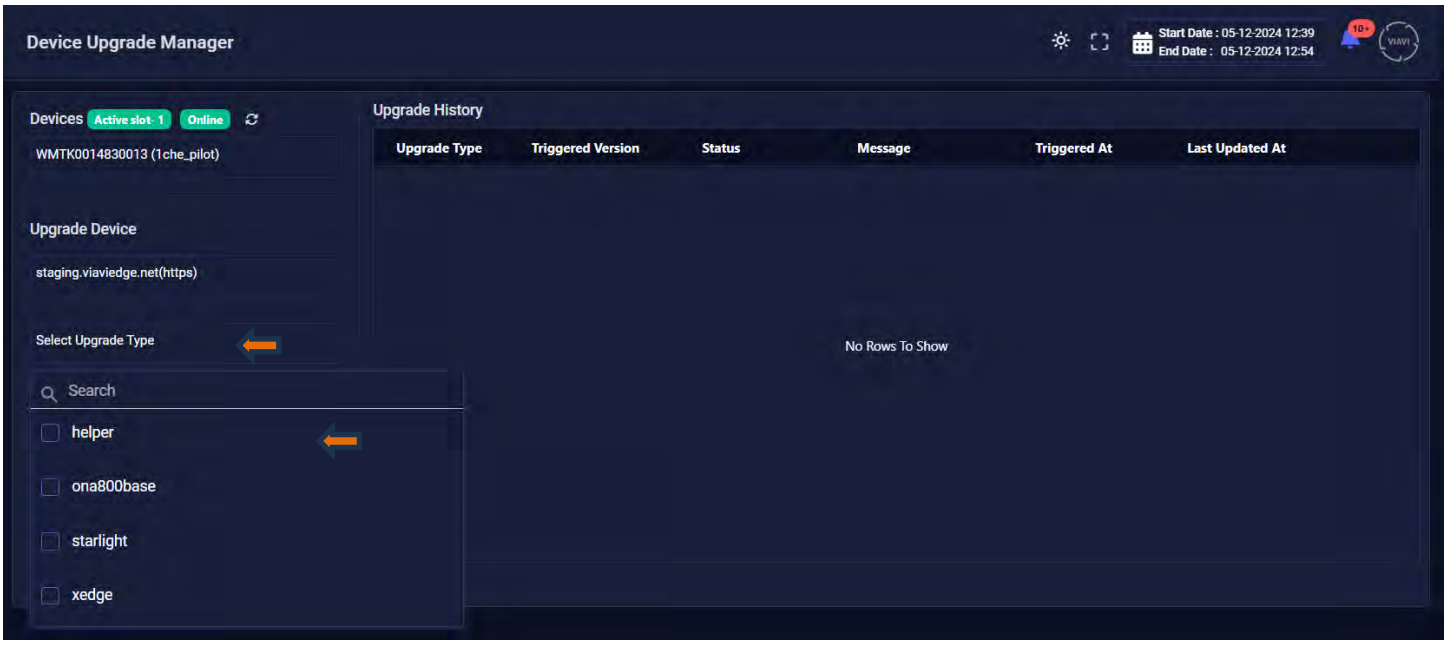
3. Selecting the device displays the upgrade history in tabular form.



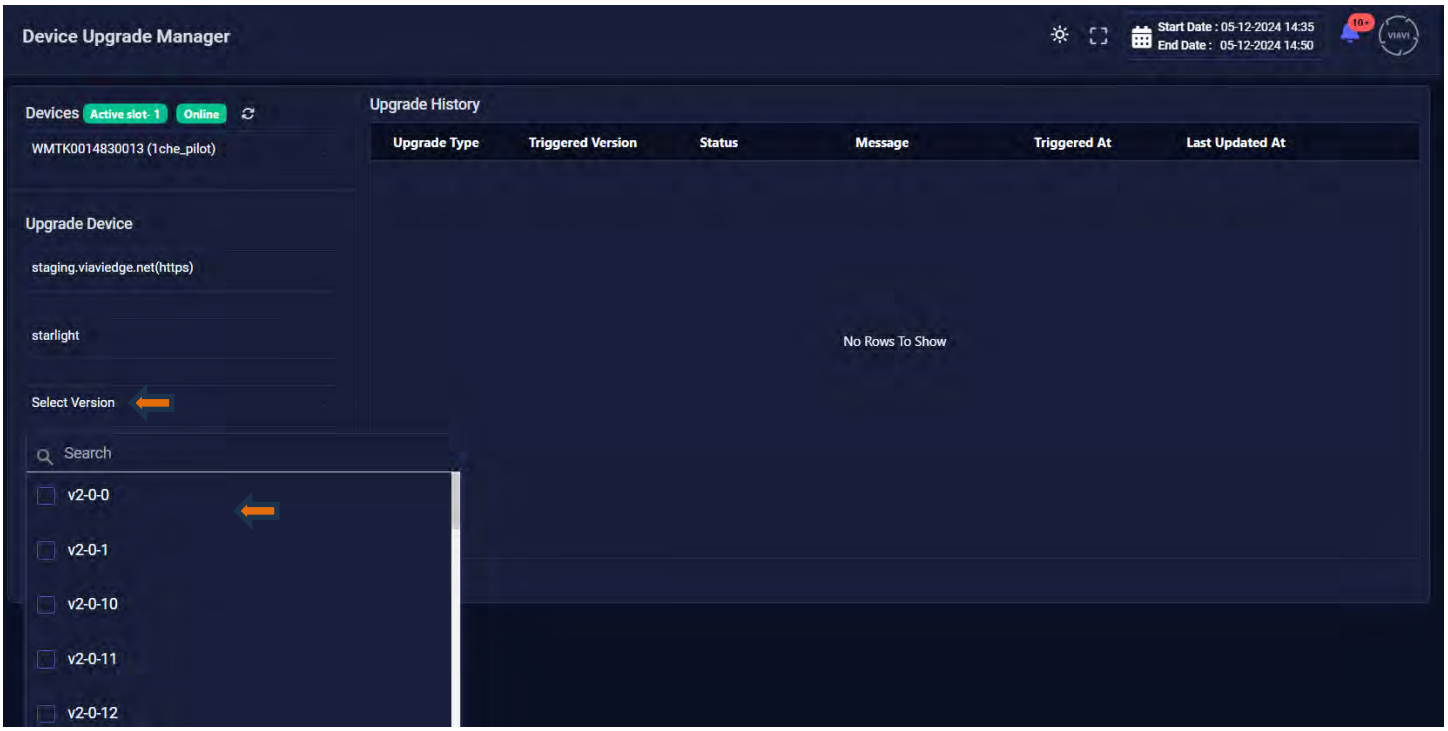
4. Select the “Server” dropdown under Upgrade device to select a server.



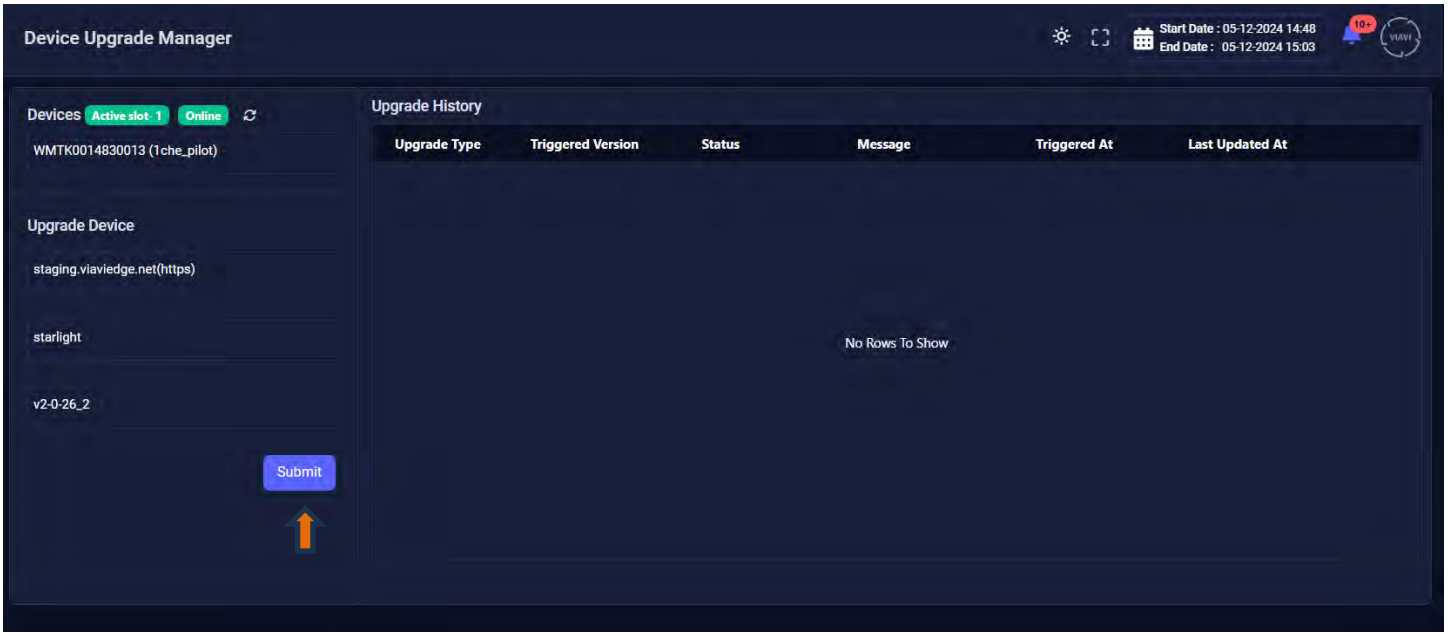
5. Select the “Upgrade Type” dropdown to select the upgrade type.



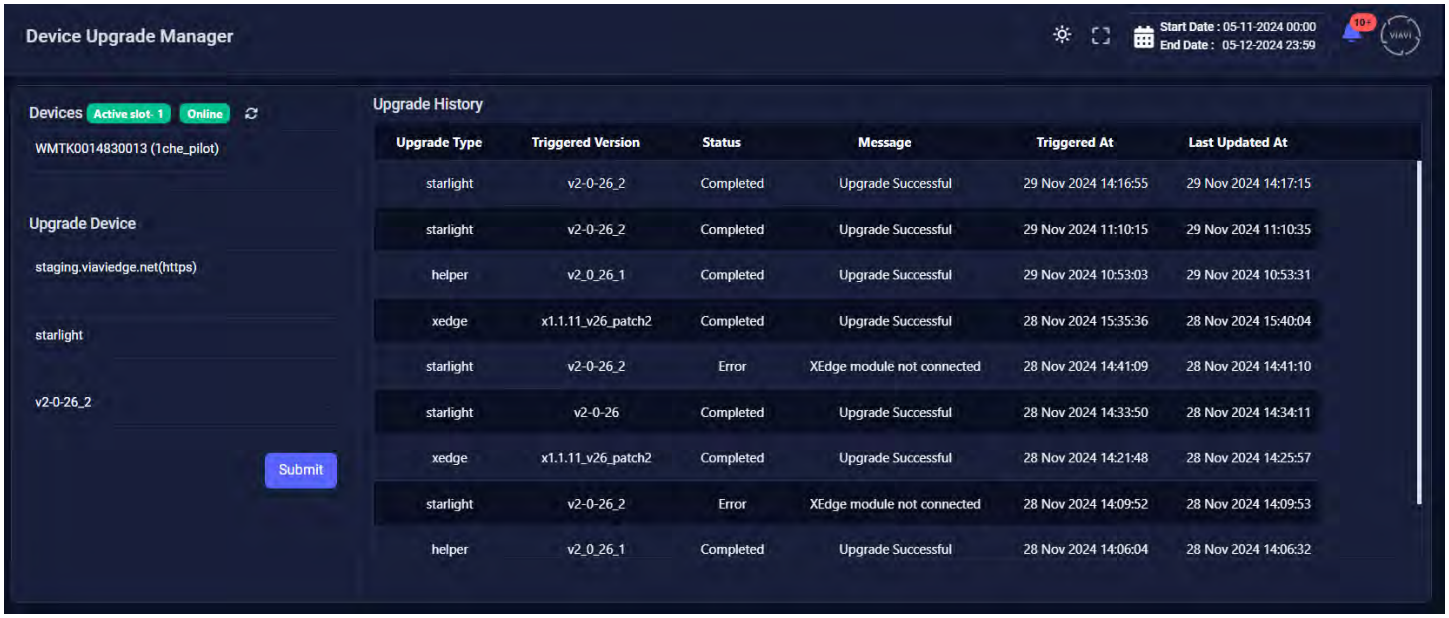
6. Select the “Version” dropdown to select a version of the upgrade.



