

FORGE/os 5

The Universal Operating System for Industrial Automation



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EMPOWER YOUR TEAM FOR SUCCESSIONAL AUTOMATION

Automation isn't easy. Every robot has its own language, nuances, and quirks that can take years to learn.

That's why we built Forge/OS – the powerful brand agnostic operating system for controlling robots and automation.



PROGRAM AND CONTROL HUNDREDS OF ROBOTS

Don't get locked into one brand of robot.

It's great to have choices. So why should buying a robot for machine tending dictate what robot you buy for palletizing? Until now, having a diverse fleet of robots on your production floor meant having specialized engineers for each brand. Not only is this costly, it can lead to major interruptions if an engineer leaves and you don't have someone with that skillset ready

to jump in and backfill that opening. We've solved this problem. What happens to those specialized engineers? They're specialized in ALL of your robots now. And your operators? Forge/OS makes them far more capable and confident than any OEM robot software can.

YASKAWA FANUC

Kawasaki EPSON

STÄUBLI ABB



LEARN FASTER

DEPLOY FASTER

GROW FASTER

Simplicity without Sacrifice.

How were we able to make Forge/OS a user-friendly automation platform without sacrificing power?

We listened to people like you.



Deploy in days, not weeks

Forge/OS has the tools to make your deployment go smoothly and in less time than using OEM software alone.



No Code Programming

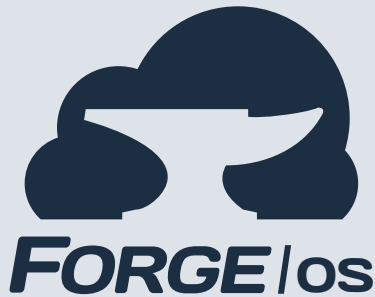
Task Canvas is a flowchart-based programming interface that allows manufacturers to deploy and manage automation by upskilling the employees they already have.



Free Educational Resources

READY.Academy features over one hundred hours of educational content, covering everything from the basics of automation to the advanced features of Forge/OS





PROGRAM
AT LEAST

40%
FASTER

WITH
FORGE/OS

✓ **More than Robots**

Forge/OS gives you full control over all of your devices through several common industrial protocols.

✓ **High Mix / Low Volume**

Reduce programming time by 40% to 60% using Task Canvas, and 90% using custom workflow wizards for applications such as palletizing.

✓ **Partner Network**

READY has partnered with an extensive list of hardware OEMS, software developers, and machine builders, to create device plugins, apps, and solutions that run seamlessly on Forge/OS.

✓ **Future-Proof Your Automation Efforts**

Add devices to your workcell without a complete redesign. Forge/OS features a modular design – so you can upgrade your automation as you grow your business.

FORGE/OS KITS

PURPOSE-BUILT FOR QUICK DEPLOYMENT



ESSENTIAL PLUS KIT

ESSENTIAL PLUS KIT Specifications

The Essential Plus Kit supplies the hardware needed to run Forge/OS, ready to plug into an OEM robot controller.

Best for

- First-Time Automators
- Fastest Deployment Time
- Plug-and-Play Automation

IP CLASSIFICATION	IP20
I/O PORTS	NONE
I/O POWER SUPPLY	NONE
COMMUNICATION	ETHERNET/IP MODBUS TCP MODBUS RTU
POWER SOURCE	120V AC, 60HZ, 15A
PNEUMATIC INPUT	NONE
PNEUMATIC OUTPUT	NONE
CONTROL BOX SIZE	300MM X 300MM X 155MM
WEIGHT	12 KG / 26 LBS

ESSENTIAL KIT Specifications

The Essential Kit for deploying with Forge/OS 5

Includes A READY Touch Pendant and a Forge/OS 5 perpetual runtime license.

Best for:

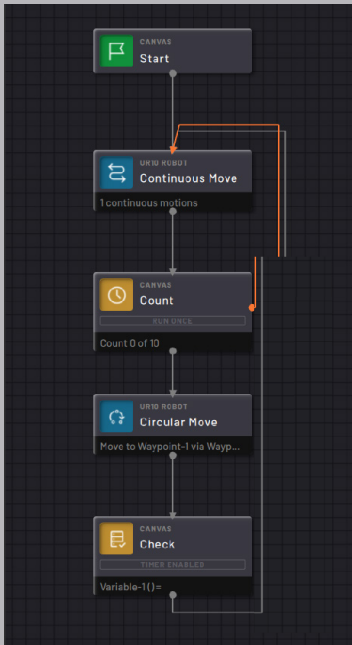
- Integrators
- Experienced Automators
- Machine Builders

IP CLASSIFICATION	IP54
TOUCHSCREEN	PROJECTIVE CAPACITIVE - MULTI-TOUCH
BACKLIGHT	LED
DISPLAY RESOLUTION	800 X 1200 (PORTRAIT)
EMERGENCY STOP	2 CHANNEL
MATERIAL	PLASTIC
WEIGHT	2.5 LBS
CABLE LENGTH	10M / 32.8 FT

ESSENTIAL KIT



FORGE/os 5



Upskill Your Machine Operators

Task Canvas, the visual, flow-chart based programming interface in Forge/OS, is a powerful tool that makes automation accessible and much less intimidating for your machine operators.

