

Industrial Application Software Platform for:
SCADA, HMI, IIoT, MES, Alarming, Reporting & More

Ignition!

by inductive automation

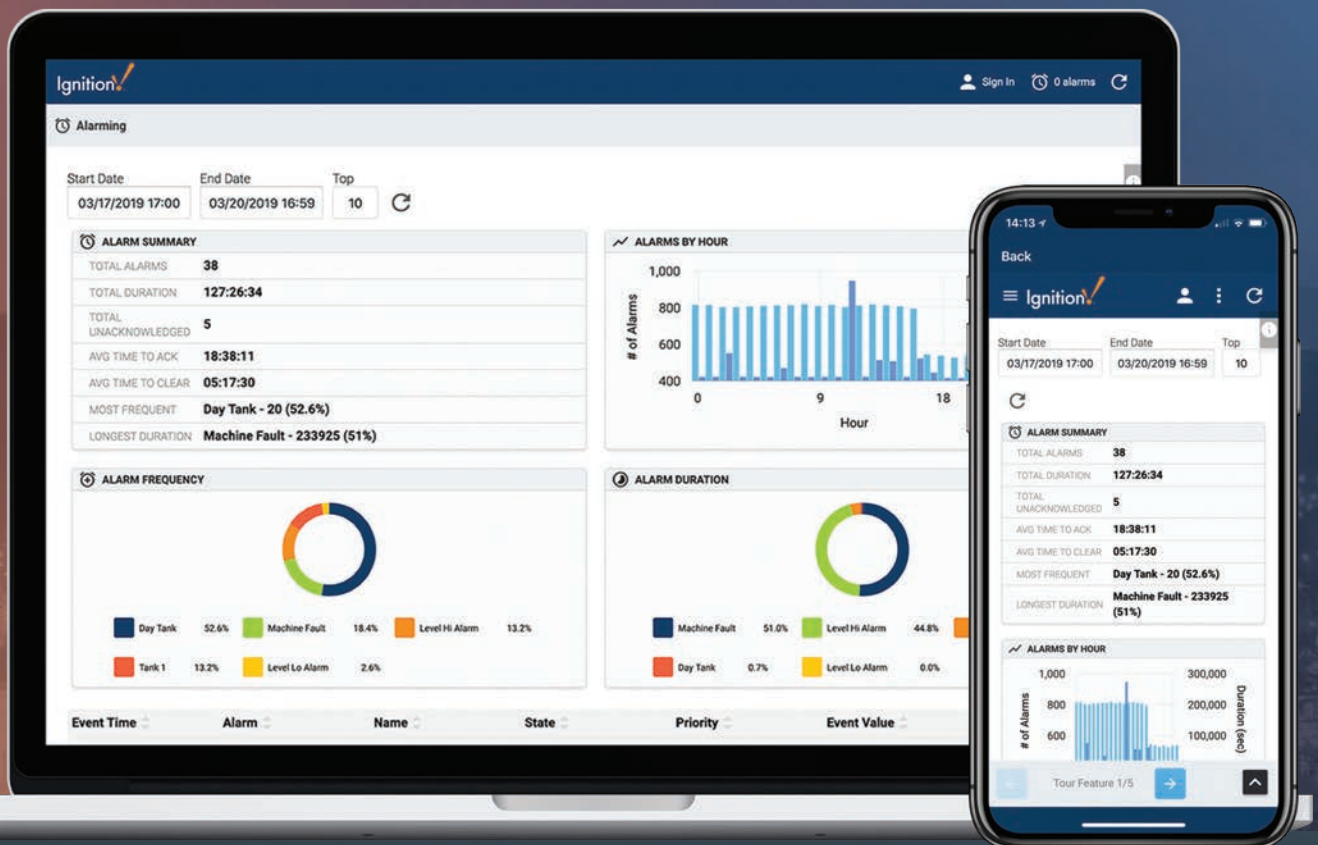
**The Unlimited SCADA Platform
of the Future**

Trusted By:



Meet Ignition!

by inductive automation



Ignition by Inductive Automation is the world's first universal industrial application platform that lets you seamlessly collect all your data, design any kind of industrial application with ease, and instantly web-deploy clients to anyone, anywhere – without limits.

With Ignition it's as easy as “connect, design, and deploy” to get your important industrial data to anyone in your organization.



