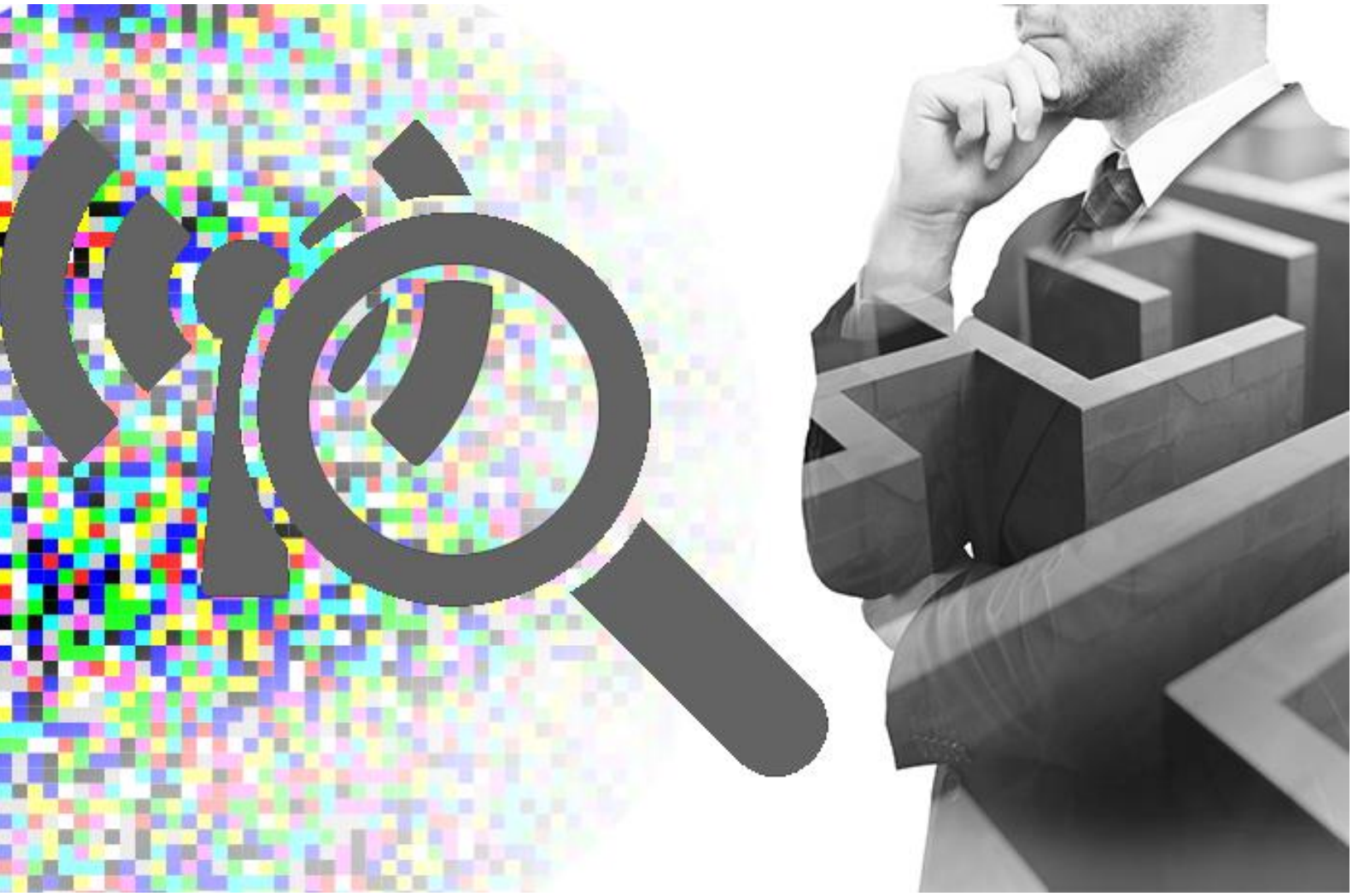

How to install the WM-100 and Wave Navigator

silex technology

When it **Absolutely Must** Connect

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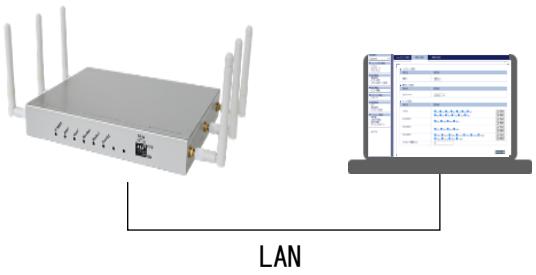
0. Pre-requisition

This document introduces the WM-100 and Wave Navigator installation process used to directly connect a computer and the WM-100 through a LAN port.



Computer	
OS	Windows Server 2016（64bit） Windows 10 IoT Enterprise（64bit） Windows 10 Professional（64bit）
CPU	Intel Core i5 or higher performance CPU
Memory	4 GByte and more available for the Wave Navigator software
HDD/Storage	1 TByte and more available for data storage

Firewall setting

Ports in use	3000、8080、8086、8090
Applications in use	Apache、Python、NginX、Grafana、InfluxDB (These will be installed during Wave Navigator installation.)

- Please ensure there is no web application running with the ports used by Wave Navigator. (3000, 8080, 8086, and 8090.)
- Please ensure the TCP/UDP port 3000, 8080, 8086, and 8090 and the applications used by Wave Navigator are allowed by a computer's firewall.

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1. Install Wave Navigator

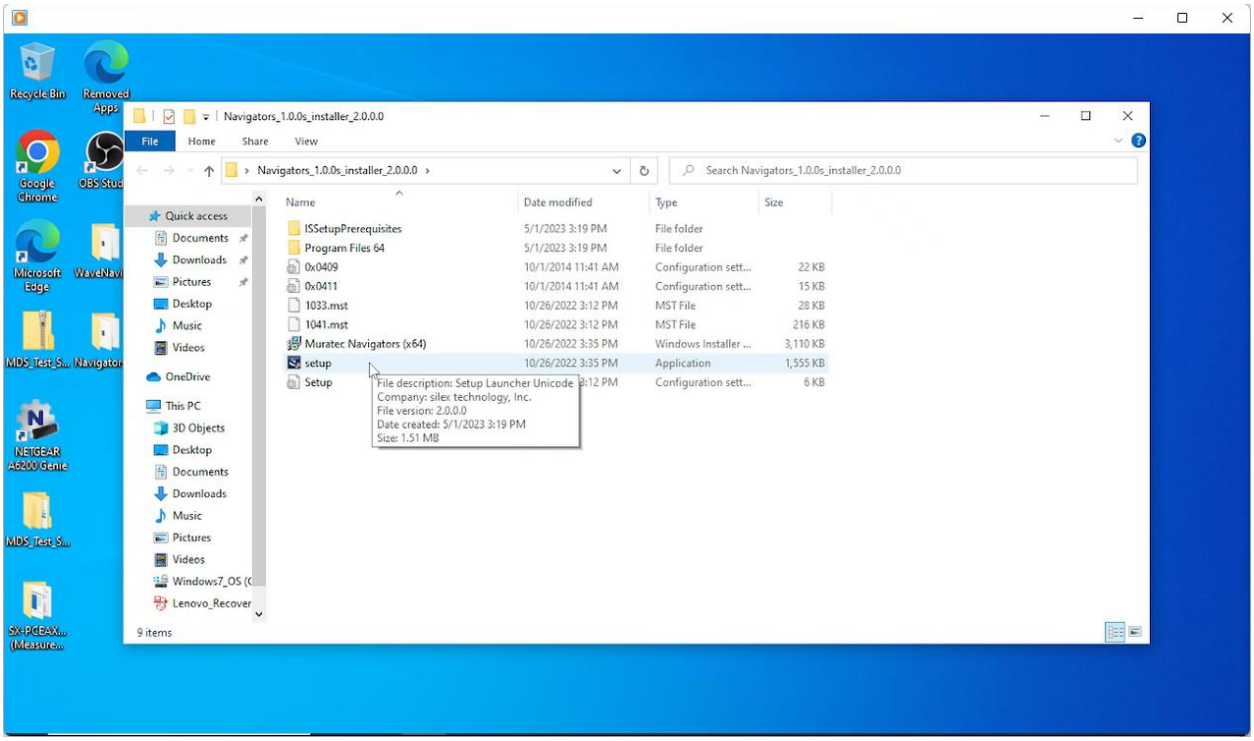
Wave Navigator consists of two installers:

- Navigators_1.0.0s_installer_2.0.0.0.zip (latest as of May 1st, 2023)
- WaveNavigator_1.0.0s_installer_2.0.0.0.zip (latest as of May 1st, 2023)

The installation can take 10 -15 minutes.

1.1 Navigators 1.0.0s installation

Click “setup.exe” in Navigators_a.b.c_installer_w.x.y.z folder. (a,b,c,w,x,y,z represents the version.)



Python 3.7.3 will be installed if it’s not preinstalled.

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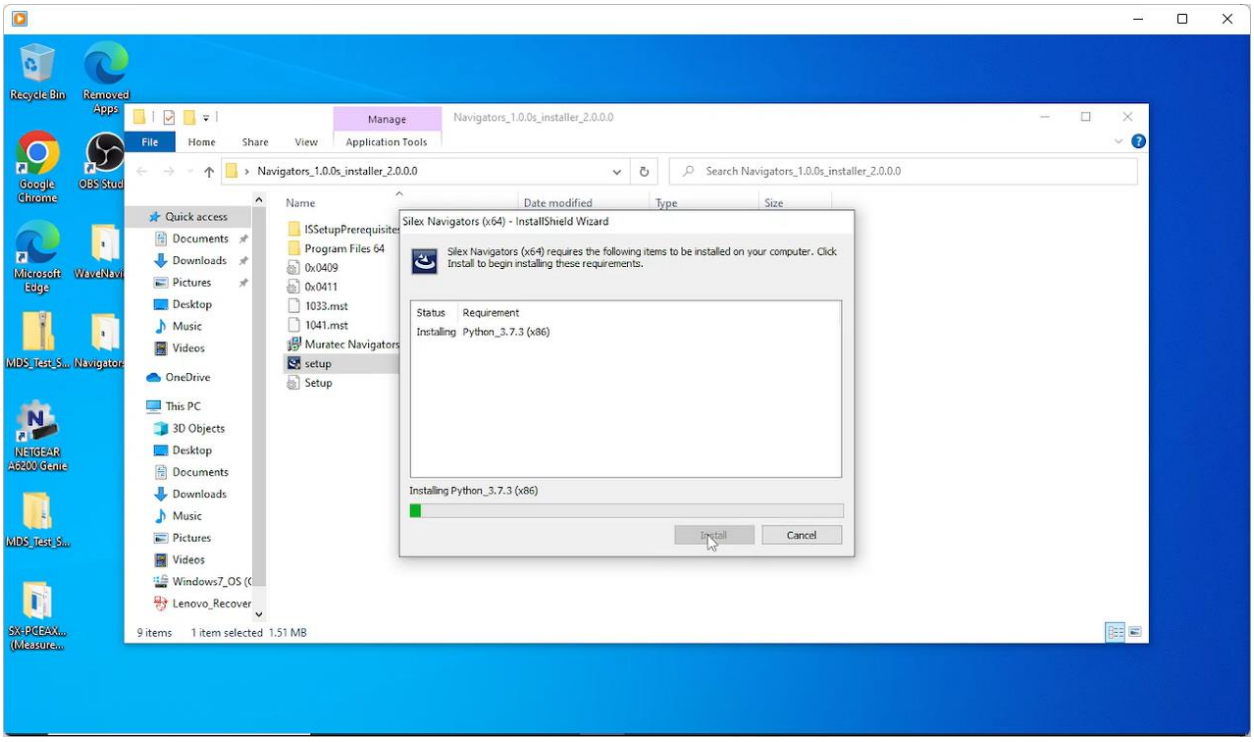

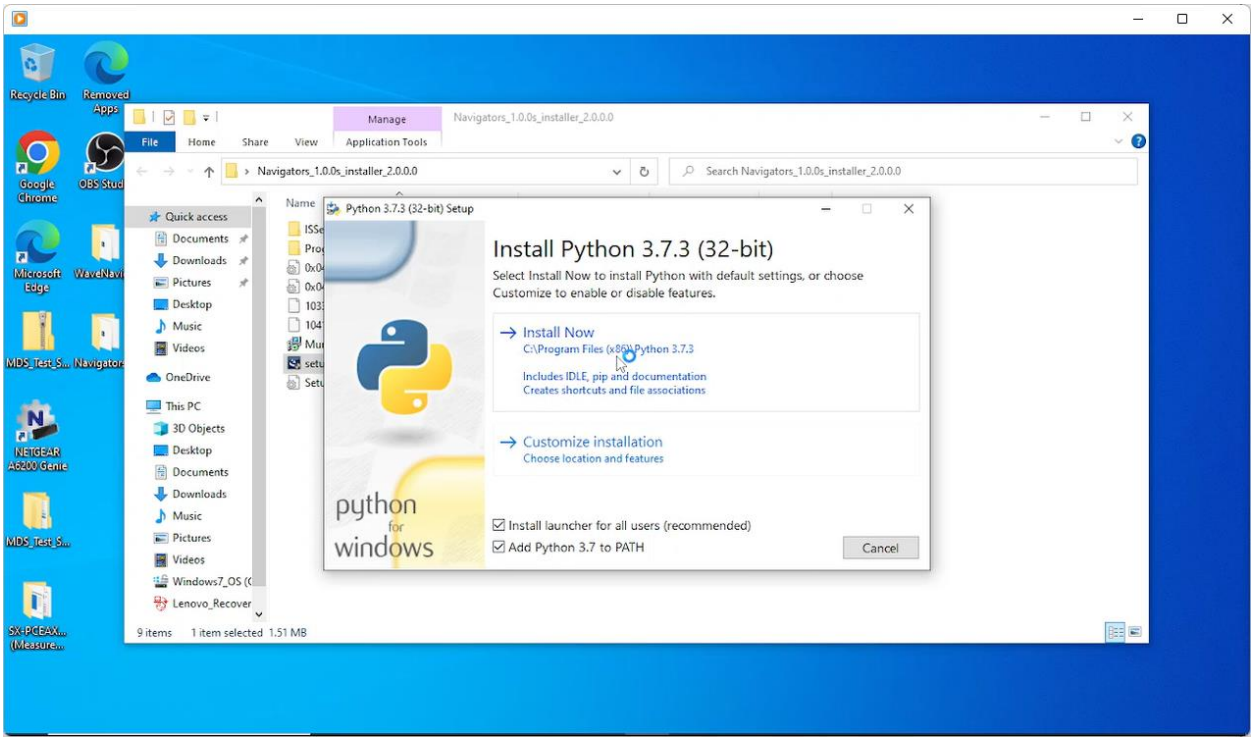

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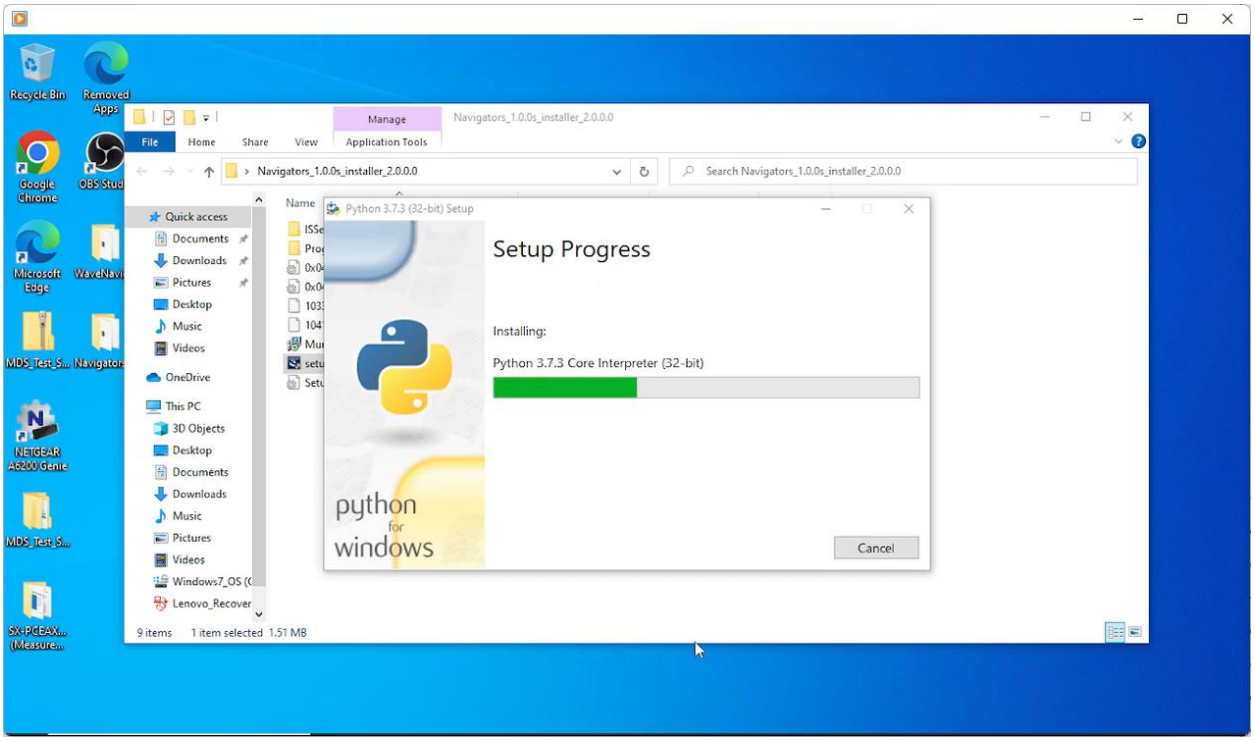

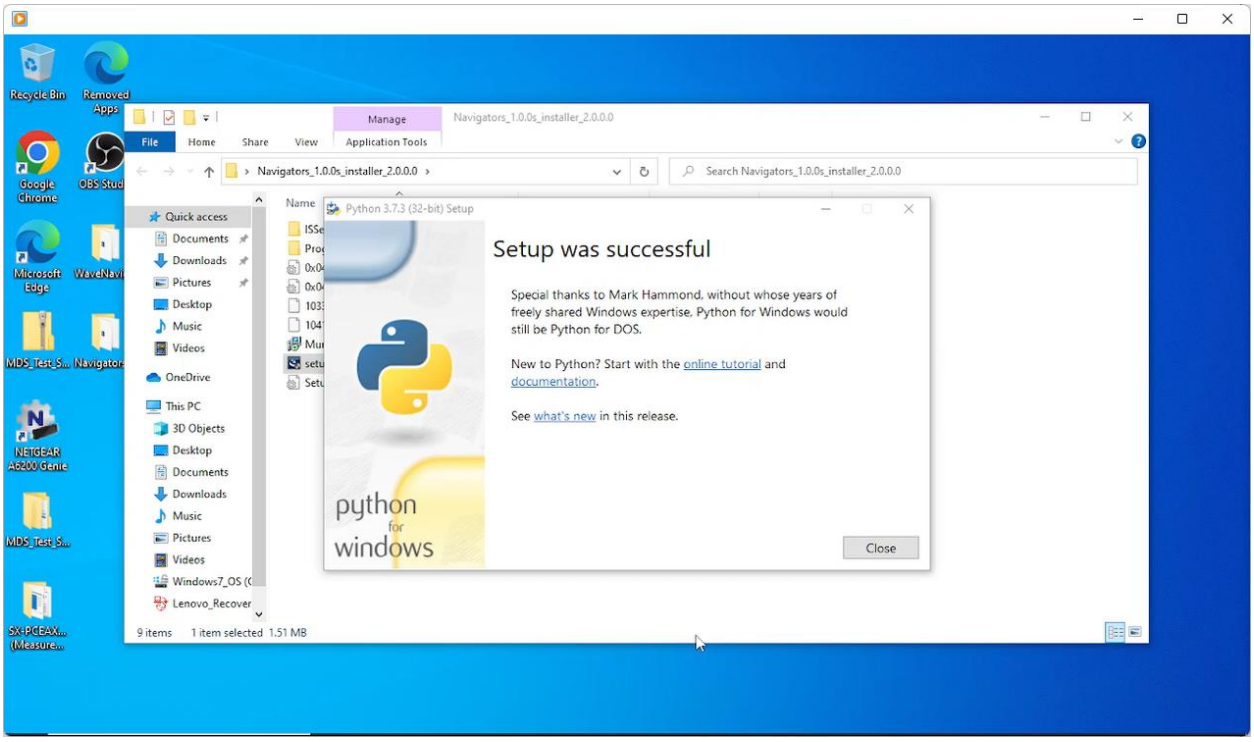

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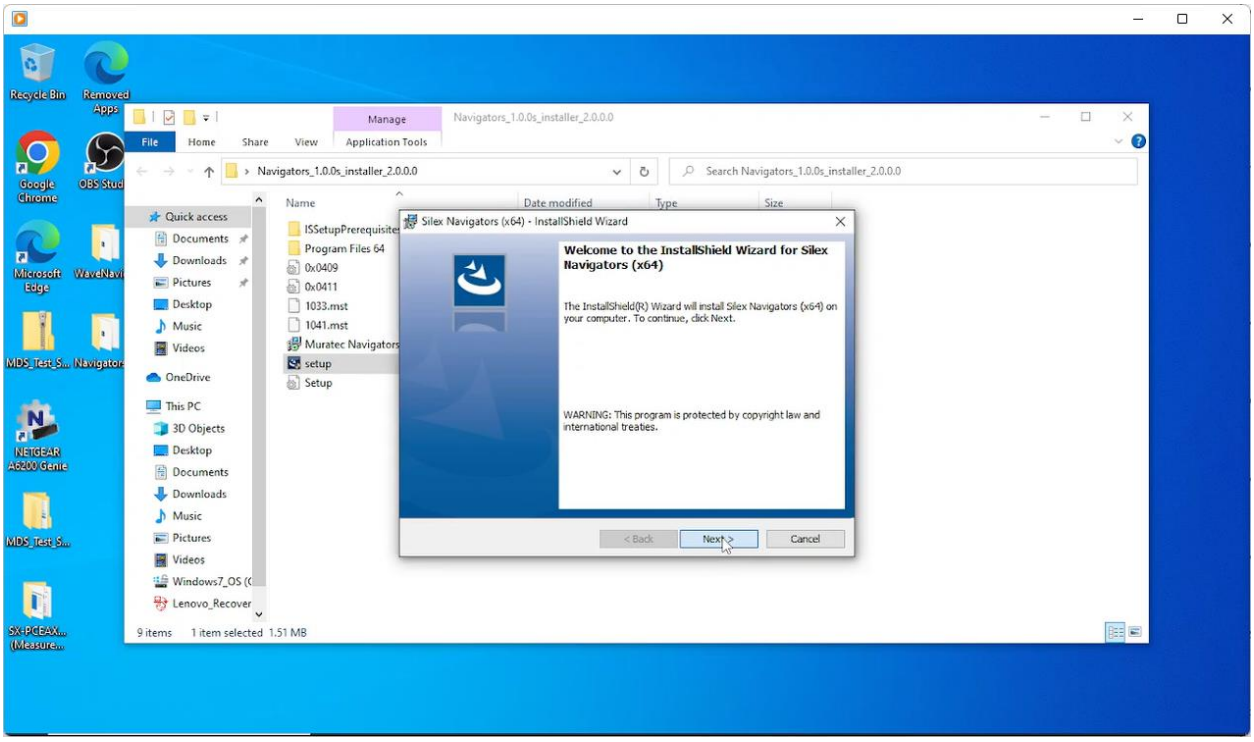

