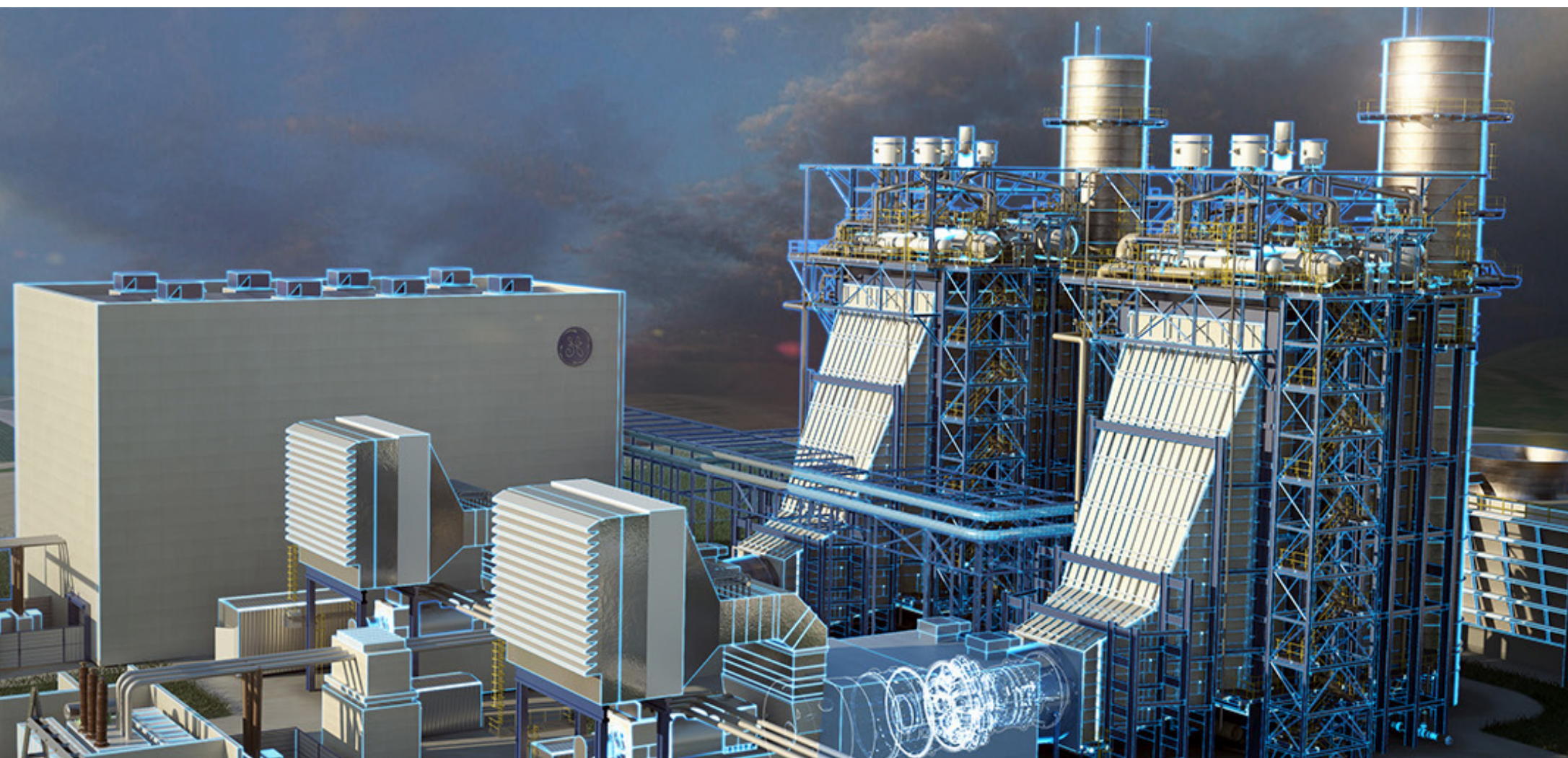




Become a Digital Industrial Company

GE Digital's portfolio overview

The operating climate for industrial companies has never been more challenging. Consumer products manufacturers are faced with cost volatility, shrinking profit margins, and constantly changing buyer preferences. Heavy equipment manufacturers are challenged with compressed cycle times, increased price pressure, and demands for customization. Oil and gas companies face intense pricing pressure, knowledge attrition, and growing environmental scrutiny. As a global industrial leader, GE faces these same challenges every day.



