Moxa Edge Device Integration with TeamViewer IoT, Remote Connectivity, and Augmented Reality (AR)

Moxa and TeamViewer have combined their unique strengths — rugged, high-performance edge devices, secure connectivity, IoT software, and attended remote support — to create an out-of-the-box integrated IIoT solution for machine manufacturers that is reliable, secure, scalable, and fast to implement.

With Moxa and TeamViewer IoT, the Future of Industrial Internet of Things (IIoT) Is Now

Machine manufacturers know it's just a matter of time before all machines are delivered IIoT-ready, with built-in internet connectivity, embedded edge devices, and preloaded remote connectivity software to collect and analyze streaming IoT data — enabling users to take remote actions based on real-time data insights.

These IIoT machines allow manufacturers to provide the shop floor equipment required to stay competitive in our modern, digital-first world. Moreover, this also opens up new revenue opportunities for machine manufacturers: Machine-as-a-Service (MaaS). Instead of selling machines outright, the machine provider is paid based on how much the machine is used over time. MaaS also saves the company that will use the machine the upfront cost of purchase.

Making IIoT-ready machines today requires manufacturers to find the right hardware, software, and connectivity solutions — three critical technologies that must be compatible and completely secure. IoT integrations and implementation processes can be complex, time-consuming, and risky, especially without flexible and secure IIoT hardware and software.

That's where the Moxa and TeamViewer integration comes in. With this new partnership, we're providing machine manufacturers with an out-of-the-box integrated IIoT solution: Moxa hardware preloaded with TeamViewer IoT, remote connectivity, and attended remote access.

To comply with strict manufacturing shop floor requirements, this integration also includes two types of secure attended remote support.

1. **Attended Remote Support**

   When an on-site technician requests help, an offsite expert can remote in to the device in question to diagnose the problem and take corrective action. While remote supporters can help resolve issues from anywhere, for added security, unattended remote support isn't possible with TeamViewer IoT. An on-site technician must be in front of the device to accept incoming connection requests or the remote supporter will be unable to access it.

2. **Augmented Reality Remote Support**

   Unattended remote support raises security concerns in IIoT environments, especially when that support is provided by a third party. Using augmented reality remote support, an on-site technician can receive visual guidance from a remote expert located anywhere in the world.

   On a desktop computer or mobile phone, the remote supporter sees what the technician sees through their smart glasses. The supporter can communicate instructions in HD audio and annotate the live video stream to guide the technician. While the technician can get visual guidance from a remote supporter, only the on-site technician can make changes to the machine.

Solution Highlights

Pre-integrated TeamViewer Software with Moxa Hardware

Two global leaders, both known for performance, reliability, and security, combine hardware and software technology in a pre-integrated IIoT toolkit.

Embeddable in New Machines or Retrofit Legacy Equipment

Leverage the Moxa portfolio of rugged edge devices, enabling you to provide the right gateway for each sensor. Quickly retrofit legacy machines with Moxa edge devices with built-in TeamViewer IoT connectivity or embed the integrated solution into new machines.

Attended Remote Access

On-site technicians can give remote supporters attended access to change settings and rules, update software, and more — from anywhere in the world.

Secure, Easy Connectivity

Get fast, reliable, and secure connectivity with end-to-end encryption — without requiring IoT VPN or complex coding.

Accelerating IIoT Implementation

The Moxa and TeamViewer IoT integration enables quick and easy IIoT implementations by getting these four essential requirements correct from the start.

1. **Industrial Secure Connectivity** — For an IIoT project to succeed, information technology (IT) and operational technology (OT) must converge, so you can collect and connect your data and make it actionable. For security, that data must be encrypted from end to end, not just while it's being transmitted.

2. **Edge Computing** —Today's edge devices perform the machine data processing and analysis right in the gateway, so you get your analysis, alerts, and events in real or near-real time — substantially reducing the amount of IoT data that needs to be sent to the cloud.

3. **Engineering the Datapath** — Sensors collect many types of data, so it's important to connect each sensor to the right device. Engineers create datapaths to distribute each type of data to the right destination, enabling fast and efficient analysis.

4. **Zero-Touch Provisioning and Device Management** — With Zero-Touch Provisioning, customers receive the gateways they need, preloaded with all required accessories and software, installed and integrated into their TeamViewer account.