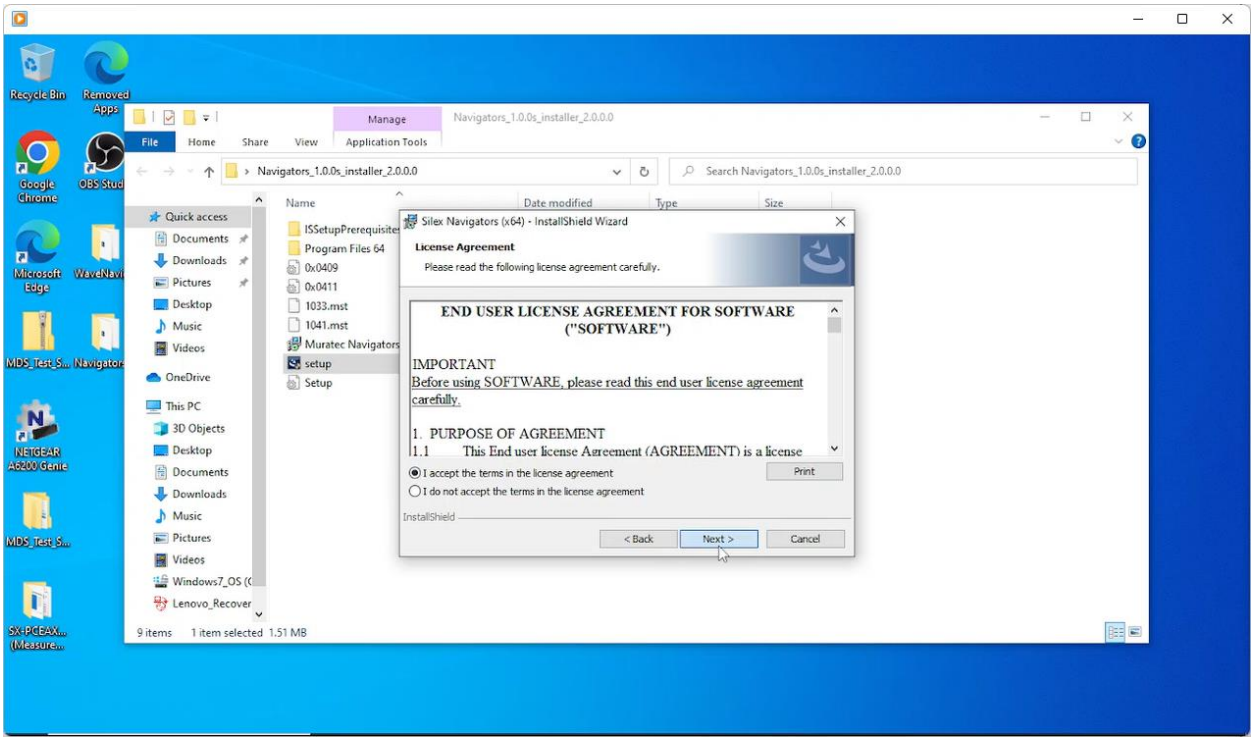

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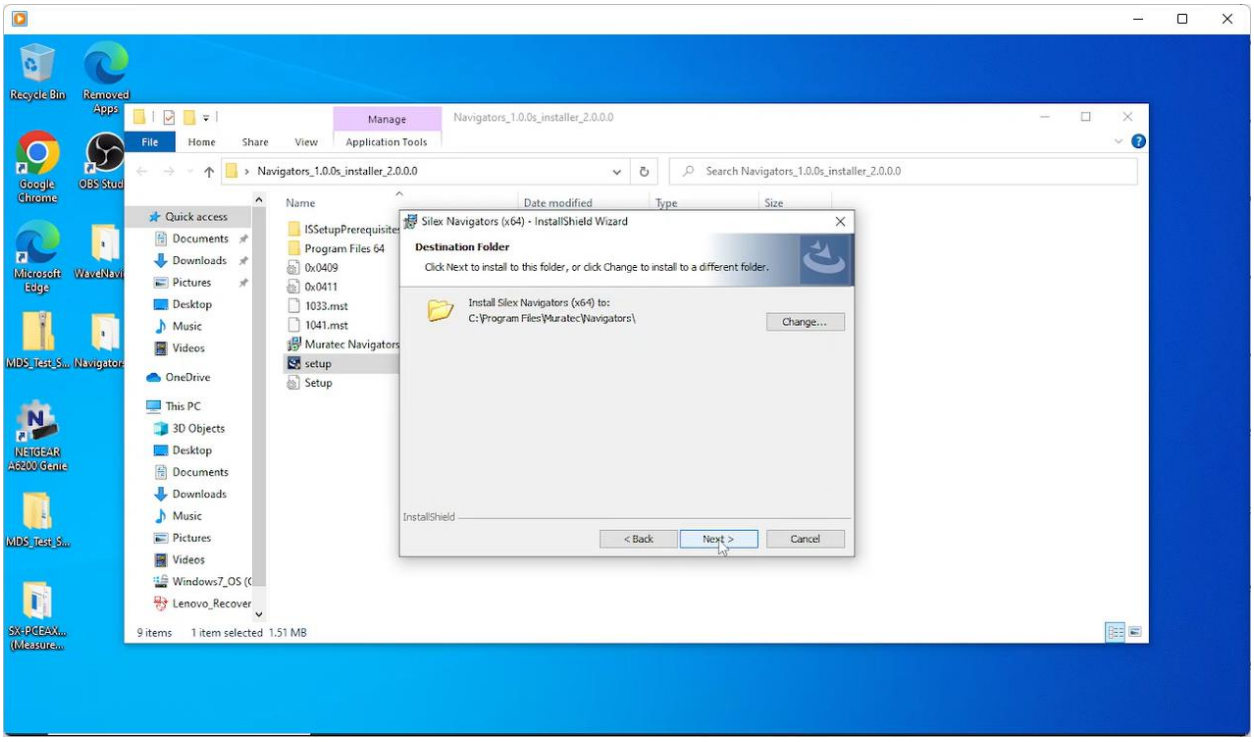

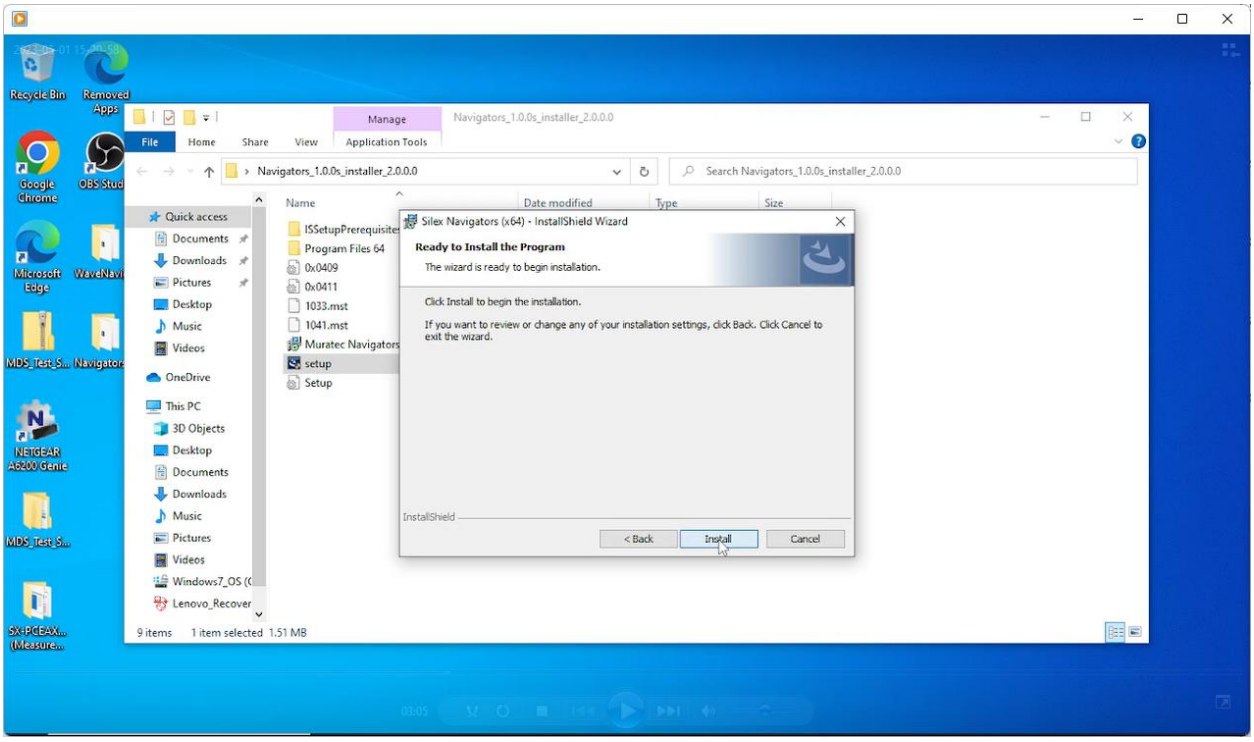

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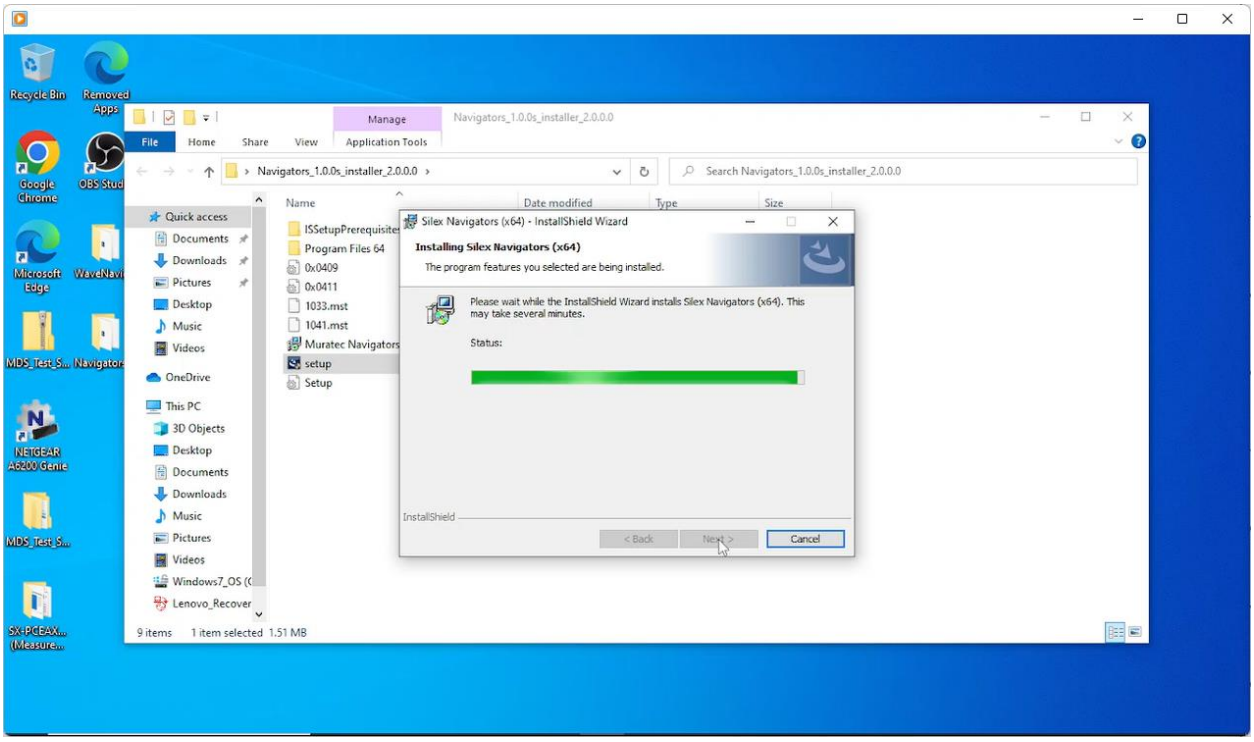
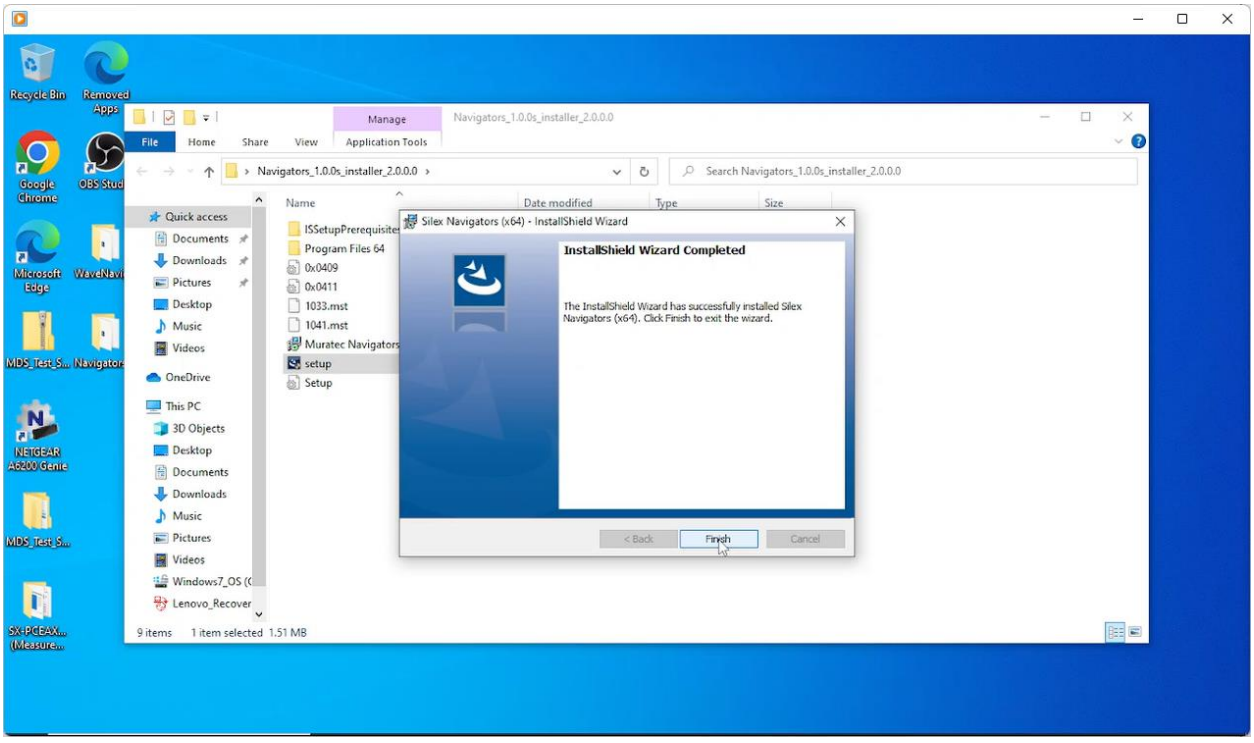


Note: A command prompt screen will appear during the installation.



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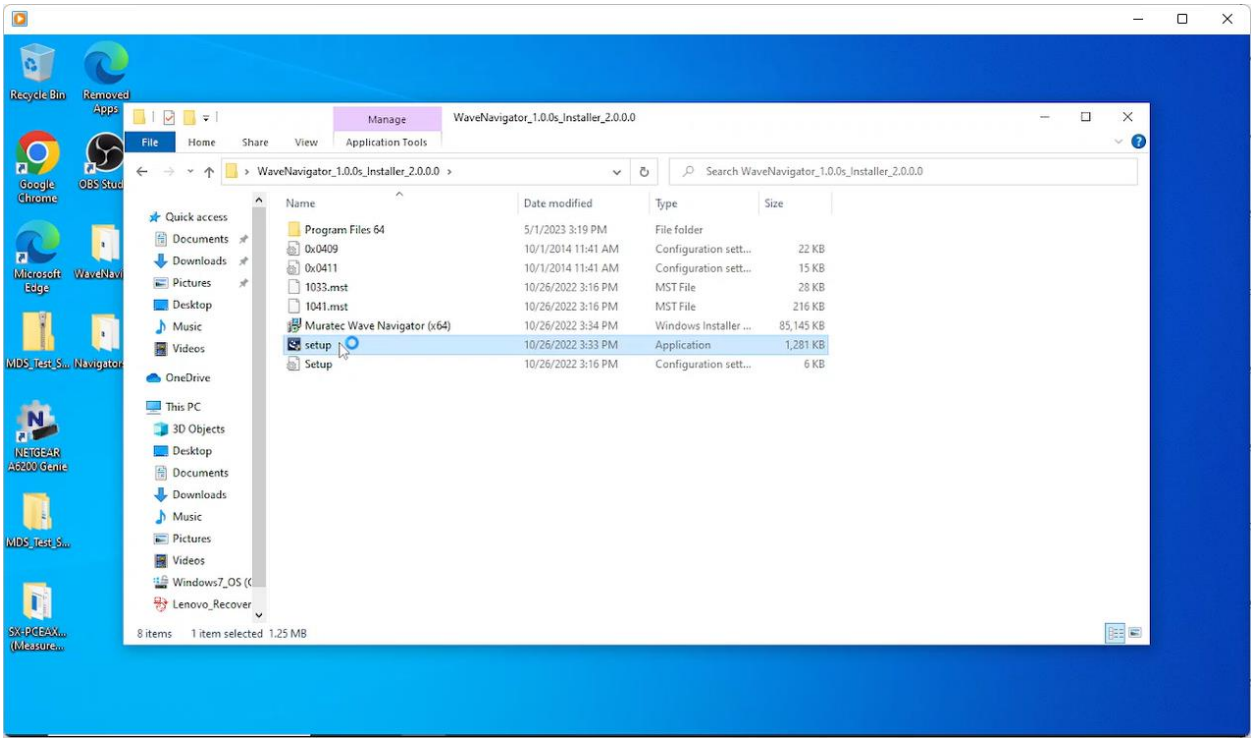
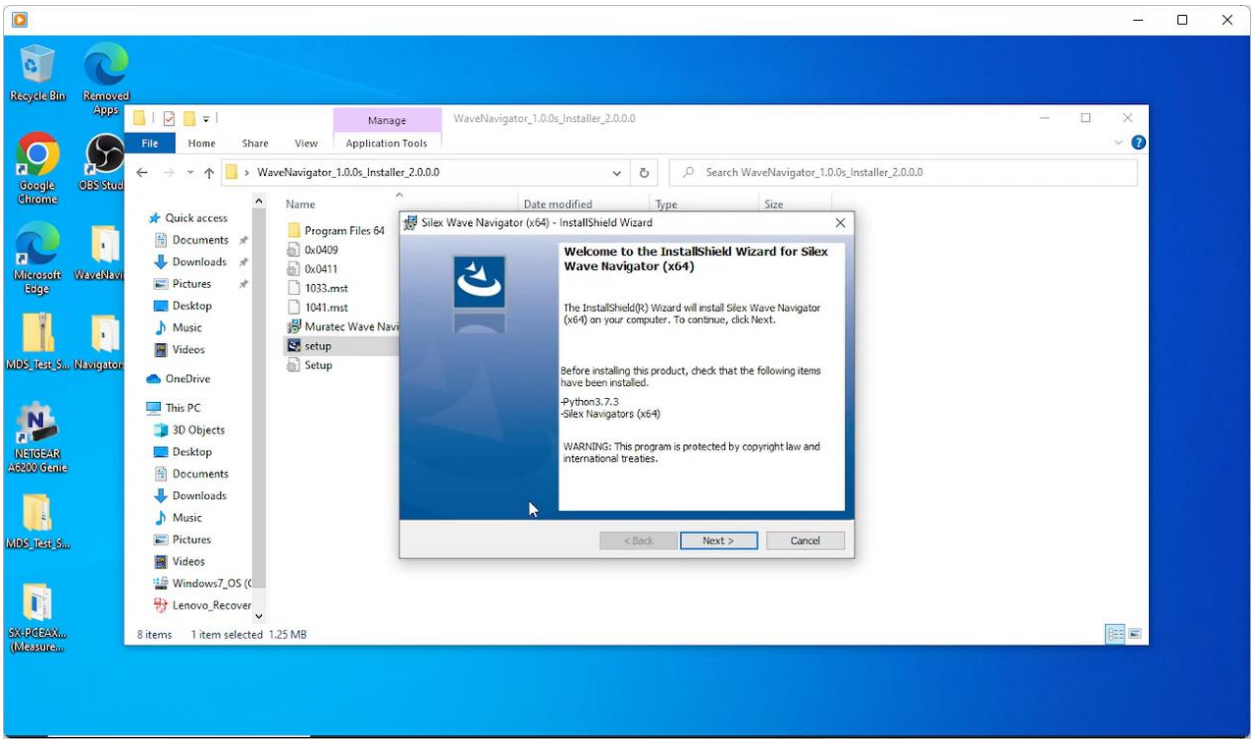
1.2 Wave Navigator_1.0.0s Installation

Click “setup.exe” in the WaveNavigators_a.b.c_installer_w.x.y.z folder. (a,b,c,w,x,y,z represents the version.)





