Operational Technology Management

The Challenges Facing Operational Technology Systems

With the rise of Industry 4.0, technologies in manufacturing environments have become increasingly complex and integrated. However, manufacturers are often still dependent on manual processes and legacy knowledge to maintain their critical Operational Technology (OT) environment. As a result, it's challenging to gain a complete picture of operational technology—let alone efficiently secure, monitor, and manage it all. Without contextual visibility, one minor issue can quickly evolve into a complex problem with costly solution. Entire operations could be halted due to a maintenance problem with one piece of machinery, putting production behind schedule.

In an era of connected manufacturing, this approach doesn't scale, especially with growing cybersecurity threats, a coming wave of worker retirements, and a need to maximize the productivity of people and systems. In addition, the process is rife with the potential for unplanned downtime.

The ServiceNow Solution

ServiceNow[®] Operational Technology Management provides a complete and contextual view of OT systems, so you can keep them secure—and up and running. Connect your operational technology to production processes with digital workflows to rapidly respond and recover from any incident or change.

We can help you safeguard and manage your OT systems across your manufacturing operations with a single system of action that improves experiences and drives outcomes across the manufacturing value chain:



Foundation

Utilizes data from multiple sources and the Purdue Model framework to define critical infrastructure levels

Visibility

Maintain system security and availability by providing a complete, contextual view of OT systems

Vulnerability Response

Centralized view, so you can easily assess, prioritize, and react to events

Service Management

Connect your operational technology to production processes and digital workflows

Benefits

Build a solid data foundation

Aggregate data from various sources into a centralized CMDB to eliminate data silos and enable predictive analytics.

Gain a contextual view of OT environments

Develop a comprehensive, contextual view of OT assets, their relationships, and dependencies, giving you an instrumental tool to protect your operations from unplanned downtime.

Fast response to OT issues

Extend digital workflows to your OT environment, turning insights into action and connecting the right people at the right time with the right information.

Improve OT security

Stay ahead of threats and vulnerabilities related to discovered OT assets, enable your team to monitor proactively, prioritize and act fast based on urgency and business impacts.



Gain a digital view of your OT systems with OT Foundation

- Define levels of critical infrastructure utilizing the Purdue Model.
- Discover OT assets through industrial security integrations and IT assets through discovery engine in OT environments.
- Aggregate data from various sources into multisource CMDBs, including OT assets data from spreadsheets using Service Graph for Microsoft Excel and from OT Security Providers using OT Certified Service Graph Connectors.

Maximize uptime with a proactive approach through OT Vulnerability Response

- Monitor across your existing systems and ecosystem of partners to create a single view of related OT assets vulnerabilities.
- Notify the right person with the right action and prescriptive information based on a preconfigured alerts policy.
- Assess, prioritize and act on urgency and business impacts using a calculated risk scoring.

Utilize OT visibility to understand OT assets' dependencies and relationships

- Visualize production processes and dependencies of discovered OT assets to make it easier to manage OT environment with contextualize insights
- Map OT asset criticality and processes following the ISA-95 standard
- Govern as a part of Service
 Graphs/CMDBs common service
 data model and table structure,
 all data elements are
 appropriately handled.

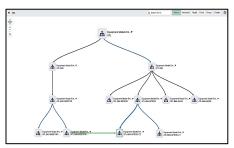
Respond and recover rapidly from incidents and changes with $\ensuremath{\mathsf{OT}}$

Service Management

- Accelerate incident resolution with built-in machine learning and contextual help to eliminate bottlenecks.
- Guide intelligent routing and collaboration to boost productivity and restore services and routine maintenance faster.
- Take control of change management while minimizing disruptions, risks, and costs.



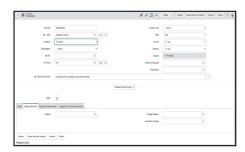
Quickly navigate to OT asset's critical information on an intuitive dashboard



Gain greater visibility on production processes and dependencies of discovered OT assets



View near real-time vulnerabilities and their impact based on urgency and importance



Improve workforce efficiency with a single workspace built to facilitate resolutions

Learn more: servicenow.com/otmanagement

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