Connect

Ignition is server software that acts as the hub for everything on your plant floor for total system integration.



Design

With Ignition you can easily extend the functionality of your system by adding hot-pluggable software modules that give you the power to build the exact system you need without slowing down your operations.



Deploy

With Ignition, you can instantly launch an unlimited number of web clients on any device with a browser including laptops, industrial displays, and mobile devices.



“Once we took Ignition on as one of our enterprise platforms, everything improved exponentially across the board from an operational standpoint.”

– Hugh Roddy, Chobani

Unlimited Licensing



Everything You Need for One Affordable Price.

Ignition is unlimited, so for the low cost of one server license you can seamlessly connect all your data, design any kind of industrial application with ease, and instantly web-deploy unlimited industrial and mobile clients to anyone, anywhere — all from one universal platform for industrial automation.



Unlimited Clients

With unlimited runtime clients at no additional cost, you can get your important data and analytics to your entire team, across your whole company.



Unlimited Designers

You can get your whole team developing projects in Ignition, even at the same time, without paying for extra designers.



Unlimited Tags

Ignition allows you to create and use as many tags as you need for devices, OPC servers, and anything else, without limits.



Unlimited Scalability

Ignition grows along with your company, so you can buy one license to connect your entire facility, or multiple licenses to connect multiple facilities.



Unlimited Connections

Using open technologies like OPC UA and SQL, Ignition easily connects to practically any PLC, database, device, and enterprise system so you can get your whole enterprise connected.



“There are no licensing limits on screens, no licensing limits on tags. That’s a wow moment.”

— Chris VanRemoortel, Bixby International

Unlimited Possibilities



SCADA, IIoT, MES and Beyond – All On One Platform.

Ignition is the world's first truly universal industrial application platform because it empowers you to rapidly develop any type of industrial application, and scale your system in any way — all on one platform.



SCADA

Easily control, track, display, and analyze your processes.



IIoT

Make your data more accessible and efficient.



MES

Track your production, manage recipes, calculate OEE, and more.



HMI

Build optimized screens to monitor and control your machinery.



Alarming

Build complex alarming systems with ease and get notifications instantly.



Reporting

Easily create and deliver dynamic, database-driven industrial reports.



Edge Computing

Capture and visualize critical data at the remote edge of your network.



Enterprise

Empower your teams with better data to make smarter decisions.



Mobile

Build mobile-responsive industrial applications using HTML5.



"Pretty much whatever we think of doing, we do it in Ignition."

— David Lewis, Sierra Nevada Brewing Co.

Table of Contents



This booklet will take you on a tour of benefits and features that make the Ignition platform so special, as well as the amazing solutions your company can easily build with Ignition.

10–29

The Ignition Platform

Connect

Industrial Application Platform
One Unified Designer

Design

Fully Integrated Software Modules
Runs on Everything

Deploy

Fits Any Architecture
Infinitely Scalable
Industrial-Strength Security

30–63

Ignition Solutions

SCADA
HMI
IIoT
MES
Mobile
Alarming
Reporting
Edge Computing

64–71

Cost of Ownership

Return on Investment
Who Uses Ignition
Contact

The Ignition Platform



Ignition is the world's first truly universal industrial application platform because it empowers you to connect all of the data across your entire system in any way, without limits.



Connect

One Central Hub for Everything on the Plant Floor

Ignition is server software that acts as the hub for everything on your plant floor to achieve total system integration. No matter what brand, model, or platform, it talks to your plant-floor equipment just as naturally as it talks to SQL databases, seamlessly bridging the gap between production and IT.



The One and Only Universal Industrial Application Platform

Ignition is the world's first truly universal industrial application platform because it empowers you to connect all of the data across your entire enterprise, rapidly develop any type of industrial automation system, and scale your system in any way, without limits. Here are the amazing features that make Ignition the first and only universal Industrial Application Platform:



Unlimited Licensing Model

Add unlimited clients, screens, tags, connections, and devices at no additional cost.



Built on Open Standard Technologies

Based on easy-to-support IT standards like SQL, Python, MQTT, and OPC UA.



Server-Centric Web-Deployment

Easily deploy clients from a central server at one site, multiple sites, or in the cloud.



Connects to Anything

Connects to any major database and PLC, bridging the gap between IT and OT.



