









The documentation, best practices, and recommendations provided by READY Robotics do NOT constitute safety advice. Products sold through READY Robotics are not by themselves a fully integrated workcell. As required in ISO 10218-2, READY Robotics strongly recommends performing a complete risk assessment of the integrated workcell per ISO 12100. You may wish to use the methodology found in the ANSI/RIA TR R15.306 Task-based Risk Assessment Methodology.



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## **OVERVIEW**

This guide helps you set up your Stäubli CS9 controller to work with Forge/OS 5.

You will follow these steps:

- 1. Set up Safety I/O hardware.
- 2. Connect the READY pendant.
- 3. Connect the robot controller to the IPC.
- 4. Power on your systems.
- 5. Get robot configuration files from Forge/OS.
- 6. Change robot settings and transfer the robot configuration files.
- 7. Add the robot in Forge/OS!

**Note:** This guide assumes that you have installed the robot and CS9 controller following Stäubli instructions. Make sure the robot controller is in working order before moving on. We recommend backing up your robot controller.

### REFERENCES

Reference	Description, Link
[1]	Amphenol Connector Assembly Instructions,
	www.amphenol-sine.com/pdf/M23-Series-Assembly-Instructions.pdf

# HARDWARE REQUIREMENTS

Image	Part Name	Description	Vendor	Part Number
Patient Patient	READY IPC	Hosts Forge/OS. <b>Note:</b> READY offers two IPCs: <b>Forge/Hub</b> and <b>Forge/Ctrl (legacy)</b>	READY Robotics	
	READY pendant	The touch screen interface for Forge/OS.	READY Robotics	112563
	READY pendant Junction Box (Forge/Ctrl only)	Connects the READY pendant to the Forge/Ctrl and robot controller.	READY Robotics	R-101257
	12-Pin M12 to Flying Leads Cable	Connects to the READY pendant Junction Box or Forge/Hub to terminals.	READY Robotics	
	CS9 Robot Controller	Connects the robot arm to power and to other devices.	Staubli	



Image	Part Name	Description	Vendor	Part Number
	Staubli Pendant	Configures the robot controller's Ethernet port, IP address, Subnet Mask, and other settings.	Staubli	
	17 Position Straight Plug Connector Kit, Threaded, E Type	Required to connect the READY pendant safety features to the Stäubli controller pendant port.	Amphenol	MA7CAE1700-S1-KIT
	Cat5e Shielded Ethernet Cables (x2)	<ul> <li>Connects the robot controller to a IPC.</li> <li>Connects the READY pendant to a IPC.</li> </ul>		
A REAL PROPERTY OF	USB flash drive, 8GB or larger	Required to transfer robot files from Forge/OS to the robot.	READY Robotics	R-400030



# SOFTWARE REQUIREMENTS

Controller	Minimum Software Version
CS9	s8.12.1

*Tip:* To check what software version your controller is on, refer to the next section: <u>Confirming Software</u> <u>Requirements</u>.

You also need the items in the table below:

Requirement	Part Number	Description	Supplier
Remote MCP Runtime License Option	D14327660	Required to connect the READY pendant to the robot controller and to control the robot.	Ctäubli
Stäubli Robotics Suite (SRS) Software for Windows PC	-	Required to configure the Stäubli controller and transfer Forge/OS files to the controller.	Stäubli



### CONFIRMING SOFTWARE REQUIREMENTS

Follow these steps to check the software version on a CS9 robot controller.

Plug the Stäubli controller into a power source. Follow Stäubli instructions for powering the controller. 1 Turn the power switch on the controller clockwise to power the controller on. Wait for the controller to boot up. On the Stäubli teach pendant, press the Home button in the upper-left corner. 3 Tap **ROBOT** on the touchsreen. Δ 2 Ξ. Ŧ  $\bigcirc$ LOGGER VALE 10G  $\odot$ ·(II) R V: ROBOT SETTINGS 10 400 青 141 2 3 1010 8 ..... 3 STÄUBLI SP2







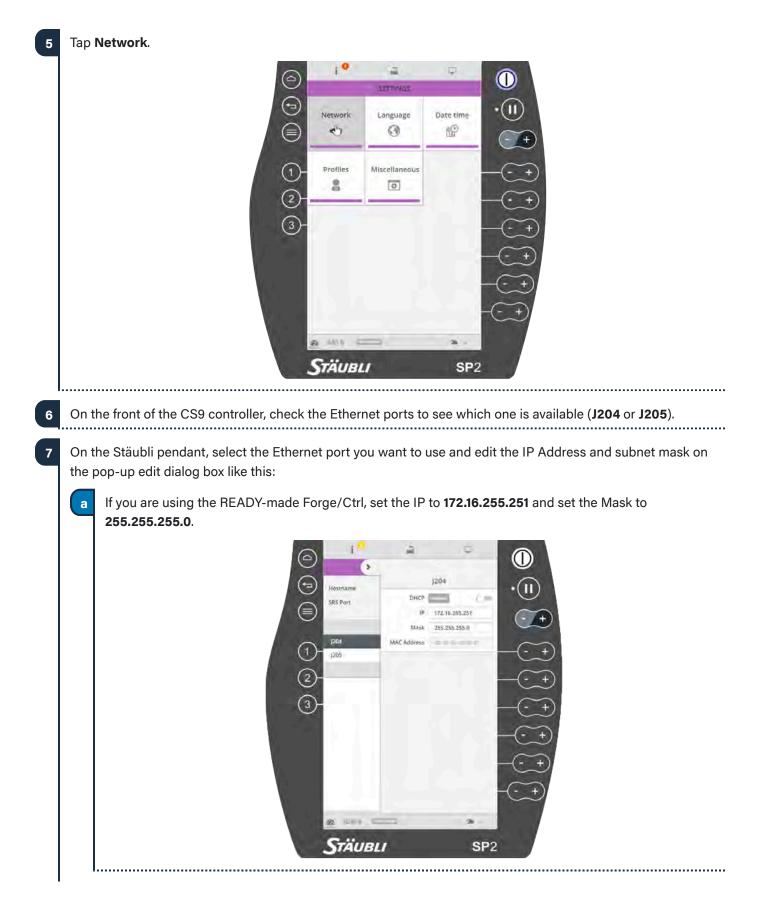
# **CHANGING THE STÄUBLI NETWORK SETTINGS**

Follow these steps to configure the Stäubli controller to connect with Forge/OS. You will disconnect the Stäubli pendant at the end of this section.