7. Click Submit.



8. View results. The user can also give a date range to view the upgrade history.



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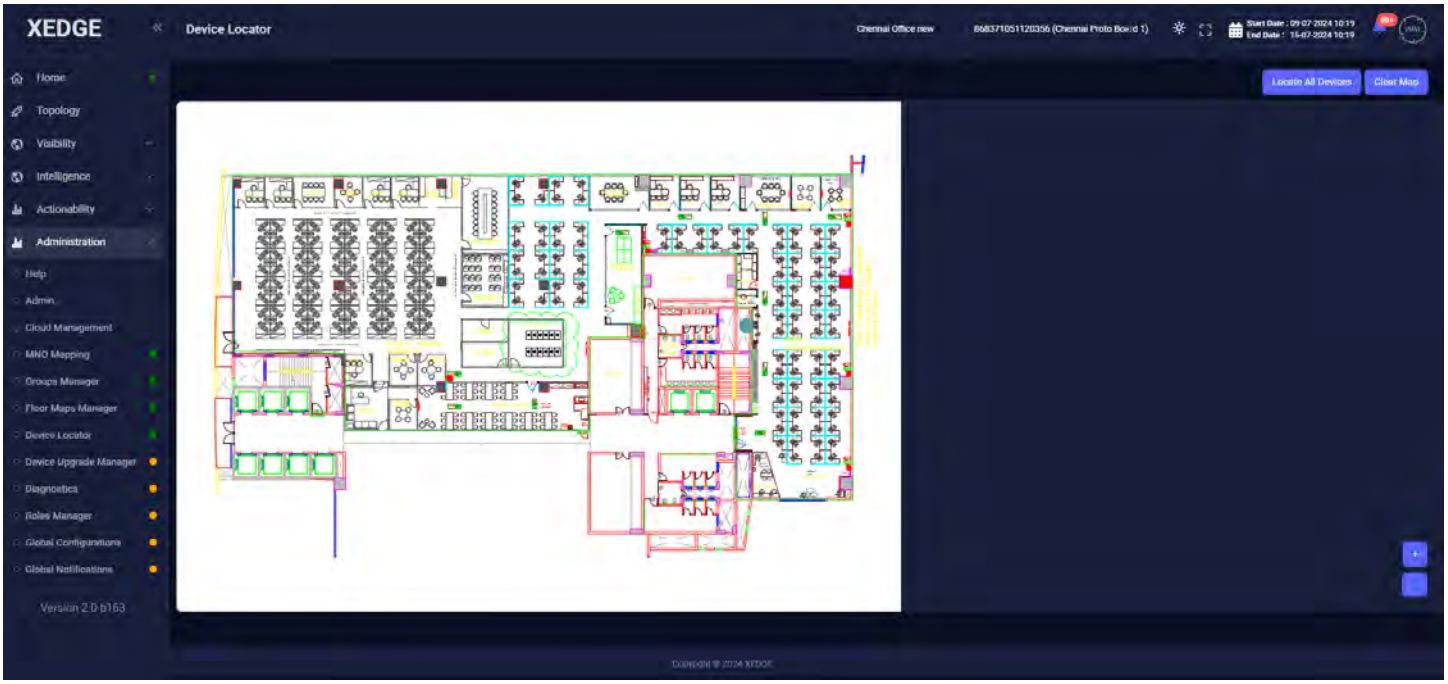
Chapter 13 Reviewing Device Locator Page

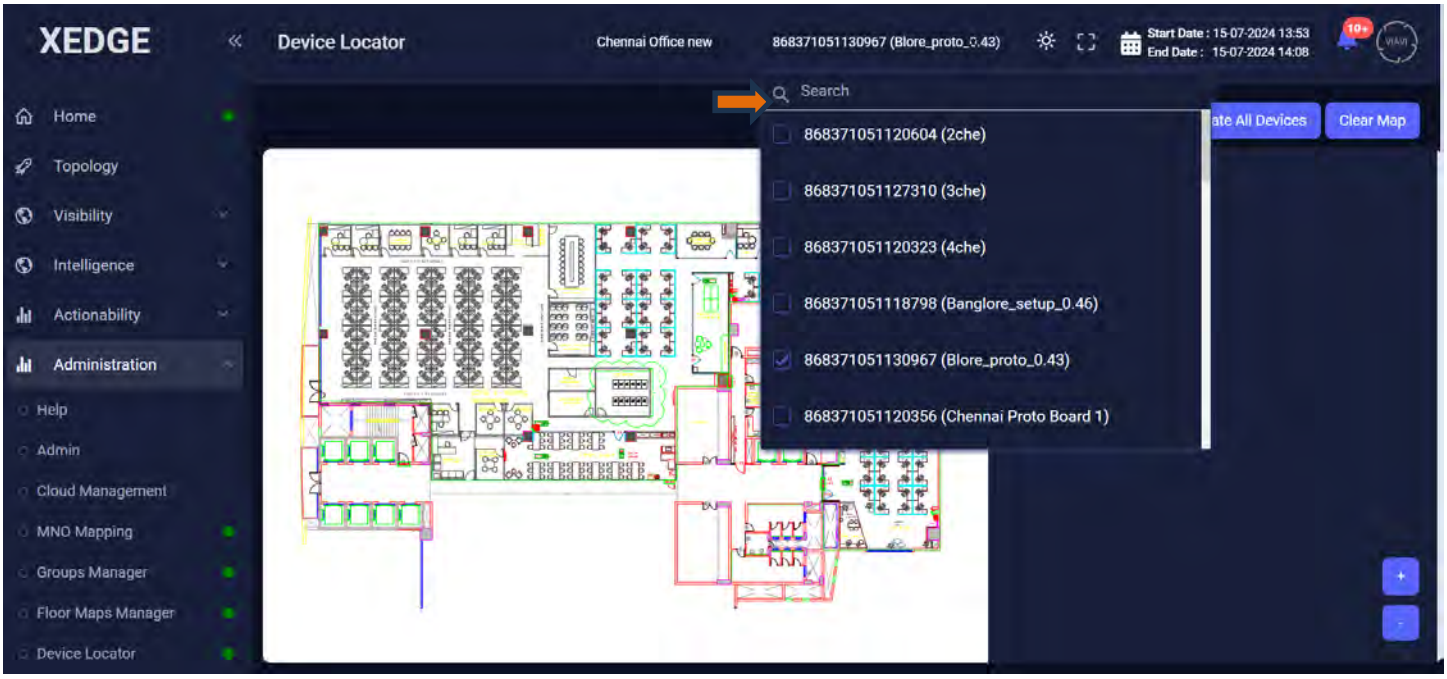
This feature is required for performing stationary tests or scheduling of tests.
The user can indicate the location of the device on a certain map.

To provide the location of the device, complete the following steps:

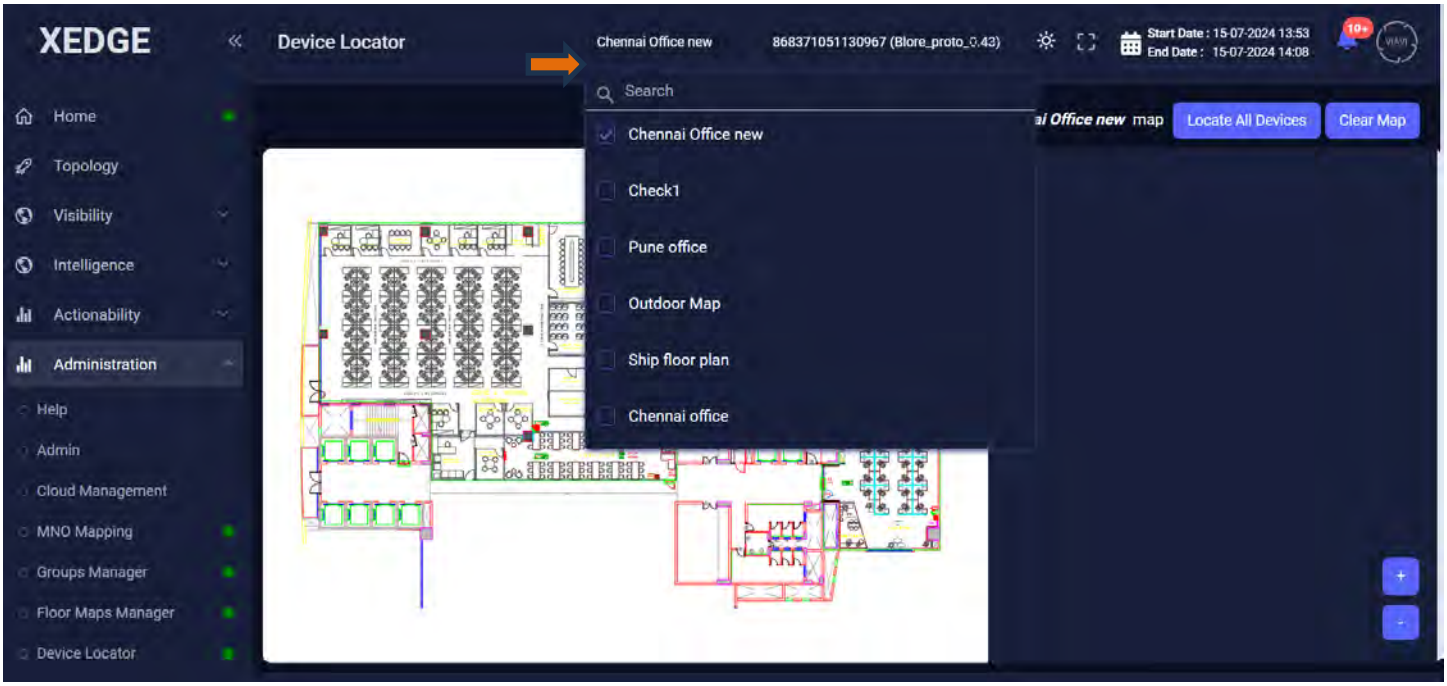
1. Navigate to Administration > Device Locator Page



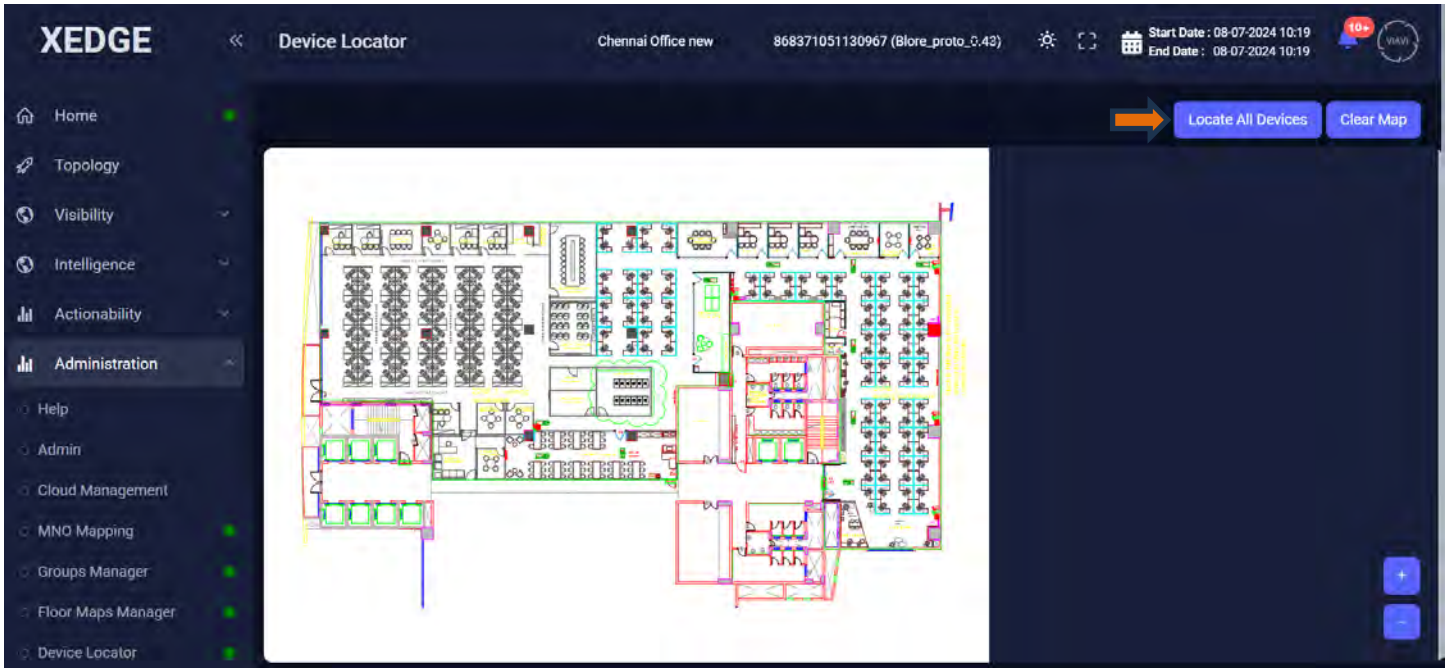
2. Click on Device dropdown to select the device.