Use the Robots You Want to Use

Forge/OS supports A LOT of robots and we're always adding more. Whether you use one brand or ten, we've got you covered. You can even transfer tasks between brands!

Device Library

Filter by

Robot

Device Name	Vendor	Type	Version
ABB Industrial robot	ABB	Robot	1.0.0
DENSO Industrial robot	DENSO	Robot	1.0.0
EPSON Industrial robot	EPSON	Robot	1.0.0
FANUC Industrial robot	FANUC	Robot	1.0.0
Kawasaki Industrial robot	Kawasaki	Robot	1.0.0
Staubli Industrial Robot	STÄUBLI	Robot	1.0.0
Universal Robots collaborative robot	UR	Robot	1.0.0
Yaskawa Motoman Industrial robot	YASKAWA	Robot	1.0.0



Expand Your Capabilities

We designed Forge/OS to be modular and limitless. Add new features and hardware support with apps from our developer partners.

Device Control. Powerful Features. Simplified Interface.

Control the entire automation cell from one teach pendant.

Easily modify any device parameters through the Forge/OS device configuration app.

Easy to learn for beginners, and extensive functionality for power users.

The Device Control interface features a central 3D visualization of a yellow robotic arm. Above the model are control buttons for 'Jog', 'Jump', 'Absolute Position', and 'Signals'. Below the model is a 'Jog Panel' with directional buttons for X, Y, Z, RX, RY, and RZ. To the right of the model is a 'Joint Position Data' section with a table of joint angles. At the bottom, there is a 'System Notifications' area and a status bar with 'DEVICE STATUS TEACH', 'USER Admin', and the time '2:21 PM 4.7.21'.

JOINTS	TCP	BASE
Base		-91.71°
Shoulder		-98.98°
Elbow		-129.22°
Wrist 1		-48.29°
Wrist 2		91.39°
Wrist 3		-108.48°

Select and Control Devices

Easy Access to Critical Settings

3D Robot Visualization

Jog Panel

Joint Position Data

System Notifications

The Modbus RTU Generic Device configuration screen includes fields for 'Device Name' (Wago I/O), 'Description' (750-882), 'Fieldbus Interface', 'Device ID' (0), and 'Update Rate' (10 ms). A table lists three selected digital outputs:

Type	Address	Display Name	DCP
Digital Output	0	DD1 - Robotgrip	<input type="checkbox"/>
Digital Output	1	DD2 - Robotgrip/pret	<input type="checkbox"/>
Digital Output	2	DD3 - Robotgrip/adv	<input type="checkbox"/>
Digital Output	3	DD4 - Robotgrip/rep	<input type="checkbox"/>

Buttons for 'CANCEL' and 'SAVE' are at the bottom. The status bar shows 'DEVICE STATUS TEACH', 'USER Admin', and the time '7:15 PM 8.15.21'.

Industrial Communication Simplified with Forge/OS

Easily set up and control many types of devices through industrial protocols including:

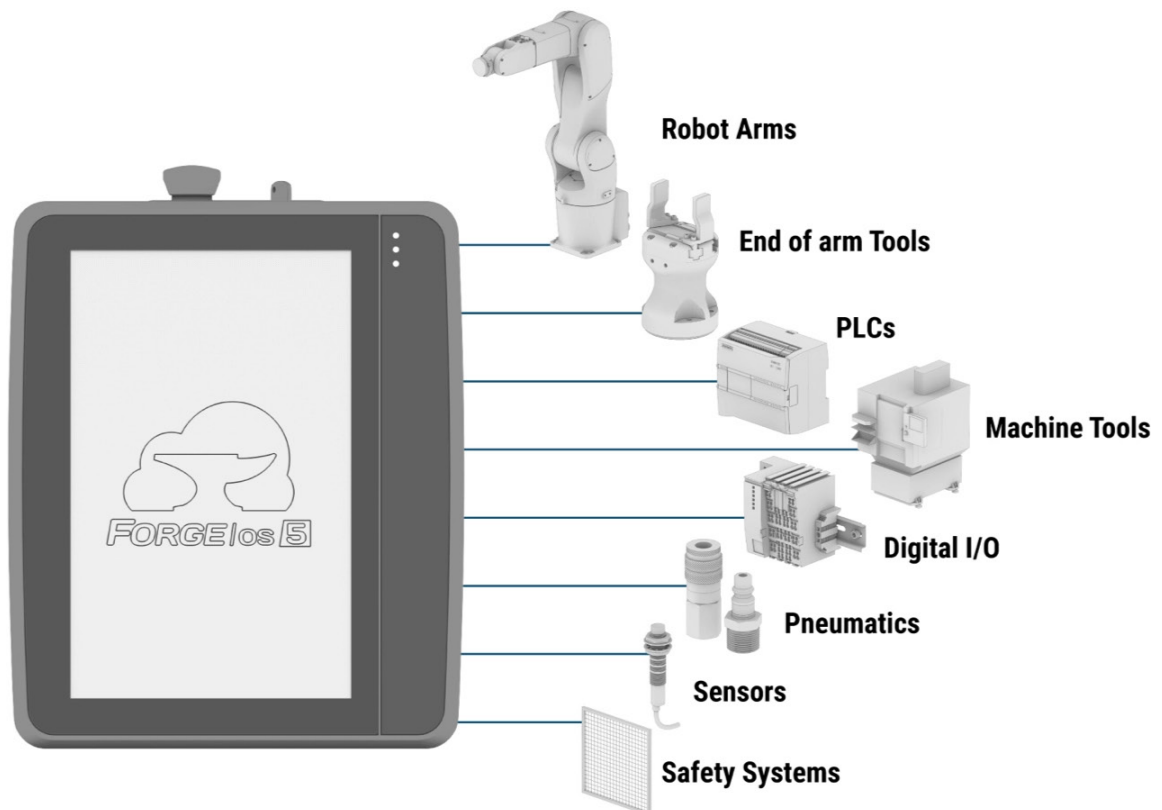
- Ethernet/IP
- Modbus TCP Master
- Modbus RTU

We will continue to expand the capabilities of Forge/OS with more communication protocols.

TAKE CONTROL OF YOUR WORKCELL



Seamlessly Integrate Your Hardware
 Forge/OS isn't just for robots. Control you entire workcell.

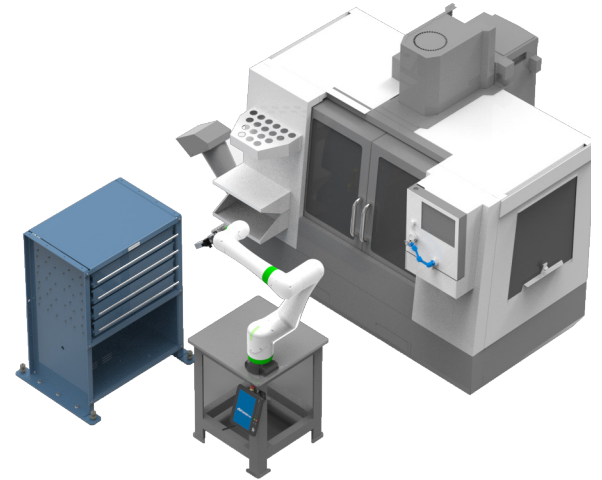


AUTOMATION SOLUTIONS

CNC Machine Tending

Forge/OS is perfect for high-mix, low-volume tasks that would normally require hiring costly integrators to program new SKUs.

Get the most out of your CNC machine tool by running lights out production with any Forge/OS supported robot, like the FANUC CRX.



Robotic Palletizing

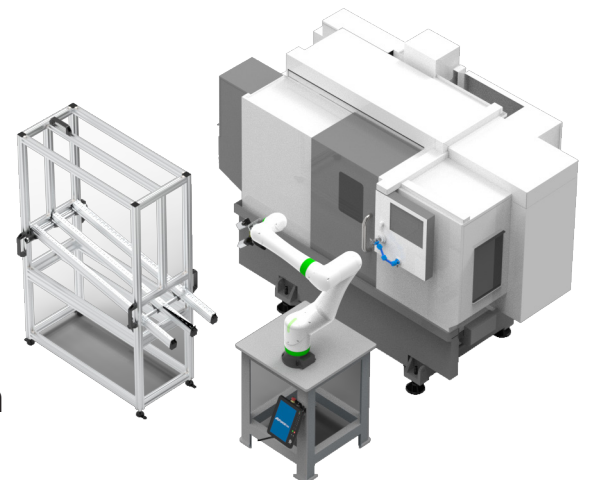
Deploy your palletizing solutions up to 90% faster with Forge/OS and READY's Palletizing Wizard.

Our brand agnostic platform gives you the power to choose from hundreds of robots, allowing you to use the perfect arm for the reach and payload you need.

Press Brake Machine Tending

Operating a press brake can be a repetitive and dangerous job for human operators.

Automating with Forge/OS helps keep your workers safe from fatigue, repetitive stress injuries, and other dangers associated with manual press brake operation.





THANK YOU
FOR CHOOSING US!

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