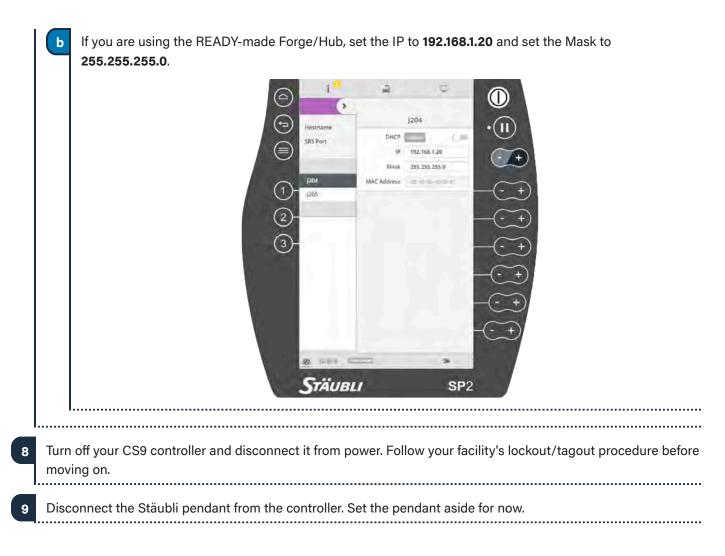
Plug the Stäubli controller into a power source. Follow Stäubli instructions for powering the controller.
 Turn the power switch on the controller clockwise to power the controller on. Wait for the controller to boot up.
 On the Stäubli teach pendant, press the HOME button in the upper-left corner.
 Tap SETTINGS on the touchscreen.



### READY









# **CONNECTING THE READY PENDANT**

The READY pendant includes these safety outputs:

- 1. Key Switch (Robot Operation Mode)
- 2. Three-Position Enabling Switch
- 3. Emergency Stop Button

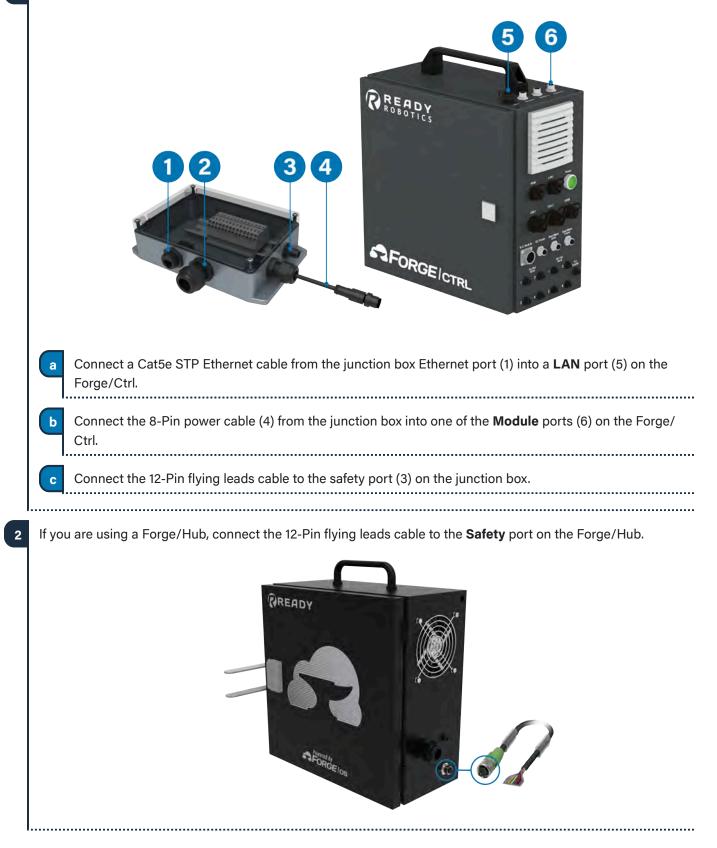




**Electric Shock Warning:** Disconnect all components from power sources before attempting this installation.







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b



Follow these steps to route the flying leads to their destinations in this table:

12-Pin Cable	Function	Destination
Brown	Enabling Switch Circuit 1	J103 - 7
Blue	Enabling Switch Circuit 1	J103 - 8
White	Enabling Switch Circuit 2	J103 - 12
Green	Enabling Switch Circuit 2	J103 - 17
Pink	Emergency Stop Circuit 1	J103 - 3
Yellow	Emergency Stop Circuit 1	J103 - 4
Black	Emergency Stop Circuit 2	J103 - 5
Grey	Emergency Stop Circuit 2	J103 - 6
Red	Key Switch Circuit 1	External Power - 24V
Violet	Key Switch Circuit 1	Safety Relay - B1
Grey/Pink	Key Switch Circuit 2	External Power - 24V
Red/Blue	Key Switch Circuit 2   Safety Relay - B2	

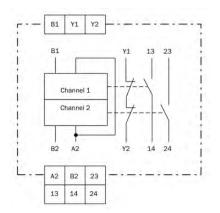
The enabling switch and emergency stop circuits connect to the Stäubli pendant port (J103) on the CS9 through the Amphenol M23 connector. Assemble the M23 connector using the destination table and these assembly instructions:<u>www.amphenol-sine.com/pdf/M23-Series-Assembly-Instructions.pdf</u>. The pin numbers of the Amphenol connector and the Staubli pendant port match.

Attach the M23 connector to port J103 on the CS9: align the male pins to the female holes and screw the connector's shell on clockwise.



4 Finish connecting the Key Switch circuit to J101 through a safety relay. This example uses a SICK UE10-2FG safety relay.





In this table, connect the two destinations that share a row:

12 Pin Cable	SICK Relay	CS9 Safe Input Block	24V External Power Supply
Violet	B1		
Red/Blue	B2		
	13	J101 - 5	
	Y1	J101 - 5	
	14	J101 - 2	
	Y2	J101 - 3	
	A2		0V



5

If use a safety fence, connect the fence contact safety inputs to J100:

Connect terminals J100-9 and J100-11 with a jumper wire.