In response, GE Digital is reimagining how industrial companies, including many GE companies, operate plants and deliver products—using data as the fuel and advanced analytics as the growth engine. We embrace the vision of the Industrial Internet and the promise of driving disruptive, positive changes across the industrial landscape.

“GE is truly on the path to digital transformation (DX). With the announcement of GE Digital as a separate software division, Predix as platform as a service in the cloud, and ready-to-roll asset performance management, this manufacturing company is evolving. The company has all the elements of DX that IDC believes are essential to success. A commitment from CEO Jeff Immelt, a reworking of the operating models, a focus on information, and a refreshing view toward sourcing work with partners and developers are in the mix.”

Robert Parker, Senior Vice President, IDC

The Industrial Internet changes everything

Imagine a world where:

- Your factories are “brilliant”—giving you real-time visibility and control over all manufacturing processes
- Your power plants replace scheduled maintenance with just-in-time, predictive maintenance to prevent unplanned outages
- Your industrial data, control networks, and applications are protected from malicious software threats—automatically and continuously
- Your analytic capabilities are infinite, and can be customized using open tools and pluggable software services—allowing you to minimize downtime, optimize performance, and react to market changes with flawless agility

This is the Industrial Internet. It is here now. It is powered by GE's Predix, the operating system for the Industrial Internet. It will change the face of global industries for generations to come.

Services to accelerate your journey

While this is an exciting time for opportunity and growth, the Industrial Internet can also bring on new challenges, questions, and uncertainty. Specifically, how do you get started? Or, what steps do you need to take to be successful? No matter where you are on your journey, GE Digital has the right [services](#) offering for you.

Use data-driven insights for optimized performance

The starting point for your Industrial Internet journey is getting connected to build “digital twins”—digital models of your machines and processes. Sensors transmit data from your industrial assets securely to your chosen storage topology—edge/on-premises, Predix industrial cloud, or hybrid. You can then use GE Digital's software suites for Asset Performance Management, Brilliant Manufacturing, HMI/SCDADA, and OT Cyber Security to gain insights that allow you to optimize your assets and operations. You can also create custom analytic applications by assembling pre-built Predix software services and building new Predix services from scratch.