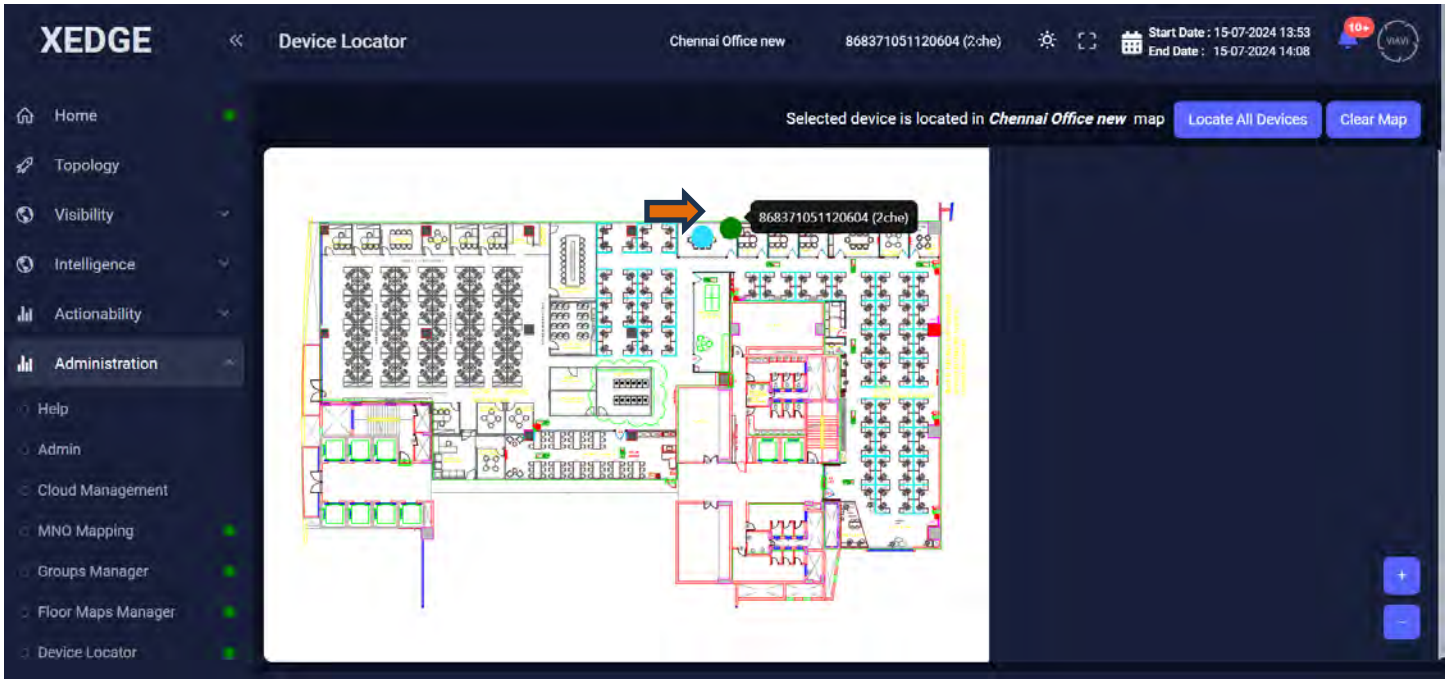
3. Click on Map drop down to select the Map on which the devices are to be located.



4. Click on Locate All Devices to locate the selected device on the Map.

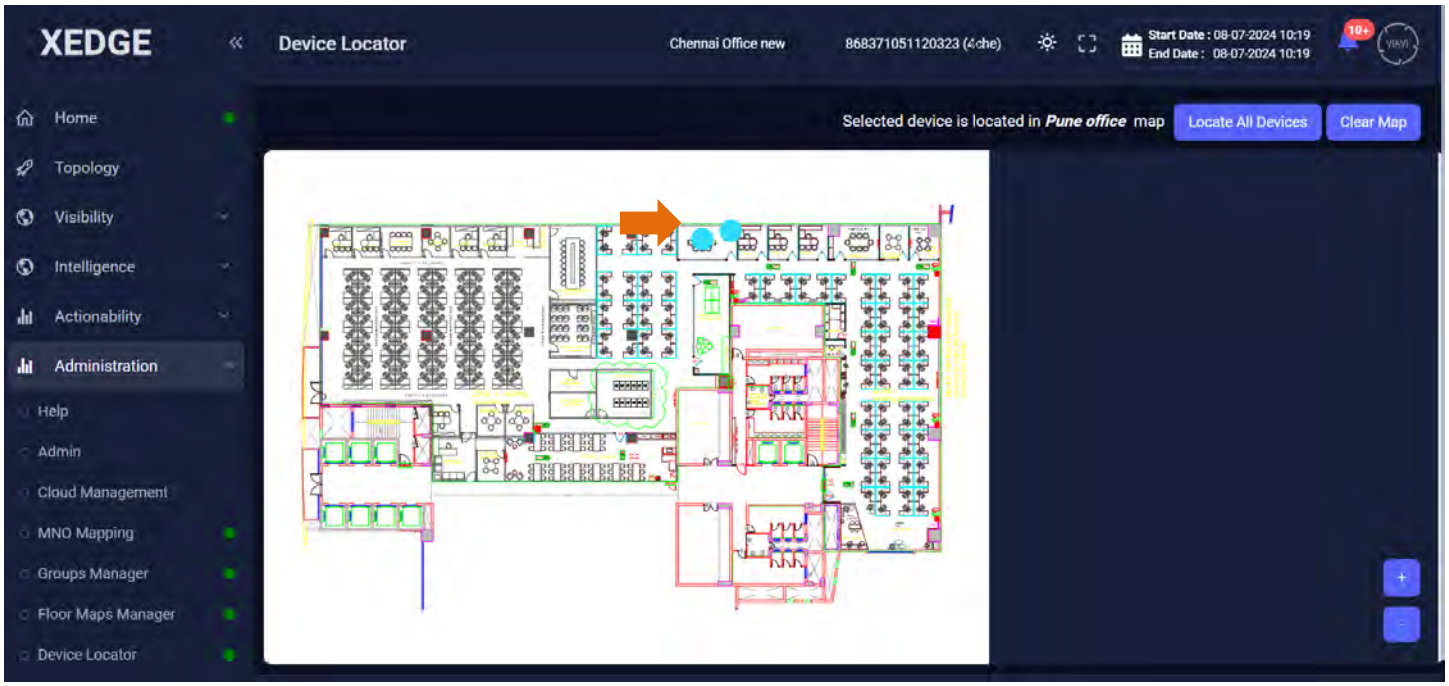


5. If the selected device is present on the Map a green dot will be indicated on the map, showcasing its location. When hovered over, the corresponding device name is displayed.

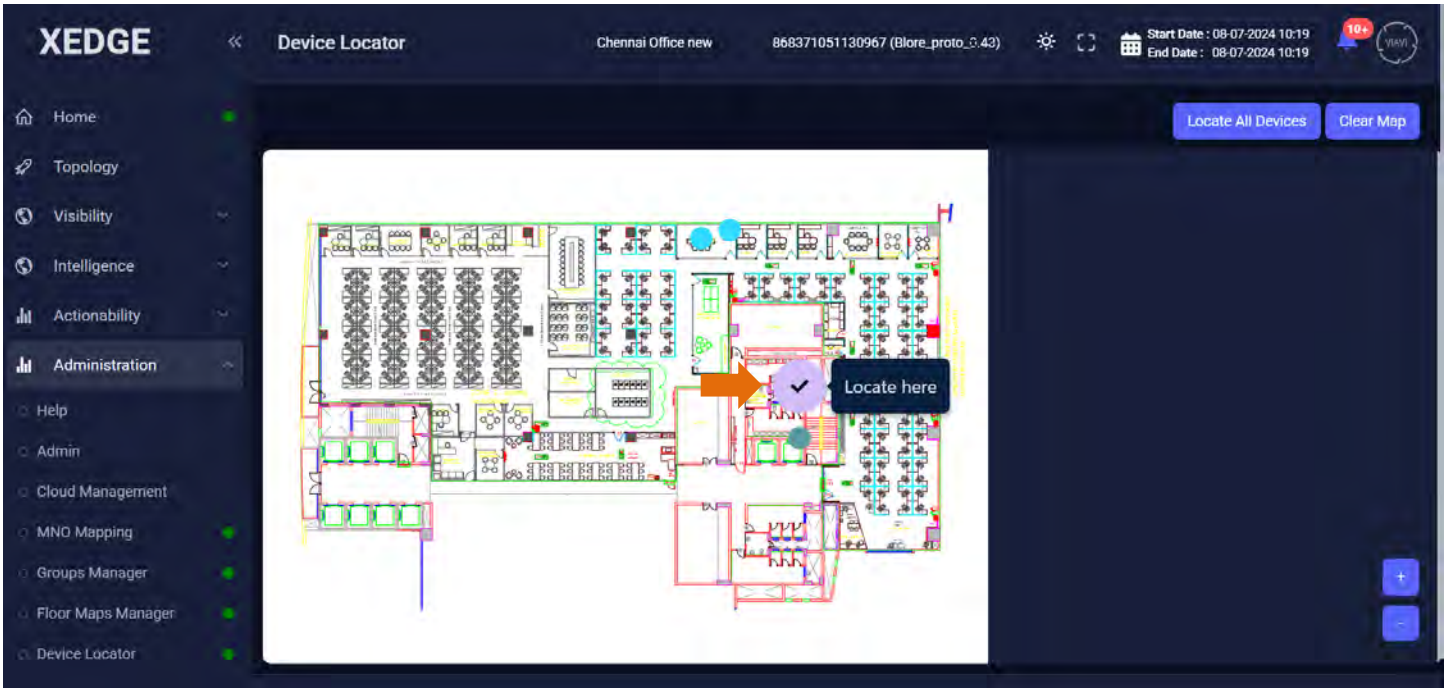


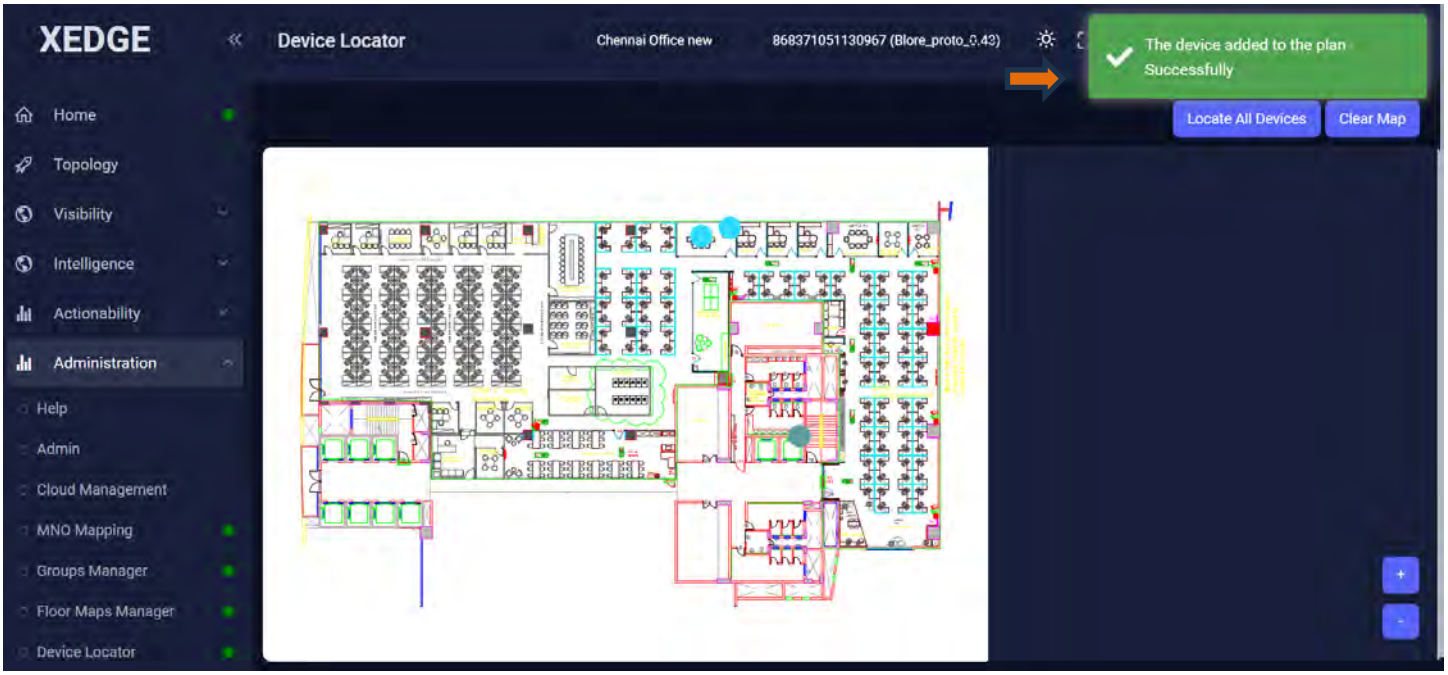
6. If any other device other than the selected device is present on the selected Map, a blue dot will be indicated showcasing its location. When hovered over, the corresponding device name will be displayed.

7. If the selected device is not present on the Map the other devices which are present on the Map will be indicated as a blue dot, showcasing its location. When hovered over, the corresponding device name will be displayed.