Solution Overview

The Moxa and TeamViewer Integration is available in three versions.

1. **Ultra-Reliable Device Connector**
   Simple data integration is provided to facilitate device management.

2. **Ultra-Reliable IIoT Gateway**
   Advanced data integration enables both device and data management.

3. **Ultra-Reliable IIoT Edge Computer**
   With a data integrator and edge analytics platform, the Ultra-Reliable IIoT Edge Computer provides more data storage capacity and increased functionality.

Each version includes:

- **Secure Shell Protocol (SSH)**, so you can operate your IIoT network securely, even if your network is not otherwise secure

- **File Transfer**, so you can transfer large files securely without an FTP server

- **Remote WebGUI** (port forwarding), so remote users can control attended edge devices as if they were there in person

Key Features

Edge Analytics

Process data from sensor-rich assets like machines, equipment, and devices in real time, close to where it is created, to reduce time, bandwidth, and data storage costs.

Secure File Transfer

Quickly transfer large files between shop floor assets and the cloud or remote devices, and share large amounts of data without an FTP server.

Augmented Reality for Field Service Support

Enable field service technicians to get visual and audio guidance through their smart glasses from remote supporters who see on their monitors what the technicians see in their field of vision.*

Available only with certain Ultra-Reliable Edge IIoT Computers.

Key Benefits

Eliminate Provisioning Hassles

Stay focused on your business, while we handle every part of your IIoT implementation, eliminating provisioning burdens.

Reduce Replacement Costs

Save on repair and replacement costs with our rugged edge devices (5-year warranty) and Moxa Industrial Linux platform (10-year guaranteed support life, including security patches).

Scale Easily

Implement your IIoT shop floor today, with easy scalability to support increasing system functions and data storage requirements as your business grows.

The Moxa-TeamViewer IIoT Toolkit

Scalable
Open IIoT
Toolkit

Moxa Hardware

	UC-2100	UC-3100	UC-8100A	UC-8200	MC-1100	MC-1220	V2406C
	DEVICE CONNECTOR	I I O T . G A T E W A Y		U L T R A - R E L I A B L E . I I O T . E D G E . C O M P U T E R			
Features and Capabilities							
Data Acquisition	✔	✔	✔	✔	✔	✔	✔
Advanced Data Integration	✖	✔	✔	✔	✔	✔	✔
Advanced Analytics	✖	✖	✖	✔	✔	✔	✔
Augmented Reality	✖	✖	✖	✖	✖	✔	✔
Software							
TeamViewer IoT	✔	✔	✔	✔	✔	✔	✔
Moxa ThingsPro	✔	✔	✔	✔	✔	✔	✔
TeamViewer Frontline xAssist	✖	✖	✖	✖	✖	✔	✔

With the Moxa-TeamViewer IIoT toolkit, you can connect shop floor machine sensors to the Moxa UC or MC series edge devices (gateways) that are appropriate for the job at hand. Pre-installed in Moxa hardware, TeamViewer IoT software provides security connectivity and remote control, enabling you to collect, monitor, and analyze sensor and machine data. As your needs grow, you can scale quickly to gateways with higher performance CPUs and more storage for data control, advanced analytics, and remote augmented reality support for field technicians with TeamViewer Frontline xAssist. Every implementation includes ready-to-run data acquisition and management software, Moxa ThingsPro.

Questions?

Call +1 (800) 638-0253 (Toll-Free)
Request a free consultation or demo today.

Let's Connect

About TeamViewer

As a leading global technology company, TeamViewer offers a secure remote connectivity platform to access, control, manage, monitor, and support any device — across platforms — from anywhere. With more than 600,000 customers, TeamViewer is free for private, non-commercial use and has been installed on more than 2.5 billion devices. TeamViewer continuously innovates in the fields of Remote Connectivity, Augmented Reality, Internet of Things, and Digital Customer Engagement, enabling companies from all industries to digitally transform their business-critical processes through seamless connectivity. Founded in 2005, and headquartered in Göppingen, Germany, TeamViewer is a publicly held company with approximately 1,400 global employees. TeamViewer AG (TMV) is listed at Frankfurt Stock Exchange and belongs to the MDAX.

Stay Connected

www.teamviewer.com

TVF-SB-EN-US-072021-1