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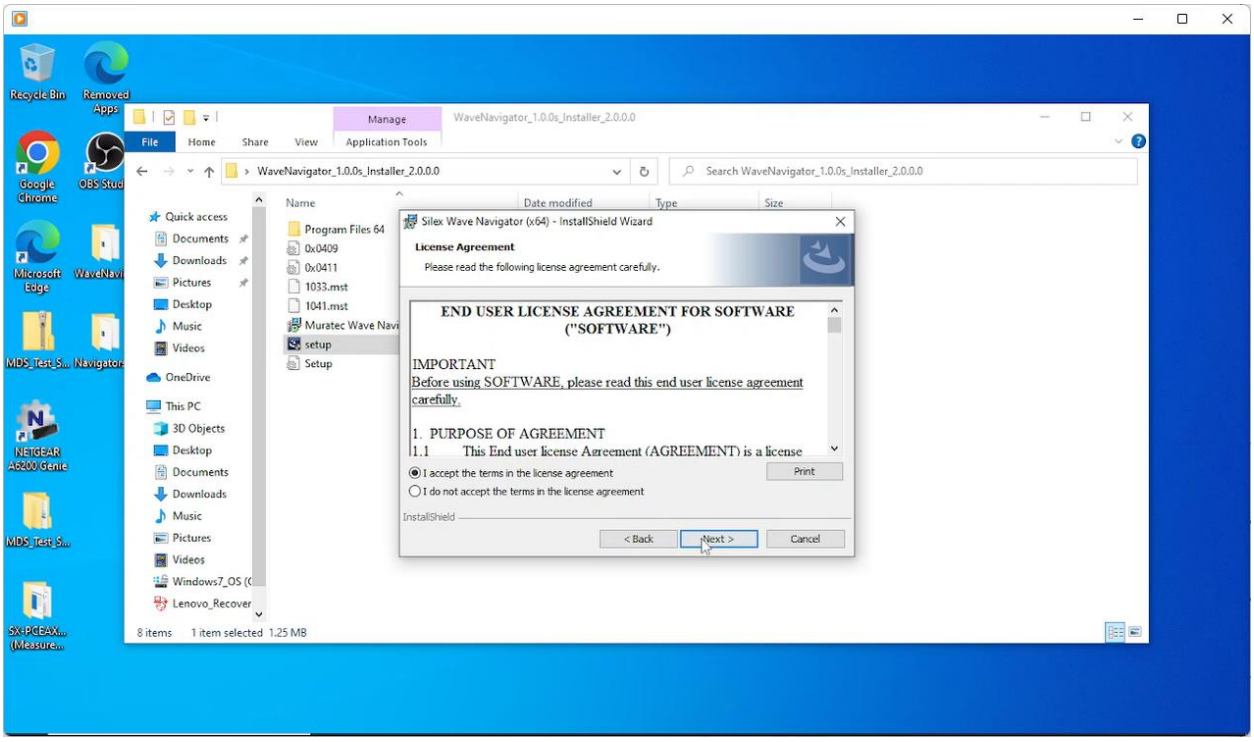

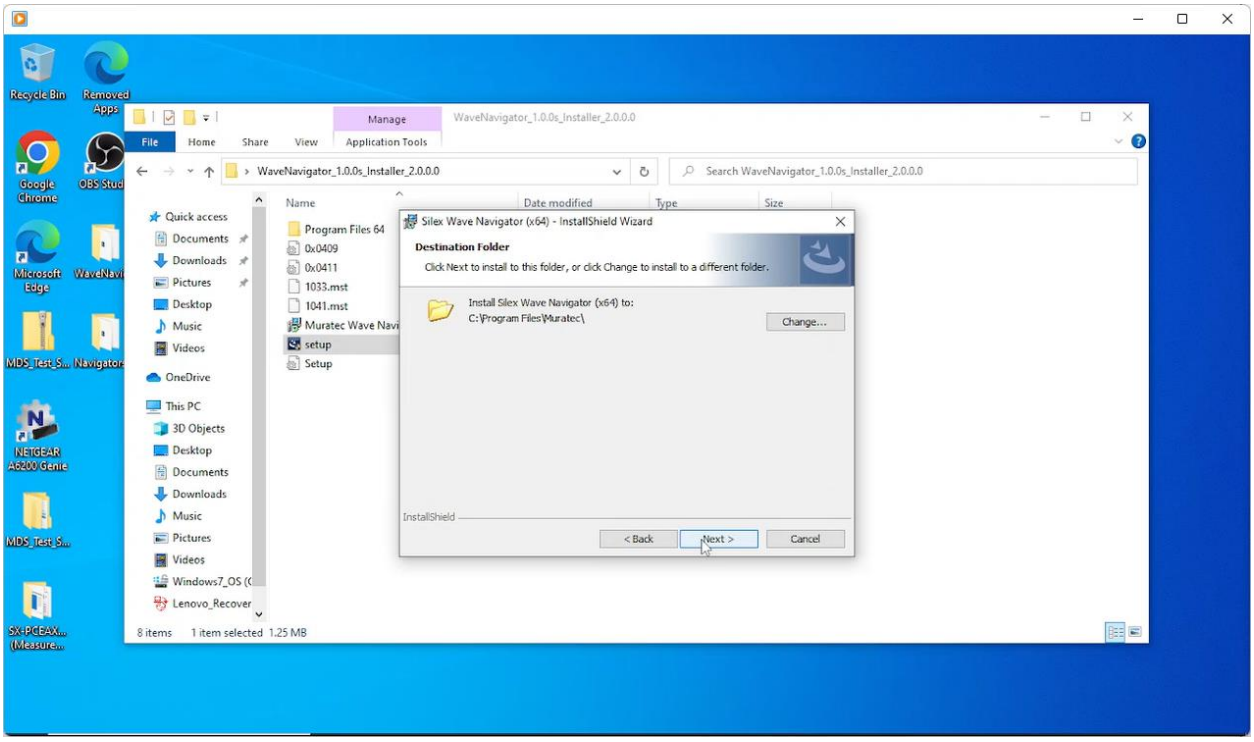

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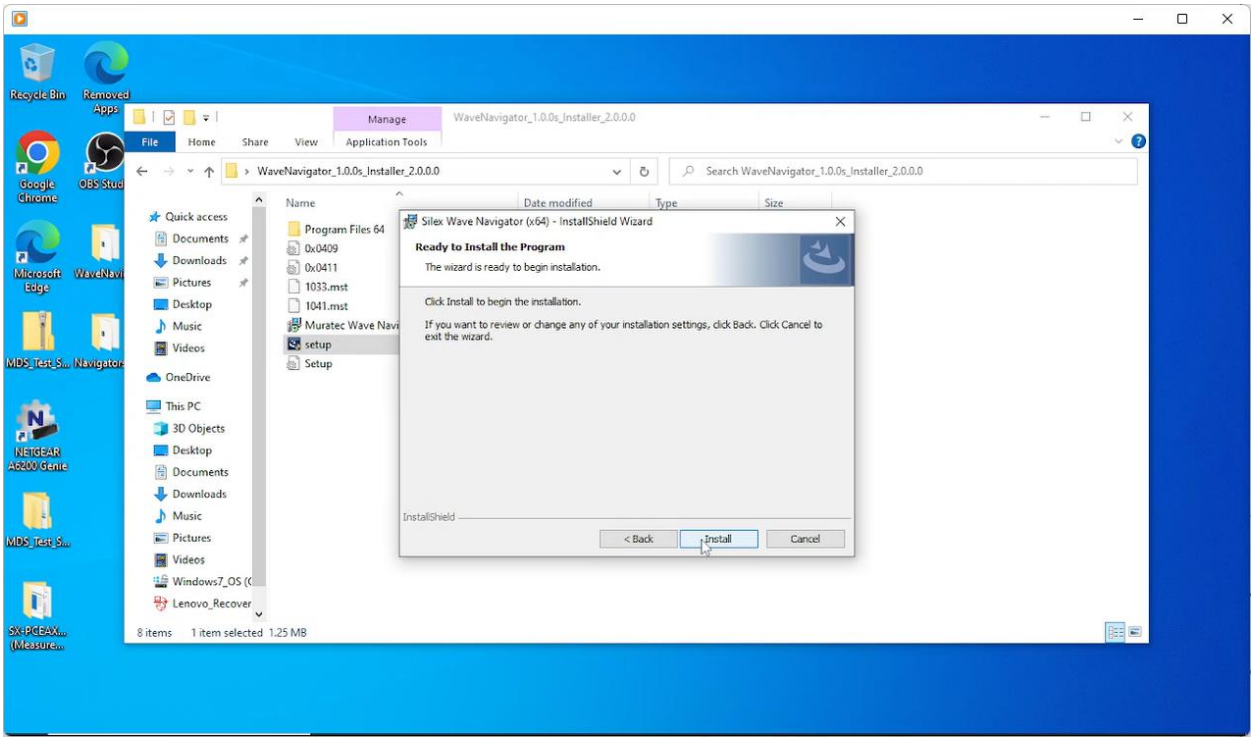

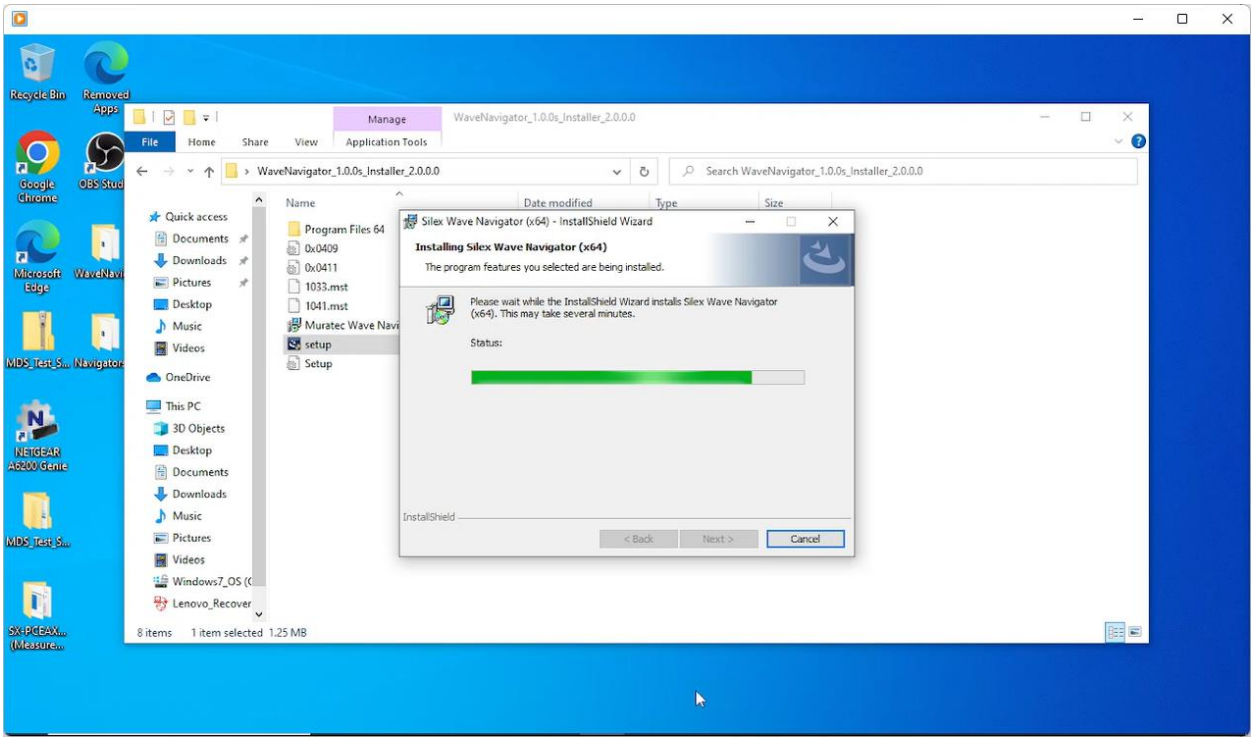

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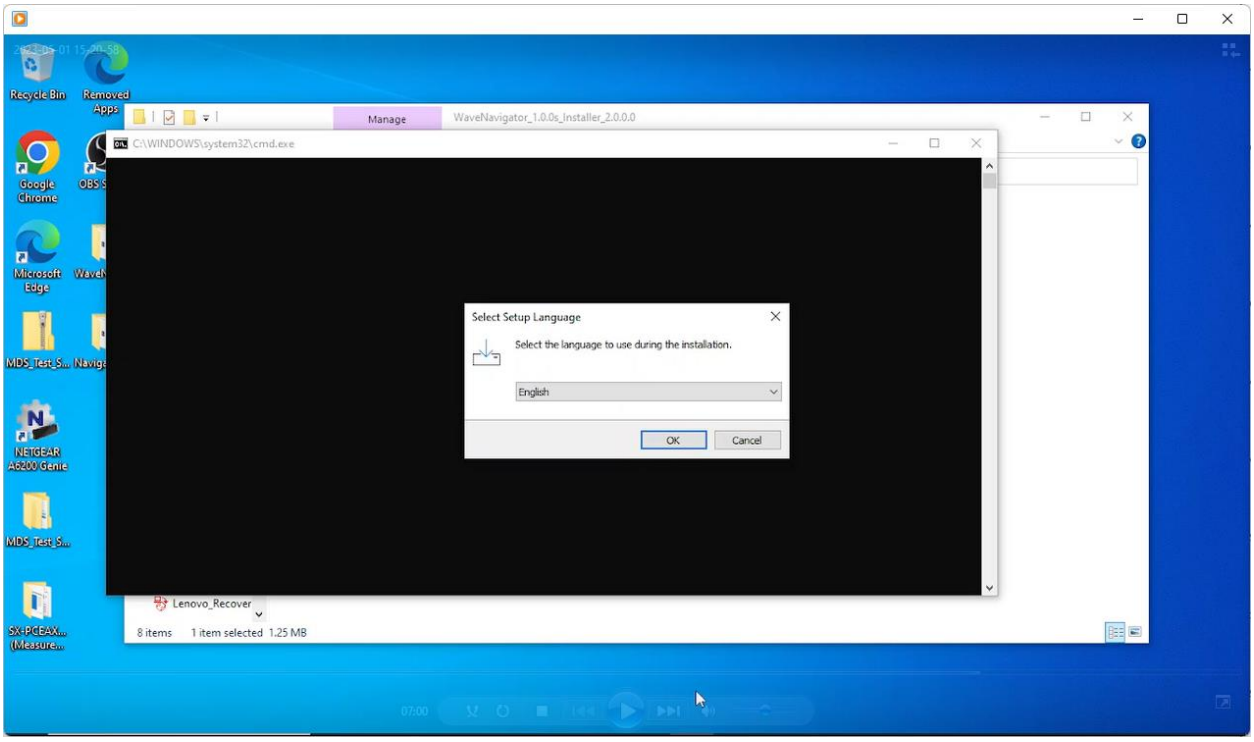

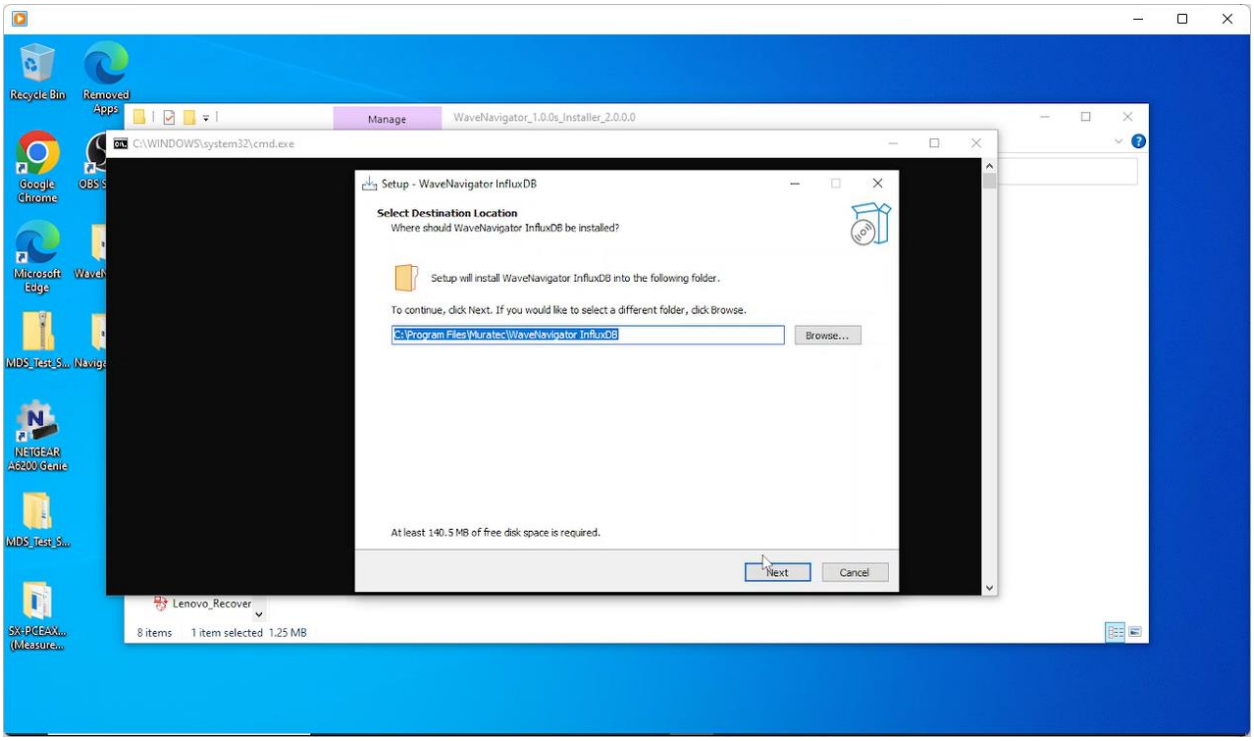

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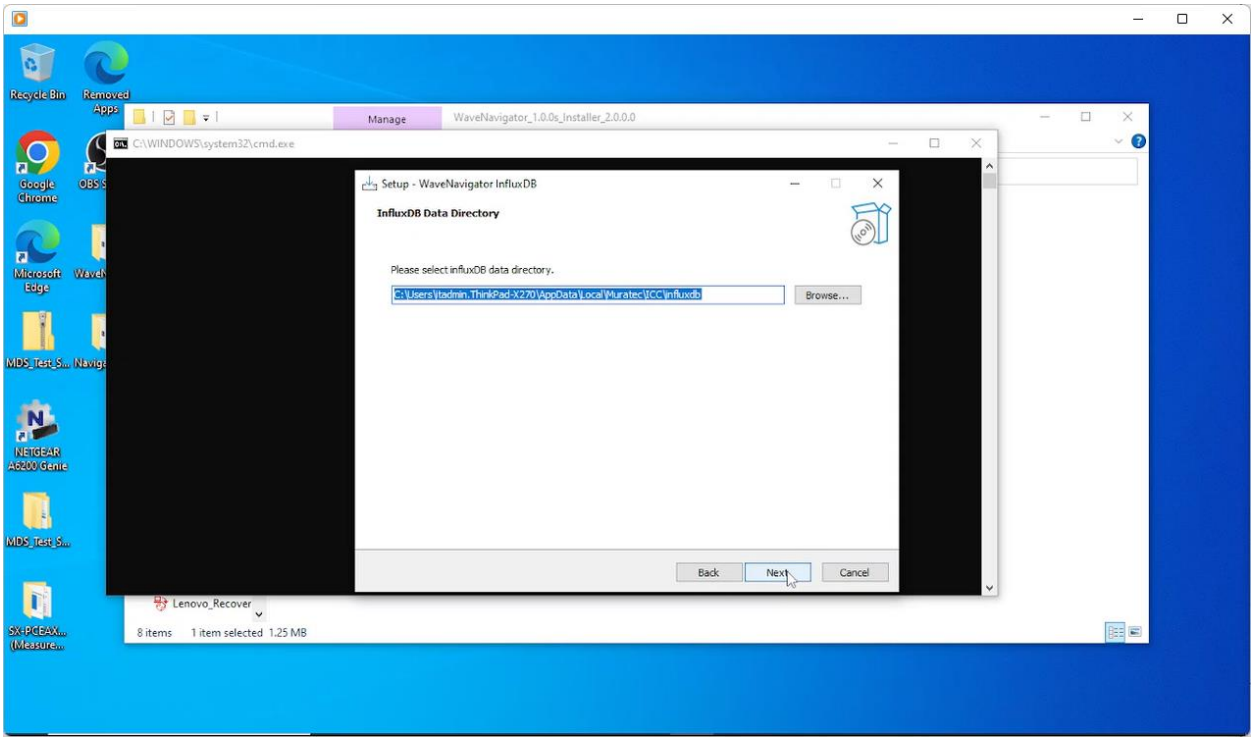

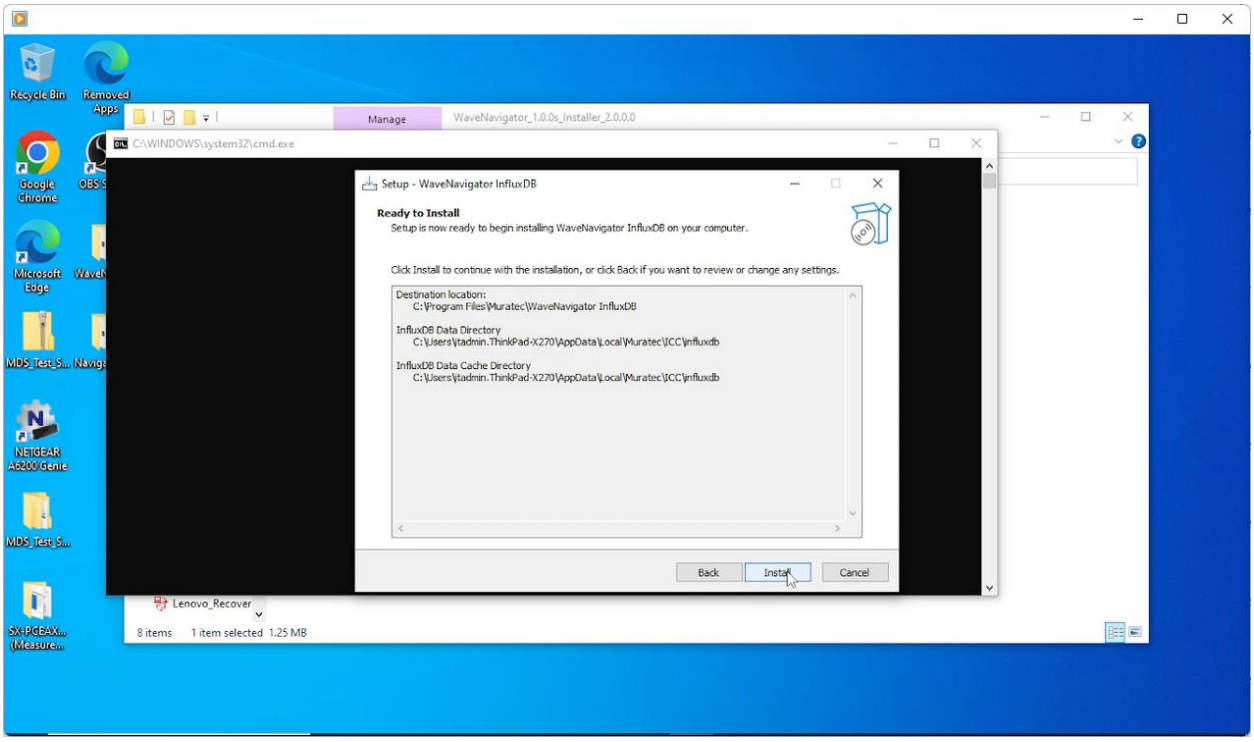

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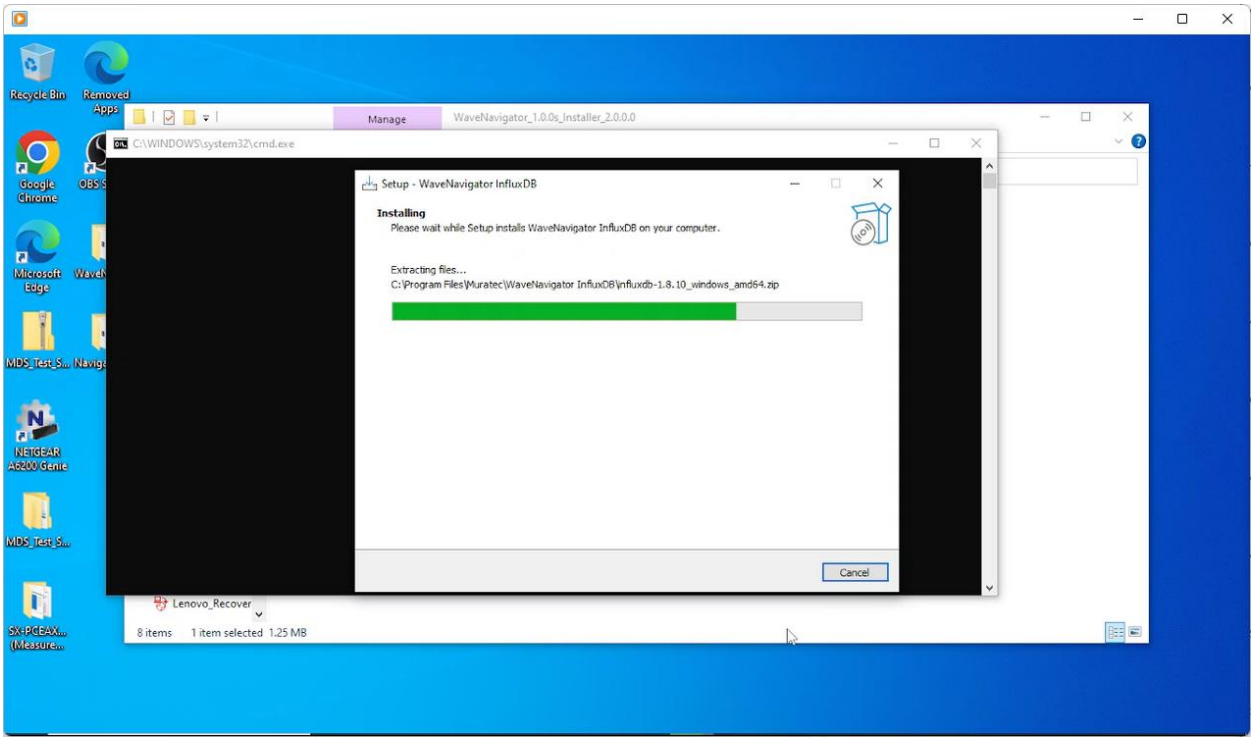