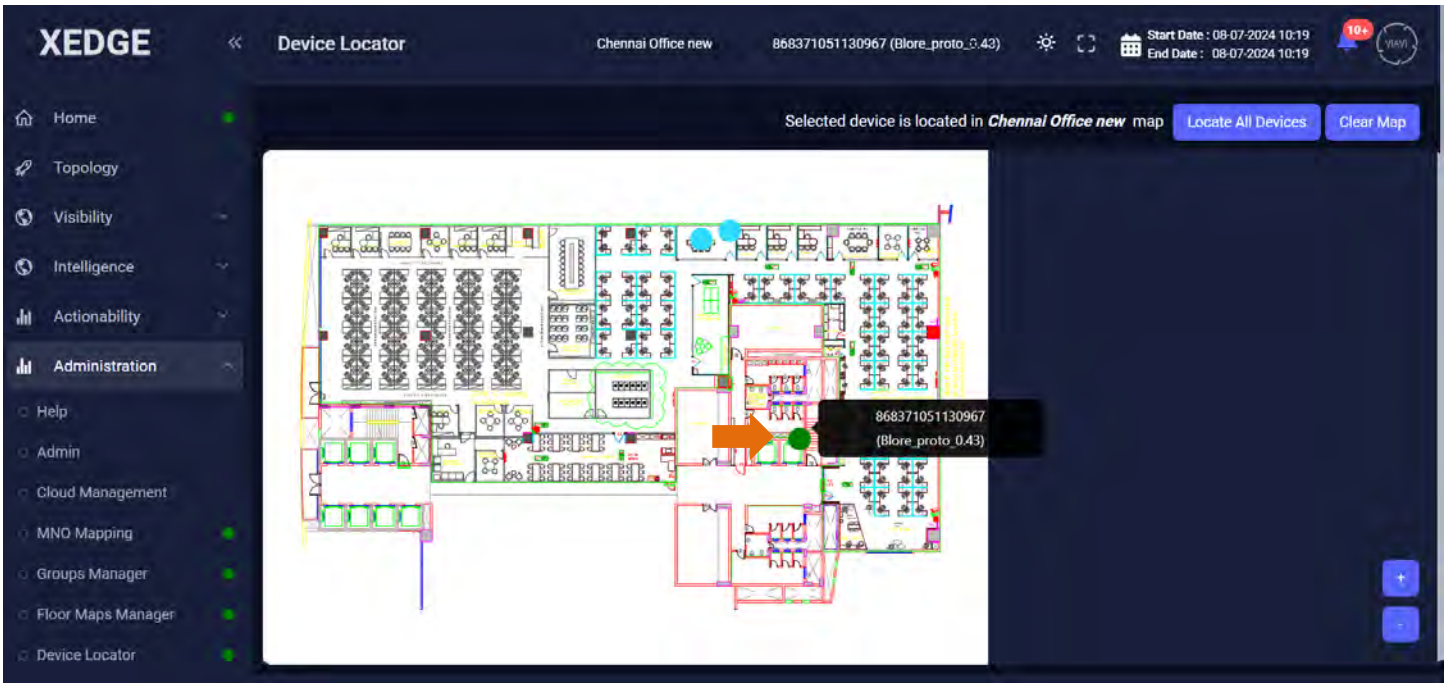


8. If the user wants to indicate the location of a device onto the map, the user has to click on the map, which will showcase a blue dot. Clicking on the blue dot will display a tick button with a text asking to “Locate here”. Once the user has clicked on the tick button a message will be displayed stating that “The device added to the plan Successfully”.

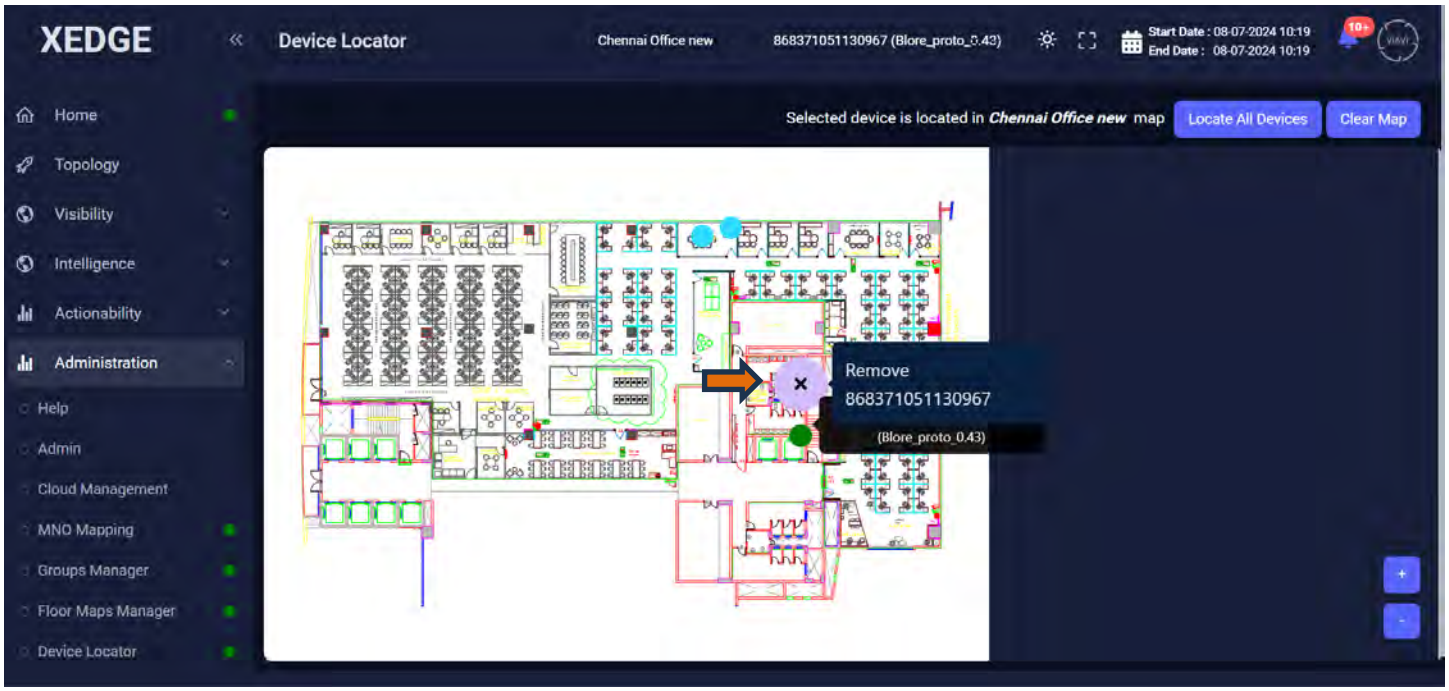


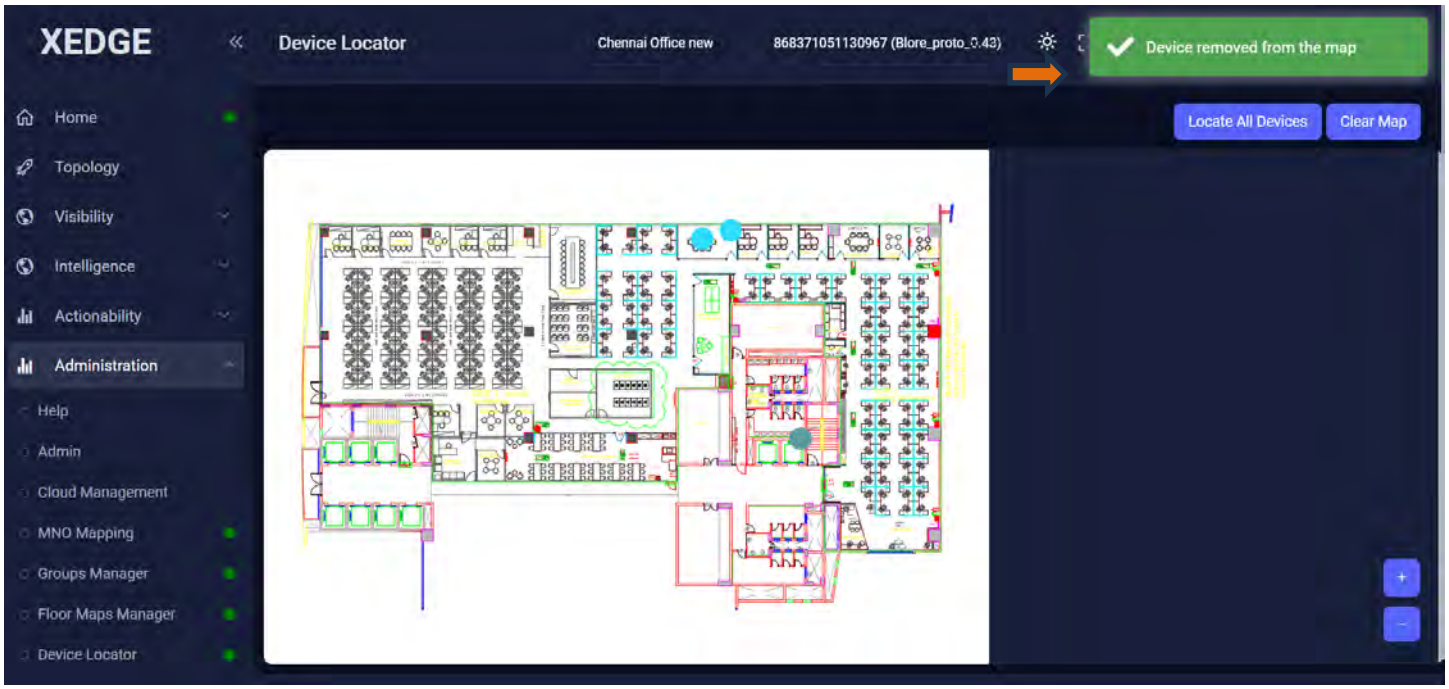


9. After getting successfully locating the device, the active device will be indicated using a green dot.



10. If the device has to be removed from that location or map the user has to click on the dot which in turn shows up a ‘X’ button. Clicking that will delete the location details for the device.

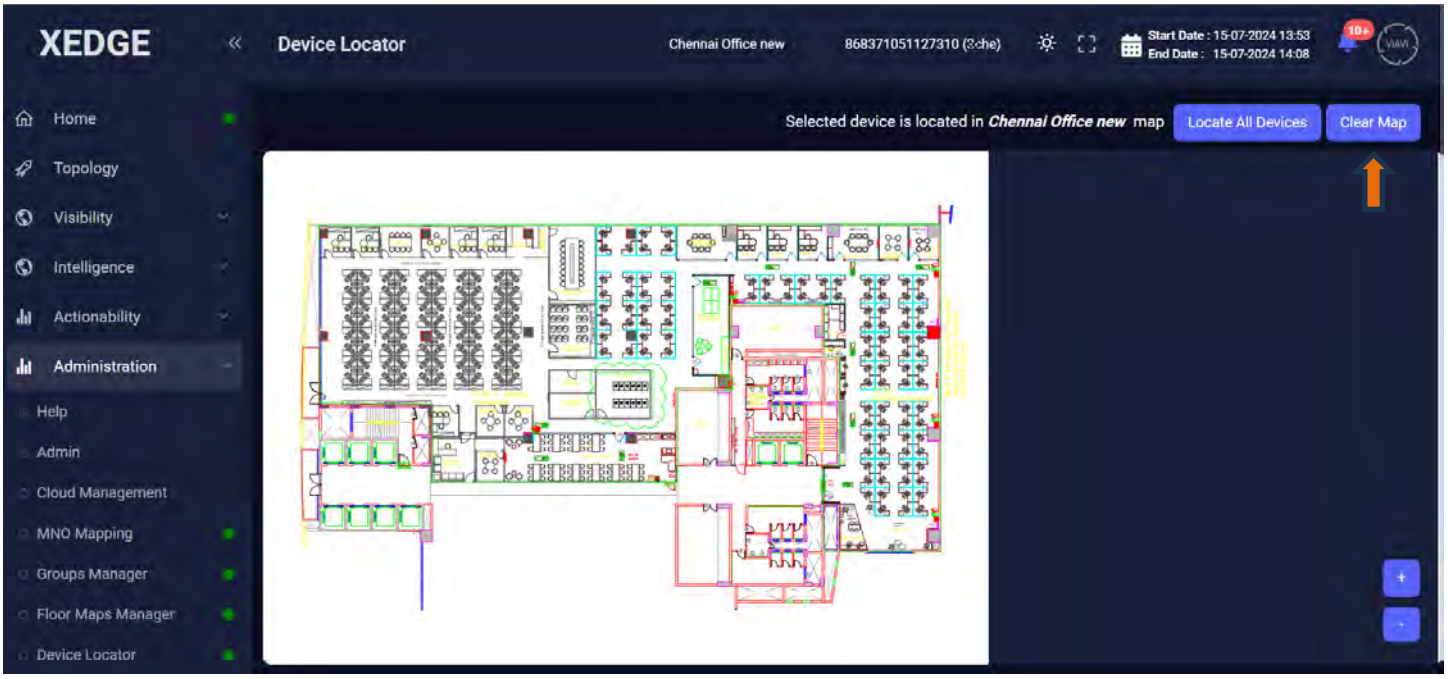




11. If we are having multiple devices located at the same location in close proximity, the locator points for each device have to be added by following the procedure given below.

    - Add the device by clicking on the location on the map
    - Clear the map
    - Add the next device

    To clear the map, click the Clear Map button. To locate a device at the same location as another device, the user will have to clear the map once and then place the new device.

