

ThingWorx Controls Advisor

Remotely Monitor & Troubleshoot Machine Connectivity.

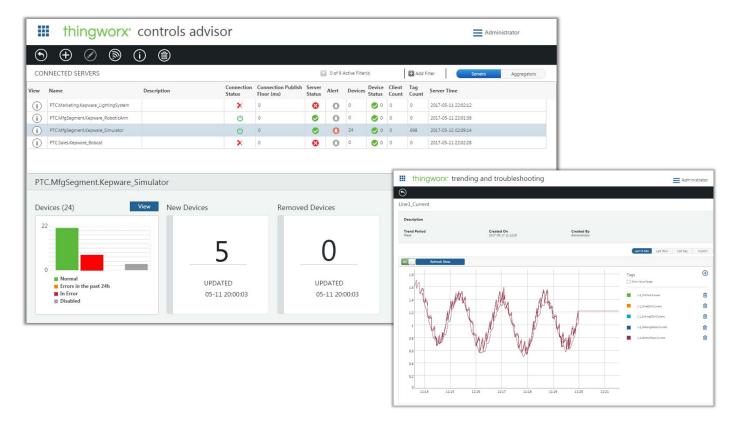
Kickstart your Industrie 4.0 Journey with PTC's ThingWorx Manufacturing Apps

You get a call from one of the operators. Data isn't showing up in the HMI, or worse there is missing data in the SQL database or plant historian. What happened? Using ThingWorx Controls Advisor, you can solve problems like these quickly and easily.

ThingWorx Controls Advisor allows Controls Engineers to actively monitor connectivity to their machines through OPC servers and be instantly notified when connectivity is lost. You'll know about connectivity issues before operations does. Once notified, Controls Advisor provides tools to remotely troubleshoot the issue, including trending, alarms, and diagnostics. You can monitor and troubleshoot your machine connectivity from a single application.

Why ThingWorx Controls Advisor?

ThingWorx Controls Advisor can be installed on your existing hardware in 60 minutes, seamlessly connecting to your OPC servers with no impact on production, you can actively monitor and troubleshoot machine connectivity with just a few clicks.



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

Solution Capabilities/Features

- Instantly receive text or email alerts when a device stops communicating
- Trend any PLC tag in minutes to speed up root cause analysis
- Create alarms and issue text and email notifications for any tag
- Remotely troubleshoot PLC issues
- Real-time connectivity to existing factory assets through OPC servers

Benefits/Business Improvements

- Proactive issue identification
- · Rapid implementation and fast time to value
- More reliable data collection
- Increase efficiency and flexibility
- Reduce unplanned downtime

ThingWorx Controls Advisor readily connects to Kepware[®] and other OPC servers to provide instant connectivity to your various assets and is built on the Thingworx industrial IoT platform. This allows for accelerated time-to-value and the ability to quickly kick start your Manufacturing Journey.

According to Gartner Research 70% of factory generated data goes unused today."

Gartner

"Predicts 2016: Opportunities Abound for the Factory to Reach Its Potential", 2015

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

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ThingWorx Production Advisor

Real-time visibility and remote insight into production line performance and status

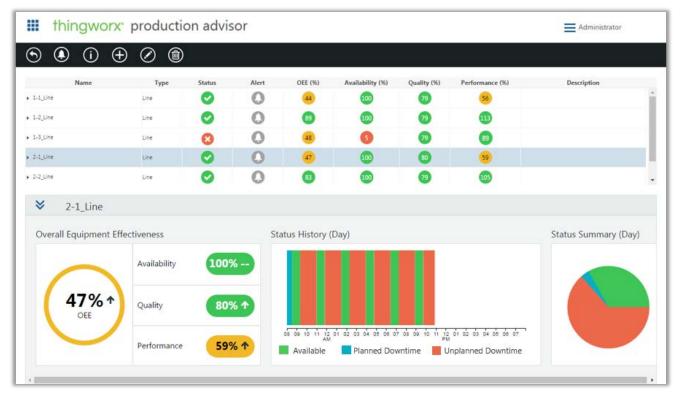
Kickstart your Industrie 4.0 Journey with PTC's ThingWorx Manufacturing Apps.

Make better-informed, faster decisions with unified connectivity to disparate factory assets and business systems. With ThingWorx Production Advisor, production managers have real-time issue detection and a new level of visibility into production performance.