Function	Destination
Fence: Contact 11	J100 - 9
Fence: Contact 12	J100 - 11
Fence: Contact 21	J100 - 10
Fence: Contact 22	J100 - 12

If you do not install external safety fencing:

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Connect terminals J100-10 and J100-12 with a jumper wire.



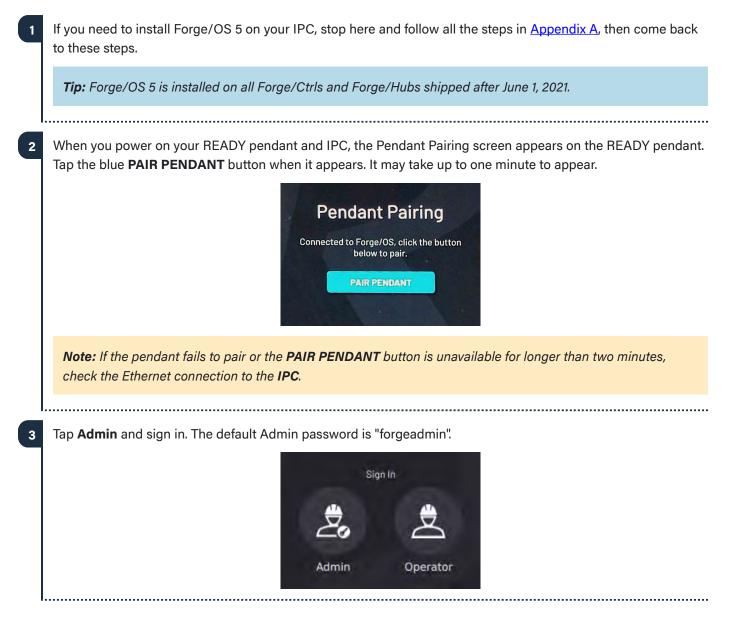
## **POWERING ON**

1	Reconnect the Stäubli controller to a power source and turn it on.
2	Plug your IPC's power cable into a power outlet.
3	Power on your IPC.
	<b>Note:</b> If you are using a Forge/Ctrl, turn the Power Disconnect Switch to <b>ON</b> . Then press the green power button on the other side.
4	If there are issues, power off each device, disconnect from power supplies, and check your wiring.



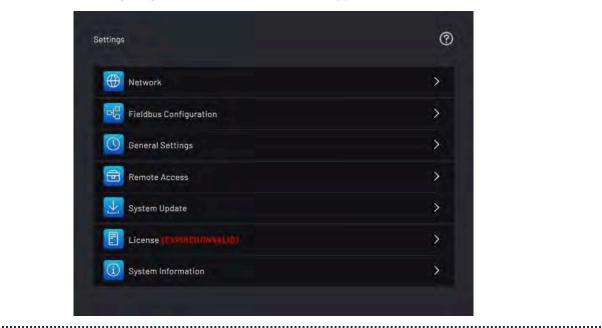
# SIGNING IN TO FORGE/OS

Follow these steps to pair the READY pendant with the IPC and sign in to Forge/OS 5.





4 If Forge/OS is inactive, it opens the Settings app and prevents you from opening other apps. If you see the screen below, follow <u>Activating Forge/OS with a License Code</u> in Appendix A.

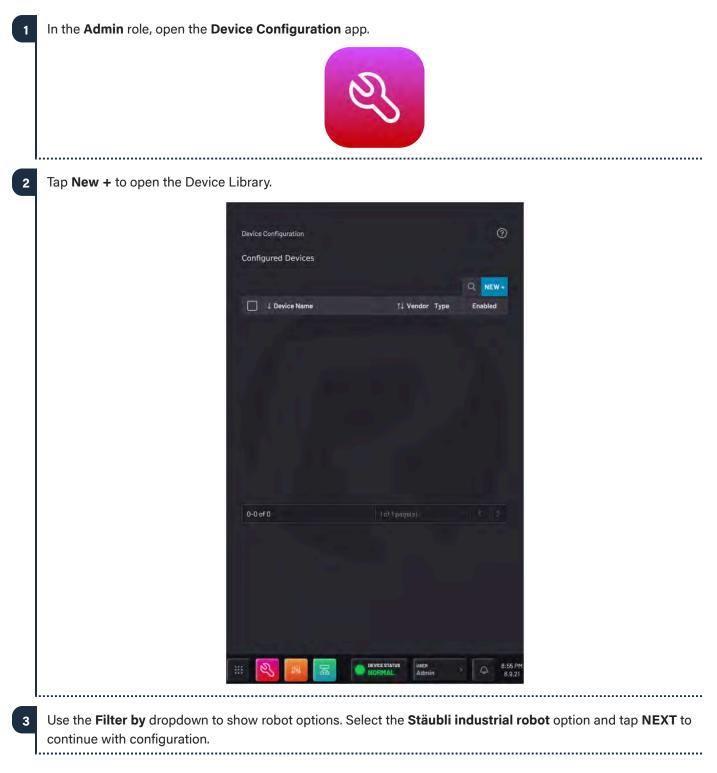


5 With Forge/OS active, move on to the next section.



# **GETTING SETUP FILES FOR YOUR ROBOT**

In this section, you add the robot in Forge/OS and copy configuration files to the robot controller.





4	Select the robot contro	ller model, then select the ro	obot mo	del. You can fill in the	other information later.	
		an a				
		Staubli industrial Ro	obot		0	
		Device Name				
		Description				
		IP Address				
		Controller Model		Robot Model		
		CS9	~	TX2-40	~	
		Force Sensor Device Select a Force Device			~	
		Copy the Configuration Files				
		Insert a 2GB flash drive into the Forge/O the setup of your robot	S IPC to copy	the configuration files needed to o	complete	
		Insert USB St	orage device	into Forge/OS IPC		
5	Insert a USB flash drive storage.	into the IPC as instructed c	on the so	creen. Use an empty fl	ash drive with at least 2GB of	
	Tip: Do not connect th	ne USB flash drive to the <b>RE</b> J	ADY per	ndant.		
6	Tap <b>Start Transfer</b> and	wait for it to finish.				•••
						•••
7	Remove the USB flash (	arive when prompted.				