Predix

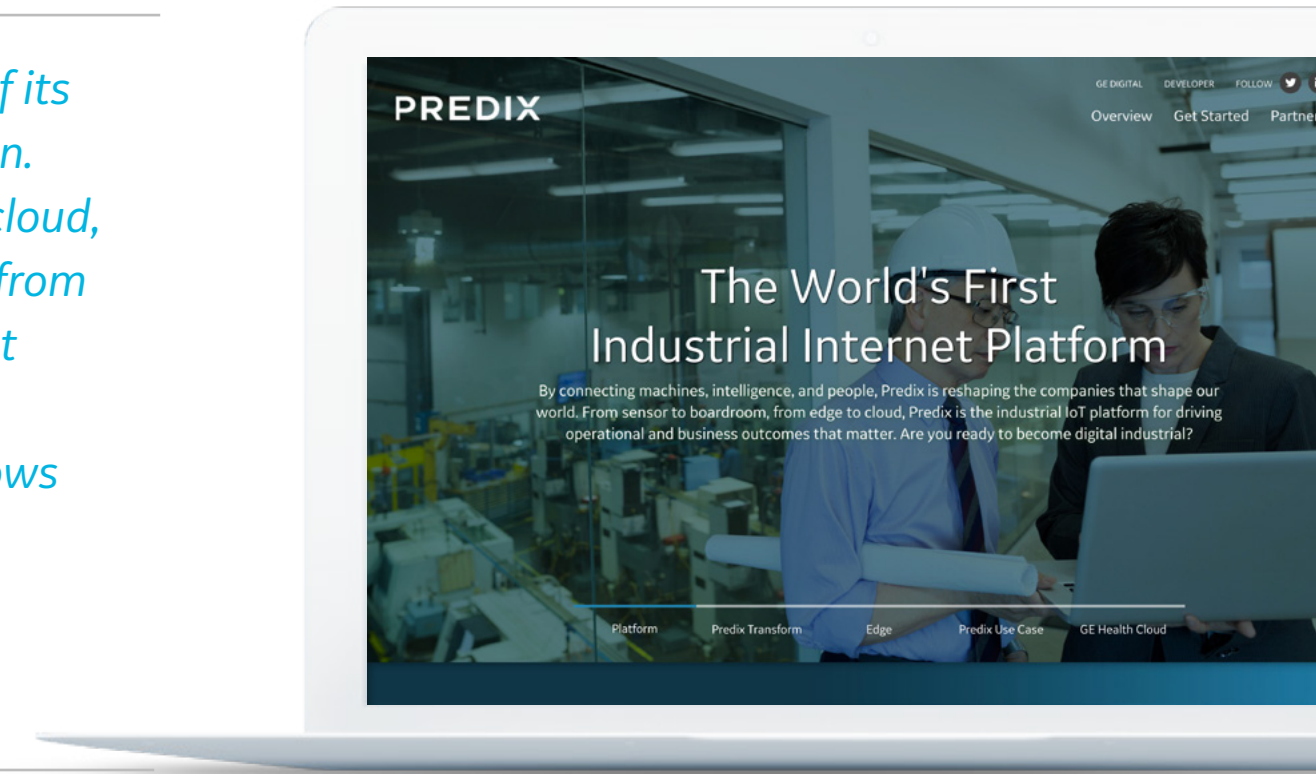
The world's first Industrial Internet platform

Created by GE to help transform its business, [Predix](#)—the operating system for the Industrial Internet—is the only solution built by industry for industry. From the edge to the cloud, Predix turns data and intelligence into actionable insights, and employs the latest innovation, including digital twins, to optimize assets and operations. All this is supported by a robust ecosystem that accelerates app development.

Industry is reinventing itself for the digital age, and Predix makes it possible.

“Like GE, Pitney Bowes is in the midst of its own physical and digital transformation. With APM apps running on the Predix cloud, we're able to extract and analyze data from our assets faster than ever, and use that insight to drive real business outcomes for Pitney Bowes and its clients. GE knows industrial machines and related data analytics better than anyone.”

Roger Pilc, Chief Innovation Officer, Pitney Bowes



Connect your data

To help accelerate industrial transformation, Predix connects every facet of your enterprise and empowers your team with unparalleled visibility and insights. It helps illuminate new business models and revenue streams.



Gain insights

With Predix, you can revolutionize your business with the ability to integrate assets and distribute knowledge from edge to cloud. Predix helps you orchestrate complex industrial data, seamlessly.



Optimize your operations

Predix enables you to build understanding to boost performance and gain insights through sophisticated modeling. You can envision the past, present, and future with digital twins—helping you to fully optimize your assets and operations.



