

# Devices and Protocols

## Native Communication Drivers

Connectivity is a key **FactoryStudio** feature. We include a wide variety of industry standard protocols, and we enable built-in communications with PLCs, historians, databases, and other devices. New drivers are continuously being added, and our SDK makes it easy to add any additional drivers that may not already be included. See "[Communication Drivers](#)" for the **list of available drivers**.

## OPC Client and Server Support

**FactoryStudio** is in full compliance with the OPC Server and Client specifications. For any protocol not included with the product, the OPC client provides all the necessary integration.

## Remote Data Servers

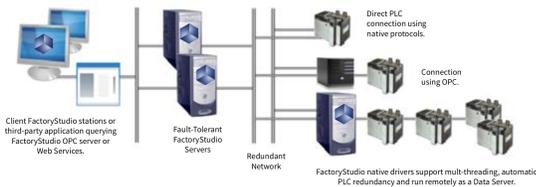
Drivers, native or OPC, and data acquisition can run on remote computers to do things like retrieving data from RS-232 devices or eliminating the requirement for DCOM OPC configuration.

## OPC Data Server FactoryStudio Station

**FactoryStudio** can be deployed as a stand-alone OPC Data Server that uses native protocols and provides data to other systems through its OPC Server interface.

## Automatic Synchronization

A Tag Import Wizard and automatic definition synchronization is provided for OPC Servers, Rockwell ControlLogix L5K files, CSV files, Beckhoff TwinCAT, OSIsoft™ PI System, and PI AFTM; new wizards are continuously being added.



## Process Isolation and Multi-threading

Data communication runs in its own .NET domain, with a WCF layer to isolate the drivers from the main real-time database. For maximum performance, multiple threads are created for each protocol and device node.

## Diagnostics Tools

A complete set of testing, deployment, and diagnostics tools provides fast and reliable application development and installation.

## Built-in Performance Monitoring

Statistics are generated to help with troubleshooting and the fine tuning of high performance applications. Some of the performance related statistics gathered include: system messages, success and error messages, dynamic block creation, and cycle time and execution time on each block.

## Dynamic Addressing

Everything in the driver configuration, from the station node IP to address and tag mapping, can be changed online using the project script. Standard applications can be created that have the runtime setup to specific conditions for where it is being deployed.



See "[Communication Drivers](#)" for more information.