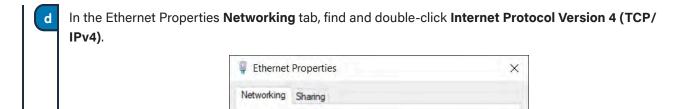


# **COPYING FILES TO THE ROBOT**

In this section, you will set up the robot controller and copy configuration files to the robot with Stäubli Robotic Suite.

		C C	ne IP settings to connect with the Stäubli controller.
	on your Windows compute ght-click the Start Menu I	•	the Run box. To open Run, press <b>Windows key + R</b> on the keyboar nd select <b>Run</b> .
b Ir	n the Run pop-up, type "no	cpa.cpl"	(Network Connections panel) and click <b>OK</b> .
		🖅 Run	×
			Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
		<u>O</u> pen:	ncpa.cpl ~
			OK Cancel Browse





Intel(R) Ethemet Connection (6) 1219-LM

FortiClient NDIS 6.3 Packet Filter Driver
 Internet Protocol Version 4 (TCP/IPv4)
 Microsoft Network Adapter Multiple.sr Protocol

Uninstall

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication

This connection uses the following items:

Microsoft LLDP Protocol Driver Internet Protocol Version 6 (TCP/IPv6)

across diverse interconnected networks.

.....

QoS Packet Scheduler

Configure.

\*

>

Cancel

.....

Properties

OK

Connect using:

<

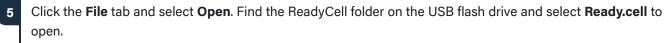
Install...

Description



	he READY-made Forge/Hub, set the IP address to <b>192.168.1.30</b> and set the Sub
mask to <b>255.255</b>	.255.0.
	Internet Protocol Version 4 (TCP/IPv4) Properties
	General
	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
	O Obtain an IP address automatically
	Que the following IP address:
	192.168.1.30
	Subnet mask: 255 . 255 . 0
	Default gateway:
	Obtain DNS server address automatically
	● Use the following DNS server addresses:
	Preferred DNS server:
	Alternate DNS server:
	Validate settings upon exit Advanced
	OK Cancel
I	
Click <b>OK</b> to save these	settings.
	5
·····	
Launch Stäubli Robotic Suit	





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Profile Remote Debug Show Remote Editor Options on... + Emulator Access... +

Controller

Remote Physical

10s

Transfer

Manager Editor

Paste

Clipboard

20

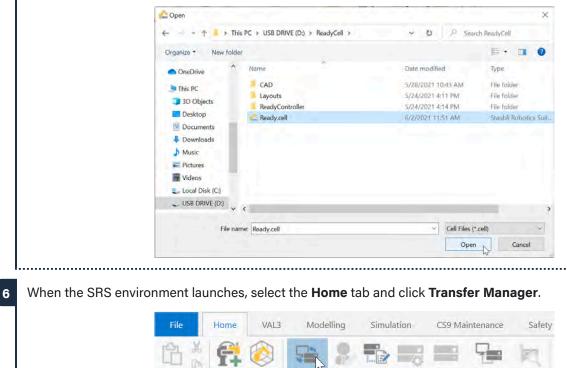
Add

. . . . . . . . .

Show

3D view

Cell





Select your controller in the **Target** area. In the **Host** field, enter the IP address of the Stäubli controller (the example below shows the IP address of the robot if you're using the Forge/Ctrl). For the **User name**, select **default**.

Target Name	General Informat	ions		-
Default	Host	172.16.255.251		• ()
CS9	Comment			
	Controller Versio	on s8.12.1Cs9 <u>B</u> 52449 (CS	9)	
	Remote connecti	on		
	User name	default		
	Password	*****		
	Port 5	653 🛟 🄊		
* × /				

8 Click **OK**. If you see an error and you cannot click OK, check the Ethernet cable to the Stäubli controller and the network settings on your PC. Then go back to the SRS Targets window and press the **refresh icon** next to the **Host** address.

9 On the **Transfer Manager** window, the left side shows the READY driver files and the right side shows the files on the Stäubli controller. On the right side, select the checkbox next to **VAL3 Applications** and click **Delete** to remove existing programs from the Stäubli controller. Wait for the process to finish. If there are no VAL3 applications on the Stäubli controller, move on.



10	On the left side, select all IO options, select Profiles > READY_ROBOTICS, and select VAL3 Applications >
	app forge.

	Transfer Manager - F17_5CBCB1_C_01 [s8.12.1Cs9_BS2449] — 🗆 🗙
	File View Language ?
	Controller - F17 5CBCB1 C 01 [s8.12.1]
	< >> < >>
	Excluded filters
the existing f	
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.
2 Wait for the	transfer to finish (when the blue >> button reappears). Expand the tree on the right to make sure and VAL3 Applications transferred onto the Staubli controller.



een the Run box. To open Run, press <b>Windows key + R</b> on the k n and select <b>Run</b> . cpl" (Network Connections panel) and click <b>OK</b> . Run × Type the name of a program, folder, document, or Internet resource, and Windows will open it for you. en: ncpa.cp × OK Cancel Browse
Run       ×         Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.         en:       ncpa.cpl
<ul> <li>Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.</li> <li>en: ncpa.cpl </li> </ul>
Internet resource, and Windows will open it for you.
OK Cancel Browse
window, double-click the Ethernet connection you are using on one Ethernet port, it's the <b>Ethernet</b> option.
Ethernet Properties ×
tworking Sharing
ionnect using:
Intel(R) Ethemet Connection (6) I219-LM
Configure
Npcap Packet Driver (NPCAP)     QoS Packet Scheduler     FortiClient NDIS 6.3 Packet Filter Driver
Internet Protocol Version 4 (TCP/IPv4)     Microsoft Network Adapter Multiple.st Protocol     Microsoft LLDP Protocol Driver     Internet Protocol Version 6 (TCP/IPv6)
< >>
Install Uninstall Properties
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel



	General Alternate Configuration	
	You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	
	Qbtain an IP address automatica	ly
	OUse the following IP address:	
	IP address:	
	Subnet mask:	
	Default gateway:	
	Obtain DNS server address autor	natically
	O Use the following DNS server add	
	Preferred DNS server:	
	<u>A</u> lternate DNS server:	
	Validate settings upon exit	Advanced
		OK Cancel
Click <b>OK</b> to save these	e settinas	