Asset Performance Management

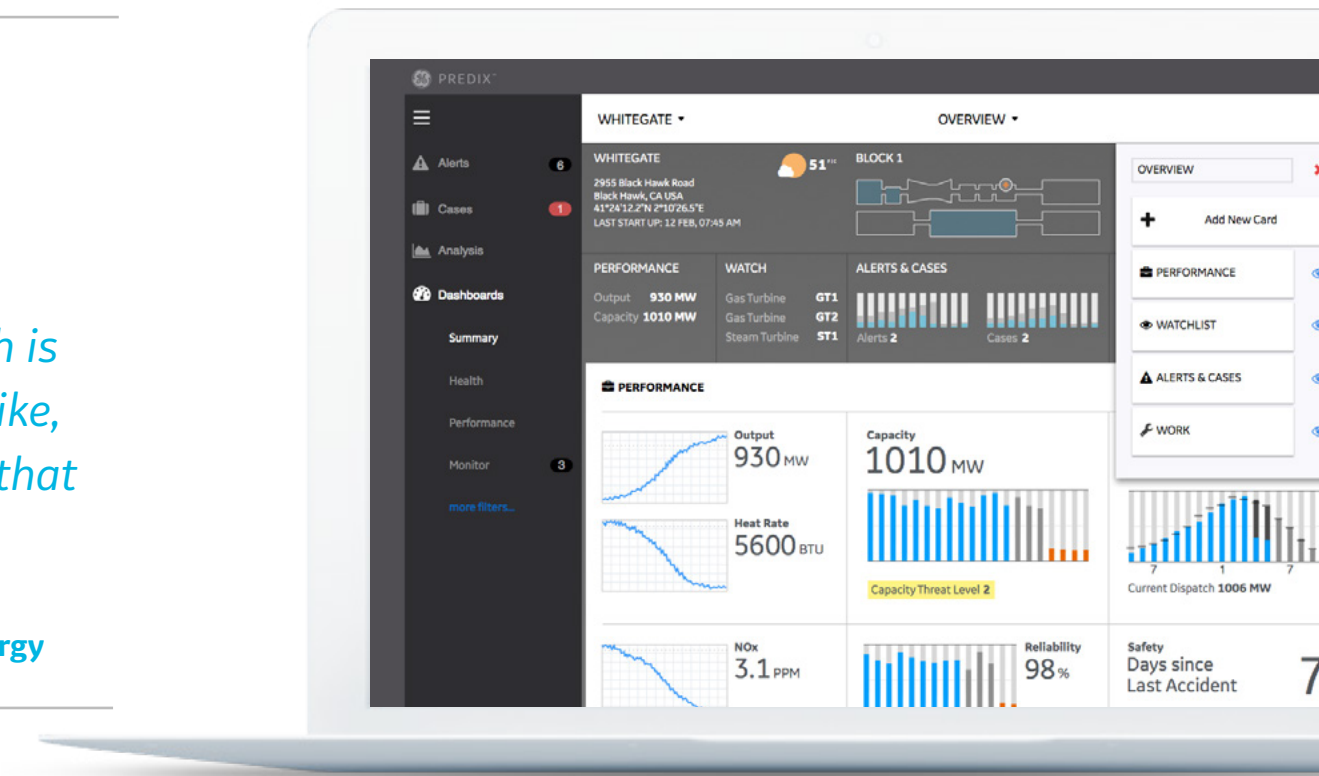
Enabling intelligent asset strategies to optimize performance

GE Digital's [Asset Performance Management \(APM\)](#) suite helps asset-centric organizations drive safer and more reliable operations while facilitating optimal performance at a lower sustainable cost by enabling **intelligent asset strategies**.

APM is capable of working across many types of assets (rotating, non-rotating, and process), OEMs (GE and non-GE equipment and machinery), and industries, across the plant and across the fleet. Built on GE's Predix—the operating system for the Industrial Internet—APM manages collaborative workflows between experts and operational teams. And, it *balances cost, availability, and risk*.

“APM is learning every time we start the plant, every time we stop the plant, every time we change load, every time we change a fan on and off. Our entire plant is being monitored by APM, which is learning what a healthy system looks like, and warning us when we deviate from that healthy system status.”

Declan Lynch, Deputy Project Manager, Bord Gáis Energy



Connect your data

Machine & Equipment Health from GE Digital, part of our APM suite, allows for the secure collection, intermediate storage, backhaul, and administration of time-series and enterprise data from external sources to edge/on-premises and cloud-based APM applications—one time during setup or continuously.



