

ThingWorx Manufacturing Apps

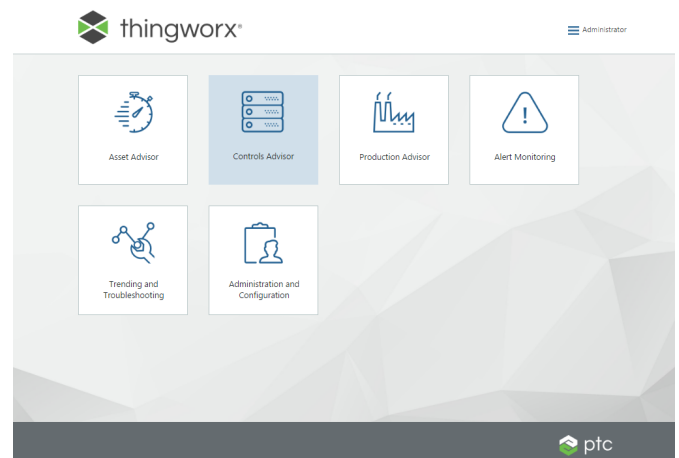
Kickstart your Industrie 4.0 Journey with PTC's ThingWorx Manufacturing Apps

Whats happening on your factory floor? Now you'll know, with unprecedented visibility delivered in real-time. Thanks to the ThingWorx Manufacturing Apps your operations teams can transform your results with unmatched flexibility and quick time-to-value.

ThingWorx Manufacturing Apps are a set of role-based starter apps built on PTC's industry-leading IoT platform, ThingWorx. Many users are able to install and configure in under 60 minutes without impacting production, these apps are 100% web-enabled and accessible via any browser.

Get Started in 60 Minutes

- **Fast to deploy:** Many can install and configure in less than an hour.
- **Role based Intelligence:** real-time, actionable access to operational information leads to proactive and faster decision making
- **Flexible to evolve:** code-less app extensibility for rapid continuous innovation
- **Built on the ThingWorx Platform:** a robust, purpose-built industrial IoT platform that includes technologies & tools that enable you to rapidly develop, deploy and extend apps and augmented reality experiences.
- **Easy to try and buy:** download free starter apps and experience them live on your production data. Upgrade to unlock capabilities to maximize value and flexibility.



The ThingWorx Manufacturing Apps Console view allows easy access to the different apps and utilities

ThingWorx Production Advisor

Plant Manager



ThingWorx Controls Advisor

Controls Engineer



ThingWorx Asset Advisor

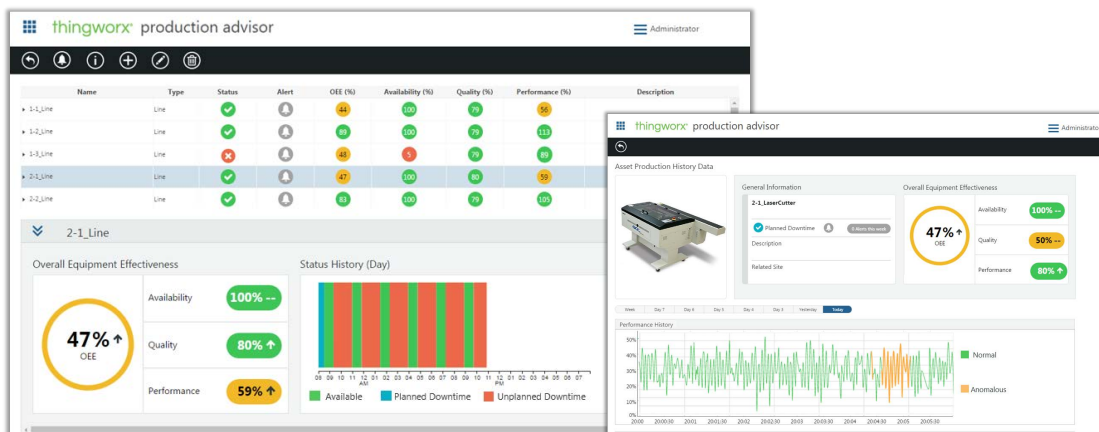
Maintenance



ThingWorx Production Advisor

A web/mobile application for production managers that rapidly unifies disparate sources of operational and business data. Users have real-time visibility into production status and critical KPIs such as availability, performance, quality and OEE.

- Real-time visibility into performance and issues
- Drill down into underlying data for root cause analysis
- Normalized manufacturing KPIs with historical trending

