

# CAE Maestro MultiSim Getting Started Guide

MultiSim enables control of multiple synchronized CAE Juno simulators with a single instructor tablet.

With MultiSim enabled, some Maestro functionality changes:

- Checklists and the intercom features cannot be used.
- The CPR graph will not appear on the CAE Maestro Run screen, however it will continue to appear on CAE Patient Monitor.

## Set Up MultiSim

To use the MultiSim feature, the software and hardware elements listed below are required. Ensure all elements are installed, configured, and running before proceeding with MultiSim setup.

- CAE Maestro v2.12 software or later on each simulator

Note: If you have an earlier version of Maestro, you must update it to version 2.12 or later. To update Maestro, go to <https://www.caehealthcare.com/solutions/product-types/software/software-updates/> and follow the on-screen instructions. The *Installing Maestro Updates* guide is also available on the website.

- Samsung Galaxy S3 or Surface Go tablet
- Two to ten Juno simulators
- Linksys central router (purchased from and preconfigured by CAE)
- Discovery service software (available from CAE)

For more information about any of the elements listed above, contact your CAE Sales Representative.

Setup Steps	
1	Install the CAE Discovery Service
2	Configure simulators and Tablets
3	Connect simulators in MultiSim
4	Connect Patient Monitor in MultiSim

## Step 1: Install the CAE Discovery Service

To prepare for MultiSim, a Windows computer with the CAE Discovery Service must be connected to the MultiSim's router network. This application automatically tracks simulators on a network and identifies them by IP address.

**Note:** This computer and application can be removed from the MultiSim network after configuring all Juno simulators.

To retrieve the instructions and application files:

1. On a Windows device, go to <https://caehealthcare.com/support/software-updates>.
2. Download the Discovery Service Installation Guide (905K007252) and the CAE Maestro Discovery Service application.
3. Follow the steps within the guide to install the application on this computer.

Ensure the Discovery Service computer is connected to the MultiSim network and running.

Record the IP address of the Discovery Service computer connected to the MultiSim router Wi-Fi network. This address is required for the simulator configuration process.

## Step 2: Configure Simulator and Tablet

Each simulator and its associated tablet must be configured to communicate with the central router.

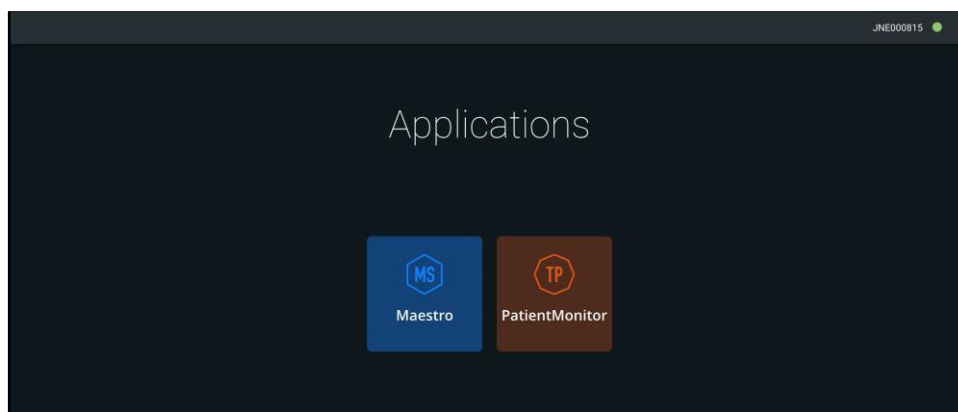
To configure each simulator and tablet:

1. Update the Maestro application on the Juno simulators and the Patient Monitors to Maestro 2.12 or later.
2. Confirm the router is powered on and running, and ensure the antenna is attached.
3. On the tablet, tap the **CAE Maestro** icon.