Gain insights

Leveraging advanced data-management and predictive-analytic tools, APM unlocks the power of your data to reveal critical insights. With APM, you get an enterprise-wide and risk-based view of the impact of asset performance management activities to help you make the best decisions.



Optimize your operations

Asset Strategy Optimization (ASO) from GE Digital, part of our APM suite, helps develop, implement, maintain, and optimize intelligent asset strategies to help you make the best decisions and maximize overall asset and operational performance. These strategies also allow you to continuously improve and learn, automatically. ASO can increase asset reliability and availability, reducing maintenance costs while balancing equipment risk profiles.



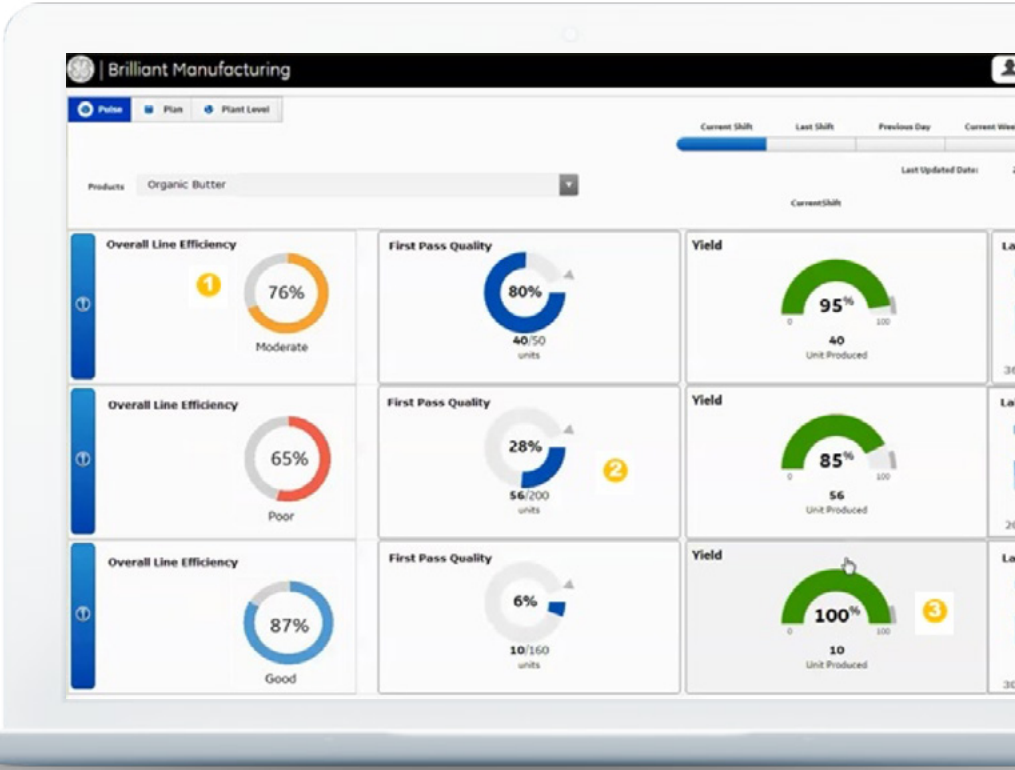
Brilliant Manufacturing

It's time for the smart factory

GE Digital's [Brilliant Manufacturing](#) is a suite of Predix-powered software and services that helps manufacturers optimize plant operations and compress cycle times between market demand and production. Brilliant Manufacturing applications can be securely deployed on-premises, on GE's Predix industrial cloud, and in hybrid configurations. Numerous GE manufacturing subsidiaries are actively using Brilliant Manufacturing software to reduce machine downtime and optimize operational efficiency.