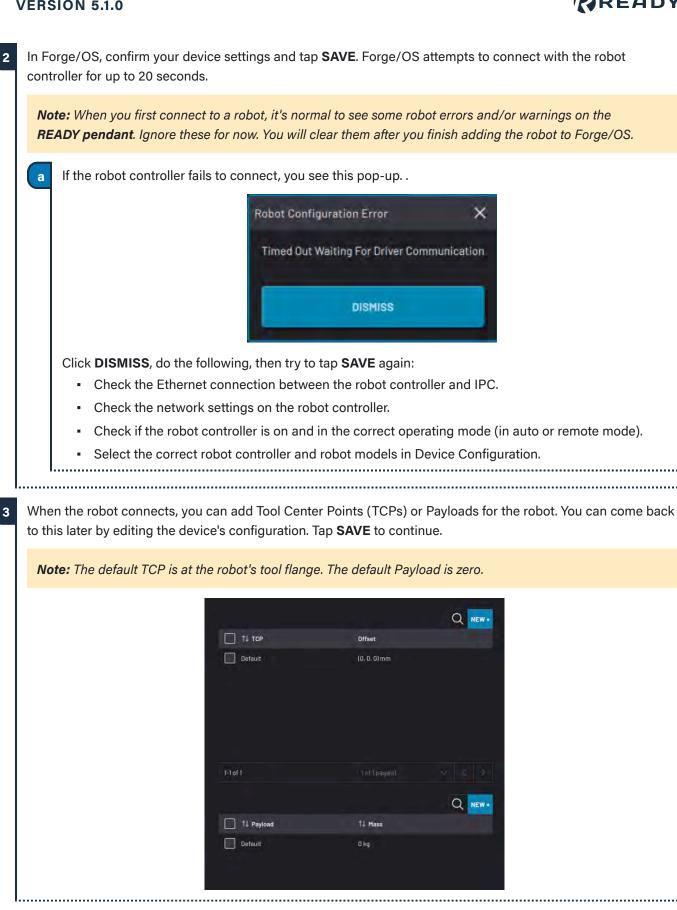


# ADDING THE ROBOT IN DEVICE CONFIGURATION

In these steps, you save the robot in the Device Configuration app and finish the setup.

	ing the READY-made <b>Forge/Ctrl</b> , enter th		
READY-mac different, en	e <b>Forge/Hub</b> , enter the IP Address <b>192.16</b>	<b>8.1.20</b> . If the IP a	address you assigned to the
unierent, en			
	a state of the second second second		
	Staubli industrial Robot		0
	Device Name		
	Description		
	IP Address		
	Controller Model	Robot Model	~
		These .	
	Force Sensor Device		~
	Copy the Configuration Files		
	Insert a 2GB flash drive into the Forge/OS IPC to copy t the setup of your robot	he configuration files need	ied to complete
	Insert USB Storage device i	nto Forge/OS IPC	





(Optional): Set up the robot controller's Input/Output (IO) signals for use in the Device Control Panel and Task



Canvas.

	Inp				
		out Signals	Output Signals		
	1			Q	
	Signals	Display Name	Data Type	DCP	
	CI_O		BOOL		
	CL1		BOOL		
	CI_2		BOOL		
	CI_3		BOOL		
	ÇI_4		BOOL		
	CL_5		BOOL		
	CI_6		BOOL		
	CL_7		BOOL		
	DLO		BOOL		
	DLT		BOOL		
	DI_2		BDOL		
	DL3		BOOL		
	DL_4 1-13 of 22		BOOL		
		ANCEL	SAVE		
	<b>ne</b> (i.e. "Open Ma nal does in other	•	en Pneumati	c Vise", or "Star	t Machining Cycle
ou want a signal	to appear in the [	Device Control Pa	nel, check th	e <b>DCP</b> box nex	t to that signal.
ote: To use these	l/O signals, integ	grate your I/O dev	ices with the	robot controller	r.
			•••••		
	S returns to the C	onfigured Device	s list, which	shows the new	robot as enabled
SAVE. Forge/O					



5 Follow these steps to clear robot errors:

	Force Sensor	ок 🔘
	OK	
	Clamping Gripper	ok 🥥
	ок	
	8 Robot arm	DISCONNECTED
	ERROR - Rabot is disconnected.	MORE C RESET
	··· 🛐 🗰 🖪 🔎	DEVICE STATUS Lithou Admin 3 5.5.21
I		
Tap <b>RESET</b> to try	to recover from the errors. If you ca	an't <b>RESET</b> an error, tap <b>MORE</b> to get more detai
and instructions.		

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# **APPENDIX A: SETTING UP FORGE/OS**

### **INSTALLING FORGE/OS**

Follow these steps to install Forge/OS and sign in to the Admin role. Installation takes about 30 minutes, depending on the resources of the IPC.

To install Forge/OS, follow these substeps. You need a Forge/OS installation USB flash drive. Contact your READY Robotics distributor for an installation USB drive.

Important: Installing Forge/OS will erase all data on the target hard drive.

a Connect a monitor, keyboard, and mouse to the IPC where you want to install Forge/OS.



Plug the Forge/OS installation USB flash drive into the IPC.

Tip: If you need more USB ports, use a USB 3.0 hub.

Restart the IPC. While the IPC is powering on, press the keyboard hotkey that takes you to the Boot Menu.

*Tip:* The key that opens the Boot Menu depends on the *IPC* model. The most common keys that do this are ESC, F10, F11, or F12. Refer to your computer's documentation for boot options.