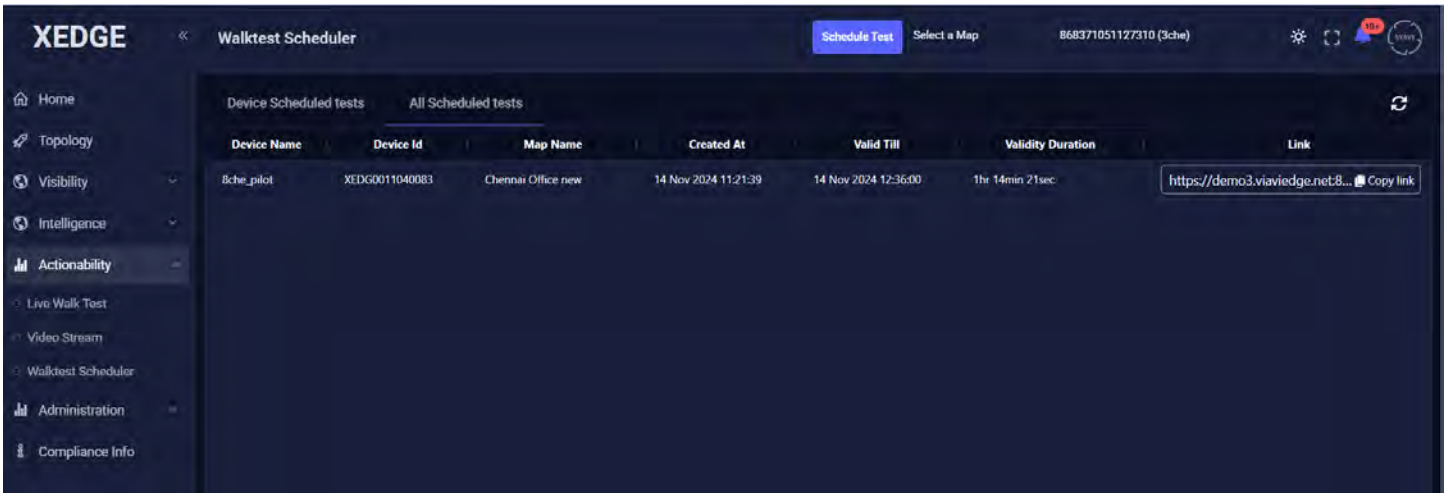


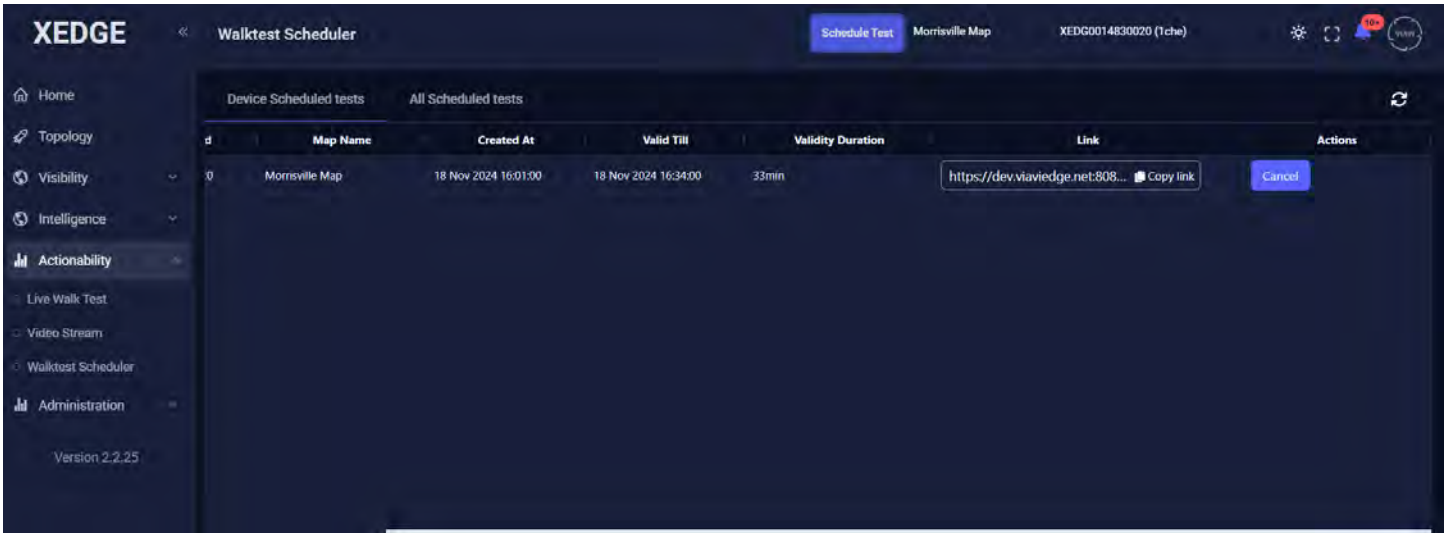
Chapter 14 Reviewing Walktest Scheduler Page

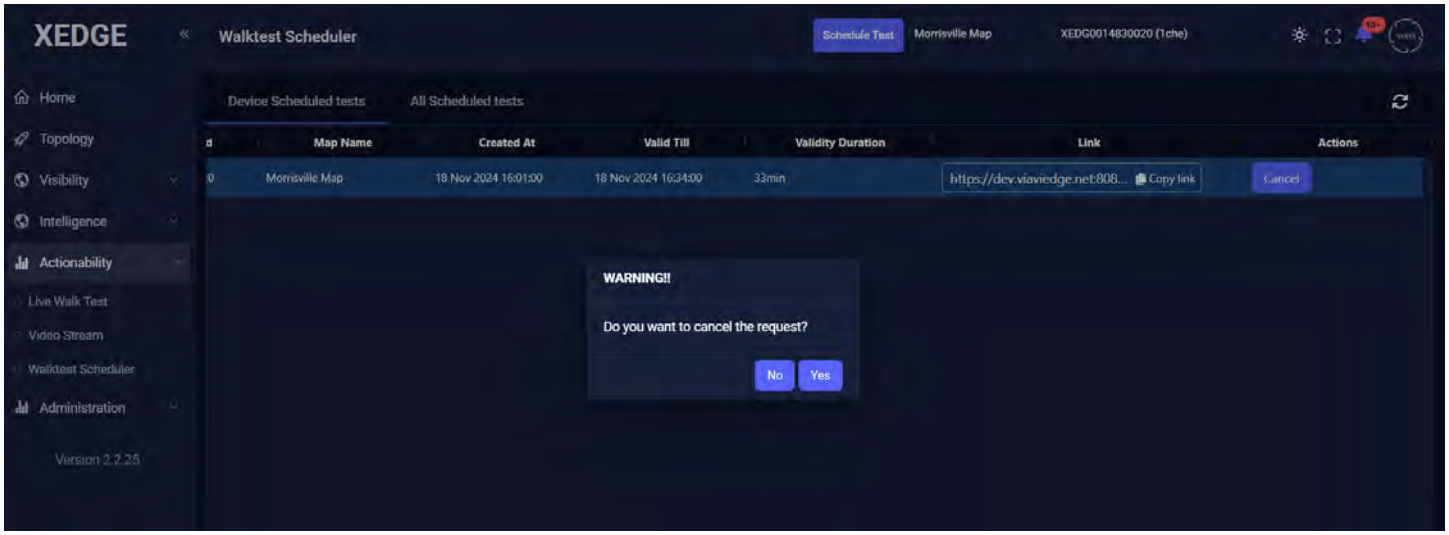
This feature lets the user schedule a walktest on a device and map. After scheduling the walktest the user will be provided with a link with preconfigured setting to start a walktest. Any user can use the link with the scheduled time frame. The user can start the walktest and continue the test with the same link until it is stopped.

To schedule a walktest for a device, complete the following steps:

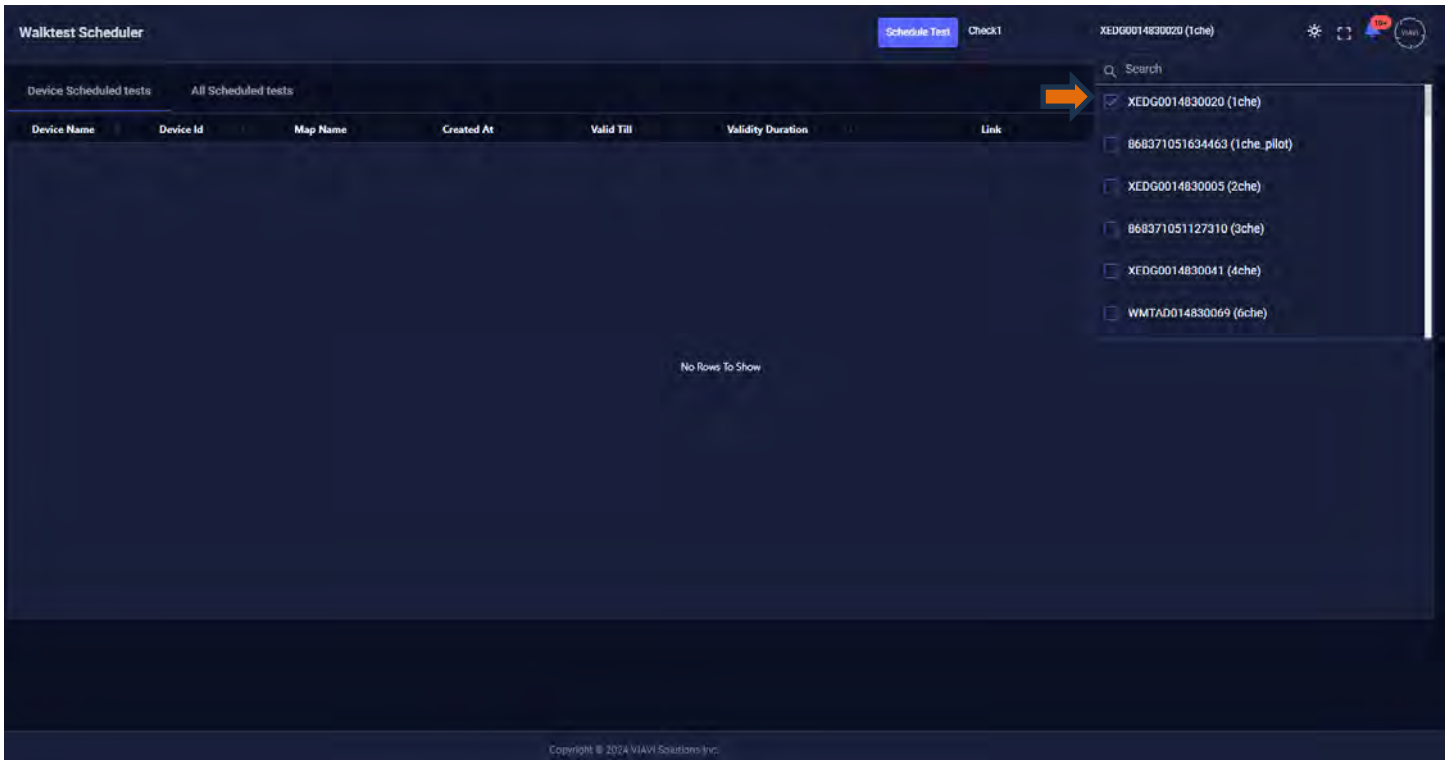
1. Navigate to Actionability > Walktest Scheduler Page