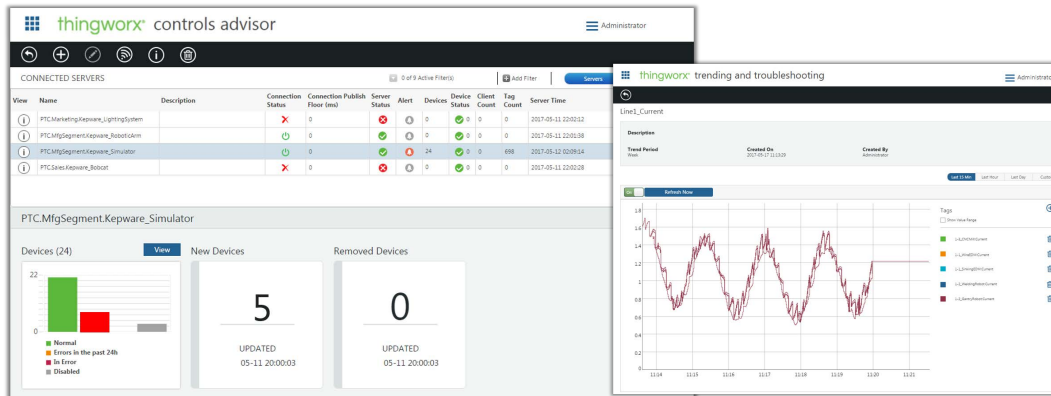


The Production Manager has visibility to many lines and associated KPI's within a manufacturing operation.

ThingWorx Controls Advisor

A web/mobile application to rapidly connect to and remotely visualize data from virtually any PLC. Controls Engineers are notified instantly of data communication errors that may cause the loss of critical production data. Simple tools enable users to trend and visualize data for rapid troubleshooting.

- Real-time visibility of asset and device status (Kepware and other OPC servers)
- Instant notification and alerts of device connectivity errors
- Easily trend tags in minutes

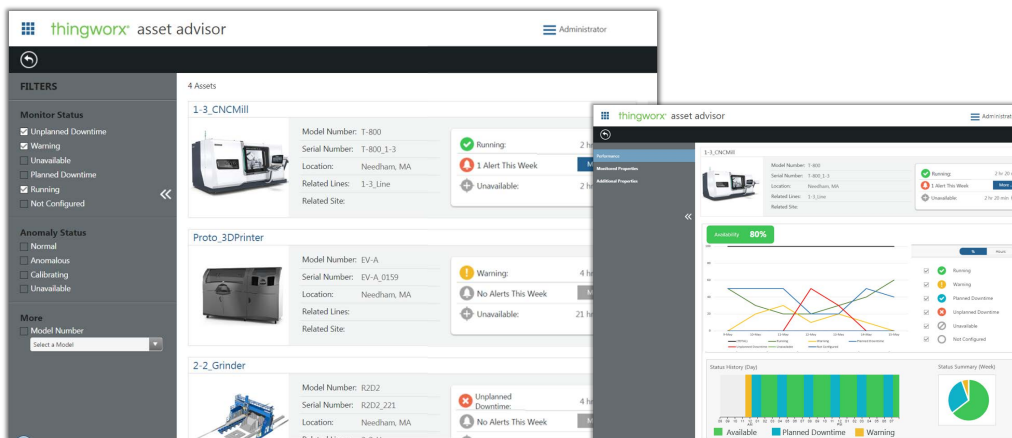


See the state of all OPC Server installs in a single webpage. Dive deeper into device connectivity trending real-time data from PLCs.

ThingWorx Asset Advisor

A web/mobile application that provides real-time visibility into the health and status of critical assets. It alerts maintenance / service technicians to potential problems that may impact production, while delivering simple, easy-to-use capabilities to trend and troubleshoot issues.

- Unified connectivity to disparate assets
- Real-time anomaly detection
- Condition-based monitoring



In a single pane of glass, ThingWorx Asset Advisor provides visibility to all the asset on the floor, the asset's current status, generate alerts based on predefined values and can detect irregular operation conditions using anomaly detection.

ThingWorx Manufacturing Apps: Editions and Features

Edition	Express	Standard	Premium / Enterprise
Access to machine data (OT)	OPC Servers (read-only)	OPC servers (read-only)	OPC servers, AWS & IoT Gateways (read/write)
Business system integration (IT)	none	read-only	read/write
Data retention	7 days max	unlimited	unlimited
Data export	no	no	yes
Configure out-of-the-box apps	no	yes	yes
Create new apps	no	no	yes
Database storage options	postgresql (installed on same machine as apps)	postgresql and any ThingWorx supported database	Standard options + DataStax Enterprise and Cloud Integrations
Usage data reporting	At license renewal (30 days)	no	no
Trend Creation	10 trends max	unlimited	unlimited
Anomaly Detection	no	Yes	Yes
Predictive Analytics	no	no	optional
AR	no	no	optional

ThingWorx IoT Platform

ThingWorx is the only enterprise-ready technology platform that enables innovators to rapidly develop and deploy smart, connected solutions for IoT.

The ThingWorx Technology Platform was built from the ground up for the Internet of Things. It contains the most complete set of integrated IoT-specific development tools and capabilities available, offering the industry's deepest functional capabilities.

ThingWorx makes it easy to develop and deliver powerful IoT solutions that deliver transformative business value.

ThingWorx Manufacturing Apps readily connect to Kepware and other OPC servers to provide instant connectivity to your various assets and deliver role-based real-time visibility into operations. Apps are built on the ThingWorx industrial IoT platform and can be extended using ThingWorx native Industrial Connectivity, Analytics and Studio capabilities. This allows for accelerated time-to-value and the ability to quickly kickstart your Manufacturing Journey.

Learn more at www.ptc.com/mfg-apps

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