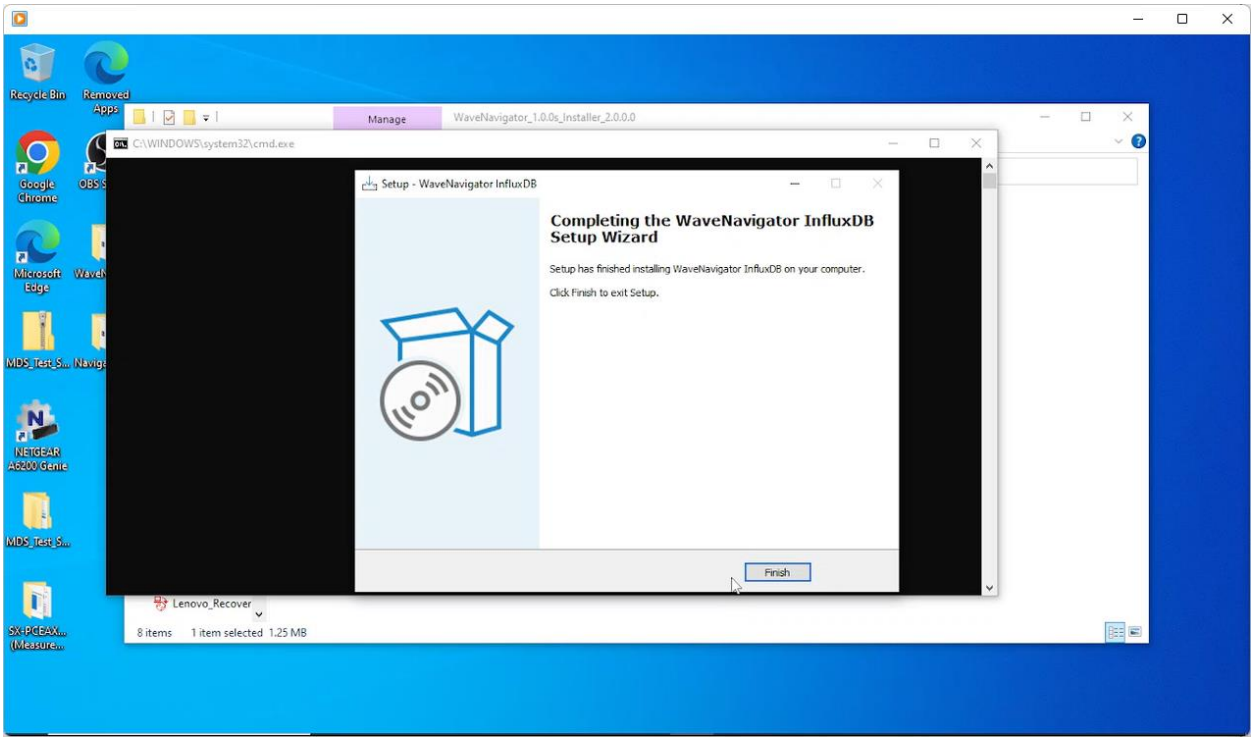

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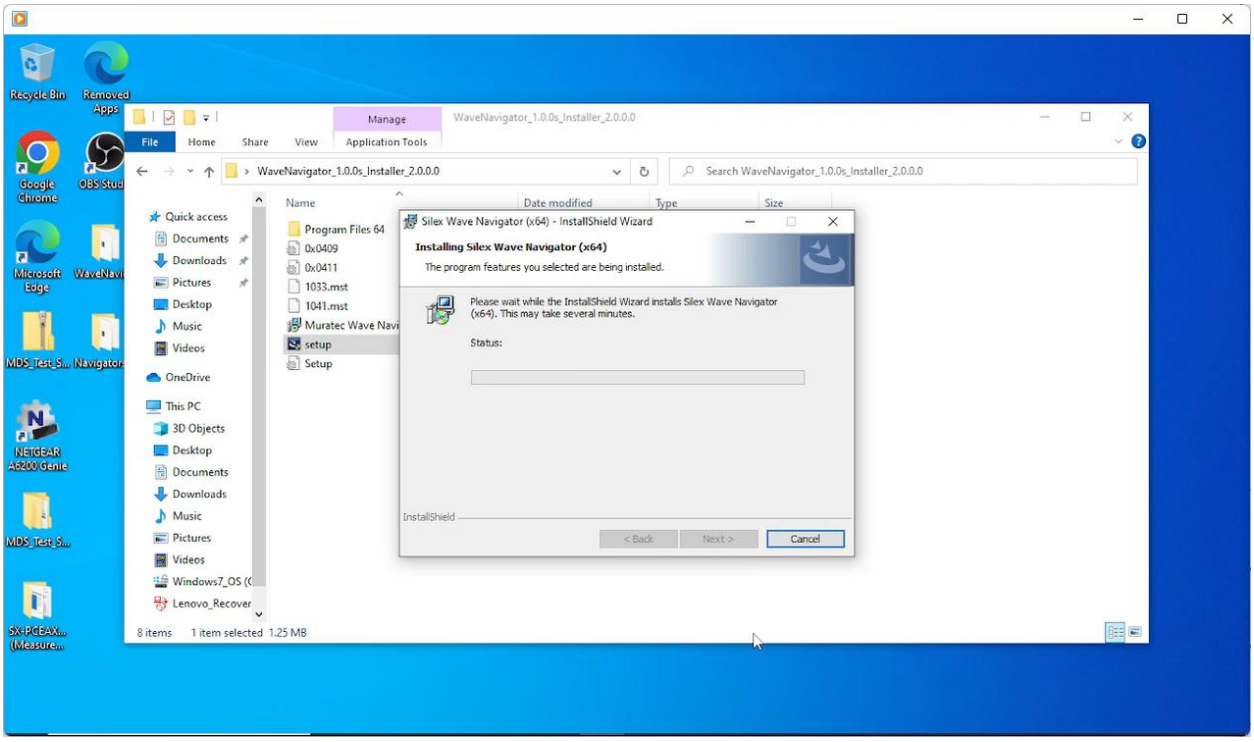
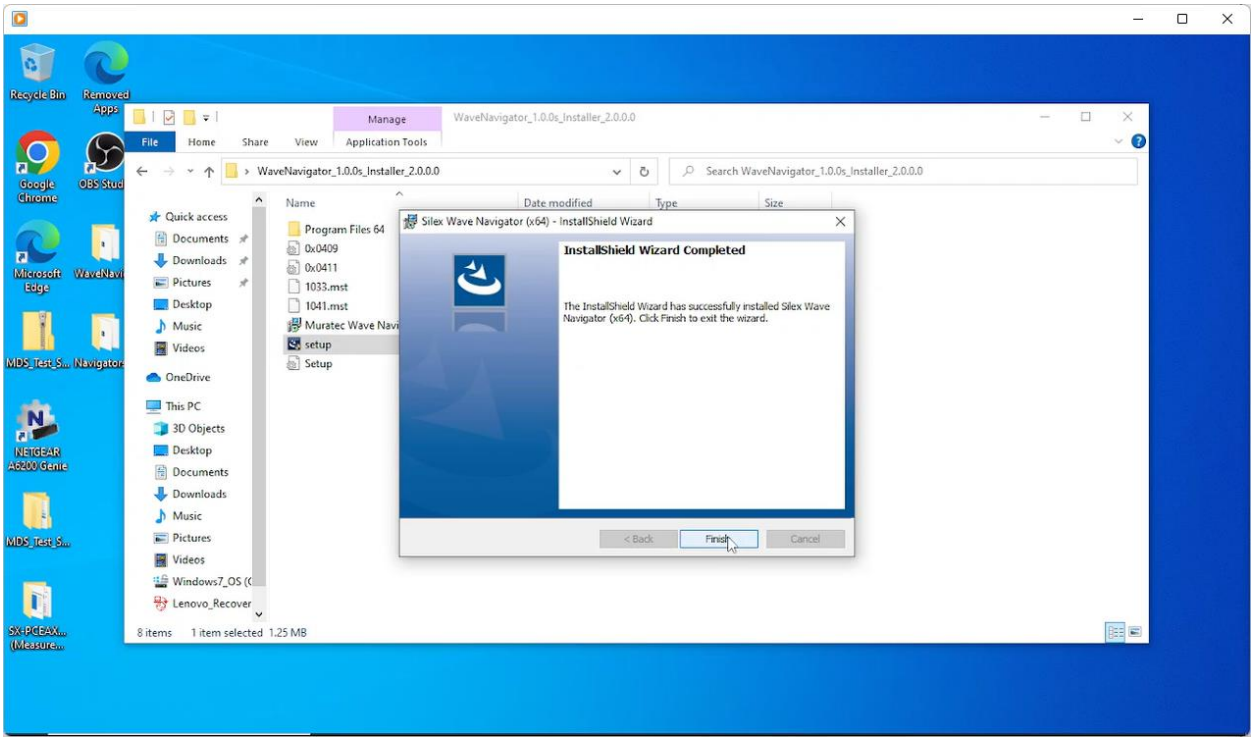


Note: A command prompt screen will appear during the installation.



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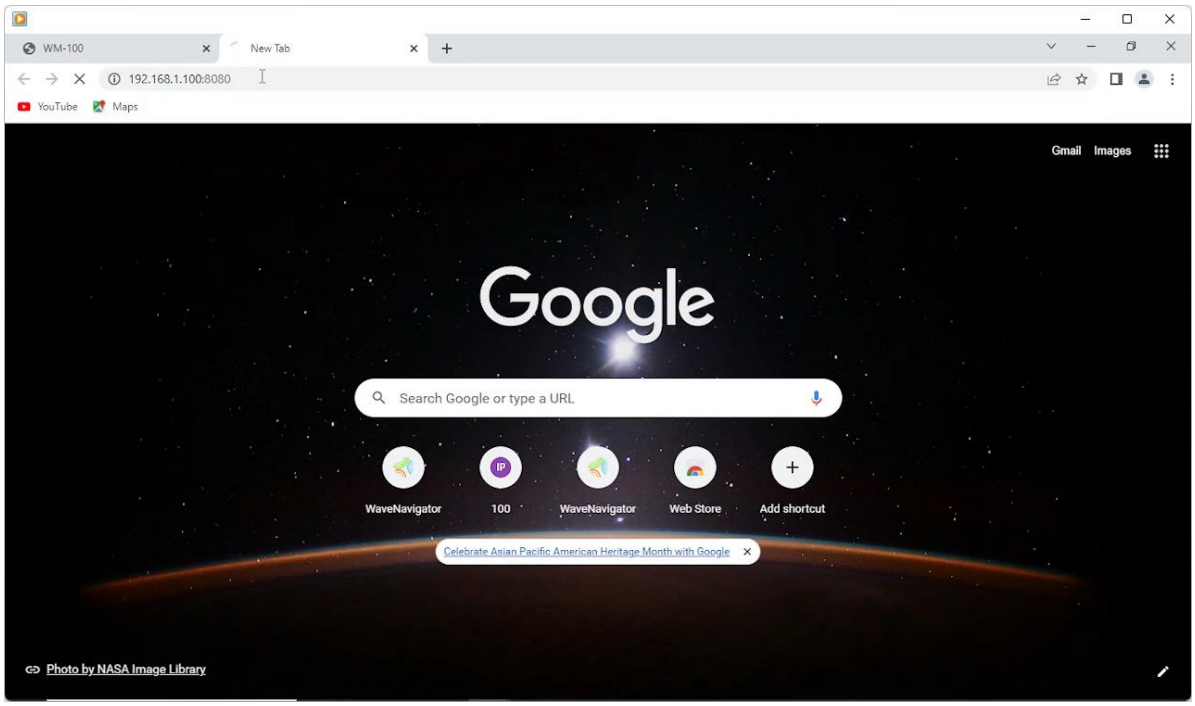
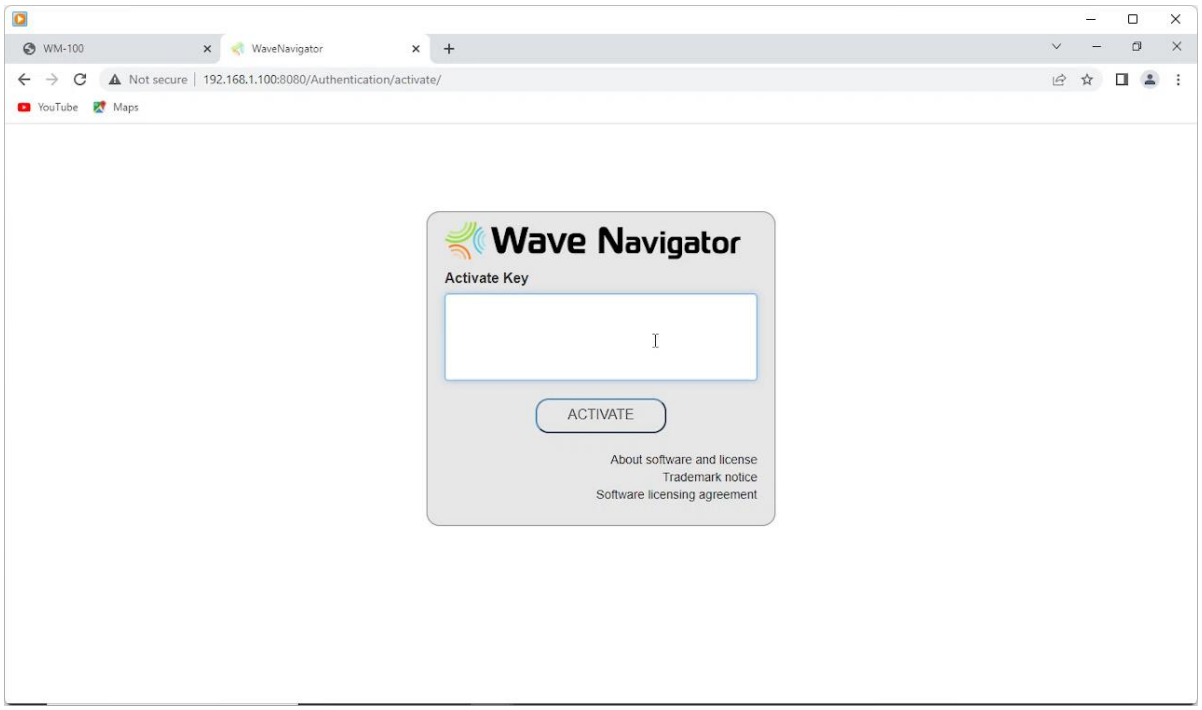
2. Configure a computer

Determine which WM-100's LAN port to be used with the computer.

- If LAN1 or LAN/PoE port is used, configure the computer's IP address to 192.168.0.100 ("IP1")
- If the LAN2 port is used, configure the computer's IP address to 192.168.1.100 ("IP2")

Launch Wave Navigator from the web browser: http://{IP1 or IP2}:8080





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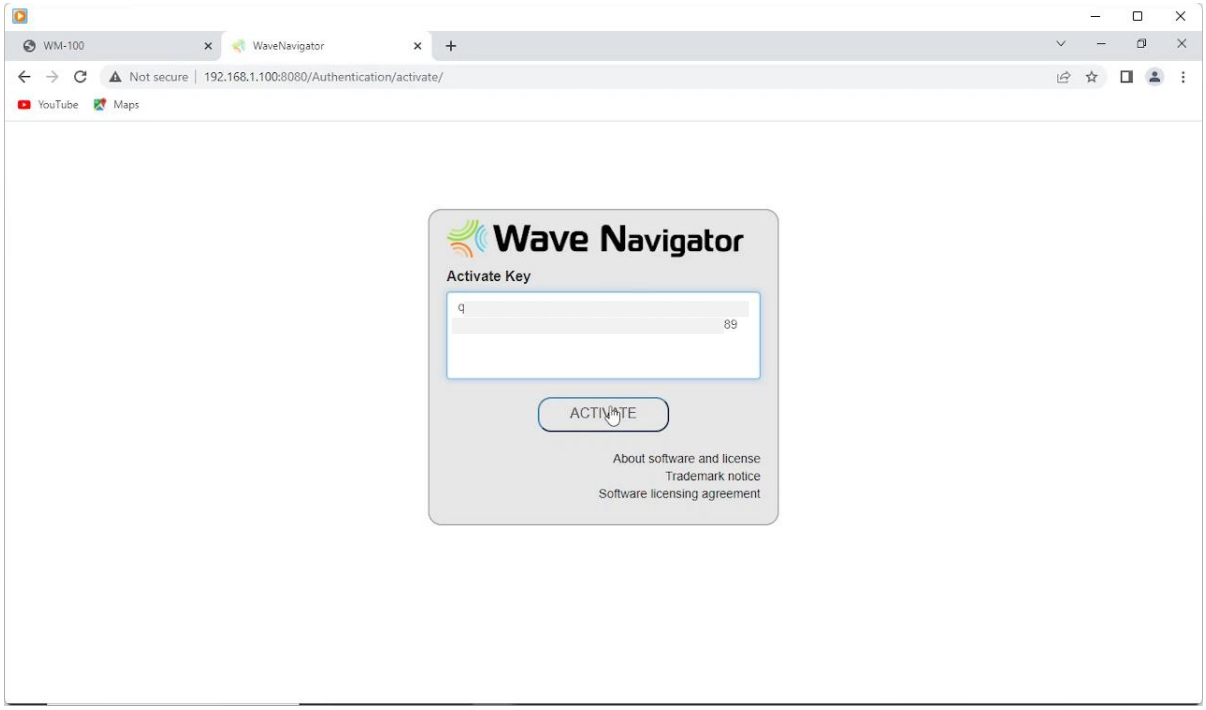
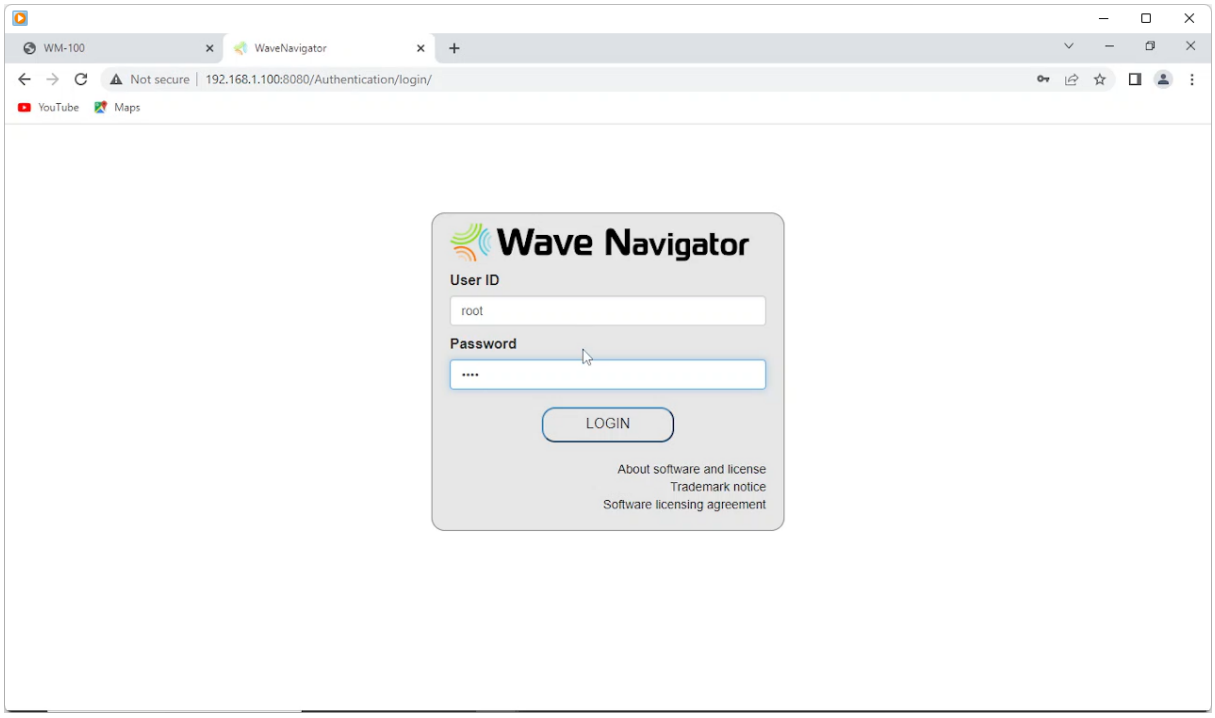
Activate the wave navigator by typing the activation key.



Log in

- Default user name: root
- Default password: root



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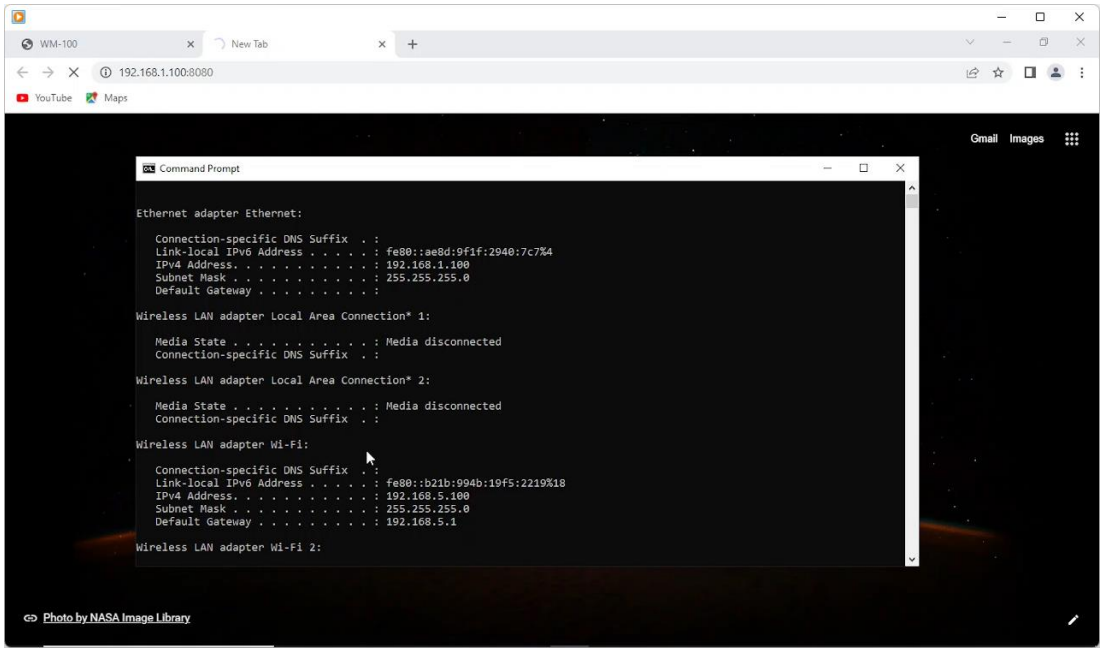
3. WM-100 configuration

Connect WM-100 to a computer.