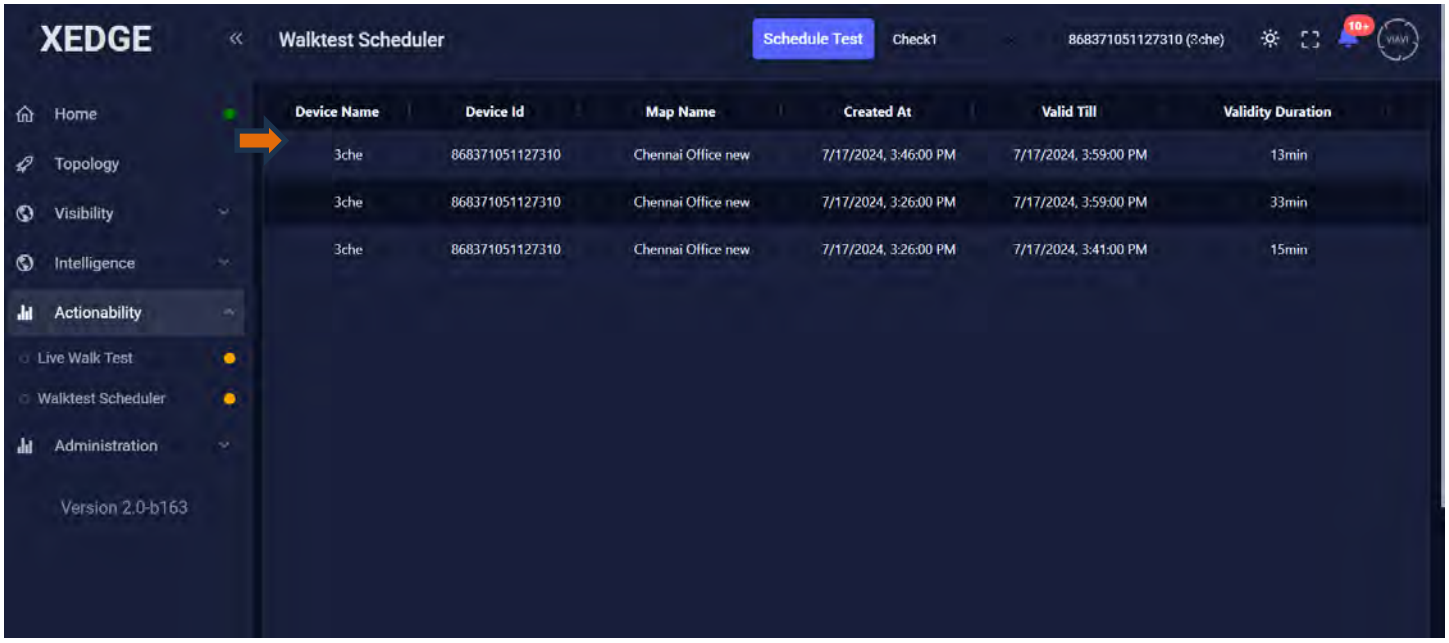




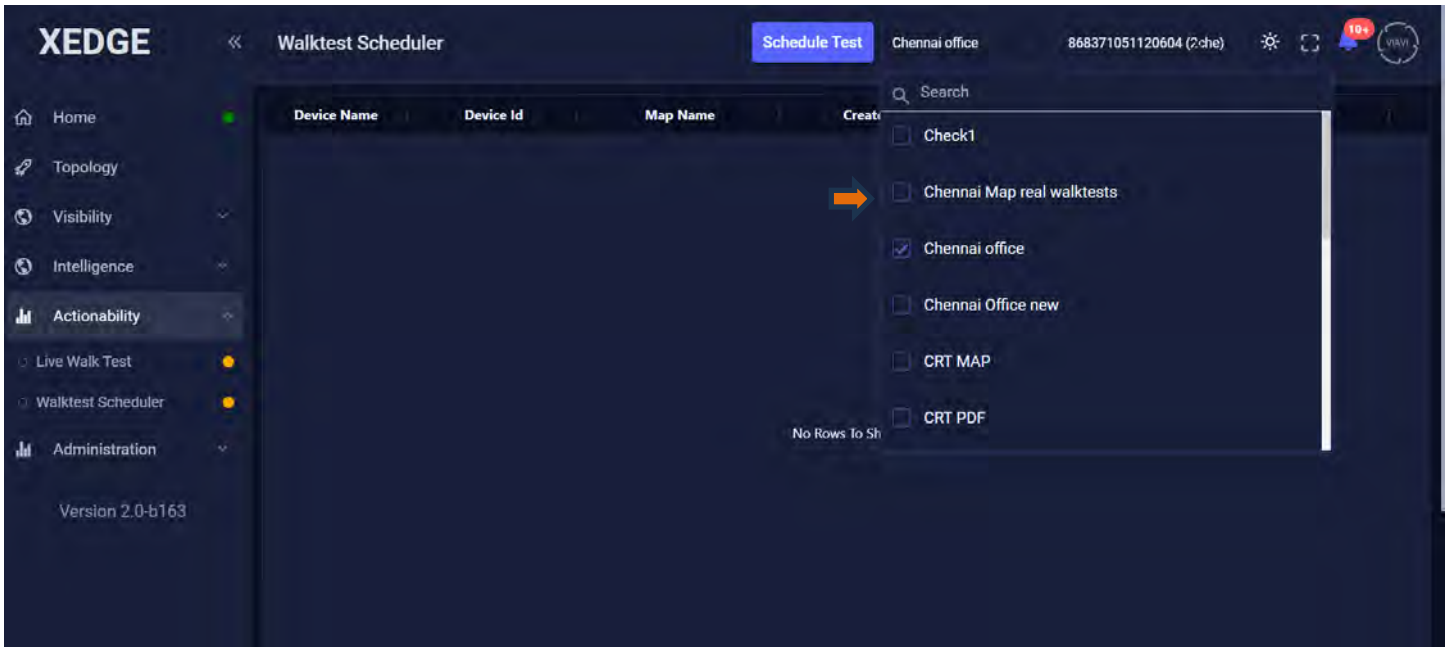
2. Click on Device dropdown to select the device



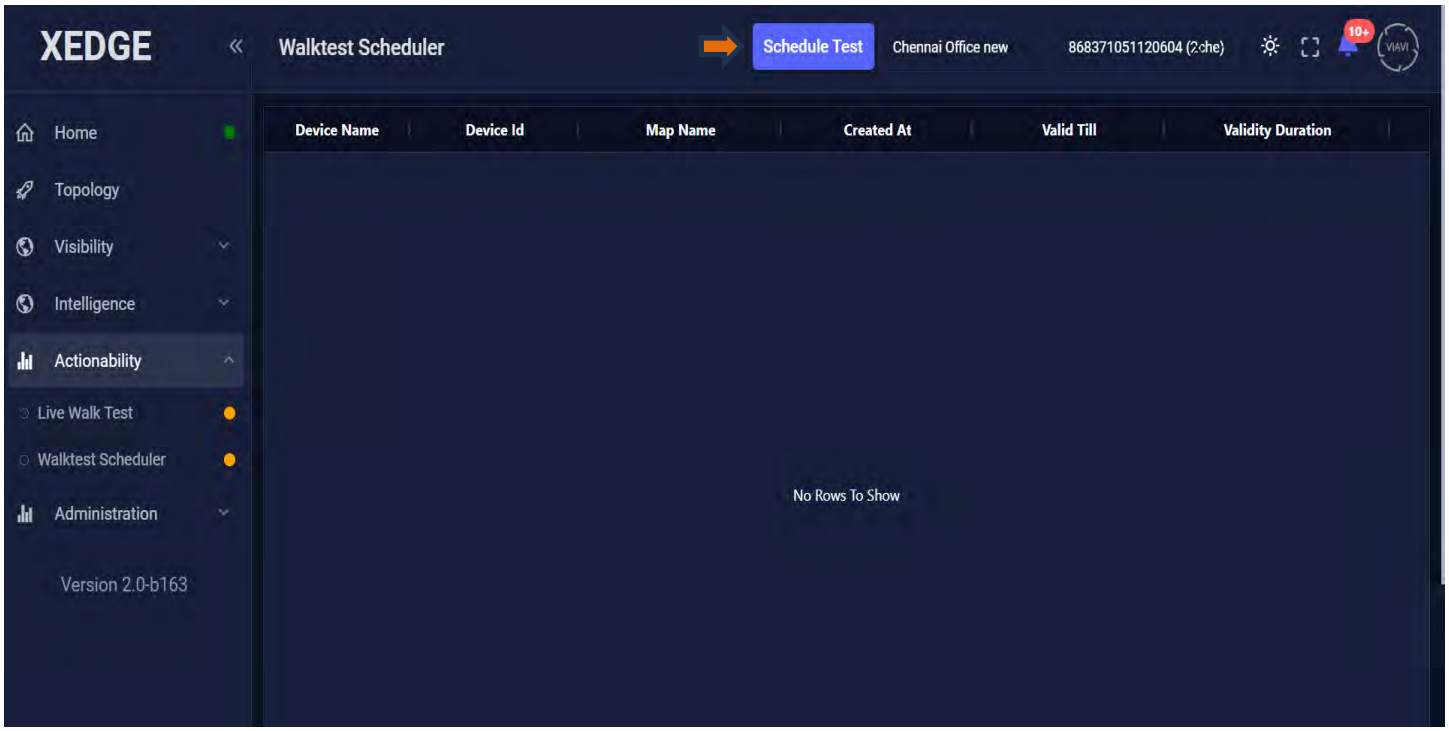
3. After selecting the device, the table lists all the scheduled test for the device.

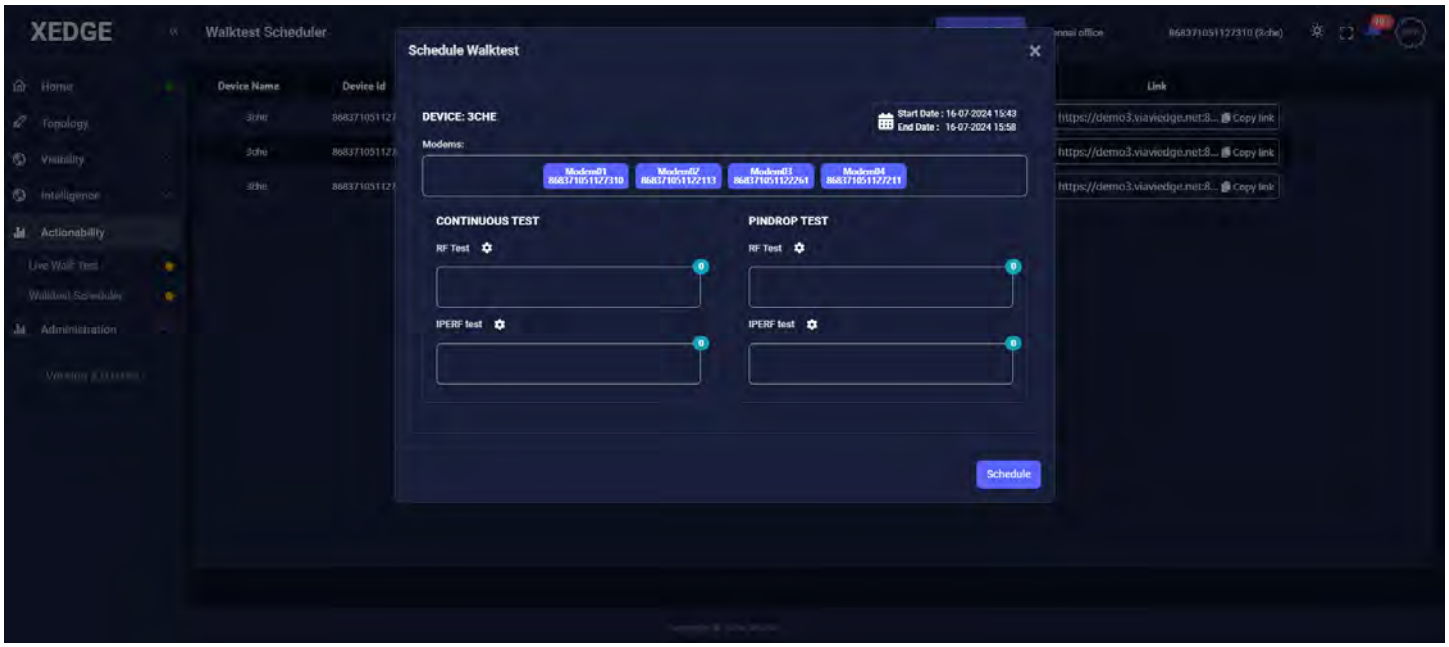


4. Click on Map dropdown to select the map on which the user wants to conduct the walktest.

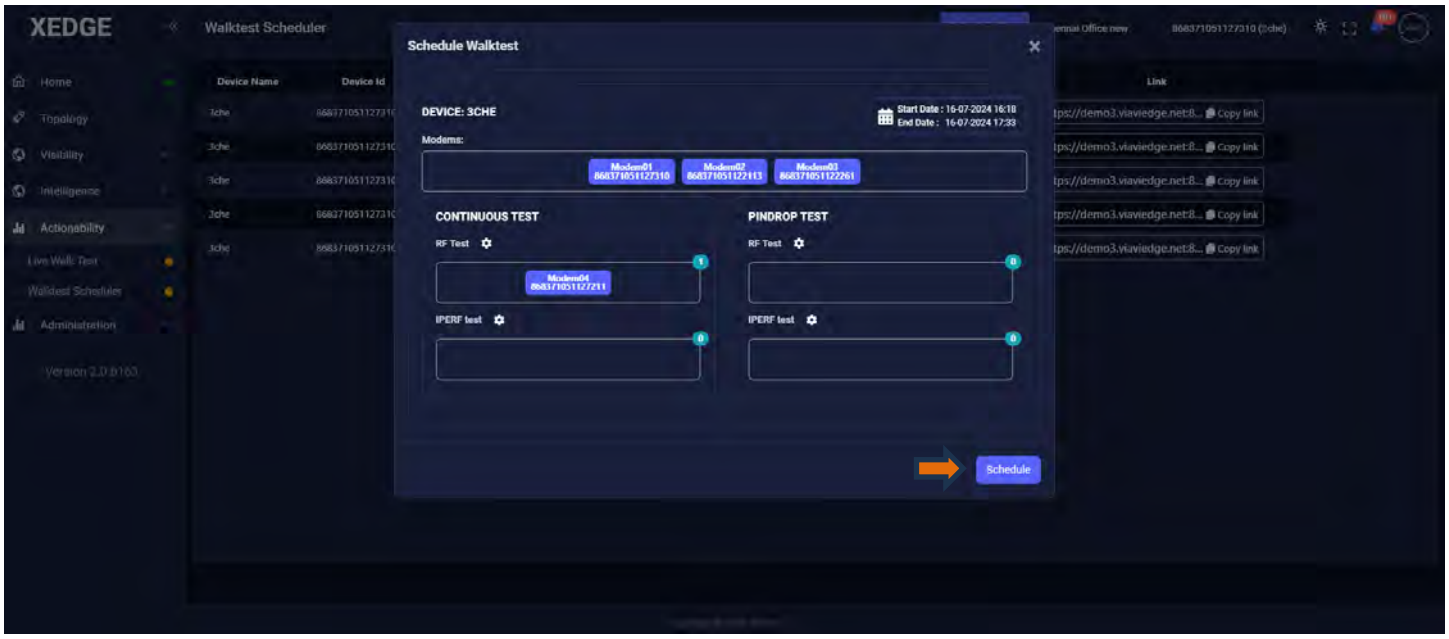


5. Click on Schedule Test button, to load the pop up showcasing the schedule walktest window with the provision to make selection for walktest.