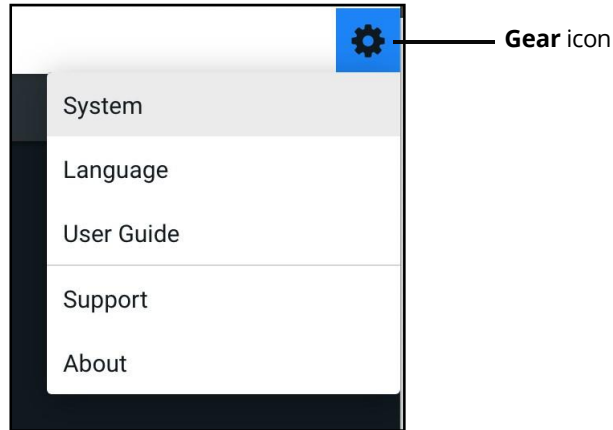
**CAE Maestro Icon**

4. On the Application Home screen, tap Maestro.



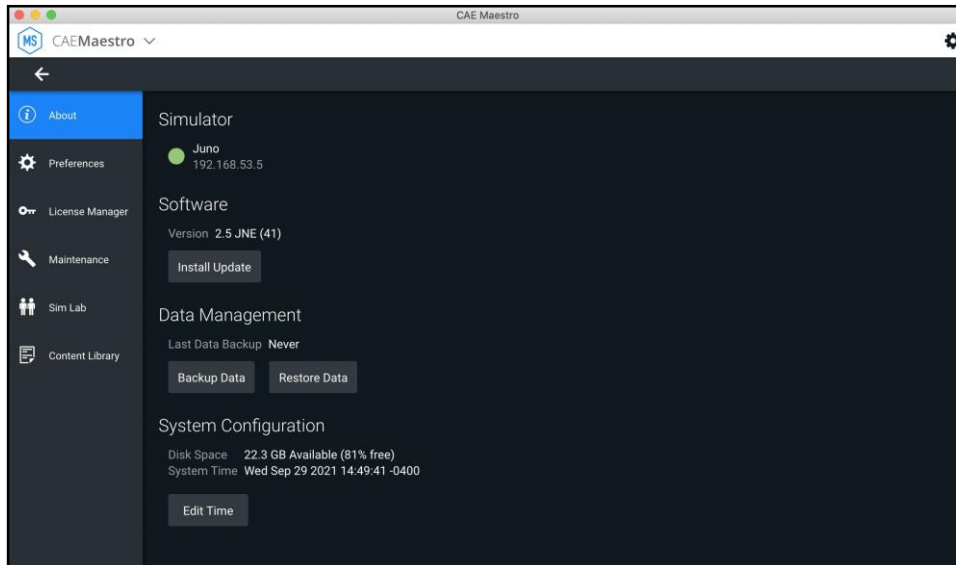
**Application Home Screen**

5. On the CAE Maestro Home screen, tap the Gear icon in the upper-right corner, then select System.



*Gear Icon Menu*

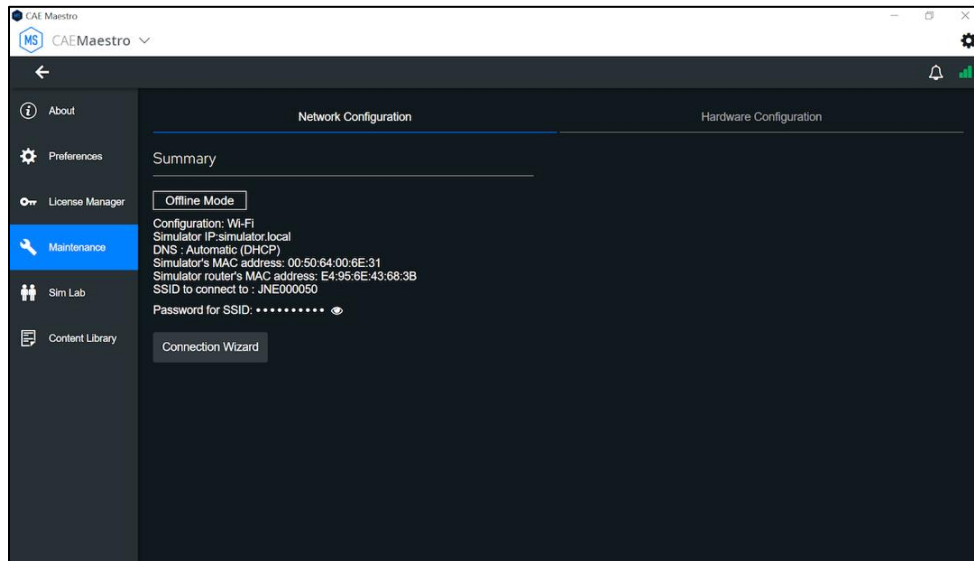
The Simulator screen appears.



*Simulator Screen*

6. Tap the **Maintenance** tab.
7. Enter the six-digit passcode. If you have not changed the password, try 000000 since this became the default after the update to Maestro v2.12 (tap the Eye icon as needed to confirm the characters are entered correctly).
8. Tap Continue.

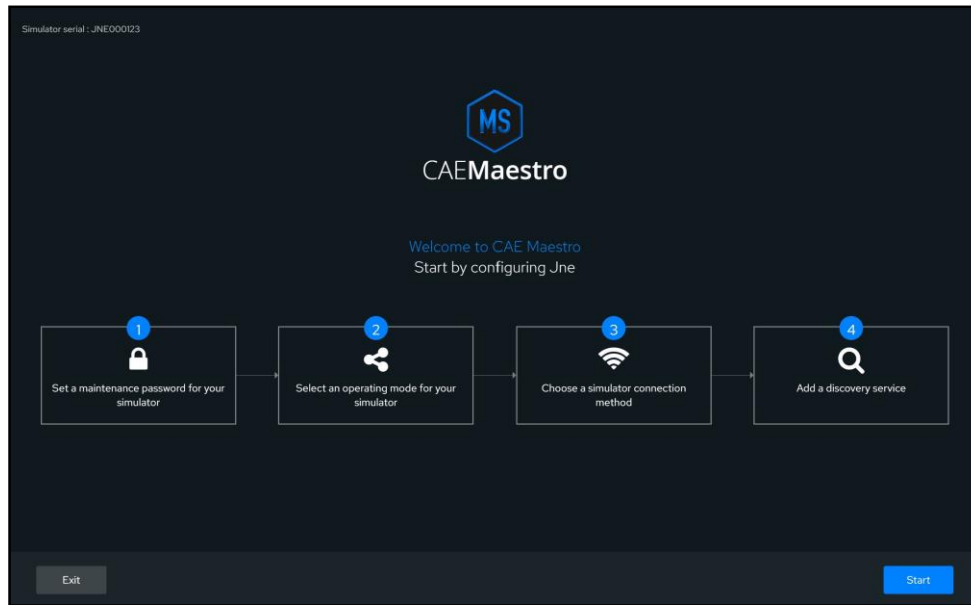
The Maintenance window appears.