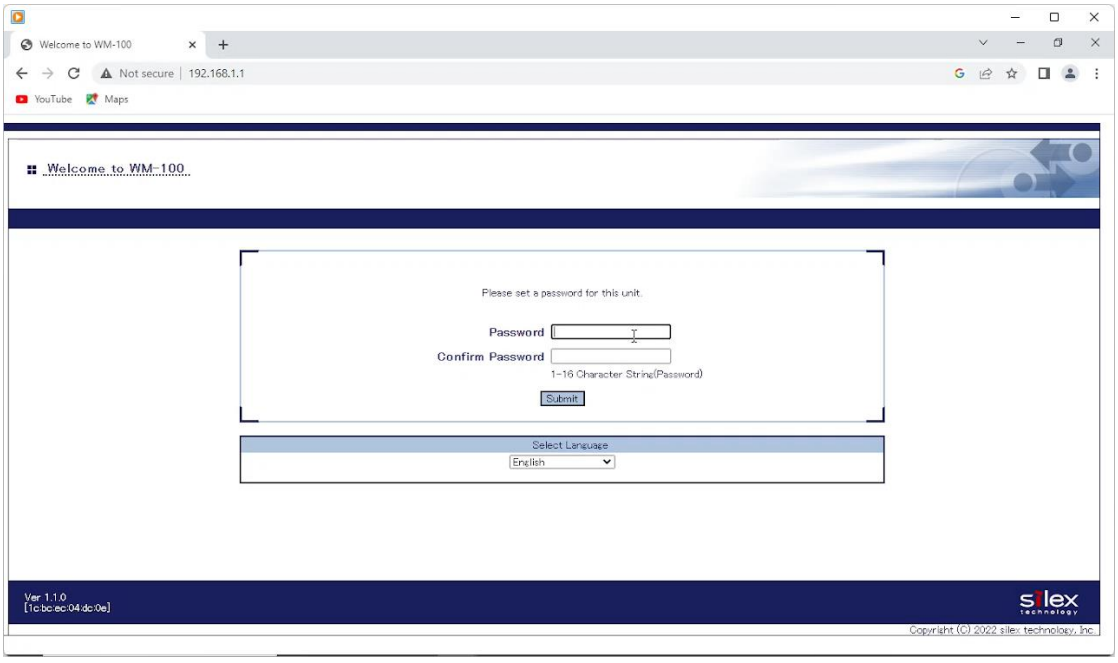
In this example, the laptop is connected to the LAN2, and its IP address is 192.168.1.100.



Access the WM-100's webpage from the computer.

Default IP address of WM-100:

- LAN1, LAN/PoE port: 192.168.0.1
- LAN2: 192.168.1.1



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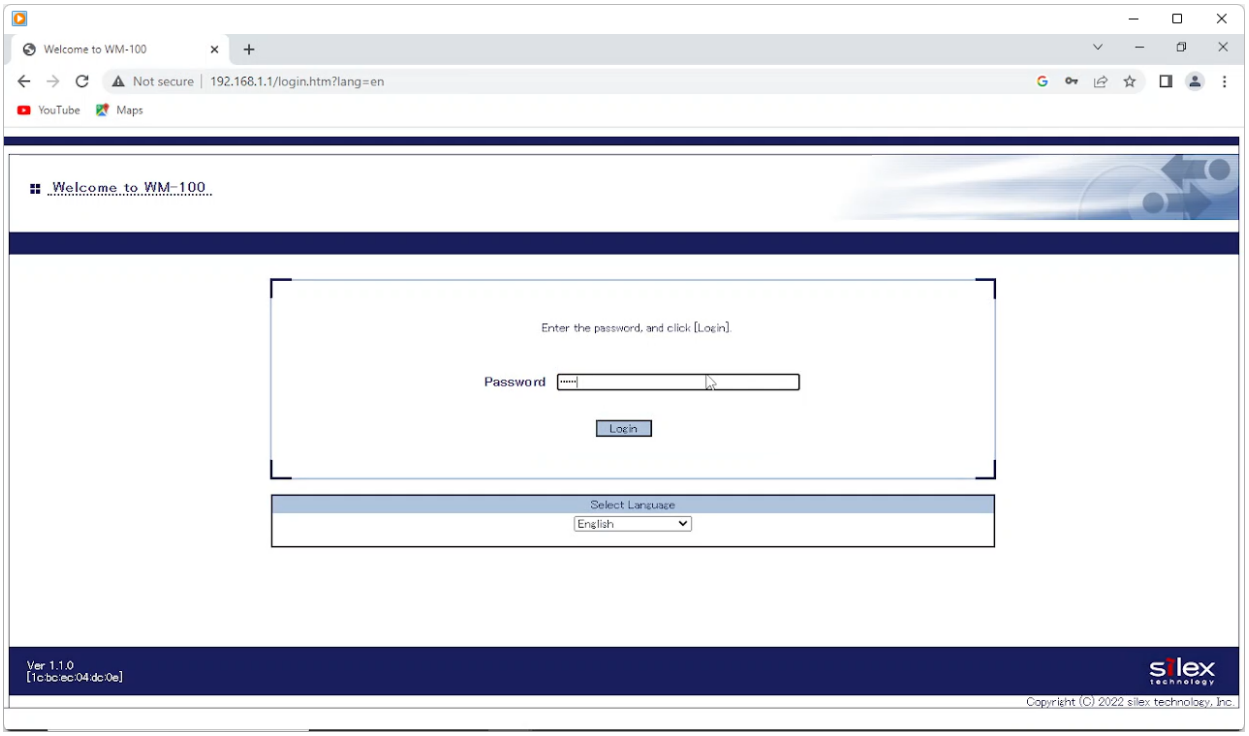
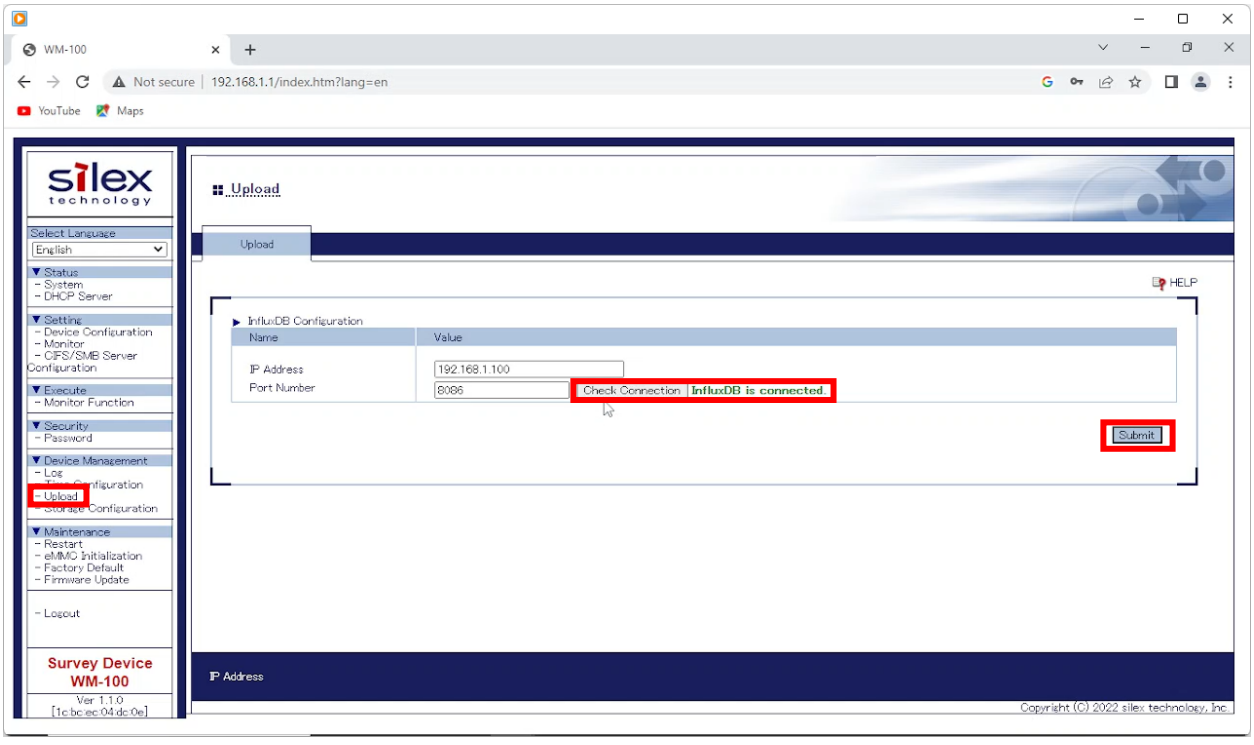


Configure the IP address of the connected computer to upload captured data and check if it can communicate with a InfluxDB. Then, click “submit”.



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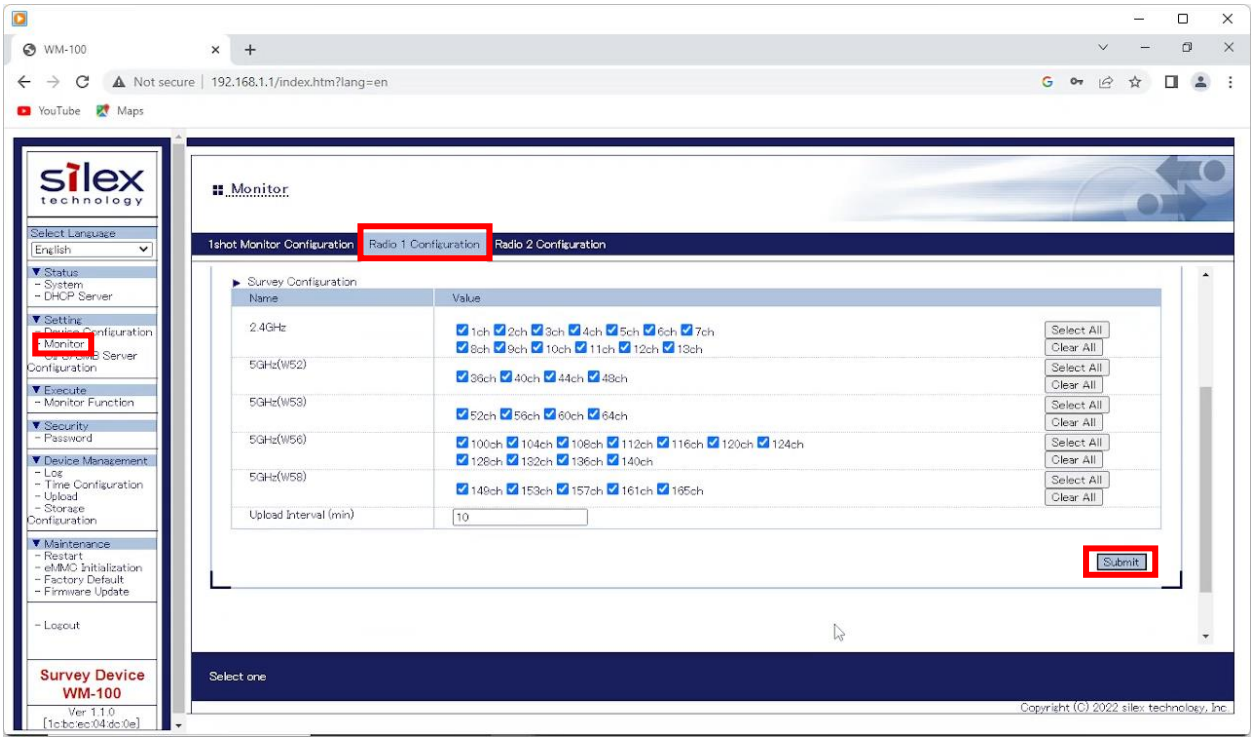
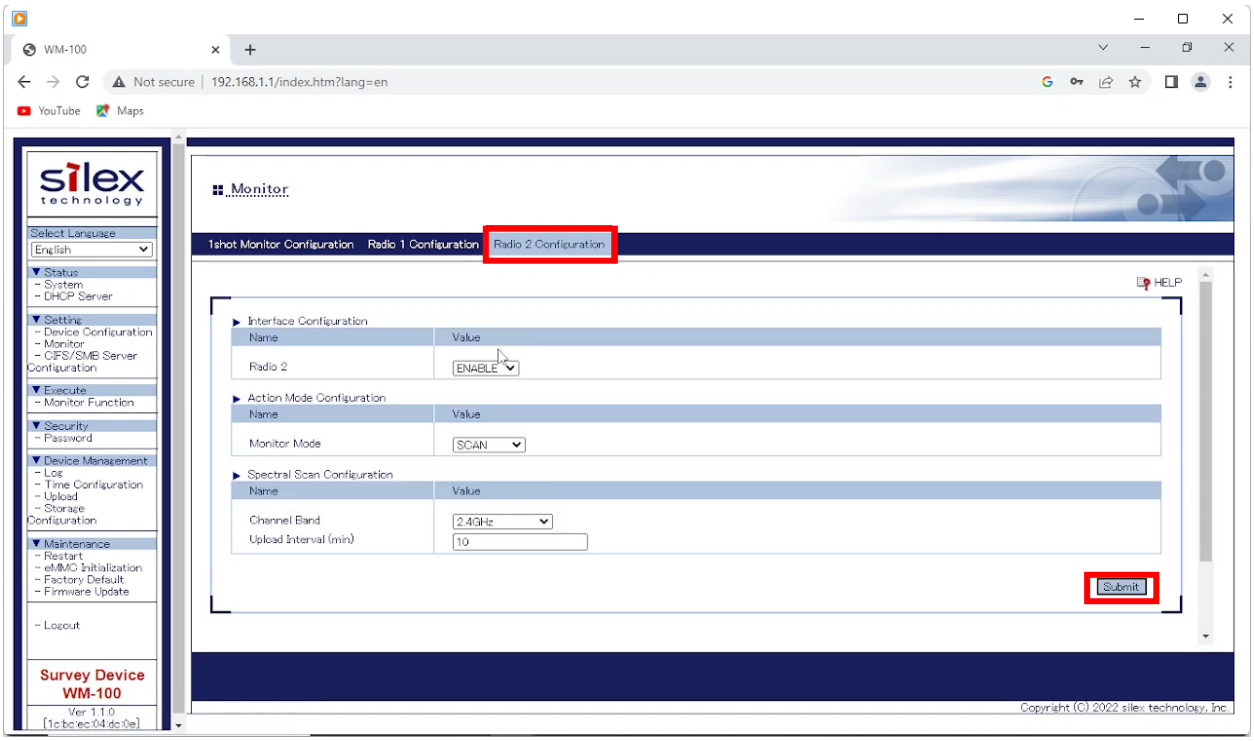
Configure the WM-100 radio interfaces, then click “submit”.

- Default:
  - Radio 1 = Survey mode
  - Radio 2 = 2.4GHz spectrum analyzer





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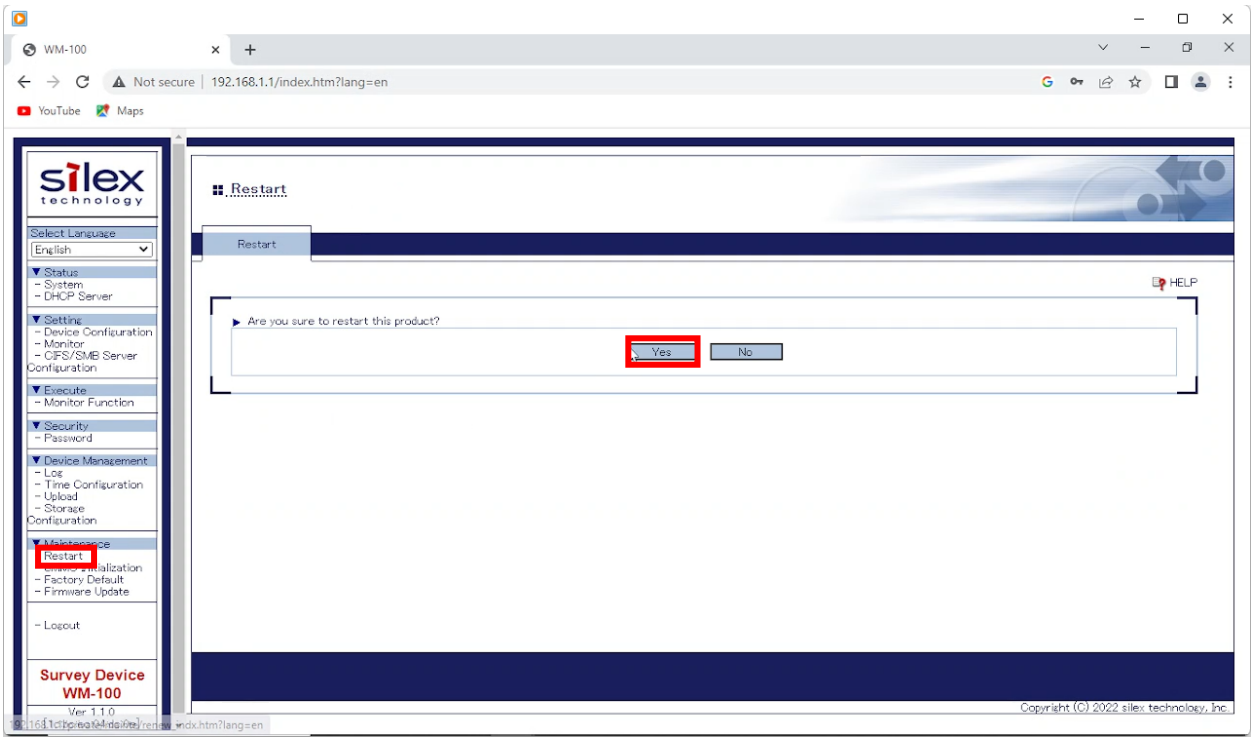
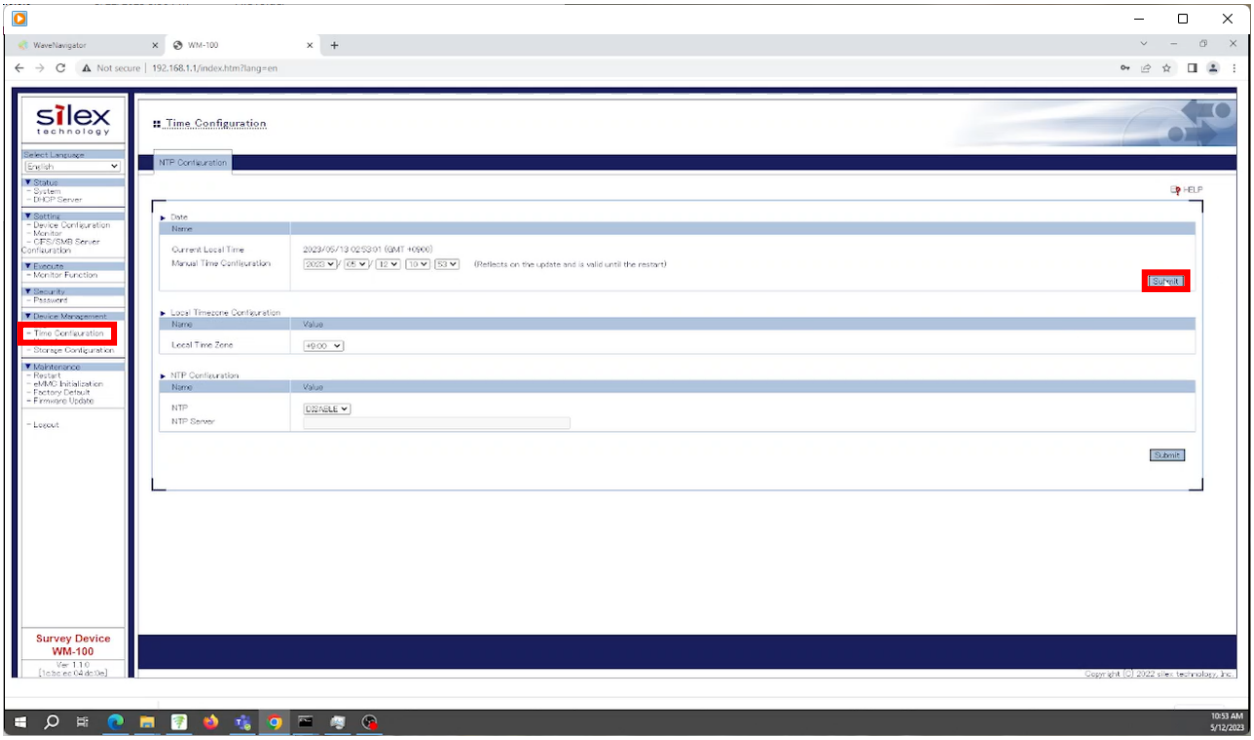
Restart the WM-100.



After the WM-100 restarts, set date and time. If a NTP server is used, enable “NTP” and set the NTP server’s IP address.



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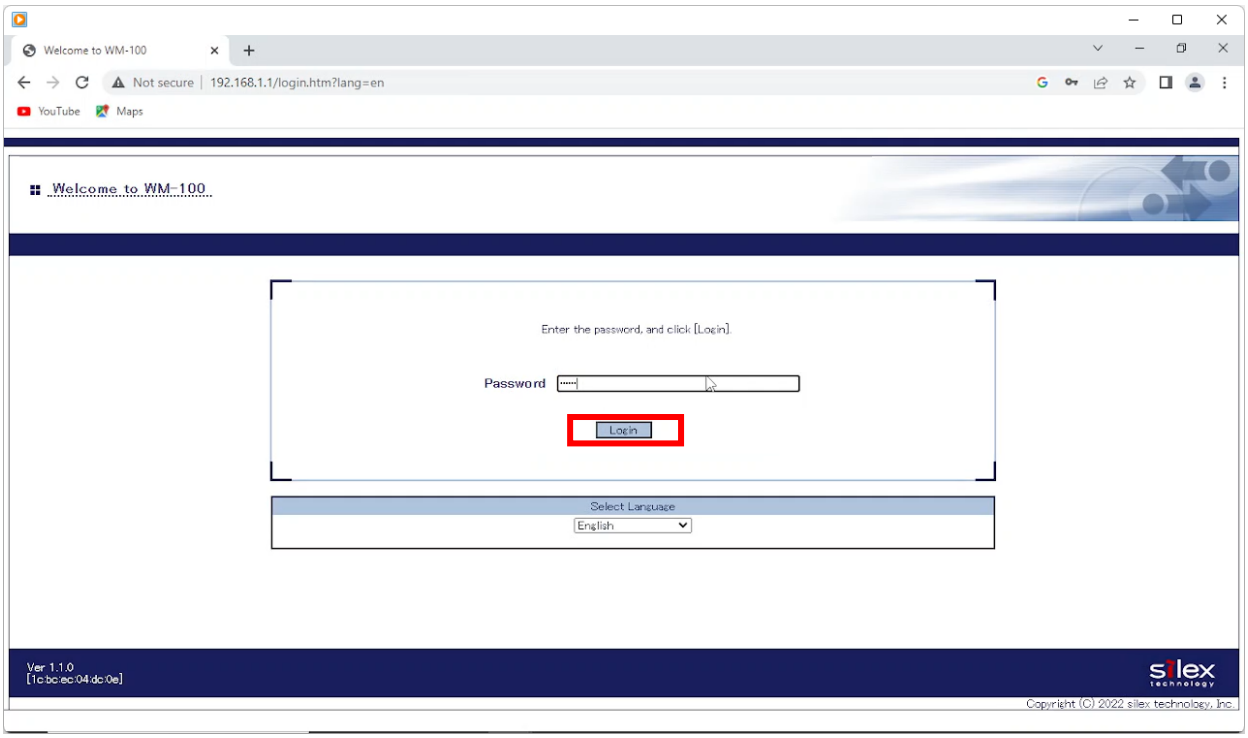
4. Site monitoring for the first time

Check the DIP switches on the front panel of the WM-100 are all OFF

DIP switch

Log into the WM-100.