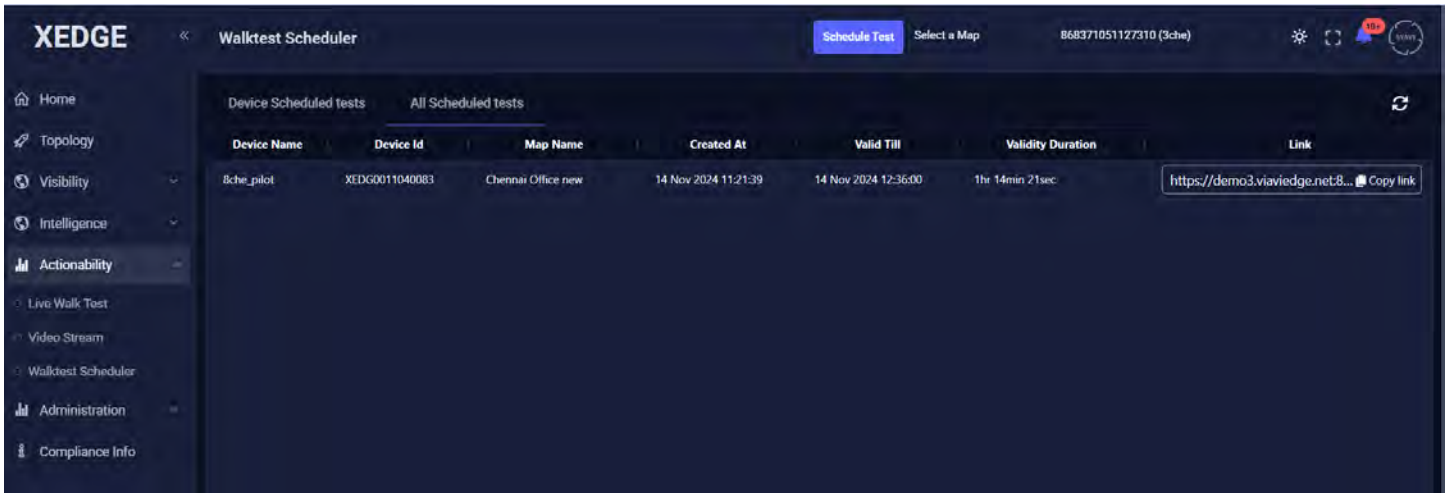




6. Once the modems, type of test, and time frame for walktest schedule is selected, click on “Schedule” to schedule the test with the selections made.

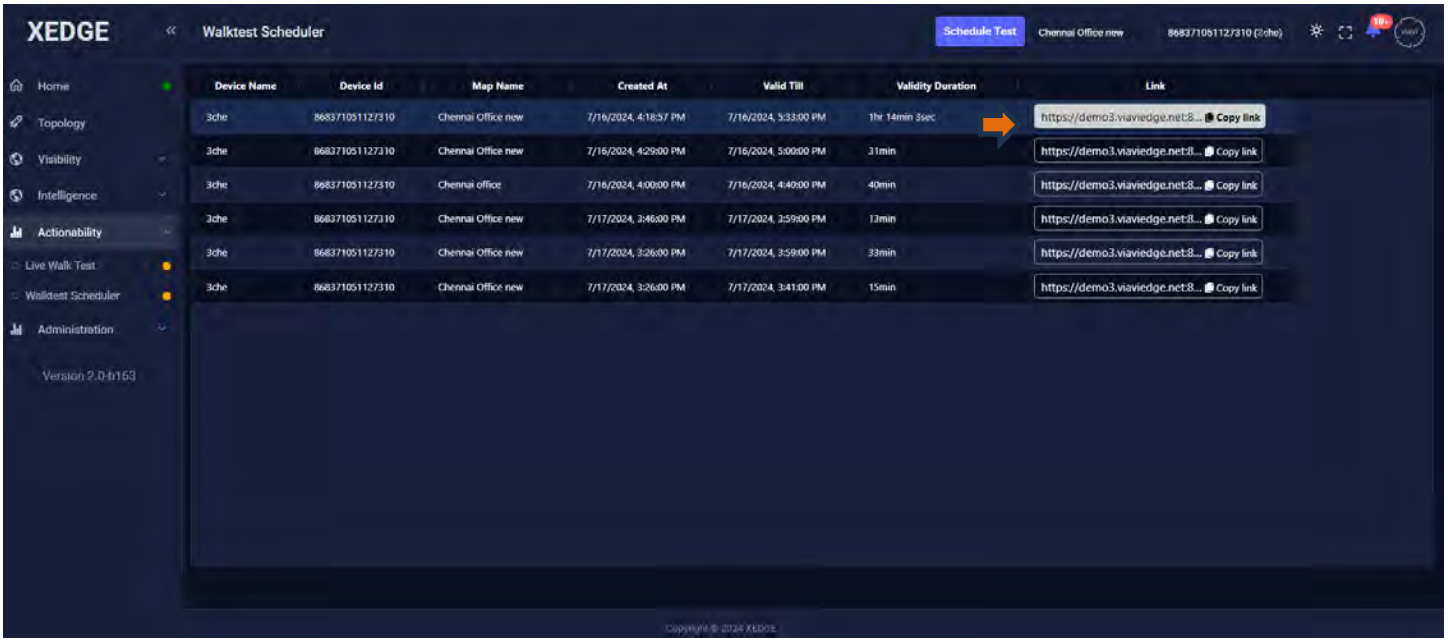


7. After clicking on “Schedule” button, the user will be directed to a table enlisting the scheduled walktests for the particular device. The user will be provided with the link to be copied within the table.

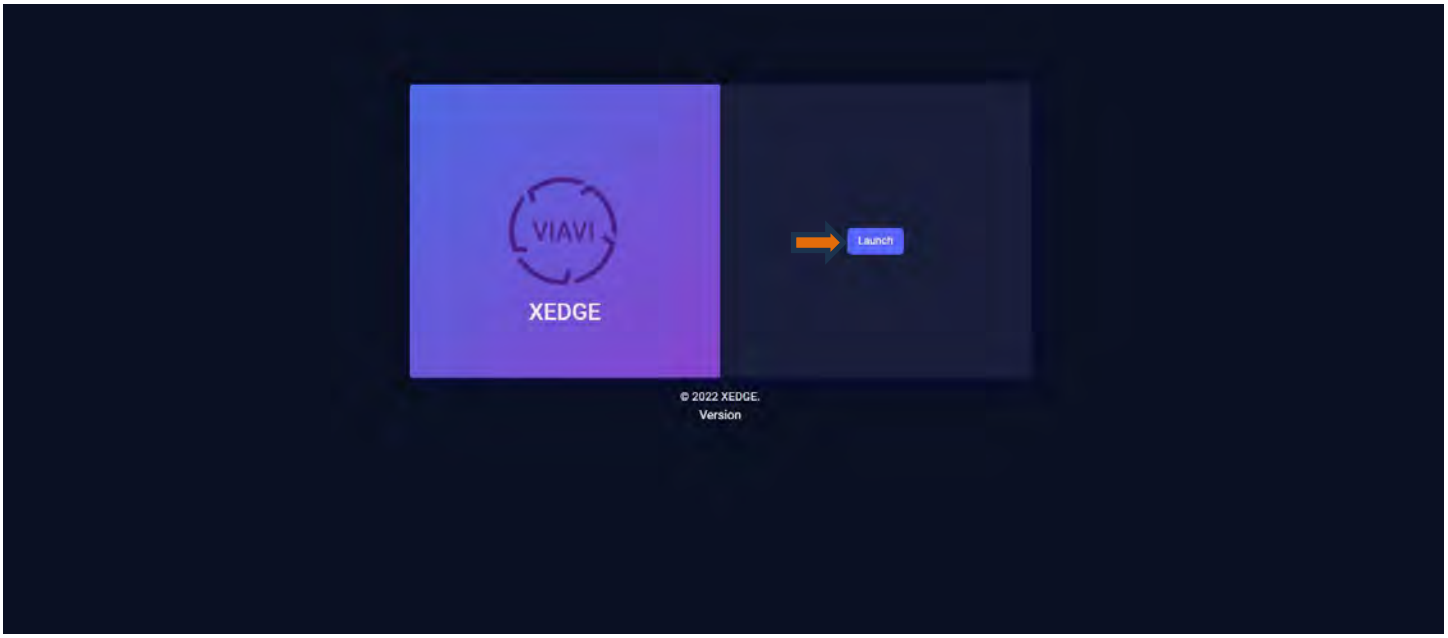


8. The Test automatically starts and stops as per the scheduled timings.

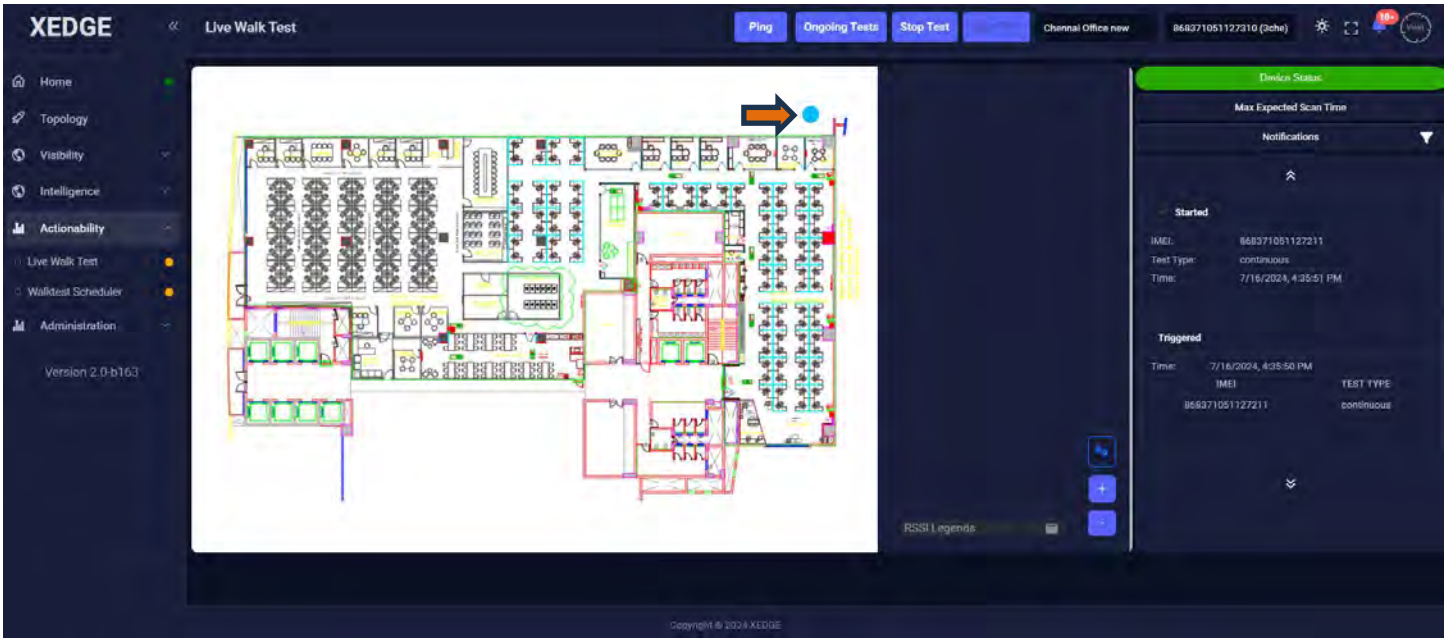
9. The user also can copy the link from the table and paste it on a browser to load the UI and continue the test.



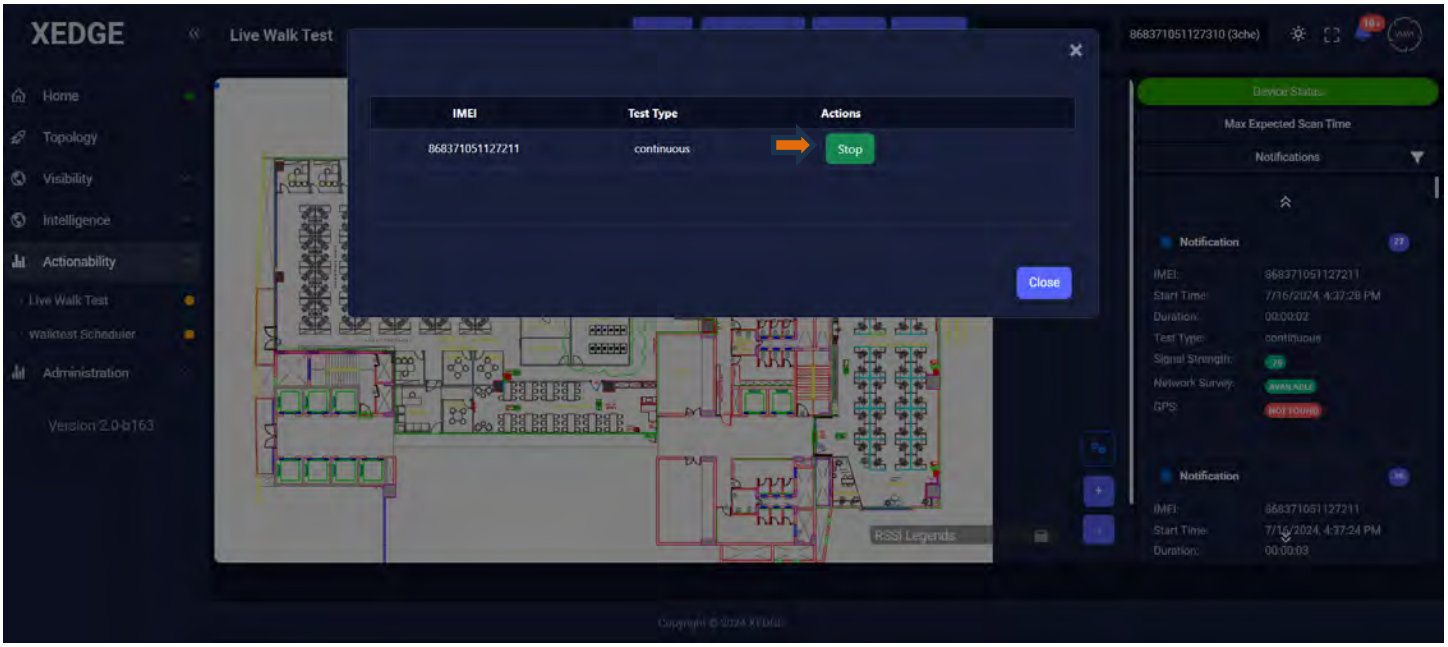
10. Once the UI is loaded, click on Launch to load the walktest page with the selected scheduled preset setting.