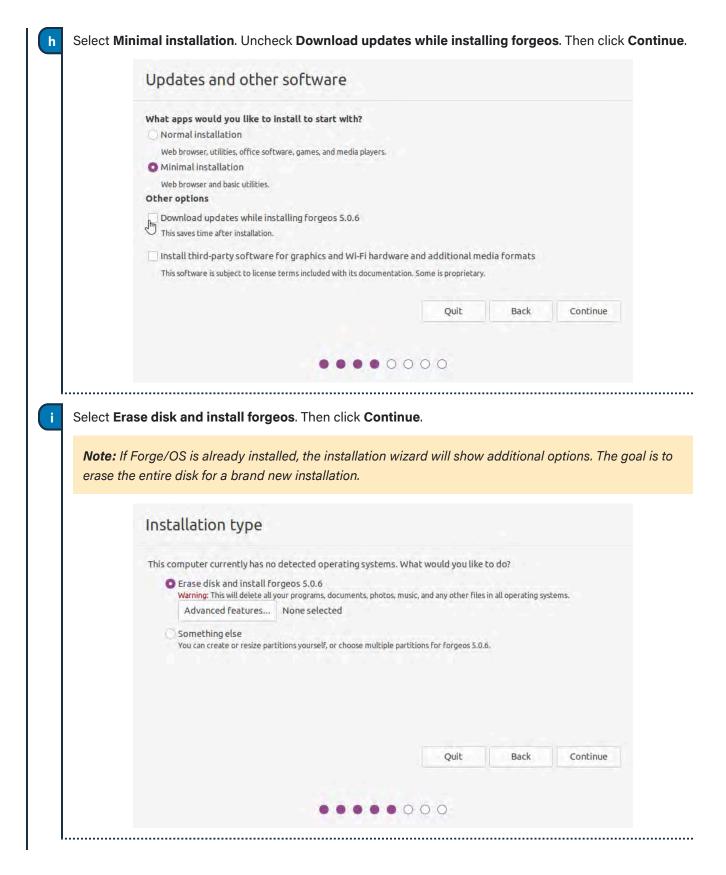
**Note:** If you're installing Forge/OS on a **Forge/Ctrl**, press F11. You may need to enter the **BIOS Admin password**. Contact READY Support if you run into this issue.

From the boot options, select Install Forge/OS to boot from the installation USB flash drive.

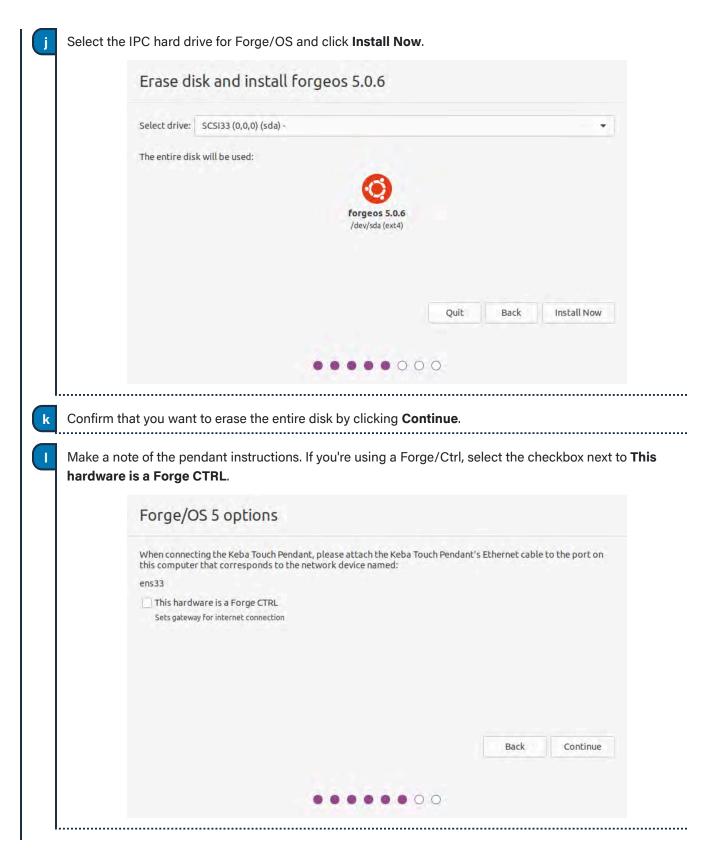


	Welcome	
	English Español Esperanto Euskara Français Gaeilge Galego Hrvatski Íslenska Italiano Kurdî Latviski Lietuviškai	Install Forge
Choose	a keyboard layout. Then click <b>Cont</b> Keyboard layout	• • • • • • • • • • • • • • • • • • •
Choose	a keyboard layout. Then click <b>Cont</b> Keyboard layout Choose your keyboard layout:	
Choose	a keyboard layout. Then click <b>Cont</b> Keyboard layout	
Choose	e a keyboard layout. Then click <b>Cont</b> Keyboard layout. Then click <b>Cont</b> Choose your keyboard layout: English (Nigeria) English (South Africa) English (UK) English (UK) Esperanto Estonian Faroese	inue.
Choose	e a keyboard layout. Then click <b>Cont</b> Keyboard layout. Then click <b>Cont</b> Choose your keyboard layout: English (Nigeria) English (Nigeria) English (South Africa) English (UK) Esperanto Estonian Faroese	inue.