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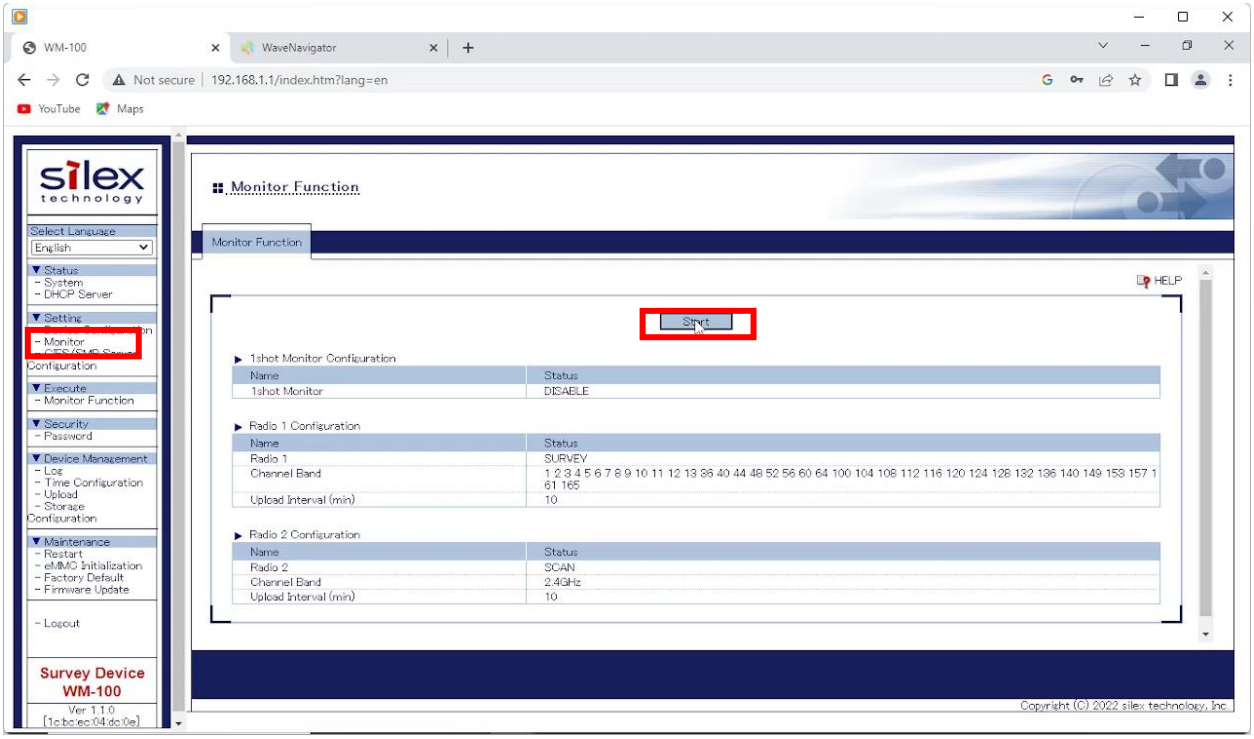
Click “start” on the WM-100 monitor page.



Wait for more than 15 minutes to get the captured data uploaded to the Wave Navigator.

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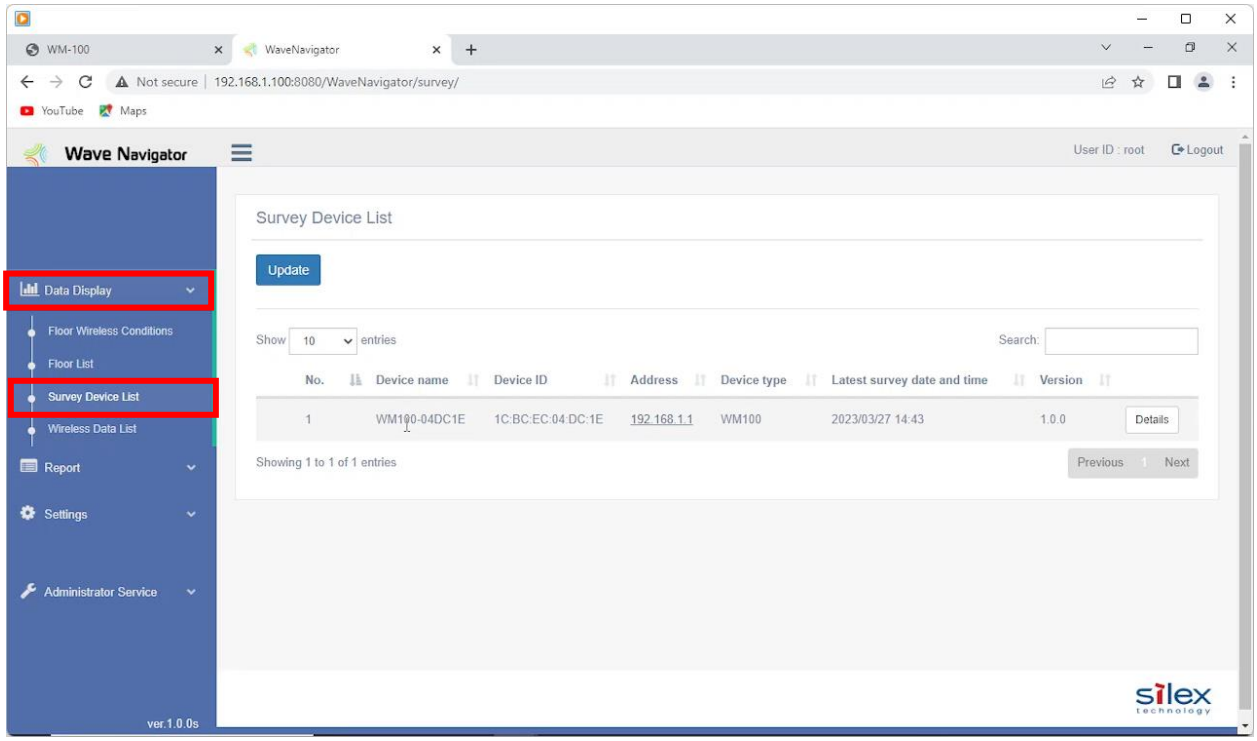
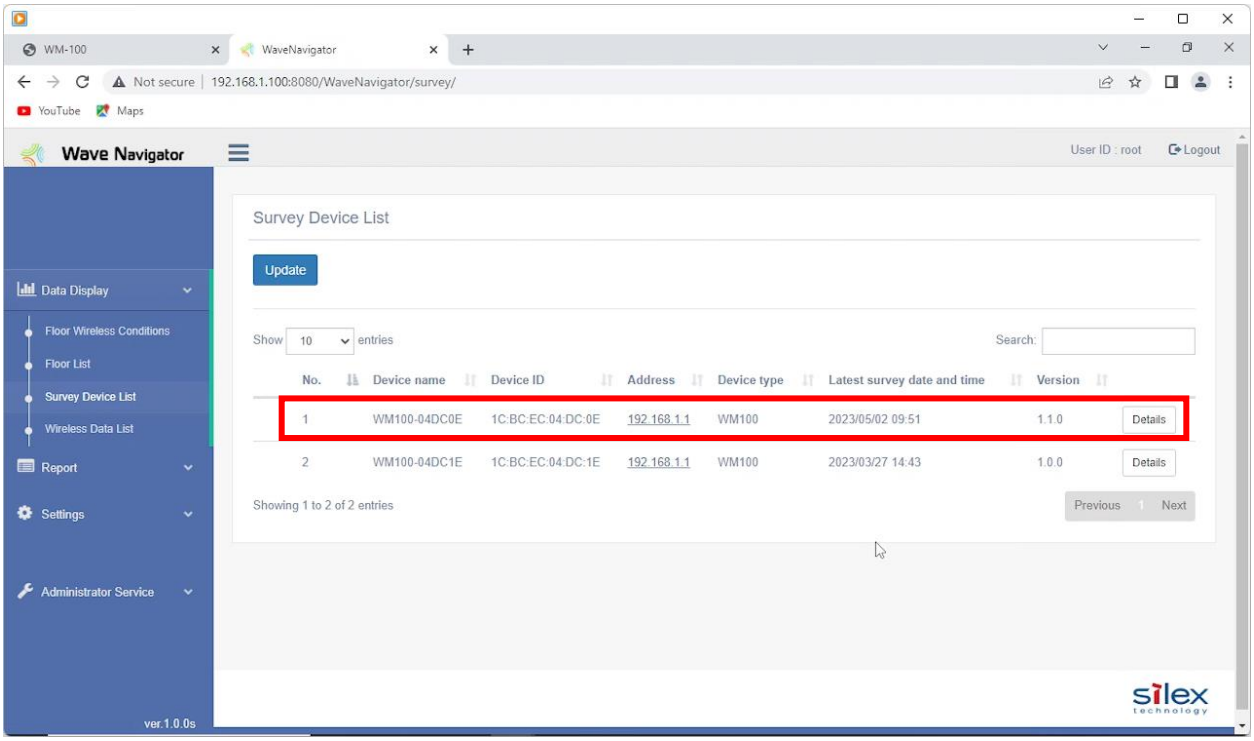
5. Confirm Wave Navigator receives the data from WM-100

Before the data is uploaded to the Wave Navigator. (Note: The device shown in this picture is from the past)



New device is listed after the data is uploaded.



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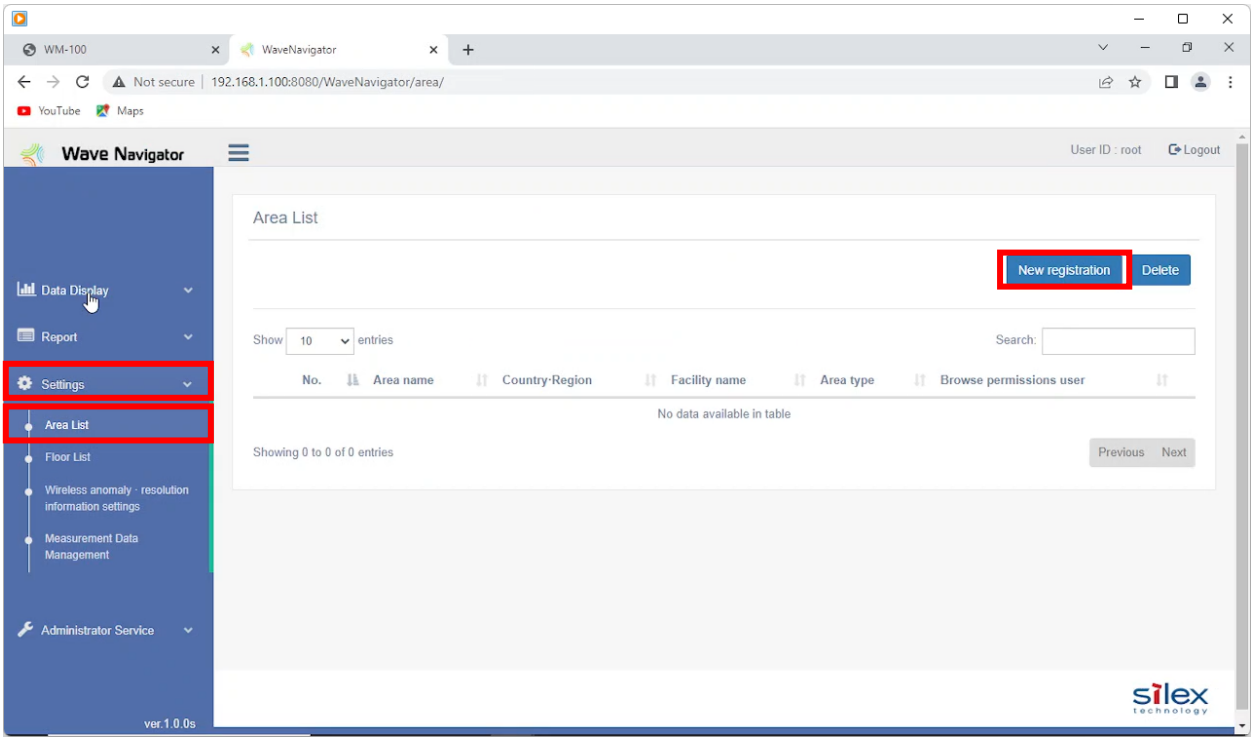
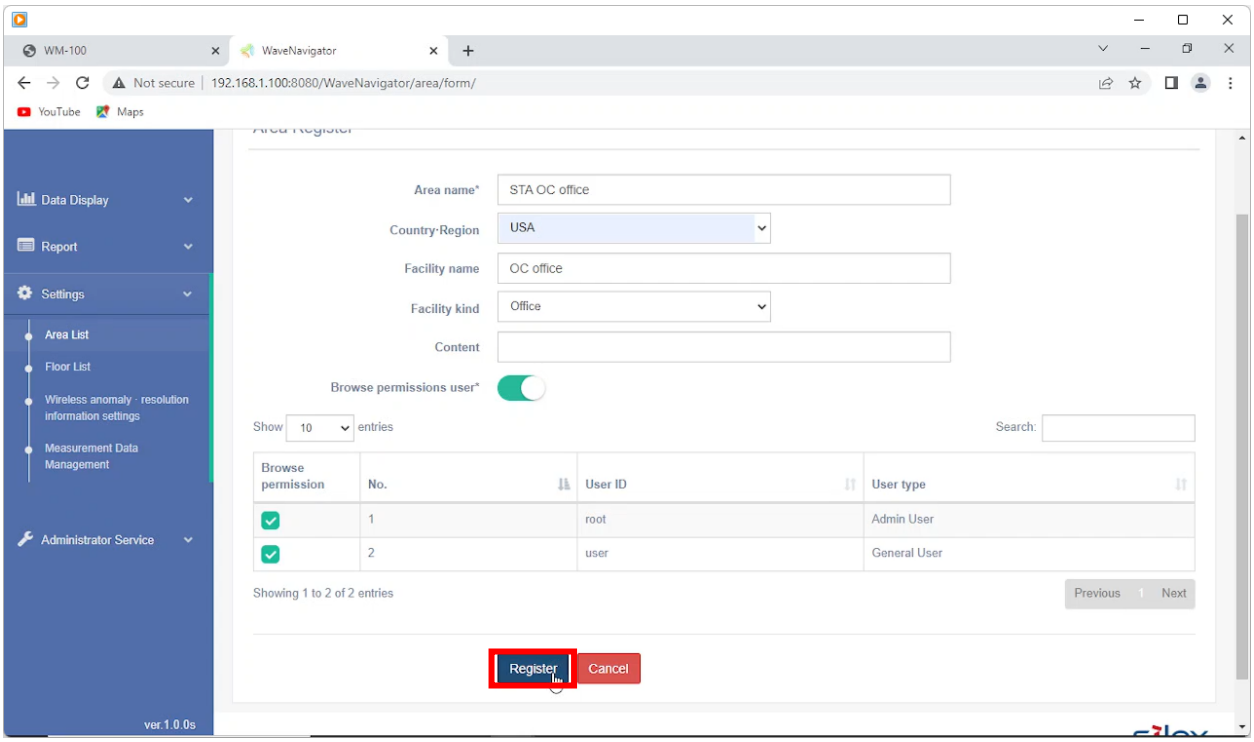
6. Set up the wave navigator

6.1 Area registration

Register the area that the WM-100 is used.





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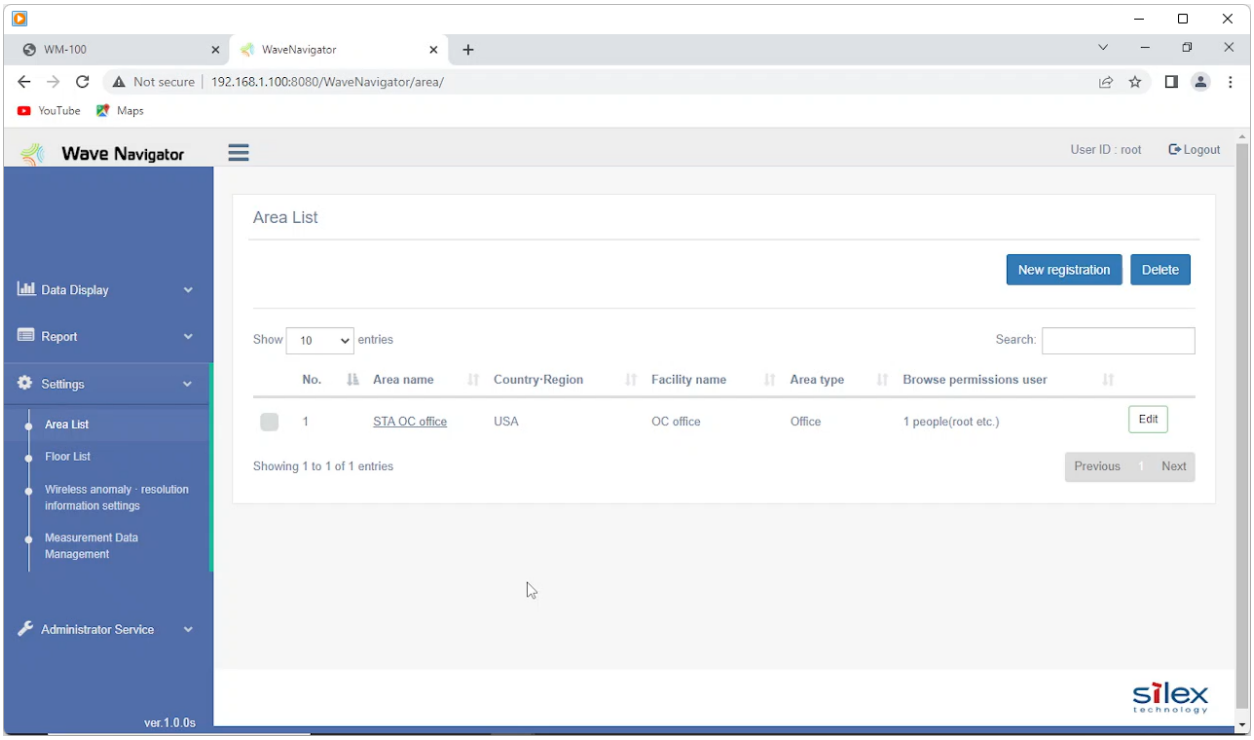
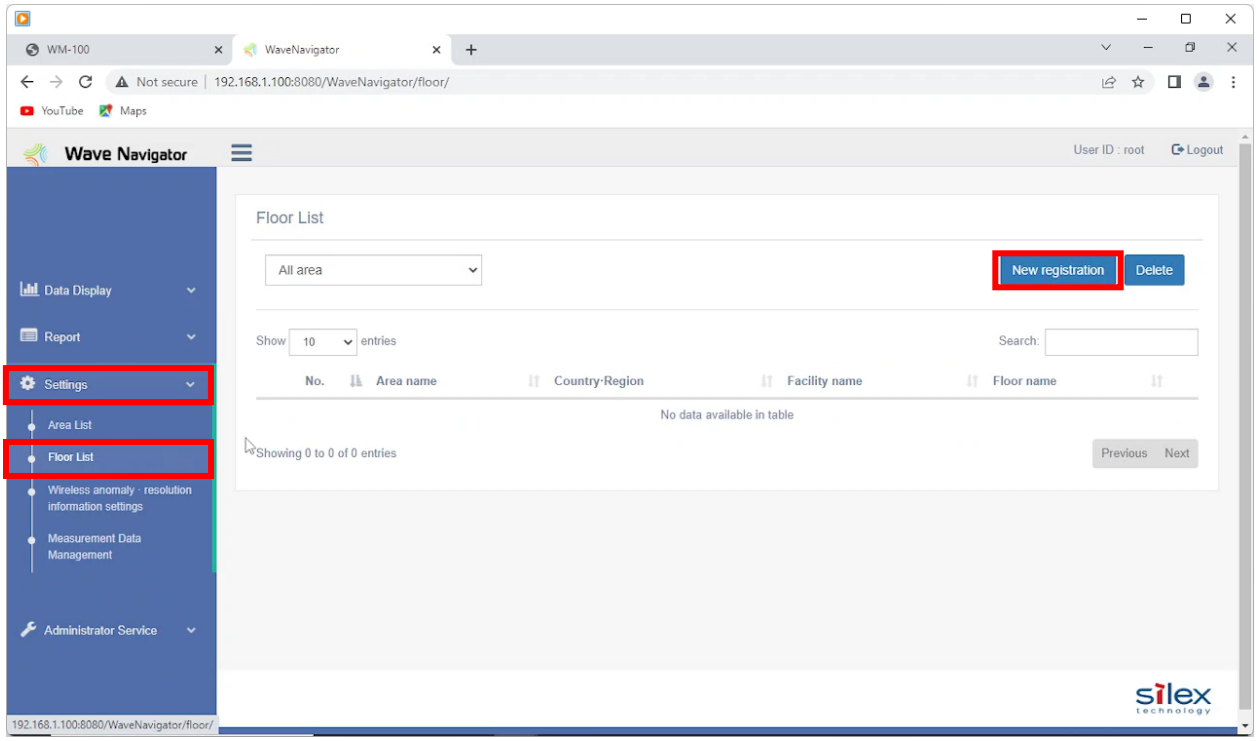


6.2 Floor registration

Register the floor that the WM-100 is used.



A floor map file (image file) is required. If you don't have the floor plan image, a blank image with same aspect ratio of your floor can be imported. The size of the floor is required.