*Configuration Screen*

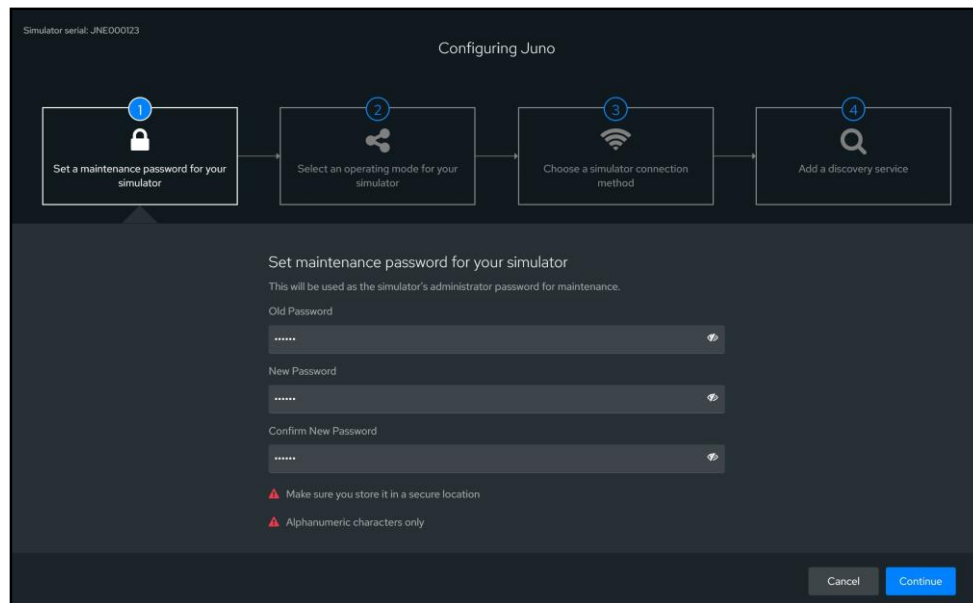
9. Tap **Connection Wizard**.

The Connection Wizard interface appears.



**Connection Wizard Interface**

10. Tap **Start**.



**Set Maintenance Password**

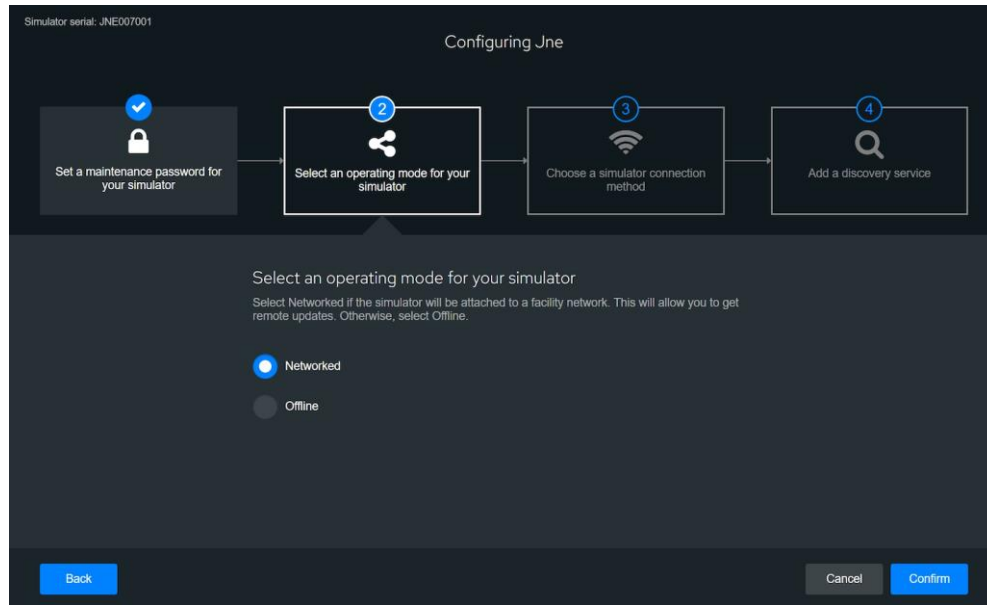
11. Enter the old simulator password, then enter a new password.

**Note:** A new password is not required. To retain the old password, enter it into the New and Confirm Password fields.

**IMPORTANT!** If setting a new password, use only letters and/or numbers and safeguard it. CAE is unable to retrieve lost passwords.

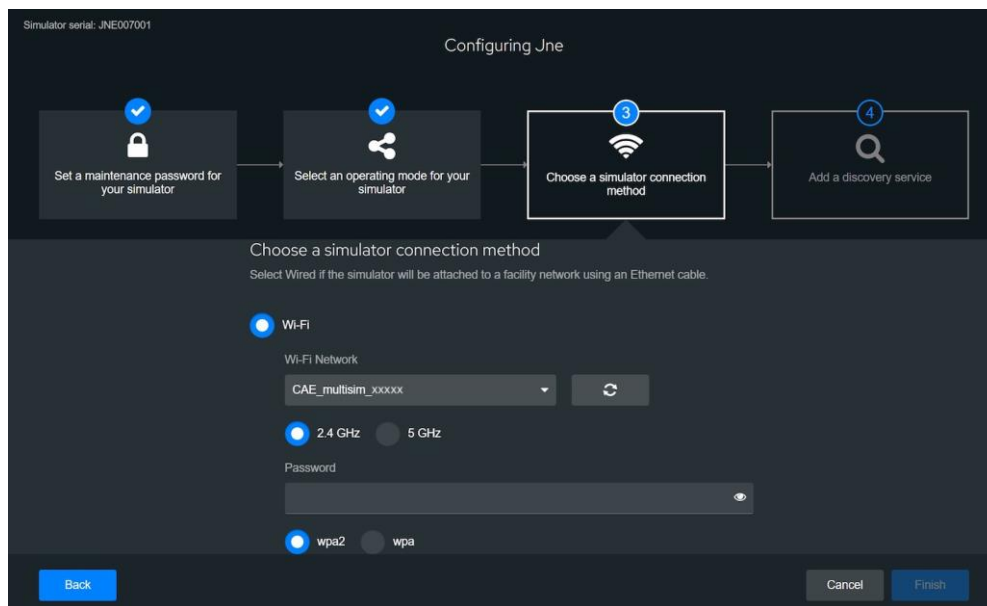
12. Tap **Continue**.

