

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 <u>https://www.caehealthcare.com/solutions/product-types/software/</u><u>software-updates/</u> 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 S	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.

		JNE000815 🔍
Applic	cations	
Maestro	(TP) PatientMonitor	

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.

•••	CAE Maestro	
MS CAEMaestro	v l	2
÷		
(i) About	Simulator	
Preferences	Juno 192.168.53.5	
On License Manager	Software Version 2.5 JNE (41)	
A Maintenance	Install Update	
👬 Sim Lab	Data Management	
E Content Library	Last Data Backup Never Backup Data Restore Data System Configuration Disk Space 22.3 GB Available (81% free)	
	System Time Wed Sep 29 2021 14:49:41 -0400 Edit Time	

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.

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Connection Wizard Interface

10. Tap Start.

Simulator serial: JNE000123	Config	guring Juno		
Set a maintenance password for your	2 Select an operating mode for your simulator	Choose a simulator connection method		(4) Q Add a discovery service
	Set maintenance password for y This will be used as the simulator's administra Old Password New Password Confirm New Password A Make sure you store it in a secure location A Alphanumeric characters only	our simulator	\$ \$	
				Cancel Continue

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.

Maestro MultiSim Getting Started Guide



14. Tap Confirm.

The simulator connection method step appears.

Sim	ulator serial: JNE007001			
		Config	guring Jne	
		<u> </u>		
	1			(4)
	<u>_</u>	<		
	Set a maintenance password for	Select an operating mode for your	Choose a simulator connection	Add a discovery service
	your simulator	simulator	method	
		Choose a simulator connection r	method	
		Select Wired if the simulator will be attached to	a facility network using an Ethernet cable	
		O WI-FI		
		Wi-Fi Network		
		CAE_multisim_xxxxx	- C	
		O 2.4 GHz 5 GHz		
		Password		
			•	
		🔵 wpa2 💿 wpa		
	Back			Cancel

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_xxxxx
- 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.

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- 20. Select WPA2.
- 21. Tap Finish.

The discovery service step

Simulator serial: JNE007000			
Set a maintenance password for your simulator	Select an operating mode for your	Choose a simulator connection method	Add a discovery service
	Add the discovery service The discovery service registers your simulator on the service hostname, please talk to your system admit Enter discovery service hostname	he network. If you do not know the discovery nistrator:	
	172.20.20.xxxx	Ing prior to continuing.	
Back			Cancel Confirm

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.

CAE Maestro			- d ×
Simulator serial: JNE007000			
	Configuration Click on "Connect" to esta	complete. blish the connection	
Set a maintenance password for your simulator	Select an operating mode for your	Choose a simulator connection method	→ Add a discovery service
	Summa Online Mi Discovery IP: Ty Simulator IP: Auton DNS: Automati SSID to connect to: CAE Password for SSID: ••	ary ade z.Wi-Fi Z.2020 xx atric (DHCP) :(DHCP) :(DHCP) :(DHCP) 	
Back			Cancel Connect

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.

Configuration complete. Cosk on "Connect" to establish the convection									
			0						
	Select an operating mode for your dimulator	Choose a similar consist ton method	Add a discovery service						
	If the simulator is connecting to Discovery service in 120 second, it will revert to an offline configuration.								
	116 Verify that the manikin was abl	e to connect to the network							
	What did the si	mulator say?							
(Acal			Carol Correct						

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.

CAE I	Maestro	-	o ×
Simu	Jator serial: JNE007000		
	MS		
	CAE Maestro		
	Juno was successfully connected		
	Start using CAE Maestro		
	P Type here to search	7:54 A	M 024 🔚

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.

MS	CAEMaestro	~			0
•	÷				
i	About	Sim Lab			
¢	Preferences	Add up to 10 simulators in yo order to be controlled by the	our lab. All simulators must have a valid lice master.	ense and the same software versior	n than the master in
o 	License Manager	Simulator Name	Status	Warnings	
٩	Maintenance	JNE000001	🧭 Online		Ō
**	Sim Lab	JNE000002	🧭 Online		Ō
Đ	Content Library		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	×
3 available simulators	
JNE000001	
JNE000002	
JNE000003	+

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.

Manually add simulator

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.



			jne007001 🖋	Disconnected 💅
Select your	simulator			
Filter by type	Select S	mulator	Searchin	g
All	← All			
Simulator Ma	rs available			
Simulator Man	ual connection			

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.



Master Simulator View



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

^o 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.

I					Disconnected		
						LUI	
Running on the Fly (Manual)					🖅 👬 JNE000000 🗢		
L Decorda	🝙 Stan D. Ardman II	- 1/4	Sounds	JNE000000 (MASTER)	Connected		Carolina
Records	33 y.o. / M / 174 cm / 70 kg	- 73	 Image: Constraint of the second second	JNE000001	Connected		Cardiac
Monitor	ECGI	^{HR} 7∩	0	JNE000002	Connected		Respiratory
oignais		, O bpm	L.	JNE000003	Disconnected	46	
							Neuro
	FCC III		6) Fluids
							-∿-
	ABP	RR	1164 / 1164				Conditions
	116/77 94 mmHg mmHg	11 breaths/min					Medications
							•
	98 <u>36.5</u>						Treatments
						-	
					00:43	Marker	Events

Runtime Screen

The system will automatically reconnect when it becomes available again.