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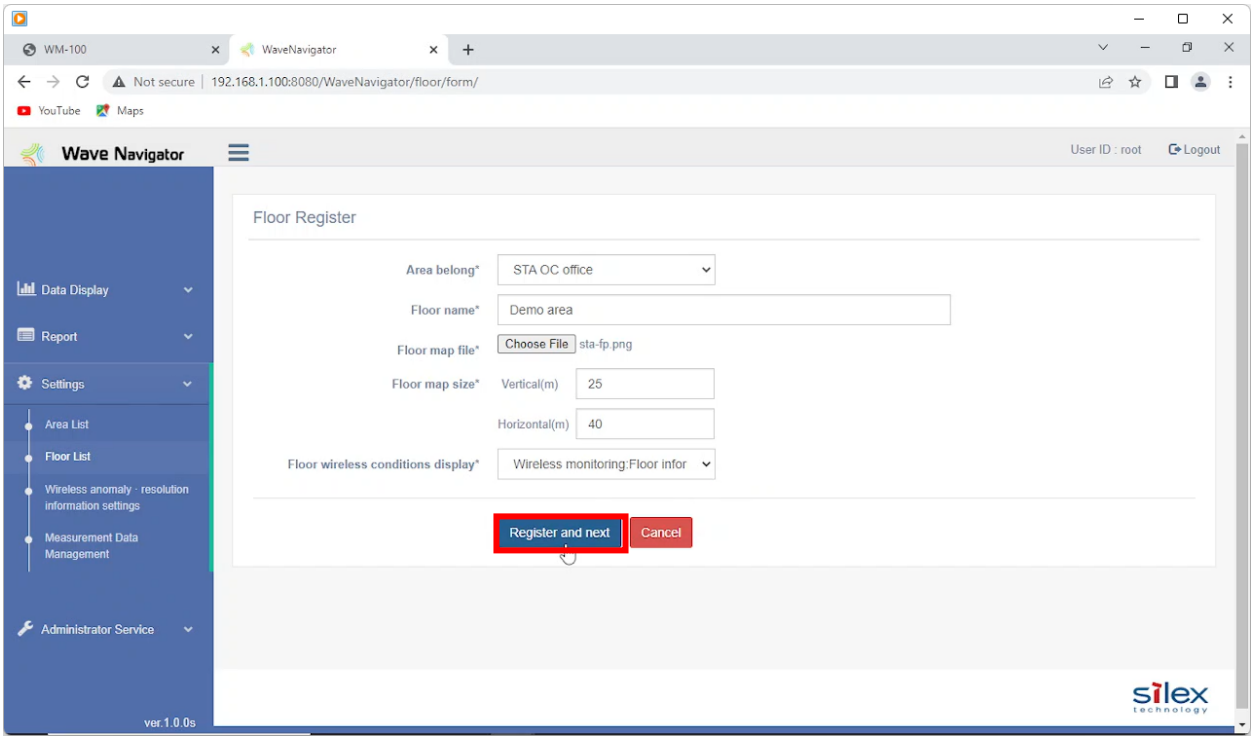
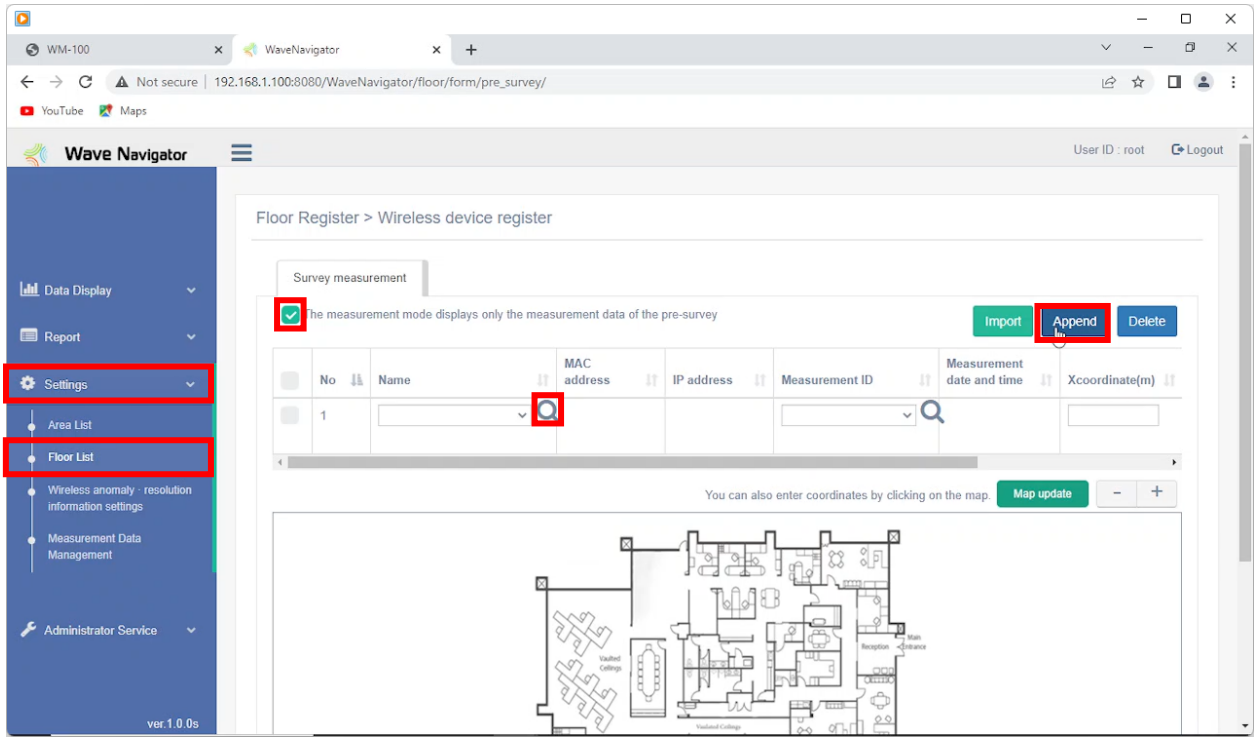


6.3 Pre-survey data registration

Register the pre-survey data captured in the process described in section 4.



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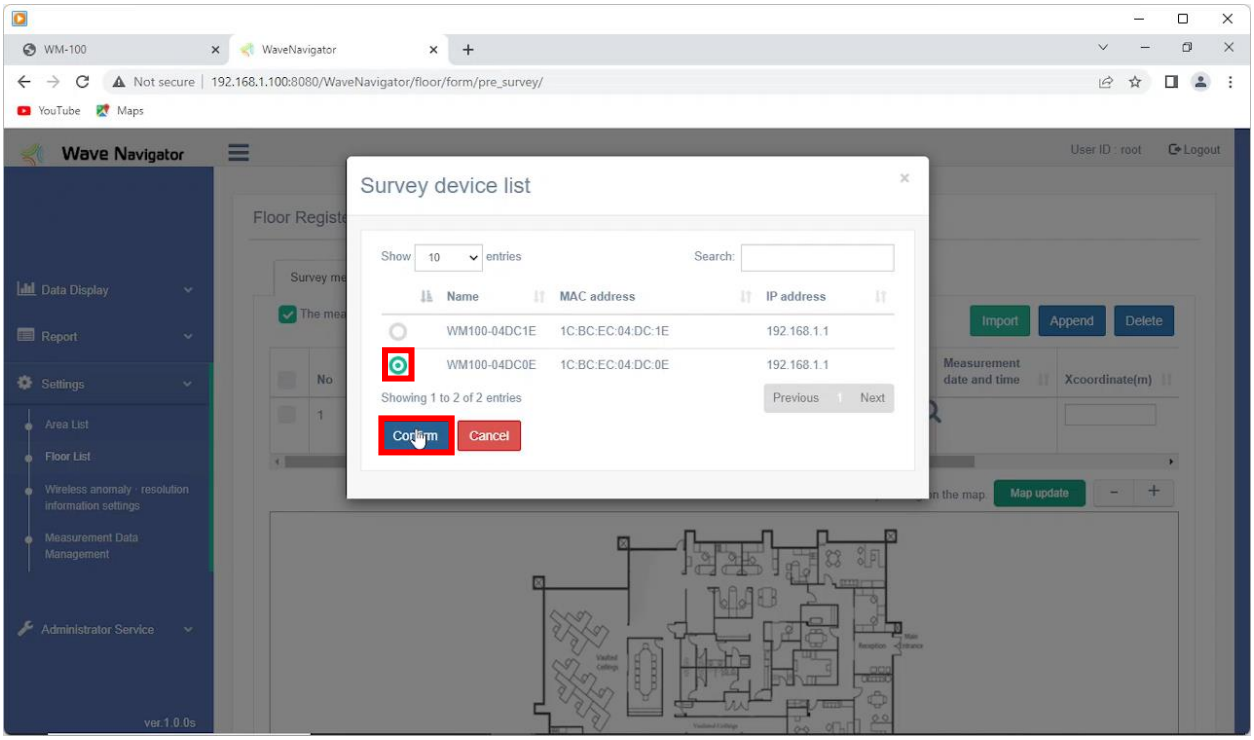

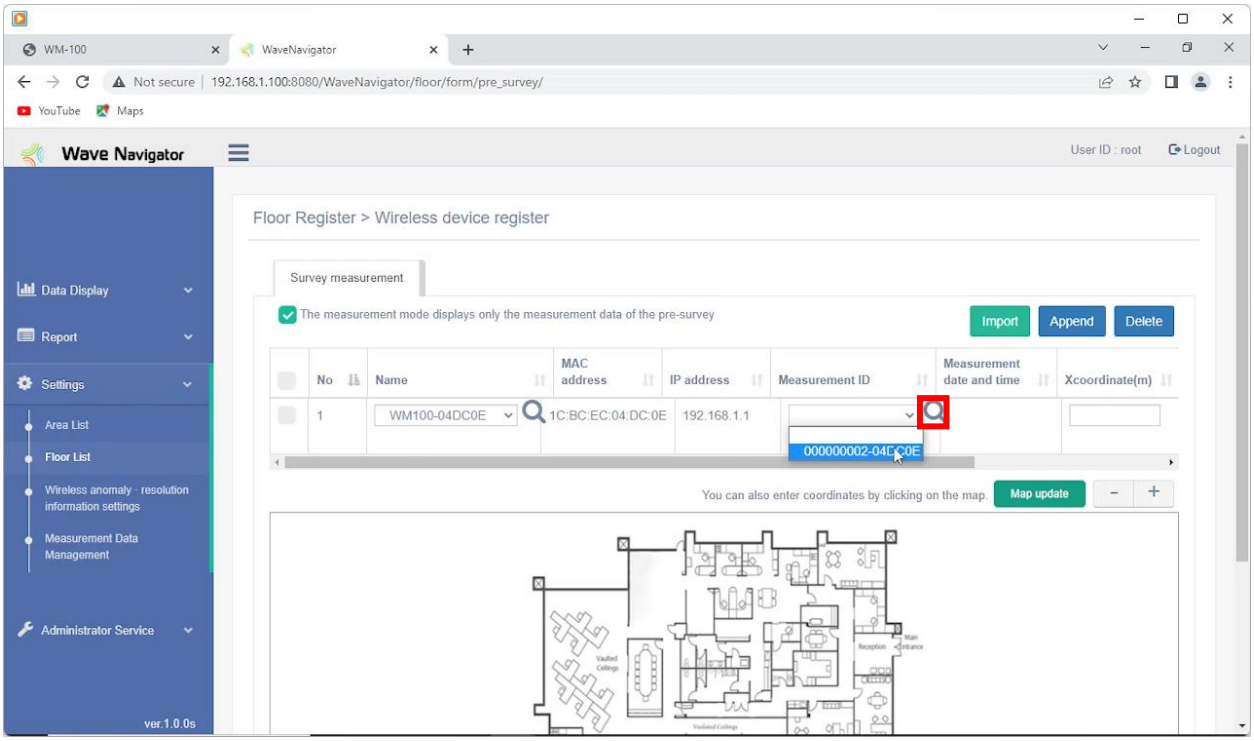

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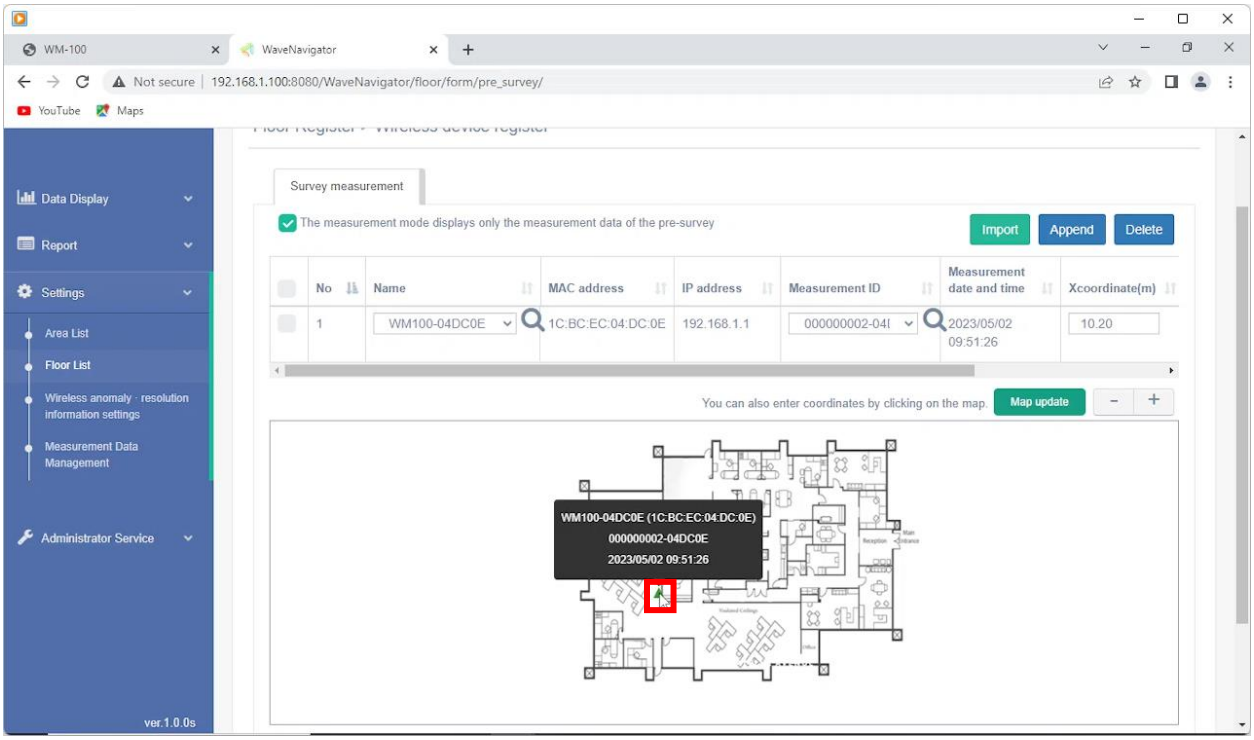

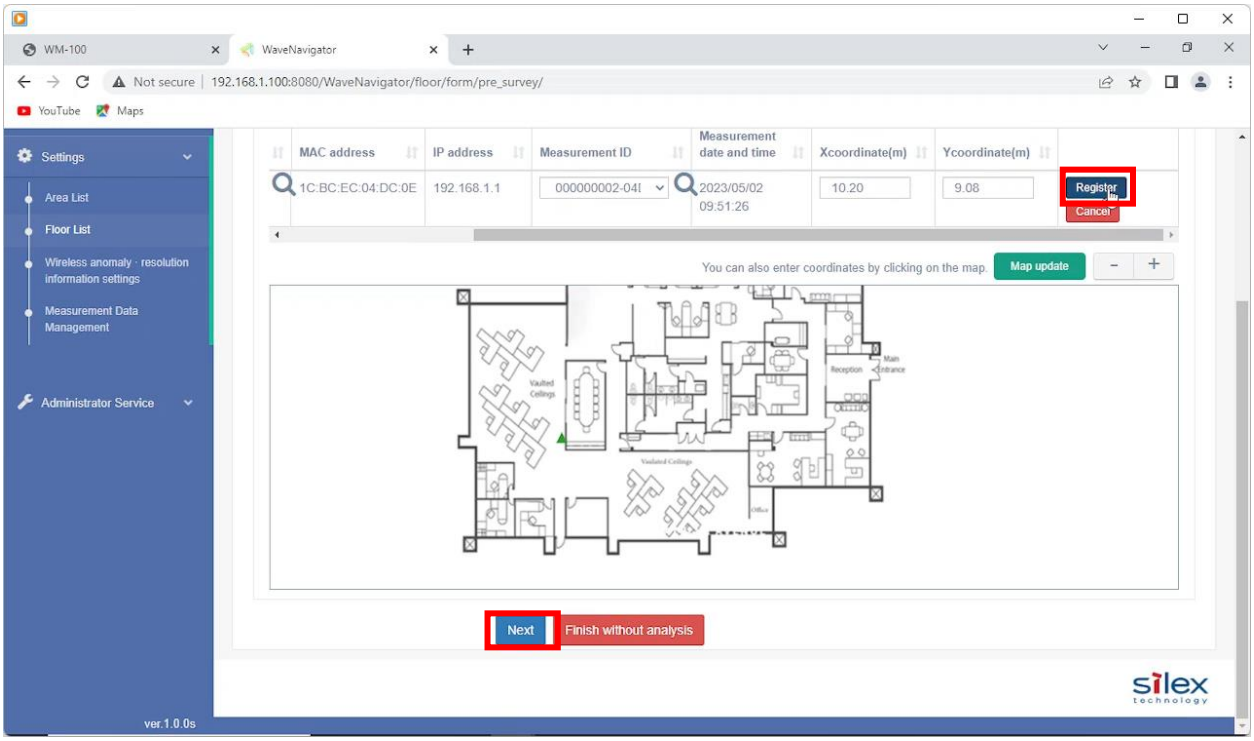

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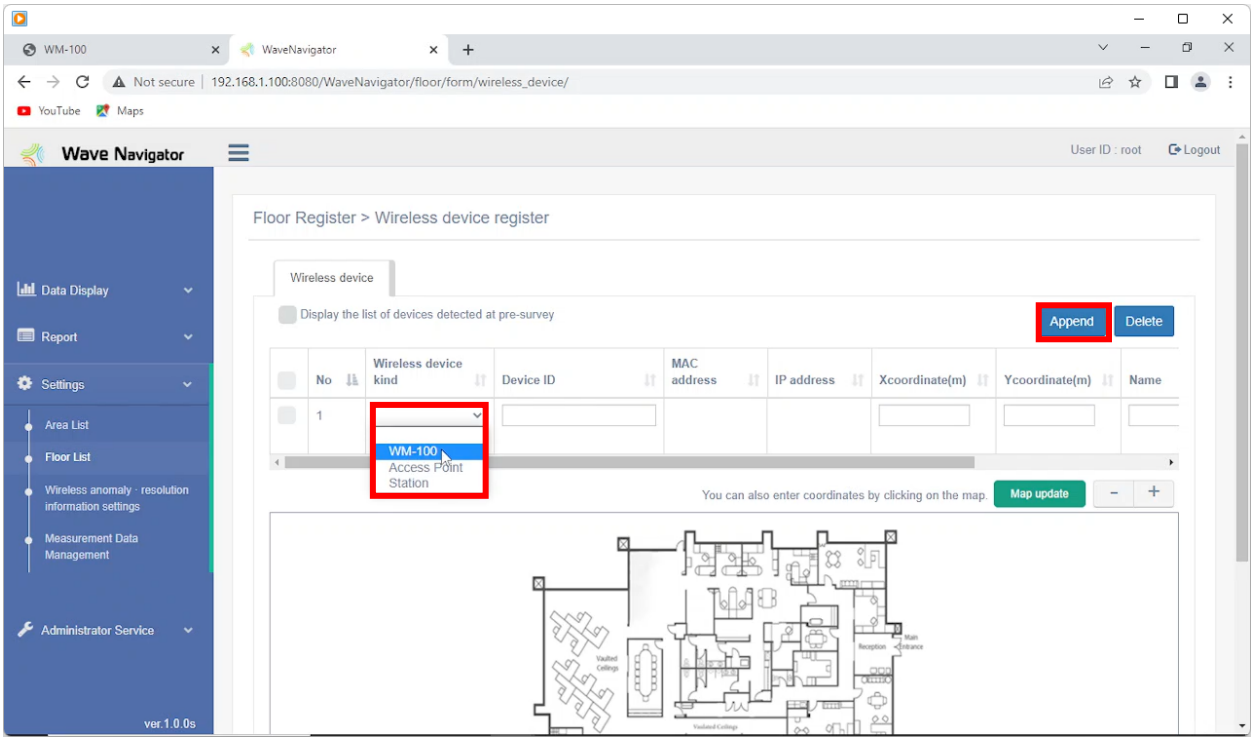
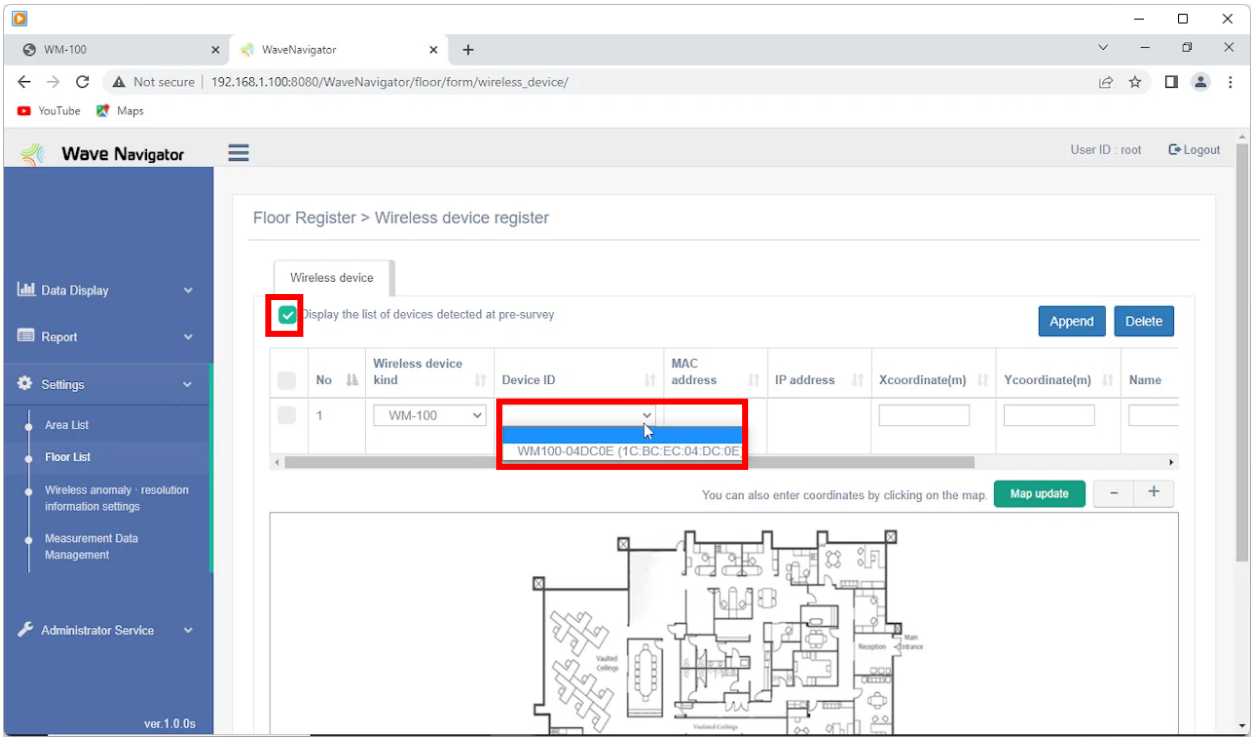
6.4 Wireless devices registration

Register the WM-100 and the wireless devices you want to monitor.