13. Choose the simulator operating mode by selecting the **Networked** radio button.



14. Tap **Confirm**.

The simulator connection method step appears.



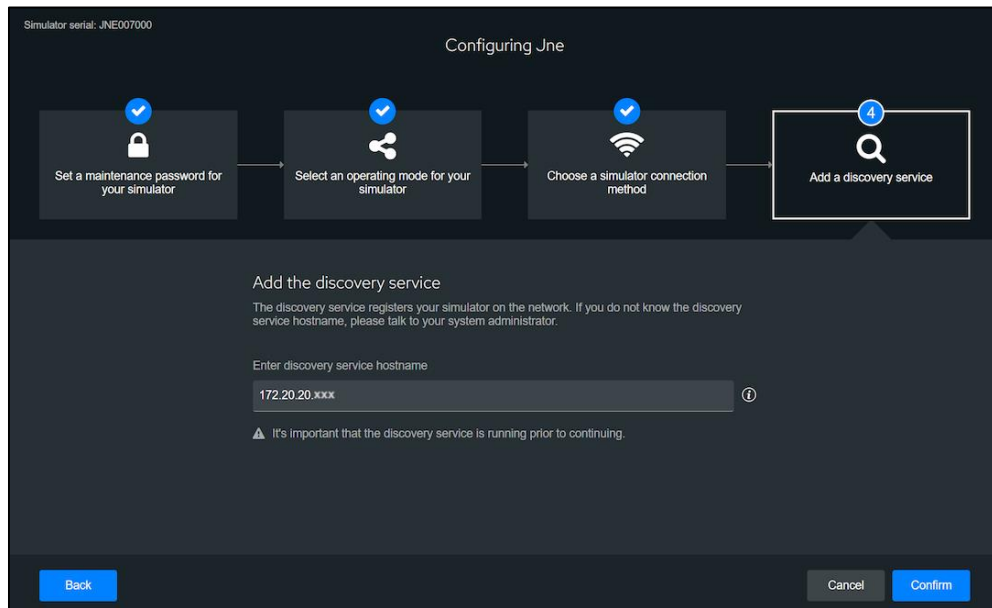
***Simulator Connection Method***

15. Select **Wi-Fi** as the simulator connection method.
16. View the Wi-Fi network drop-down menu and select **Enter SSID Manually**.
17. Type in the SSID name of the MultiSim router exactly how it is labeled on the router label. (case-sensitive). i.e., CAE\_multisim\_XXXXXX
18. Enter the password of the network. (caeadmin)
19. Select 2.4 GHz or 5 GHz. Consult with the IT department regarding the best choice for this environment.

20. Select WPA2.

21. Tap **Finish**.

The discovery service step



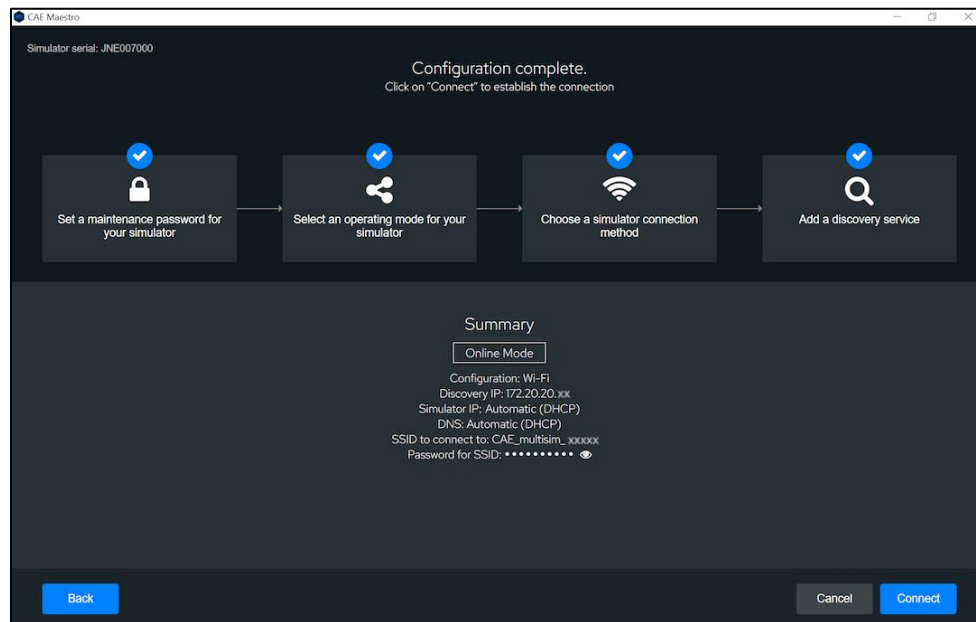
### Add Discovery Service

22. In the **Enter discovery service hostname** field, enter the IP address (IPv4) of the device that hosts the Discovery Service.