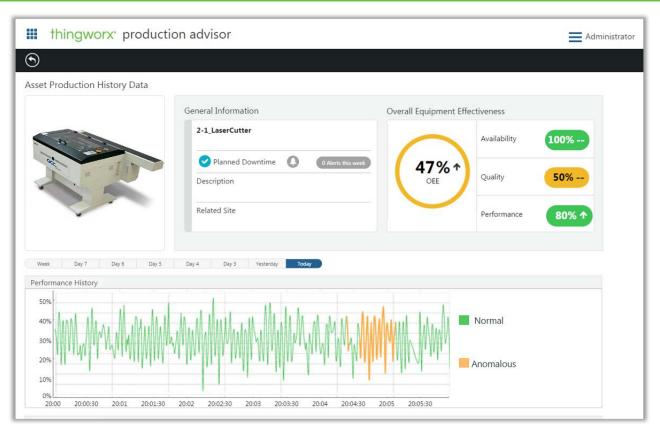
ThingWorx Production Advisor connects and unifies different sources of internal and external data and delivers information plant management cares about in a role-based view. Plant managers can now monitor the real-time operational performance of the factory: all lines, all assets, with up-to-the-minute status, availability, performance and quality KPIs.

Why ThingWorx Production Advisor?

ThingWorx Production Advisor connects the top floor to the factory floor, empowering plant managers and production managers with the real-time visibility they demand today. Machine production data is now available wherever it is needed and in the format it is wanted. It's the best of both worlds: production professionals can ensure correct execution while driving continuous improvement.



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



Description: View your asset's current status as well as production history in a single screen.

Solution Capabilities/Features

- Real-time visibility into key performance indicators and issues, for rapid problem resolution
- 360 view into operations, including historical trending.
- Drill down into underlying line assets data for root cause analysis and continuous improvement.
- Role-based delivery for better and faster decision making

Benefits/Business Improvements

- Increased operational performance
- · Rapid implementation and fast time to value
- Improved quality
- Increased Responsiveness

ThingWorx Production Advisor readily connects to Kepware[®] and other OPC servers to provide instant connectivity to your various assets and is built on the Thingworx industrial IoT platform. This allows for accelerated time-to-value and the ability to quickly kick start your Manufacturing Journey.

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J9103-ThingWorx-Production-Advisor-DS-EN-0517

ThingWorx Asset Advisor

Remotely monitor and automatically detect anomalies across your various assets

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

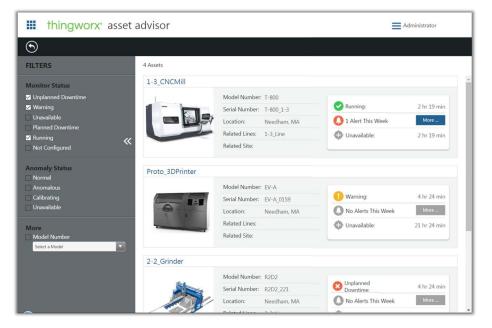
Rework, scrap, and unplanned downtime can negatively impact your cost structure. ThingWorx Asset Advisor puts you in the best position to improve capital equipment maintenance, operational efficiency and final product quality.

ThingWorx Asset Advisor connects to your manufacturing equipment and provides real-time sensor details, alerts and anomalies. This allows you to understand how your equipment is being utilized, how it performs and ultimately improve the efficiency of that equipment.

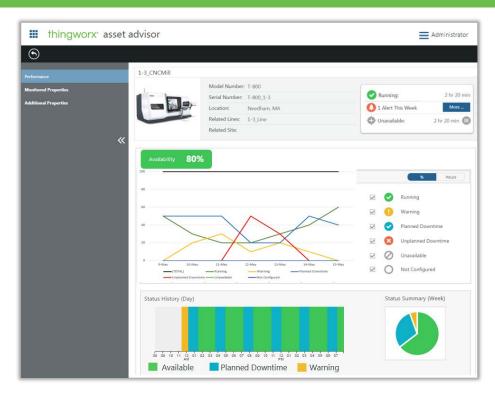
Each persona in the organization gets reliable, consistent, meaningful and actionable data, making problem solving and collaboration much easier. Make better-informed, faster decisions with unified connectivity to disparate factory assets and business systems. Where Maintenance teams used to operate reactively, ThingWorx Asset Advisor now enables them to take the initiative by automatically detecting anomalies, in order to determine if a corrective action can be taken before it impacts production.

Why ThingWorx Asset Advisor?

ThingWorx Asset Advisor improves your maintenance processes and production performance with real-time monitoring of your assets. Automatic detection of anomalies and visibility into sensor details help you catch problems before they potentially impact production.



Description: In a single pane of glass, ThingWorx Asset Advisor provides a view of all assets on the floor, including their status, automatically detected anomalies and alerts.



Description: Rapidly view the real-time and historical status of assets as well as any alerts

Solution Capabilities/Features

- Automatically detect anomalous readings to take
 proactive action
- Real-time visibility into asset status, sensor details
 and issues
- · Connects to all your industrial assets

Benefits/Business Improvements

- · Optimized maintenance planning and execution
- · Rapid implementation and fast time to value
- Increased efficiency and flexibility
- Improved quality
- Reduced scrap and rework
- Reduced unplanned downtime

ThingWorx Asset Advisor readily connects to Kepware[®] and other OPC servers to provide instant connectivity to your various assets and is built on the Thingworx industrial IoT platform. This allows for accelerated time-tovalue and the ability to quickly kick start your Manufacturing Journey.

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