“GE Digital’s Brilliant Manufacturing suite has enabled significant reductions in unplanned machine downtime resulting in higher plant efficiency. As part of our Digital Thread strategy, we will increase our machines and materials connectivity by 400% in the coming year.”

Bryce Poland, Advanced Manufacturing Brilliant Factory Leader, GE Transportation



Connect your data

Brilliant Manufacturing gives you a single, secure way to gather data from a wide variety of assets and systems, creating a comprehensive and validated data repository. Brilliant Manufacturing applications then transform machine data into actionable production efficiency metrics so that plant managers can reduce unplanned downtime, maximize yield, and increase equipment utilization.



Gain insights

Brilliant Manufacturing includes powerful applications for managing production operations—including the control of product flows between equipment—generating product genealogy reports and scheduling changes to reduce excess inventory. Applications provide full traceability of products through every step of the manufacturing lifecycle.



Optimize your operations

Brilliant Manufacturing integrates production data with information from ERP and PLM systems, allowing factories to ship higher quality products while reducing the cycle times and costs for new product introductions. Brilliant Manufacturing enables manufacturers to track each serialized item that moves through the production process, and view the information needed to optimize routing decisions. Manufacturers are able to understand real-time sequence requirements and proactively manage the plant floor when a sequence is broken.



HMI/SCADA

World-class automation software for the smart operator

GE Digital's [HMI/SCADA](#) suite helps customers in manufacturing and infrastructure industries design and implement real-time supervisory control applications. Trusted by thousands of industrial businesses, GE Digital's proven HMI/SCADA suite is used in wide-ranging applications from discrete, hybrid, and continuous manufacturing to utility distribution, generation, and extraction. These applications leverage the latest technologies and can be deployed in a variety of architectures, from a single system on an individual packing machine or remote substation to complex central and distributed network architectures that span multiple factories and geographies.

“By providing real-time hydro station information to our dispatch center, we’ve significantly reduced our troubleshooting downtime, in some cases by as much as 100%, as we can now see exactly when and where the problem is occurring and immediately provide a targeted response.”

**Pierre Letarte, Process Control Superintendent,
Great Northern Paper**



Connect your data

GE Digital's HMI/SCADA software enables fast acquisition and consolidation of data directly from machines—and works across a variety of OEMs—via an extensive suite of I/O drivers and data processing capabilities. Each driver is rigorously tested in our labs, with partners, and in the field, ensuring that your device connections will be fast and reliable.



Gain insights

HMI/SCADA applications include a robust, scalable SCADA engine that drives deep visibility into every aspect of your industrial processes. Our HMI visualizations and analytics provide advanced situational awareness that allows your operators to supervise work across machines, in the control room, and throughout your enterprise.



Optimize your operations

HMI/SCADA enables fast, intelligent monitoring and control by giving operators advanced tools for detecting problems before they occur. HMI/SCADA applications provide a window into your operations cycle—end-to-end—integrating complex processes, analytics, and control into a single pane of glass. Optimization of the entire operator experience reduces downtime, waste, setups, and rework.