**Note:** The hostname is unique and is identified during the discovery service installation process.

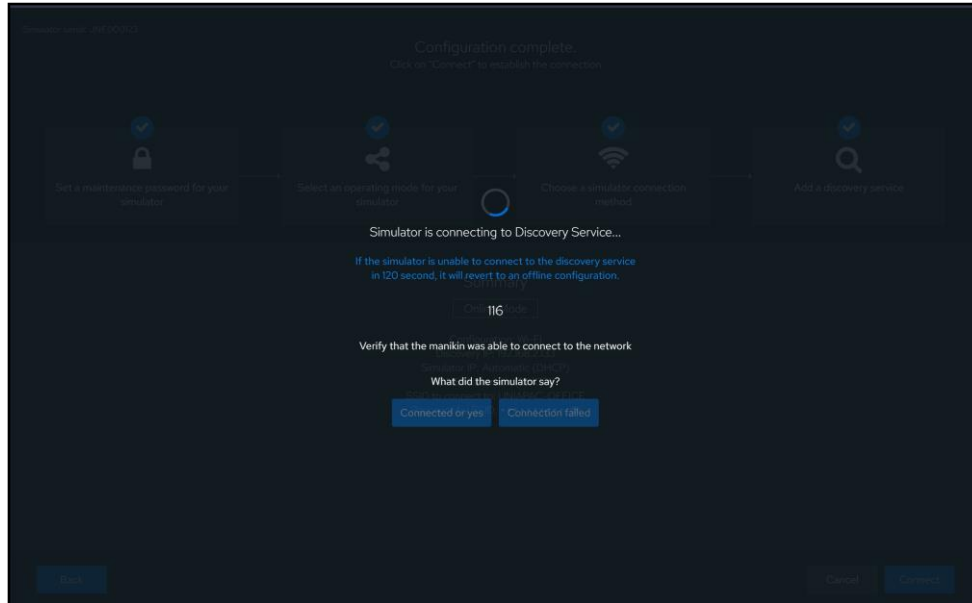
23. Tap **Confirm**.

The selection Summary appears.



### Summary

24. Review the selections. If changes are required, tap **Back**, if good tap **Connect**.
25. Connection may take up to 120 seconds. The screen provides information about progress.

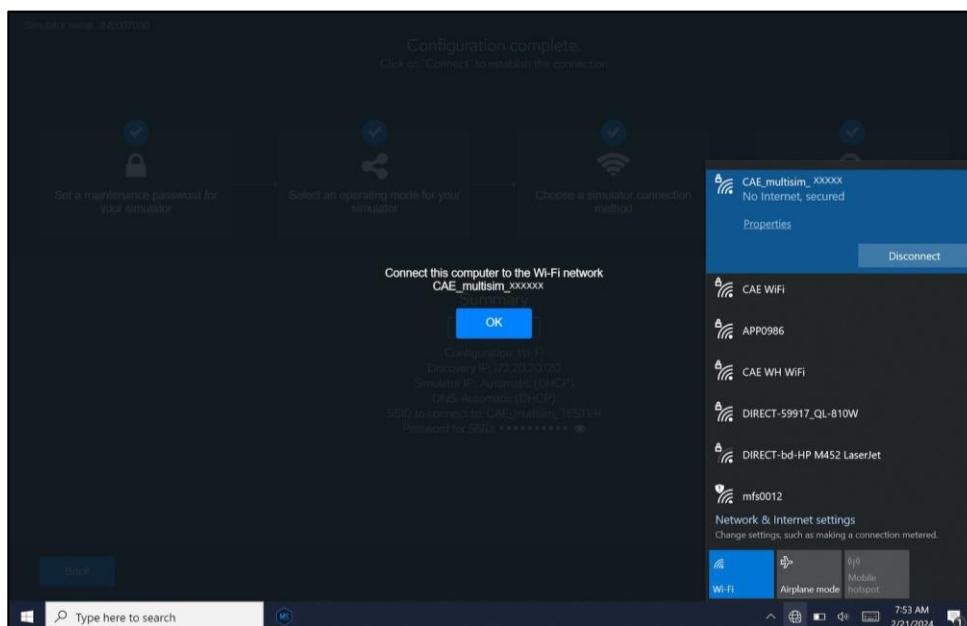


***In Progress Notification***

26. The simulator will say “Connected” or “Yes” when connected. When you hear this, tap the **Connected or yes** button, which will become available after the 120-second countdown is complete.

**Note:** If the simulator does not respond or says “No,” tap **Connection failed**. The simulator will revert to the last working configuration. Confirm the Discovery Service is available and that the IP address is correct before repeating the setup procedure.

27. The screen will now display an instruction to complete the connection before proceeding. **IMPORTANT! Do not tap the OK button** until you have followed steps a-d:



***Connect Computer Screen (Surface Go Tablet)***

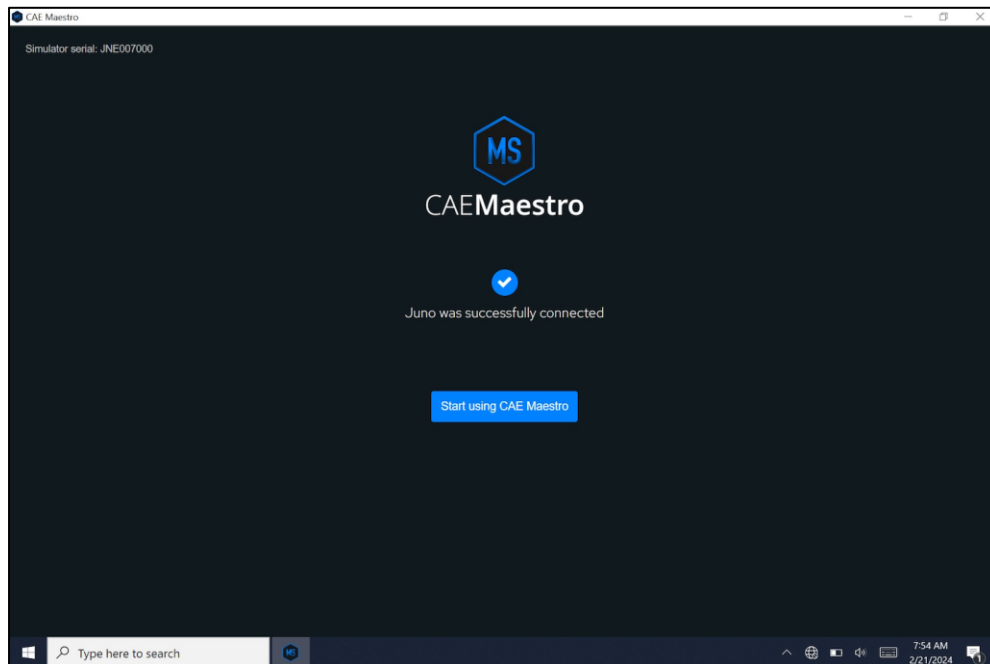


- a. Tap the Wi-Fi icon on the tablet or laptop to view the panel of Wi-Fi networks.
- b. Locate the MultiSim Wi-Fi network, check the box to connect automatically, and tap **Connect**.
- c. Enter the password for this network (caeadmin).
- d. If the discoverable PC prompt appears, tap Yes.

**Note:** Tap anywhere on the screen outside the panels to close the Wi-Fi panel.

28. Return to the Maestro screen and tap **OK**.

**Note:** After a short wait, CAE Maestro launches.



*Successful Connection Screen*

Tap **Start using CAE Maestro**.

Maestro MultiSim is now configured for this simulator and tablet.

29. Repeat **Step Two** for each Juno being placed on the MultiSim network.

**Note:** When all systems have been converted to MultiSim, the Discovery Service can be removed from the central router network and the application can be uninstalled.

When complete, continue with **Step 3**.

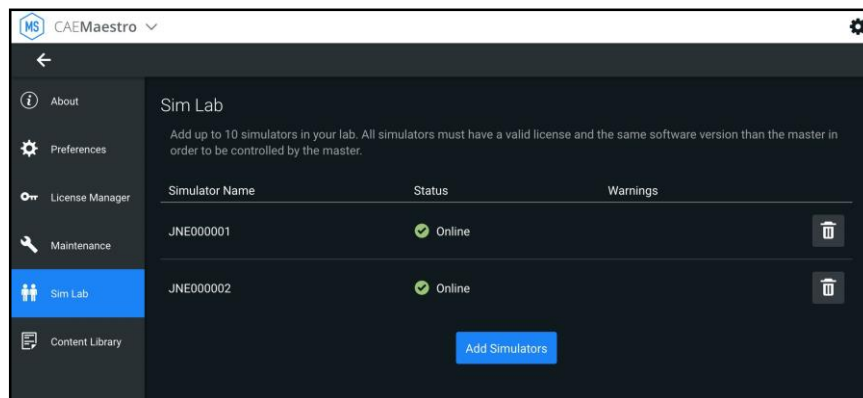
## Step 3: Connect Simulators in MultiSim

Once simulators are configured, connect them in the Sim Lab. This lets you select simulators to run simultaneously.

**Note:** Before starting this process, ensure all simulators are powered and connected to the central router. They do not need to be running a patient.

To add simulators in the Sim Lab:

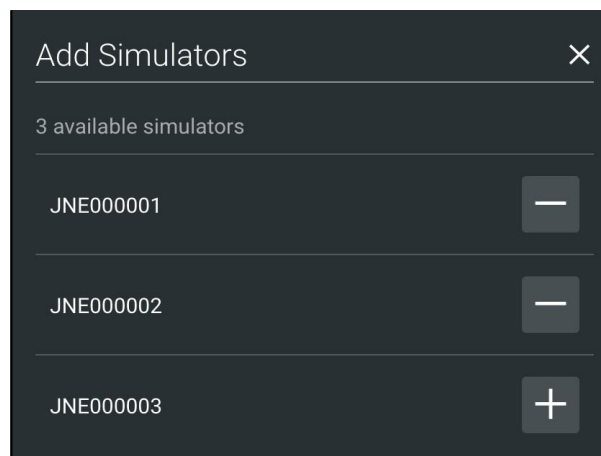
1. Select one of the simulators to configure as the “master.”
2. From the Maestro Home screen, tap the Gear icon and from the drop-down menu, tap **System**.
3. Tap **Sim Lab** tab.
4. On the Sim Lab screen, tap **Add simulators**.



**Sim Lab Screen**

A list of configured simulators appears.

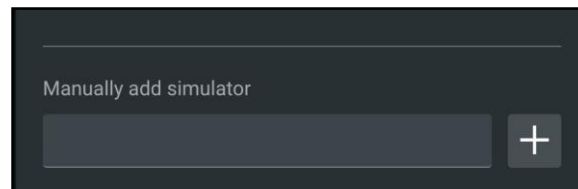
5. Tap the plus sign (+) next to each simulator you want to add.  
Once added, the plus sign becomes a minus sign (-). Tap the minus sign to remove the simulator from the lab.



**Add Simulators Screen**

6. (Optional) You can add a simulator not included in the list if you know the IP address of the simulator. In the **Manually add simulator** field at the bottom of the screen, type the IP address, then tap the plus sign.

Tab the back arrow to return to the Maestro Home screen.



*Manually Add Simulator*

## Step 4: Connect Patient Monitors in MultiSim

Patient Monitors must be linked to the patient simulator and the MultiSim network.