Modular Configurability

Use integrated software modules to build any kind of industrial application to fit your processes.



Universal Designer

One integrated development environment to build applications for HMI, SCADA, MES, and more.



Cross-Platform Compatibility

Installs on any major operating system including mobile OSes like iOS and Android.



Rapid Development and Deployment

Get all your tools in one place so you can build and deploy applications quickly and easily.



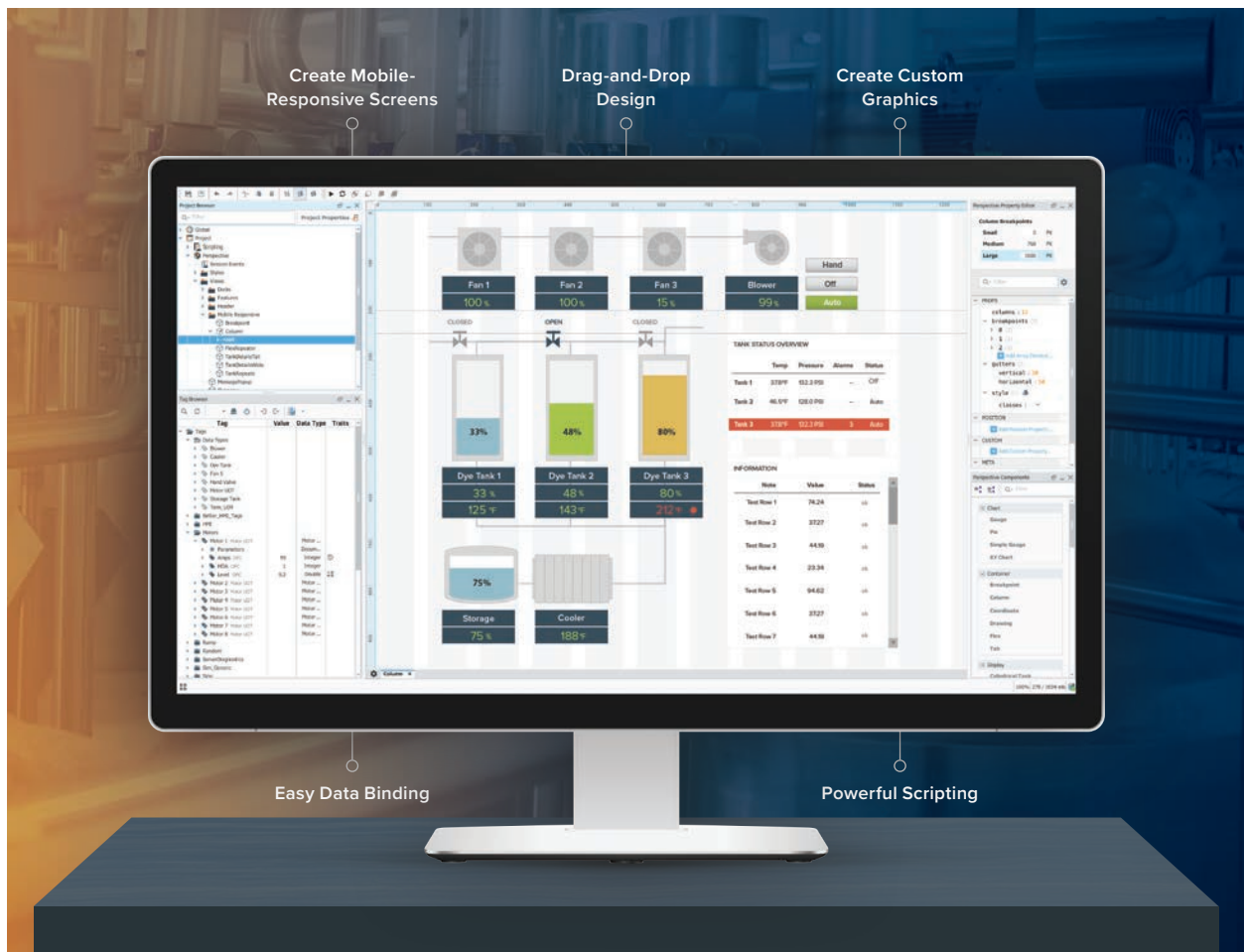
View on Any Device

View clients on any device including desktops, industrial displays, and mobile devices.