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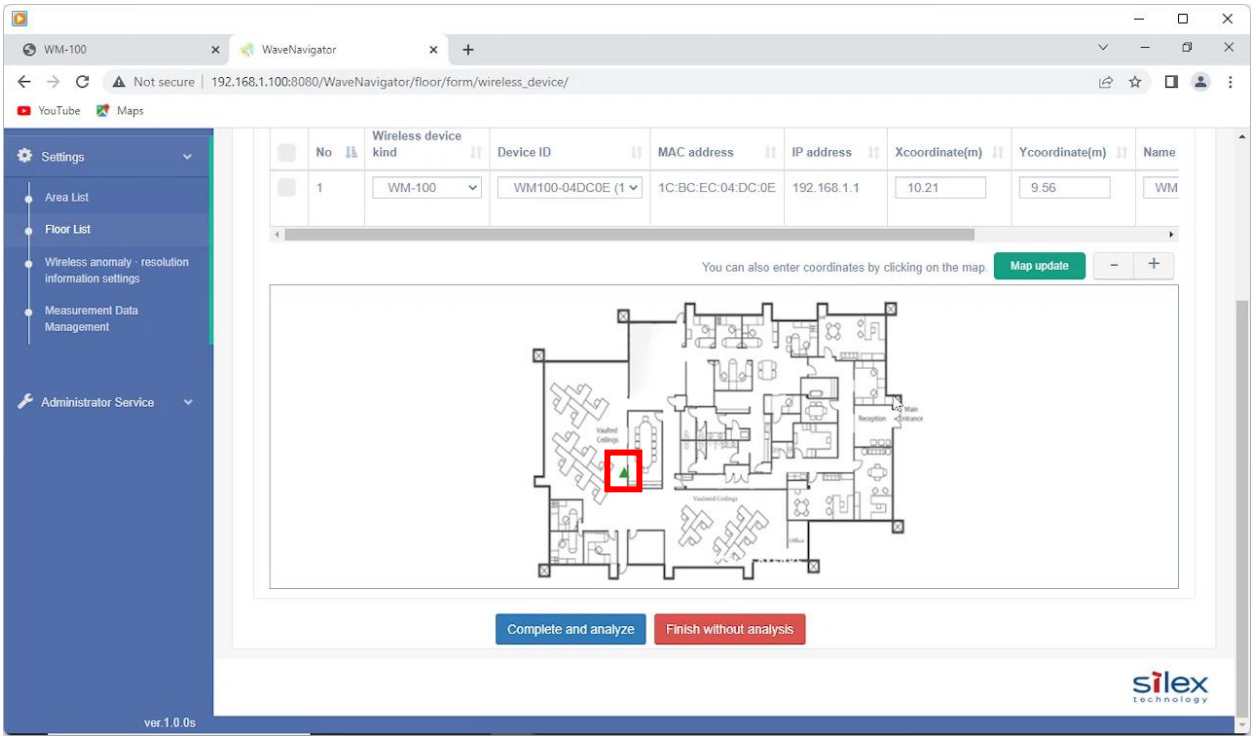

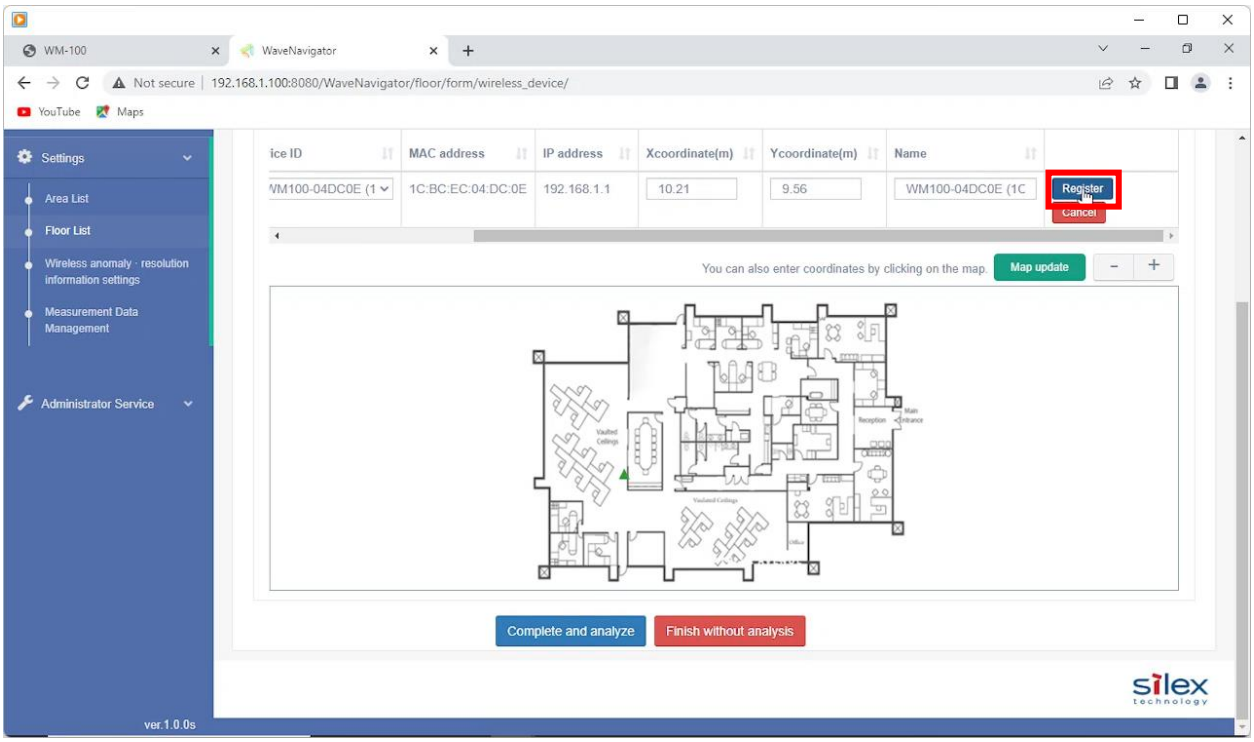

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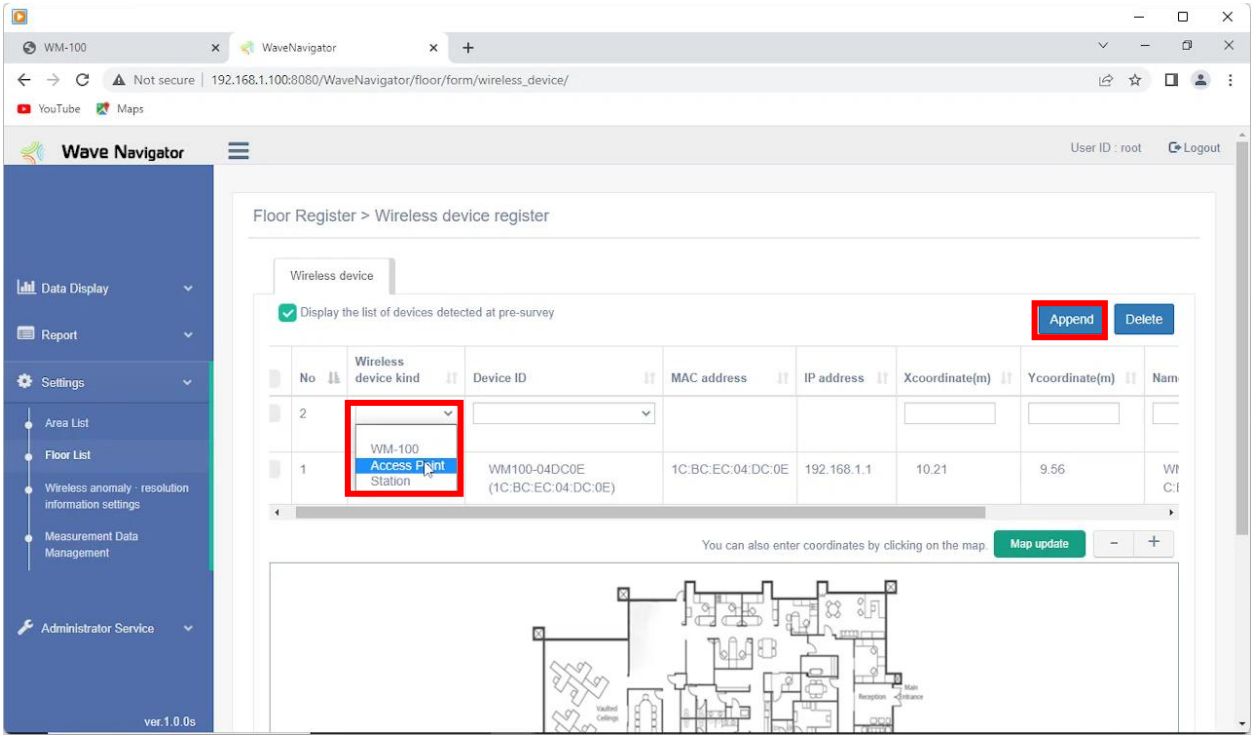
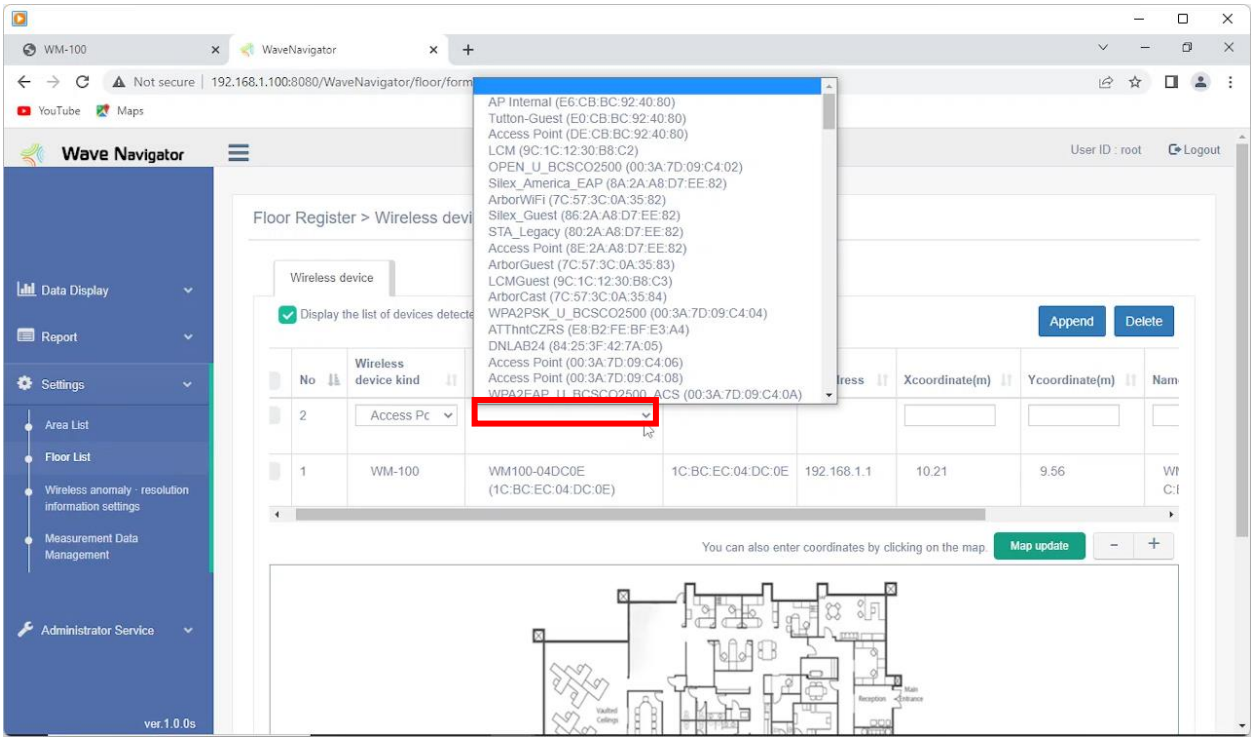
Register wireless devices such as Wi-Fi access points and/or Wi-Fi STAs that you want to monitor.





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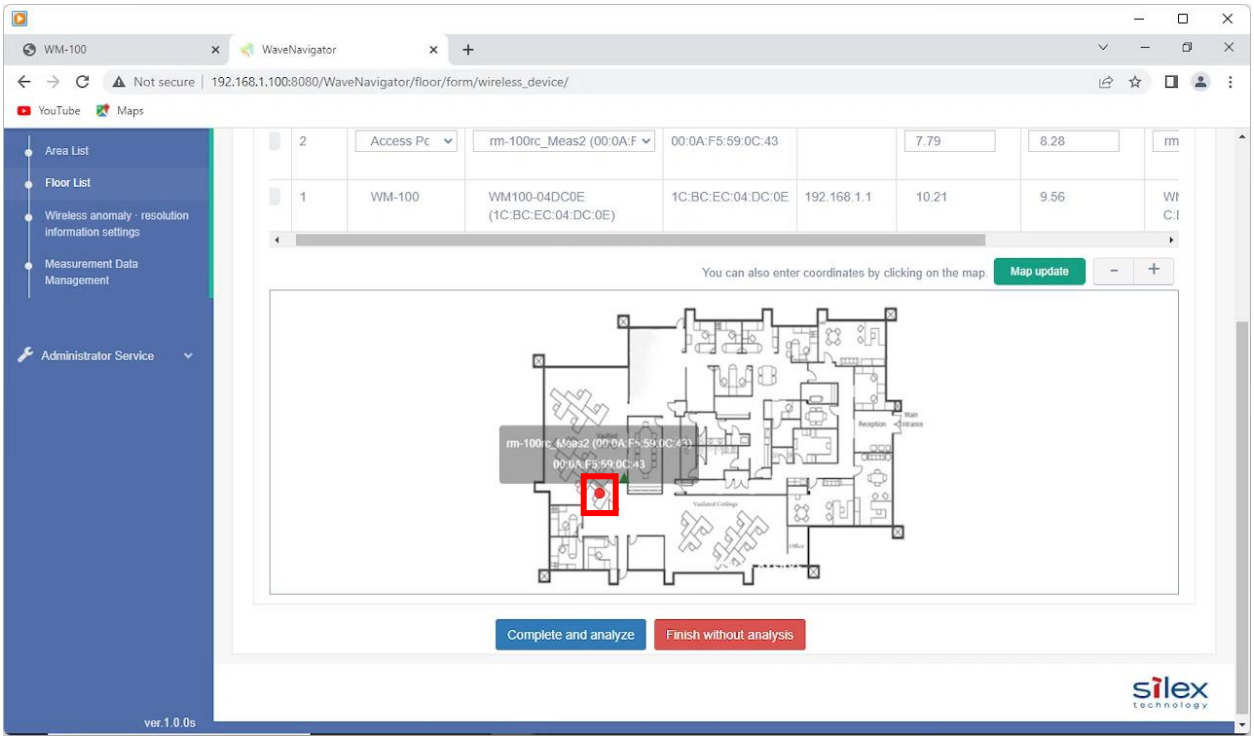

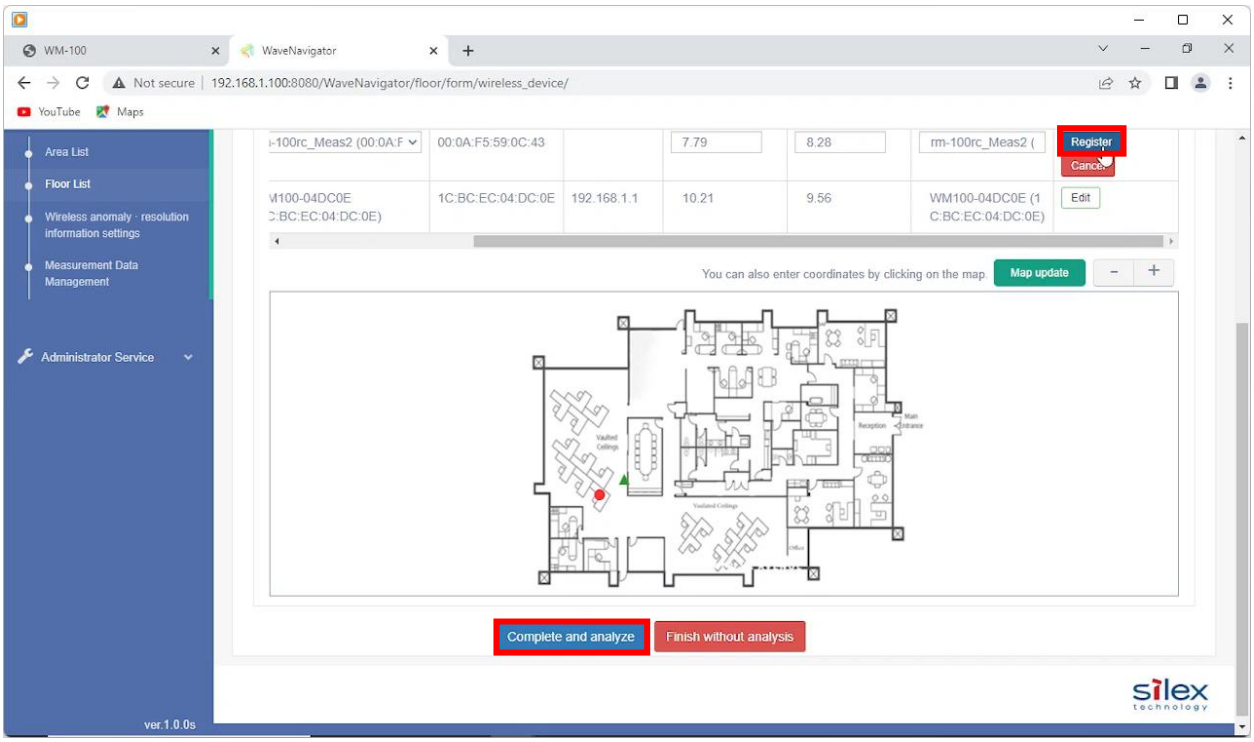

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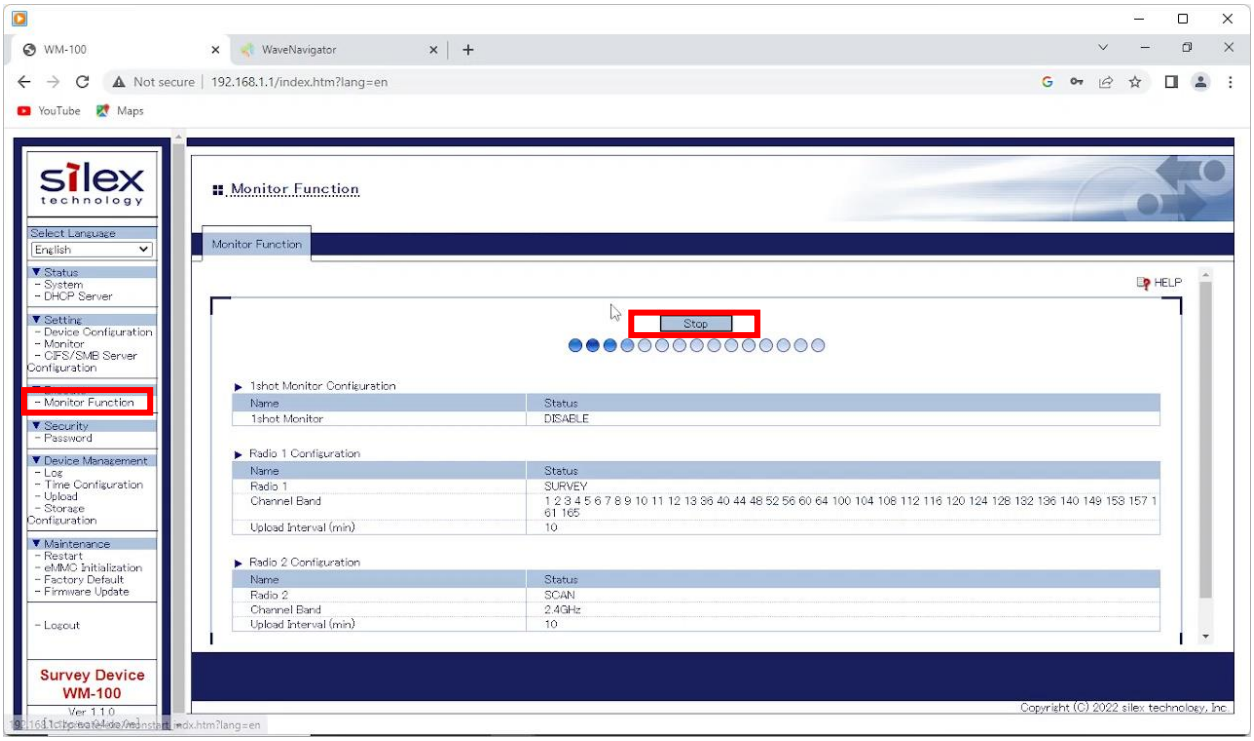
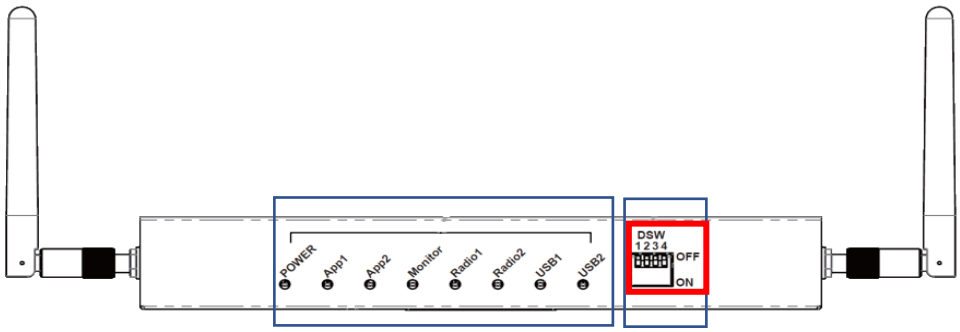
7. Stop the pre-survey and start monitoring

1. Stop the WM-100's monitor



2. Change the WM-100's DIP switch #2 from OFF to ON.



DIP switch

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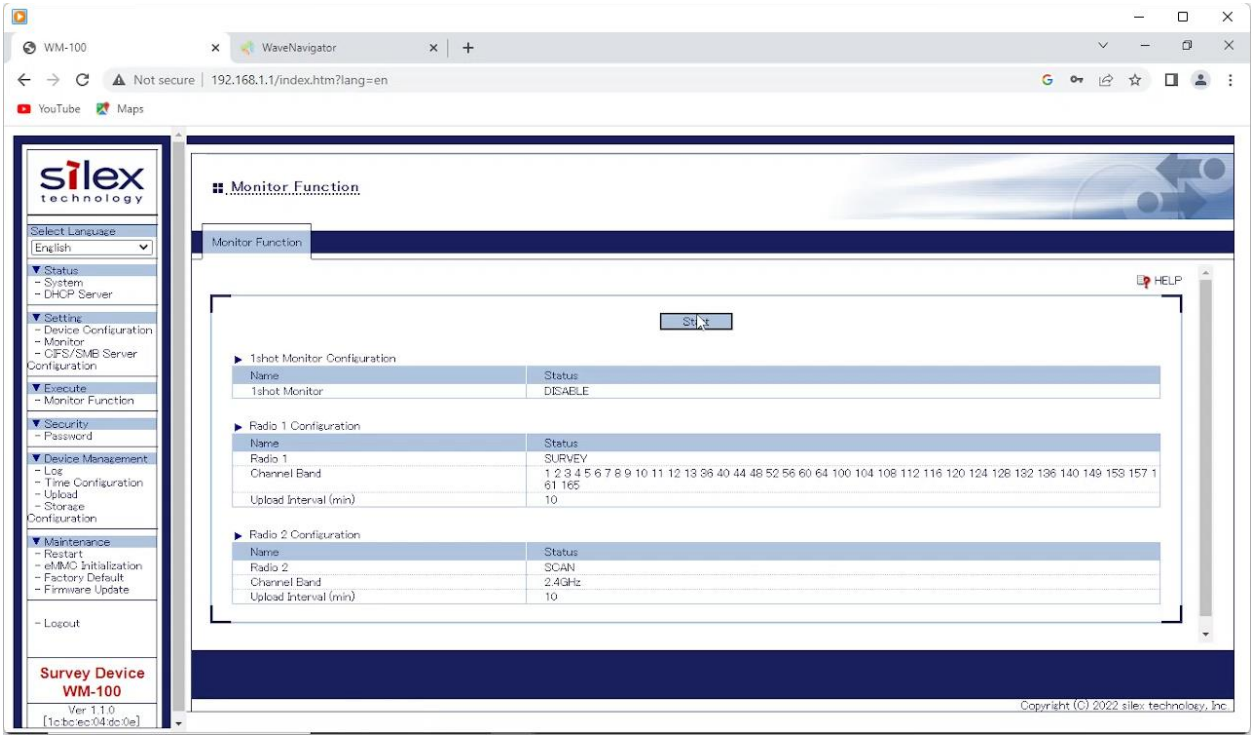
3. Start the WM-100's monitor



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