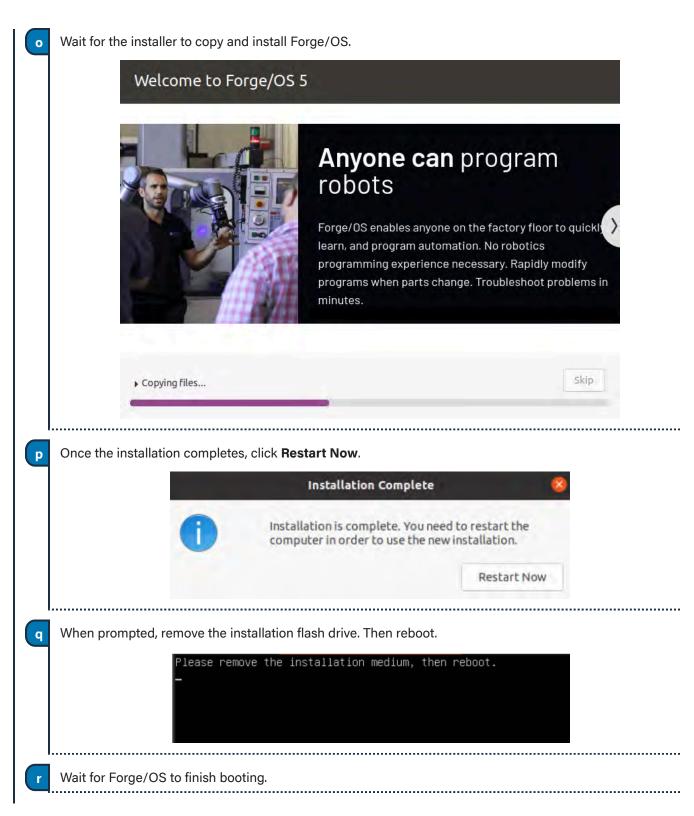




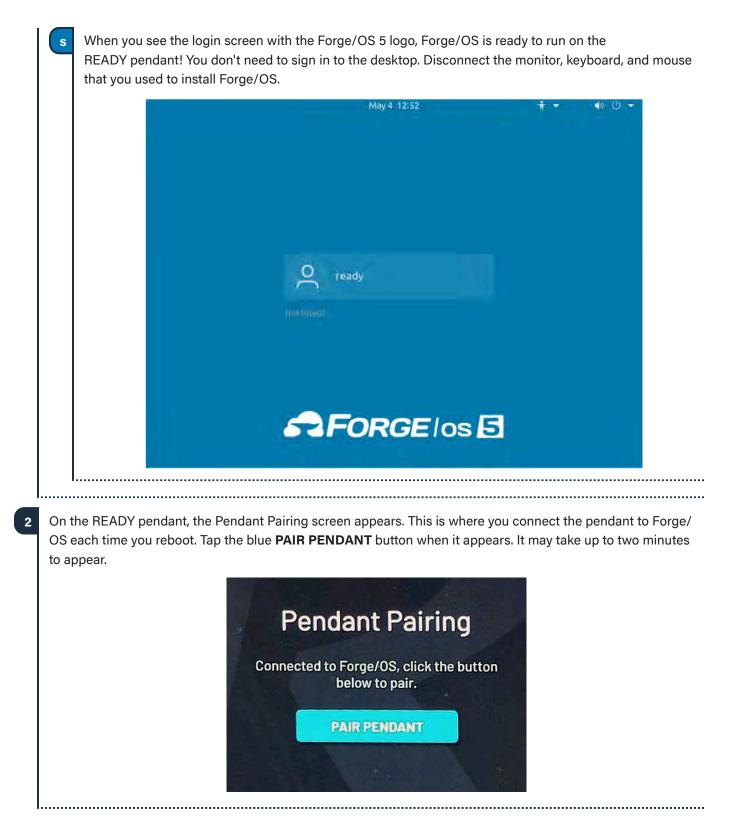


m	Choose your timezone. Then click <b>Continue</b>	<b>G</b> ,
	Where are you?	
	New York	
		Back Continue
n	Choose your IPC's host name. The host name password. Then click <b>Continue.</b>	me identifies the IPC on the network. Pick a username and
n	password. Then click <b>Continue.</b>	ou create here are for accessing the IPC desktop. They are
n	password. Then click <b>Continue.</b> <b>Note:</b> The username and password that you NOT for signing into Forge/OS on the <b>REA</b> Who are you?	ou create here are for accessing the IPC desktop. They are NDY pendant.
n	password. Then click <b>Continue.</b> <b>Note:</b> The username and password that you NOT for signing into Forge/OS on the <b>REA</b> Who are you?	Du create here are for accessing the IPC desktop. They are ADY pendant.
n	password. Then click <b>Continue.</b> Note: The username and password that you NOT for signing into Forge/OS on the REA Who are you? Your name: Your computer's name:	DU create here are for accessing the IPC desktop. They are
n	password. Then click <b>Continue.</b> Note: The username and password that you NOT for signing into Forge/OS on the <b>REA</b> Who are you?  Your name: Your computer's name: Pick a username:	DU create here are for accessing the IPC desktop. They are ADY pendant. Forge User YOUR-HOSTNAME The name it uses when it talks to other computers. forge
n	password. Then click <b>Continue.</b> Note: The username and password that you NOT for signing into Forge/OS on the REA Who are you? Your name: Your computer's name: Pick a username: Choose a password:	DU create here are for accessing the IPC desktop. They are ADY pendant. Forge User YOUR-HOSTNAME The name it uses when it talks to other computers. forge
n	password. Then click <b>Continue.</b> Note: The username and password that you NOT for signing into Forge/OS on the <b>REA</b> Who are you?  Your name: Your computer's name: T Pick a username: Choose a password: Confirm your password:	DU create here are for accessing the IPC desktop. They are NDY pendant.
n	password. Then click <b>Continue</b> . <b>Note:</b> The username and password that your NOT for signing into Forge/OS on the <b>REA</b> Who are you? Your name: Your computer's name: Pick a username: Choose a password: Confirm your password:	DU create here are for accessing the IPC desktop. They are
n	password. Then click <b>Continue</b> . <b>Note:</b> The username and password that your NOT for signing into Forge/OS on the <b>REA</b> Who are you? Your name: Your computer's name: Pick a username: Choose a password: Confirm your password:	DU create here are for accessing the IPC desktop. They are ADY pendant. Forge User YOUR-HOSTNAME The name it uses when it talks to other computers. forge Log in automatically
n	password. Then click <b>Continue</b> . <b>Note:</b> The username and password that your NOT for signing into Forge/OS on the <b>REA</b> Who are you? Your name: Your computer's name: Pick a username: Choose a password: Confirm your password:	Du create here are for accessing the IPC desktop. They are ADY pendant. Forge User YOUR-HOSTNAME I Log in automatically Require my password to log in
n	password. Then click <b>Continue</b> . <b>Note:</b> The username and password that your NOT for signing into Forge/OS on the <b>REA</b> Who are you? Your name: Your computer's name: Pick a username: Choose a password: Confirm your password:	Du create here are for accessing the IPC desktop. They are ADY pendant. Forge User YOUR-HOSTNAME I Log in automatically Require my password to log in



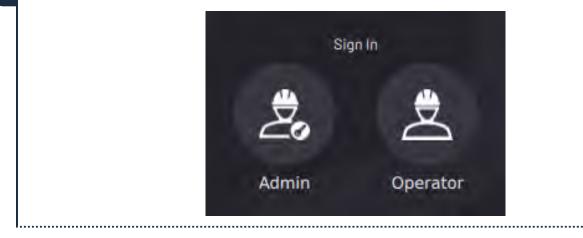








3 Tap Admin and sign in. The default Admin password is "forgeadmin".



**Note:** After installation, you have limited access to Forge/OS until you activate it with a license code. See <u>Activating Forge/OS with a License Code</u>.