Wurldtech OT Cyber Security

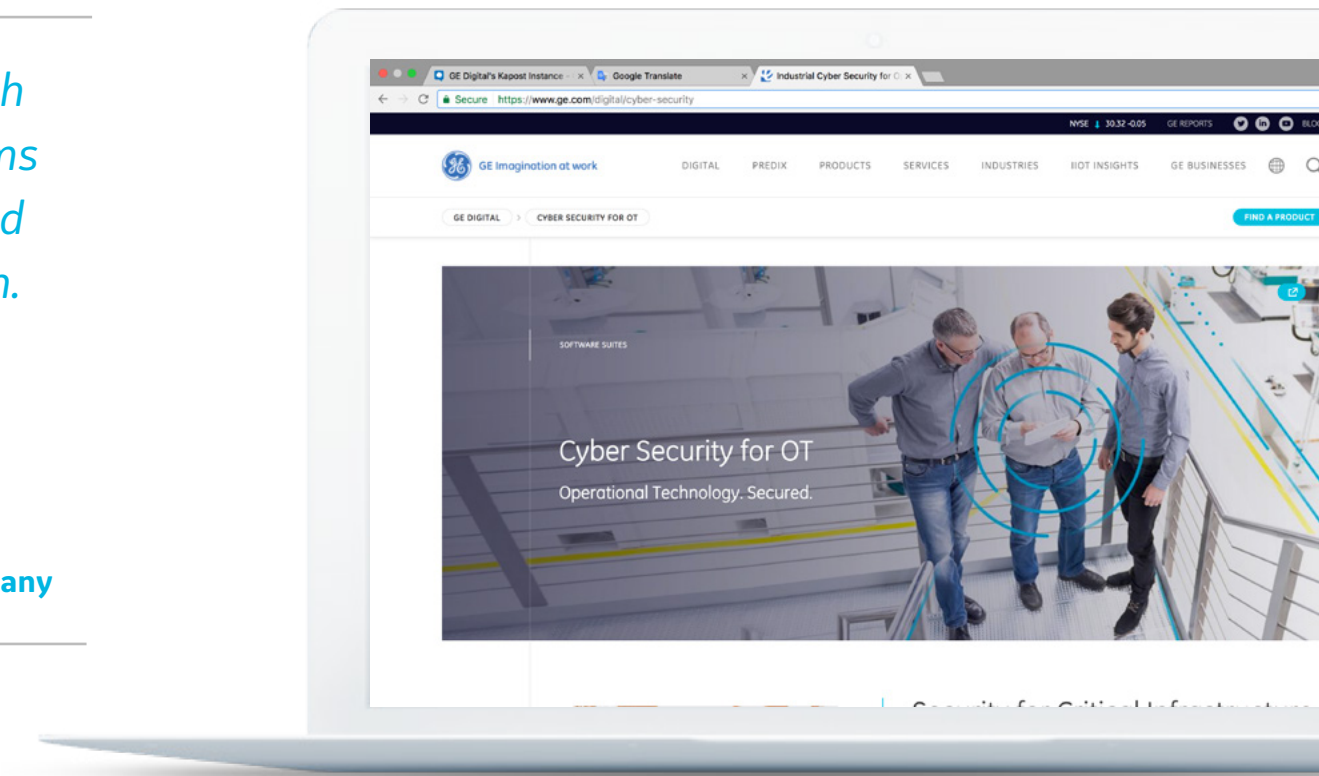
Get on the path to operational resilience

[Wurldtech](#), part of the GE Digital family, provides operational technology (OT) cyber security products and services to help improve the security posture of both device manufacturers and system operators.

Our award-winning OpShield solution was developed to inspect network traffic and enforce policies to protect industrial control systems. OpShield monitors and blocks malicious activity and misconfiguration to ensure highly available operations and secure productivity.

“We are very pleased to be working with Wurldtech to protect our critical systems around the world. They have unmatched expertise and experience in this domain. Wurldtech’s products and services are trusted and integrated throughout our global operations.”

Ted Angevaare, Global DACA Manager, Shell Oil Company



Connect your data

OpShield is easy to install into existing environments—no network re-engineering or downtime is required. It automatically identifies traffic on the industrial network and enforces network security policies unique to OT environments. In addition, Wurldtech provides a variety of cyber security assessment services aimed at identifying network vulnerabilities and improving OT security.



Gain insights

OpShield’s centralized management console provides a graphical interface that allows system operators to easily deploy security policies and vulnerability signatures. It also offers a network-wide view of alerts and attacks. OpShield gives operators visibility into network traffic and applications across your connected production systems.



Optimize your operations

OpShield provides breakthrough drag-and-drop virtual zoning for simple, non-invasive network segmentation. In addition, security administrators can easily define policies that whitelist specified traffic. Using OpShield, organizations can optimize the security of OT applications, networks, and processes.





About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive, and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure, and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

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