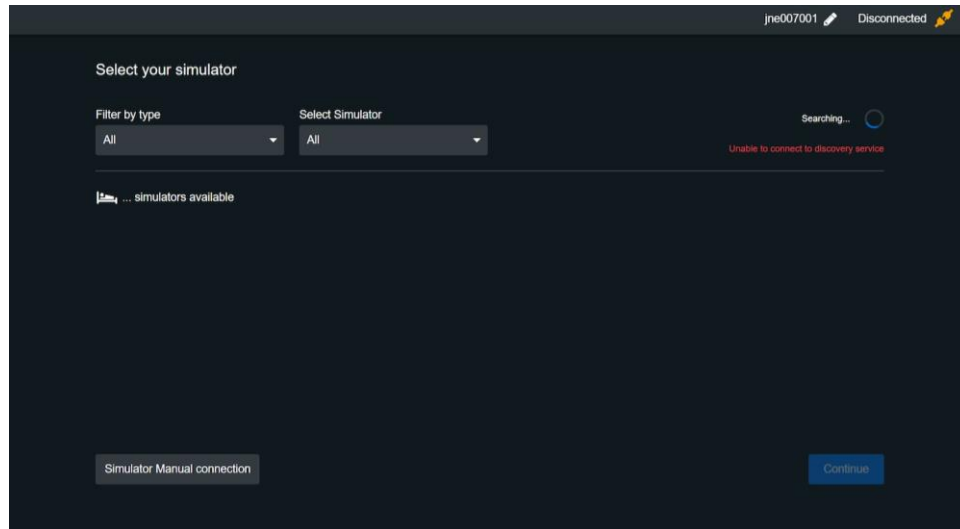
**Note:** Before starting this process, ensure all simulators are powered and connected to the central router. They do not need to be running a patient.

To connect Patient Monitors to the MultiSim network:

1. Connect the Patient Monitor to the MultiSim network by following steps a-d:
  - a. Tap the Wi-Fi icon on the tablet or laptop to view the panel of Wi-Fi networks.
  - b. Locate the MultiSim Wi-Fi network, check the box to connect automatically, and tap **Connect**.
  - c. Enter the password for this network (caeadmin).
  - d. If the discoverable PC prompt appears, tap Yes.

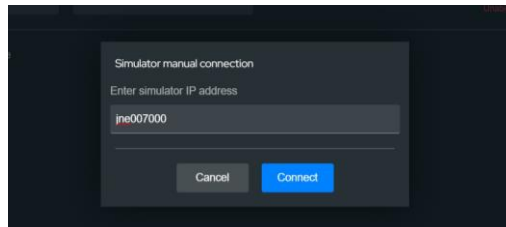
**Note:** Tap anywhere on the screen outside the panels to close the Wi-Fi panel.

2. Wait a few moments while the Patient Monitor connects to the Multisim network.
3. Tap or click on **Maestro** icon to launch the application.
4. The Select your simulator window appears.



**Select your simulator Screen**

5. Tap **Simulator Manual connection**.



**Manual Connection Entry**

6. Using the keyboard, delete “simulator.local” from the text field and enter the serial number found on the back of the designated simulator’s tablet or behind the removable pad on the manikin’s hip. (ex. JNE007000)
7. Tap **Connect**.
8. The Maestro Home screen appears.
9. Tap or click on **Patient Monitor** to launch the application..

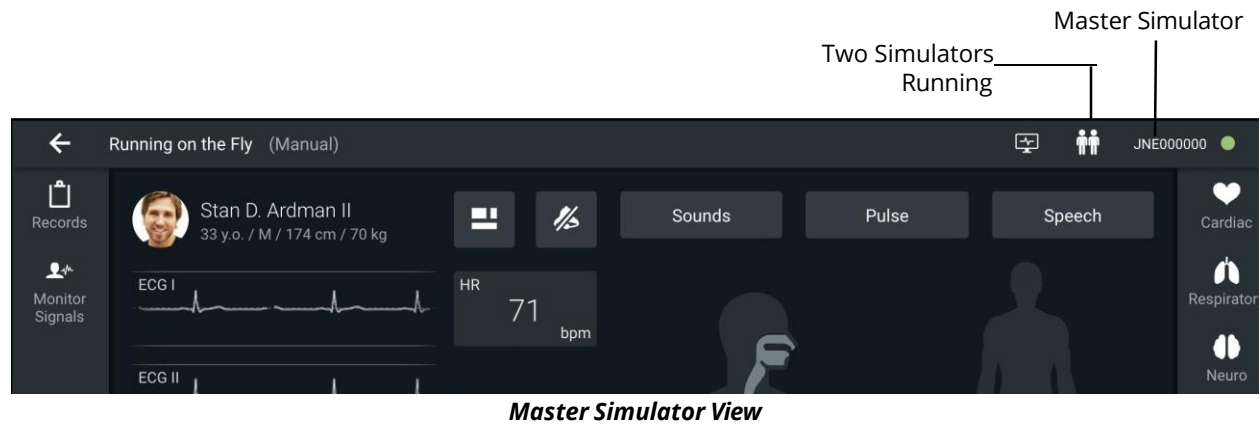
# Using MultiSim

The MultiSim feature provides views and options that differ from running simulations without MultiSim. This section describes only those views and options using MultiSim.

## Run a Simulation

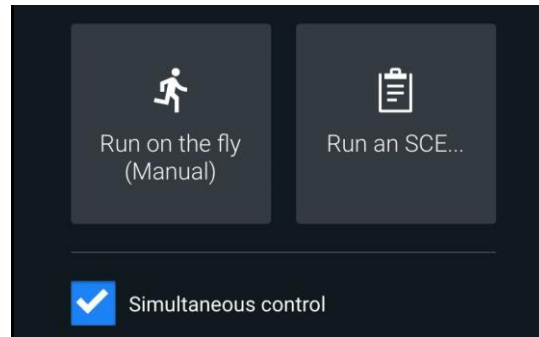
The tablet and simulator from which you run all simulations is designated as the “master” simulator. The screen displays a list of simulators included in the simulation, but vitals and patient information will appear only for the master simulator. Any changes made to the master simulator (such as parameters, conditions, sounds, pulse, etc.) will apply to all simulators.