# ACTIVATING FORGE/OS WITH A LICENSE CODE

To activate a Forge/OS license, you need:

- A USB flash drive (2GB or greater)
- An internet-connected PC
- A valid Forge/OS license code

*Tip:* Connect a USB keyboard to the port on the bottom of the **READY pendant** to type in any text field in Forge/OS.

On the Settings app main screen, tap License Info.

Settings	Q
	>
며 Fieldbus Configuration	>
General Settings	>
Remote Access	>
System Update	>
E License (EXPIRED/INVALIO)	>
System Information	)

2

Tap **ACTIVATE CERTIFICATE**.

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< License	0	
License Status		
License Code License Name	Unknown License Type	
	ACTIVATE LICENSE	

	e code. Then tap <b>ACCEPT</b> .	
Note: To edit the	e license code after you've tapped ACCEPT, tap the penc	il icon in the top-right corner.
Insert the USB fla	ash drive into your IPC.	
Insert the USB fla	ash drive into your IPC. Then tap <b>START WRITING CER</b>	TIFICATE TO USB DRIVE.
	✓ Settings	0
	License Code:	Ø
	Transfer Activation Certificate Insert a USB Flash Drive to transfer the activation certificate	
	Click start to begin writing	
	START WRITING CERTIFICATE TO USB DRIVE	
Wait for the files t		
NEXT.	to finish transferring. When the file transfer is complete,	remove the USB flash drive and tap
	Settings License Code:	
	< Settings	@
	<ul> <li>Kettings</li> <li>License Code:</li> <li>Transfer Activation Certificate</li> </ul>	•
	<ul> <li>Settings</li> <li>License Code:</li> <li>Transfer Activation Certificate</li> <li>Insert a USB Flash Drive to transfer the activation certificate</li> </ul>	•

READY

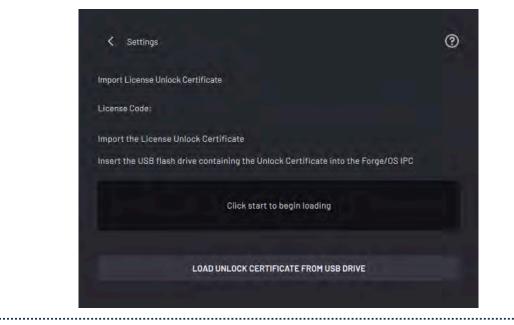


**b** Find the USB drive in your PC file explorer. Open the new "Forge\_OS-License-Activation-Certificate.txt" file from the USB drive and copy all the contents.

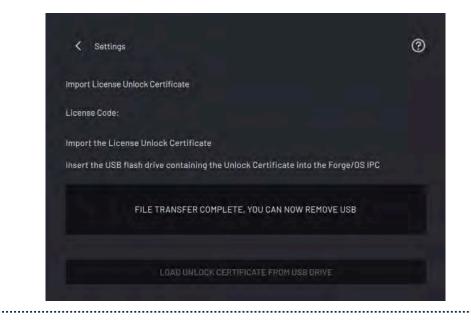
		Date modified	Туре	Size	
	Forge_OS-License-Activation-Certifica		Text Document		3 K
	Forge_OS-License-Unlock-Certificate	5/9/2021 12:21 PM	Text Document		0 K
C Open a	an internet browser and go to the Forg	e/OS 5 License Activat	ion Portal.		
	: Access the license activation portal at ation.aspx?Type=1&cid=7461&pid=893		ne/selfservice/		
	READY				
	Forge/OS 5 License Portal				
	Activation Certificate				
		Activate			
		Activate			
		Activate			
d Paste t	the contents of the activation certificat				
		e file and click Activate			
The po	rtal generates new text characters. Co	e file and click Activate		=orge_OS	6-
The po		e file and click Activate		=orge_OS	6-
e The po	rtal generates new text characters. Co	e file and click Activate		=orge_OS	 5-
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9 Insert the USB flash drive into the IPC again. Tap LOAD UNLOCK CERTIFICATE FROM USB DRIVE.



10 Wait for the file to finish transferring. When the file transfer is complete, remove the USB flash drive and tap **SAVE**.





11 Forge/OS returns to the licensing home screen and shows an active license. If the license status isn't active, restart these license activation steps. Double-check your license code.

K License		0	)
License Status			
Active			
5475 Days Remaining			
License Code			
License Name		Permanent Single Node License	e
Expiry Date		01 January 203	7
	DEACTIVATE LICENSE		



# CHOOSING PREFERENCES

These steps help you choose system preferences, including language, units, time, and network settings. To change preferences for the first time, go to General Settings:

Change the Or	nits of Measure, Time a	and Date settings,	or the Admin logi	n password.
Note: If you	later forget your passw	ord, contact READ	Y Robotics to rese	et it.
	Ceneral Setting	gs		0
	Language			
	English (United State	rs)		~
	Units of Measur			
	Measurement	Metric	() Imperial	-
	Length	millimeter mm/second	Inch	
	Mass	kilogram	pound	
	Force	newton		
	Torque	newton-meter		
				- A.
	Time and Date			
	Current date : 01/04/2 Current time : 5:24:16		SET DATE AND TIME	
	Select Time Zone			
	America/New_York			~
	Login Settings			
		CHANGE LOGIN PAS	SWORD	
	CAN	ICEL		



# RESOURCES

Want to learn more about how Forge/OS can empower you?

Visit READY.academy (ready.academy) for FREE hands-on courses to help you deploy a robotic system.

Visit READY.market (market.ready-robotics.com) for products and services offered by READY and our partners.

Visit our Support site (support.ready-robotics.com) for robot startup guides, FAQs, and more.

Visit our **Resources** page (<u>ready-robotics.com/resources</u>) for articles, whitepapers, and other resources.

If you encounter a problem and need to talk to someone, reach out to us.

- Email READY Robotics: support@ready-robotics.com
- Call READY Robotics: +1-833-732-3977