Design

Create Any Kind of Industrial Application for Any Industry

Ignition comes with everything you need to create any kind of industrial application for desktops, industrial displays, and mobile screens. The Ignition Designer combines a rich component library, easy data-binding, and powerful tools for drawing and scripting, into one fully integrated development environment.



One Unified Designer

The Ignition Designer is built into the Ignition platform so it comes standard, at no extra cost, with every Ignition installation. The Designer brings all your data, systems, and developers together into one beautifully simple, integrated development environment specifically designed to help you build industrial applications more quickly.

Accelerate Application Development

With a clean, intuitive design and a straightforward project management system, the Ignition Designer makes ease-of-use a priority. If you can dream it, Ignition can do it — fast!



Unlimited Design Clients

You can launch an infinite number of Designers, and have multiple people work simultaneously on the same project without locking anyone out of shared project resources.

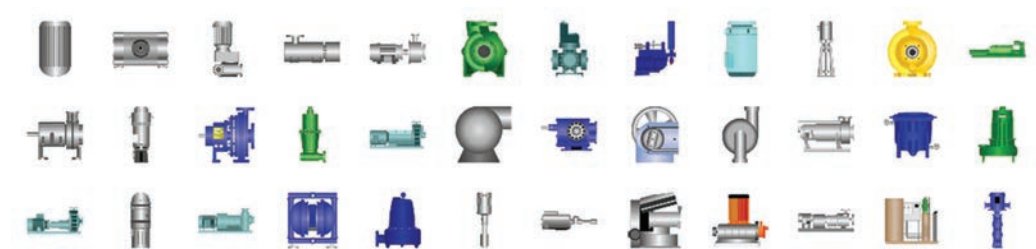


"Ignition is my engine of innovation because that's my framework for what I build upon. When my boss asks me to dream up something new, I almost always turn to Ignition."

— Jason Hamlin, Plant Instrument Technician

Rapidly Build and Easily Customize Large Projects

Ignition's simple project inheritance file system makes it easy to define an overarching corporate project that shares resources such as templates, scripts, and themes across multiple applications.

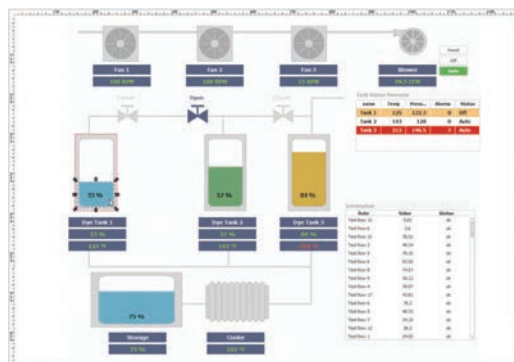


Create Custom Graphics and Animations

Use powerful 2D vector drawing and animation tools to create any shape with a variety of line strokes, color fills, patterns, and gradients, or import your own Scalable Vector Graphics (SVG).

