

When you choose remote service options, you accelerate the process of troubleshooting technical issues on your machine. With online access, JOA technical staff will determine if the issue you are experiencing can be resolved remotely, or if a technician is required onsite. We provide world-class service support to reduce unplanned downtime with a service appliance gateway equipped with software to maintain and run your machine. By design, this secure gateway is designed to perform even when an internet connection is weak.

Fast, remote support solutions are built into every JOA® platform.

Today, remote access solutions are integrated on all JOA° machines. Existing machines not already equipped with a virtualization server can be retrofitted to enable our remote access service. The service appliance gateway is provided as a virtual machine, installed within your own IT infrastructure. A Virtual Private Network (VPN) adapter is also available for software updates and direct connection to the host.



Remote Access Devices and Technology

1. Virtualization Devices Enable remote support—anytime, anywhere.

- Physical devices are virtualized, facilitating "do anywhere" architecture.
- Multiple engineers on a single project always have access to the correct software version and current files.
- To provide fast and effective support, the service appliance includes all software required to service the machine.

Minimize replacement costs for obsolete technology.

- Virtual machines replace PCs with limited life, reducing costs.
- Machine operators work with "thin client" devices that are easy to use and economical to replace when obsolete or damaged.

Increase service operation efficiency with JOA® flexPBS controls.

- Virtual controls on the machine facilitate rapid engineering and product changeover.
- flexPBS controls are accessible from anywhere through a secure connection.

2. Secure Two-Factor Authentication Connection Optional verified login and complete activity tracking with remote connectivity software.

- Access secured with "Two-factor authentication" and/or "white list" restriction.
- Audit trail tracks who connected and for how long.
- Software logs records connections, transactions, and records and saves a video transcript of what was done to a machine.
- Established path between sites can eliminate having to open holes in firewalls, depending on your IT requirements. IT support is not necessary.

3. Thin Clients

Easy-to-use "thin clients" provide an operator-friendly interface.

- Devices designed to interact with remote sessions.
- Lightweight, disposable and costeffective, these devices are easy to replace when the technology becomes obsolete.
- Customized, embedded Operating System for security and reliability.
- Any client can be "shadowed" for remote support or diagnostics.

Applications

- Machine marquee
- Mobile Operating Systems
- Console operator interface
- Push-button control station
- Industrial Wi-Fi tablet
- Robot control teach pendant

4. Additional IoT Technologies for Select Control Systems Ensure access by authorized personnel only.

- Badge-based RFID reader ties machine interface access to operator credentials.
- Audit trail records any HMI changes back to the operator.
- Guard switches with RFID keying secure machine doors and entry points.

Real-time, precisely synchronized devices.

 Hundreds of servo drives, PLCs, cameras record in same time domain over standard Ethernet.

Converged network with CIP.

 Common Industrial Protocol (CIP) puts all machine controls on a single Ethernet network.