11. Click on the loaded UI to start the test.



12. Click on Stop Test to stop the test.



13. Repeat the steps to start the test with multiple modems or with a different type of test.

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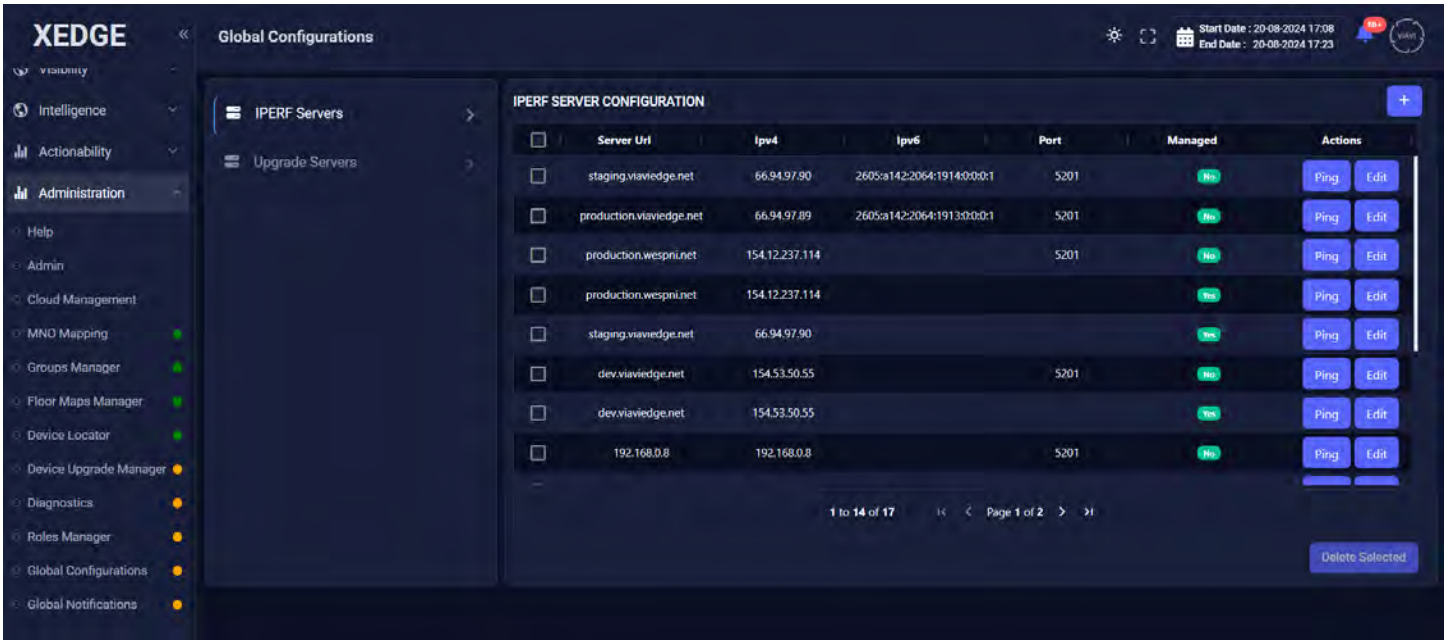
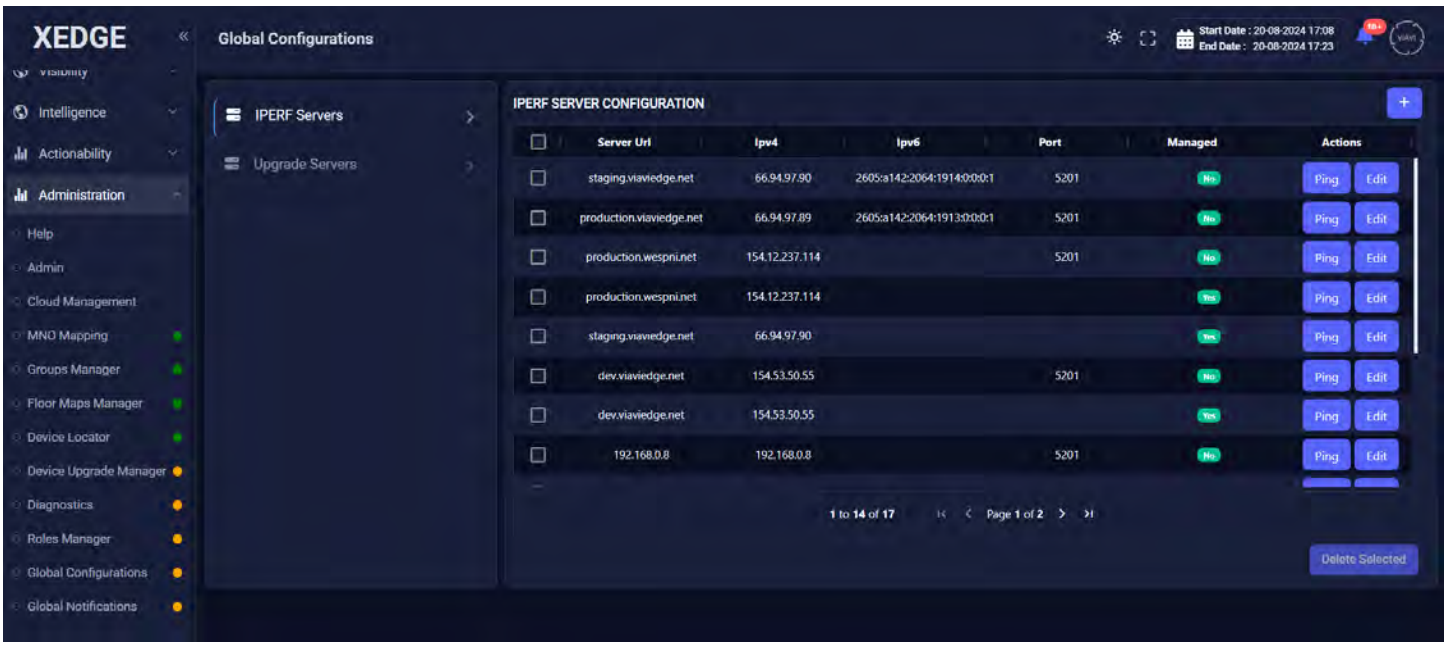
Chapter 15 Global Configurations

This feature lets the user configure the servers.
To configure the servers, complete the following steps:

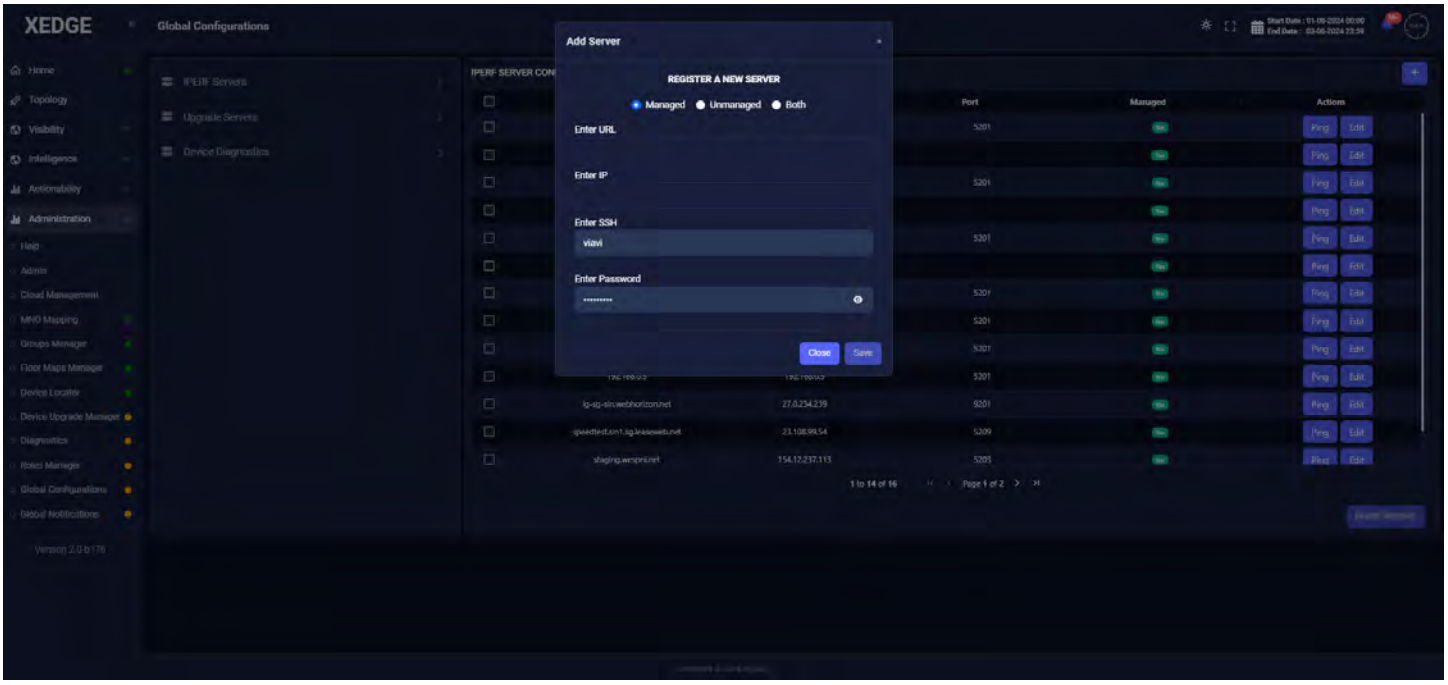
1. Navigate to Administration > Global Configurations Page



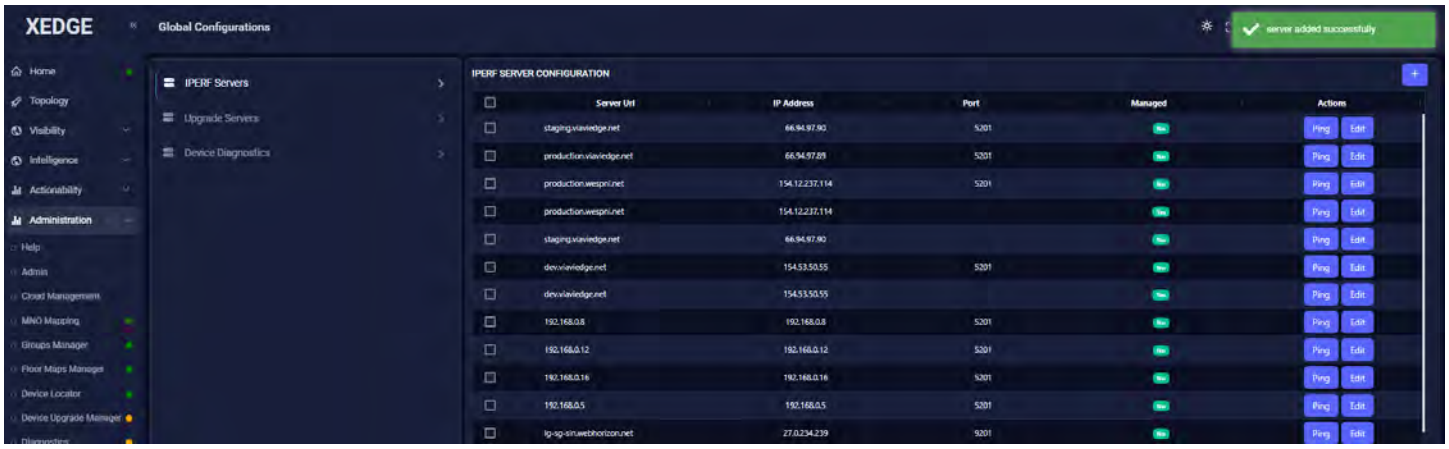
2. To add a server click on '+' button. A pop-up window appears, prompting to register a new server.



3. Enter the type of server and the corresponding URL, IP and SSH, along with the Password. Once the details are entered, click on save to register a new server.



4. Once the server is added successfully, a message “server added successfully” is displayed and the newly created server appears in the displayed list of servers.



5. The user can filter the list of servers by clicking on the header of each column