**Example:** Two simulators are configured to run a simulation (JNE000001 and JNE000002). You run the simulations from JNE000001’s tablet, which becomes master. You will see two simulators running, and data displaying for only the JNE000001 simulator. Any changes made to the master will apply to JNE000002.



To run multiple simulators for a session:

1. From the Maestro Home screen, tap the check the box next to **Simultaneous Control**.

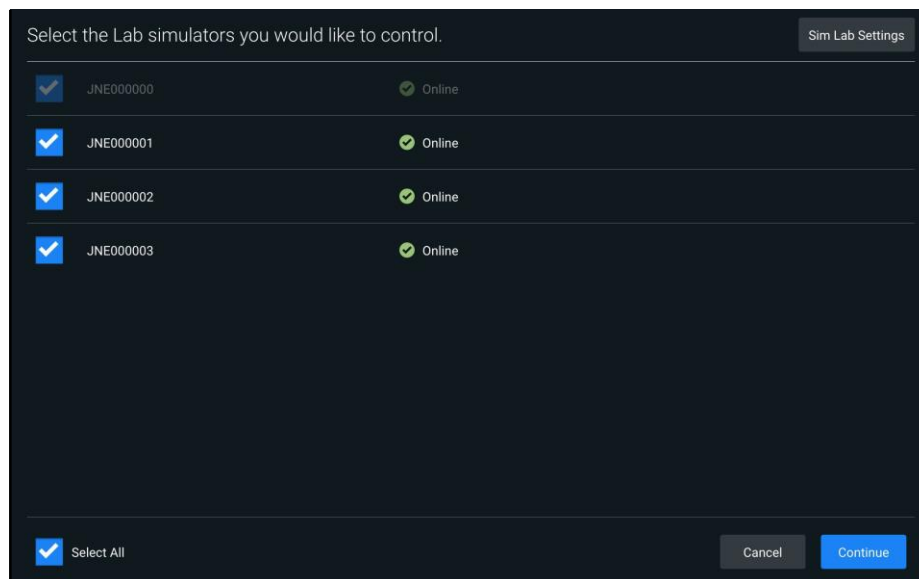


### ***Simultaneous Control***

2. Tap an option to run simulations: **Run on the fly (Modeled or Manual)** or **Run an SCE**.
  - If you selected Run on the fly (either mode), you are prompted to select a **Gender**, and then tap Start.
  - OR
  - If you selected Run an SCE, tap the Play for the desired session.

**CAUTION:** When running an SCE, if a simulator has another version of the selected SCE, a message appears indicating that the other version will be overwritten. To continue, tap **Overwrite other SCE versions**.

3. From the list of connected simulators (which appear as Online), select two or more to simulators to control, or tap **Select All**.



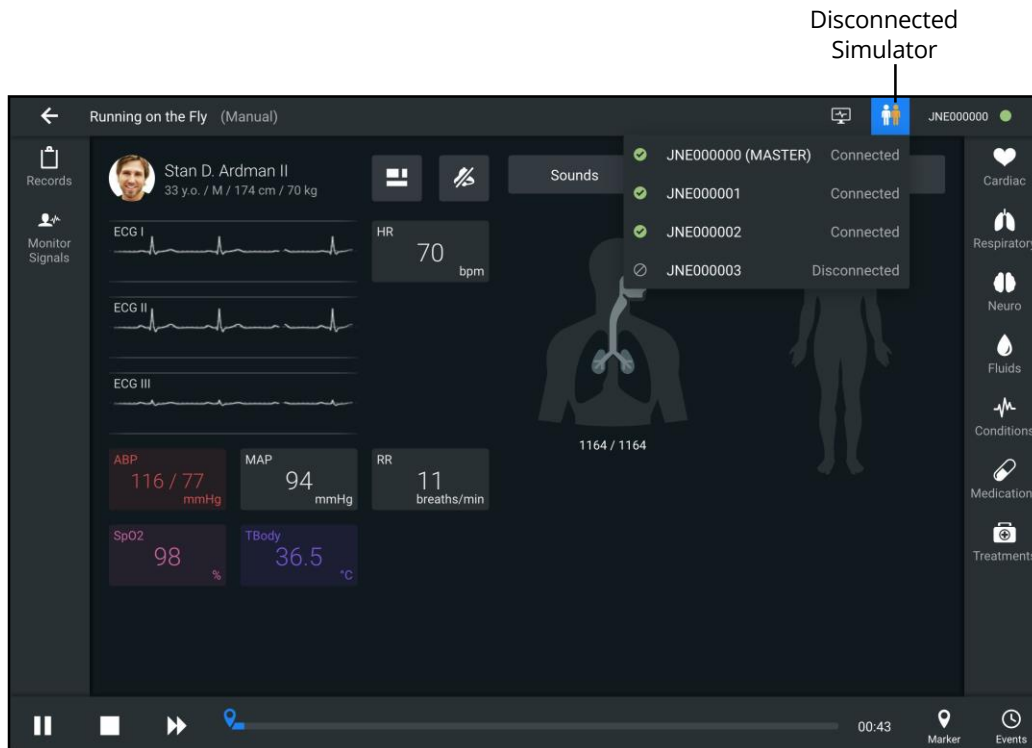
### ***Select Simulators***

4. Tap **Continue**.

The Runtime screen appears.

**Note:** If a simulator disconnects while running a simulation, the simulator icon changes color. This may happen, for example, if the WiFi connection is lost.

To display a list of disconnected simulators, tap the **Simulator** icon.



**Runtime Screen**

The system will automatically reconnect when it becomes available again.