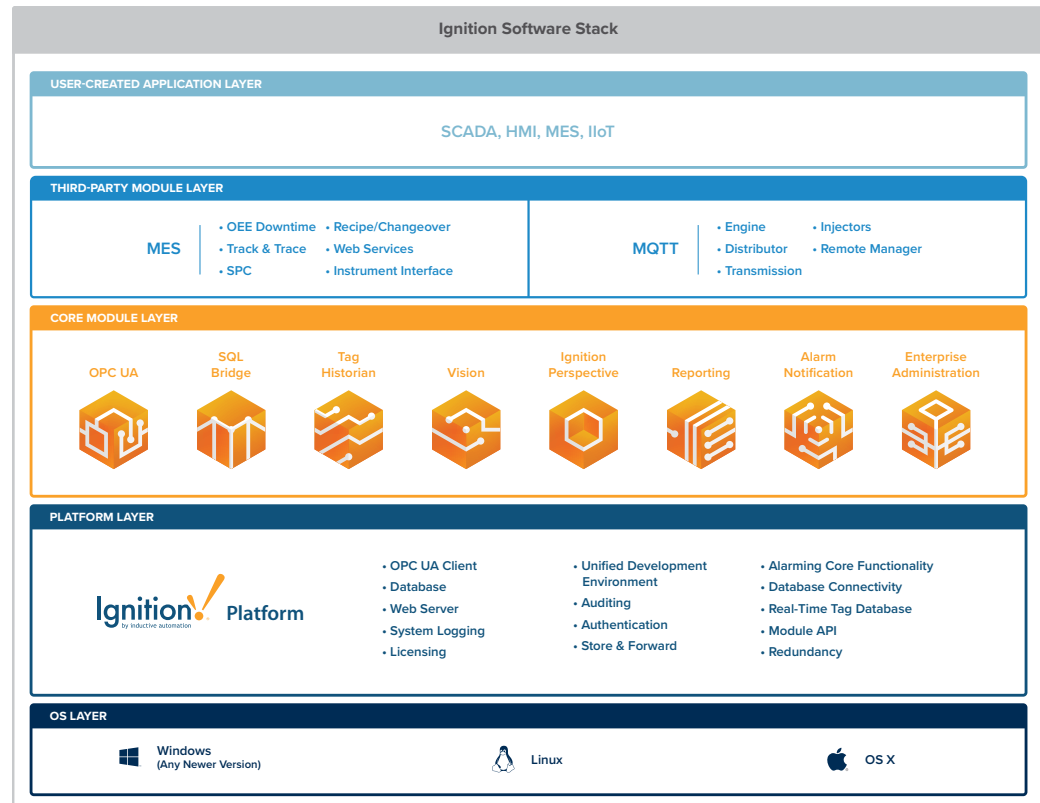
Easy Drag-and-Drop Design

Use simple drag-and-drop data binding to easily create links between properties of on-screen components and data tags from PLC values, SQL queries, expressions, and more.



Fully Integrated Software Modules

Ignition is a universal industrial application platform capable of unlimited extensibility through the addition of fully integrated software modules. All modules are hot-pluggable so they can be installed, removed, and upgraded without impacting your operations in any way, and they all work together seamlessly.



Build the Exact System You Need

With a full suite of powerful Ignition Core and third-party modules available for the Ignition platform, you can easily develop industrial applications perfectly customized to your unique processes.



"The modules, integration, and flexibility of the Ignition platform let us build an application that's easily adopted in production."

– Enrico Aramini, HTC High Tech Consultant SRL

Inductive Automation Modules

Inductive Automation makes a full line of powerful Ignition Core modules that empower companies to create virtually any kind of industrial application.



Ignition Core Modules

With the Ignition Core modules, users can add features such as charts and tables, mobile access, voice notifications for alarms, transaction management, sophisticated logic systems, enterprise administration, and much more.



Vision Module

The visualization module for plant-floor and desktop screens. Launch unlimited rich, web-deployed clients anywhere on the network. Display charts, graphs, trends, HMI screens, and more.



Ignition Perspective Module

The visualization module for mobile-first industrial applications. Easily build pure-web, mobile-responsive, visually stunning applications for monitoring and control using HTML5.



SQL Bridge Module

Easily log data, call stored procedures, and synchronize data bi-directionally.



Tag Historian Module

Turn a SQL database into a high-performance time-series tag historian.



Reporting Module

Create dynamic, database-driven PDF reports with pixel-perfect layout — with ease.



Alarm Notification Module

Configure the logic for how, why, and when alarm notifications are delivered, manage alarm notification for groups of users, and send notifications via email.



Enterprise Administration Module (EAM)

Secure and manage many Ignition installations from one location.



OPC UA Module

Connect to most major programmable logic controllers (PLCs) with the Ignition OPC UA Module. This module serves as a totally cross-platform OPC UA server with an open, plug-gable driver system. Drivers for OPC UA Module: Modbus Driver, UDP and TCP Drivers Module, Allen-Bradley Driver Suite, Siemens Driver, DNP3 Realtime Driver, Omron Driver

Strategic Partner Modules

Inductive Automation's Strategic Third-Party Module Partner Program enables third-party software providers to create modules for the Ignition platform in their area of expertise.



Use the Sepasoft manufacturing execution system (MES) modules to bridge the gap between the plant floor and the executive level.



OEE Downtime Module for Ignition

Combines both OEE calculations and downtime tracking to give operations managers a robust software package that measures efficiency and insight into how to boost OEE.



Instrument Interface Module for Ignition

Capture raw textual data from instrument type devices via serial, text files, OPC devices and more, and parse out that data to Ignition, databases or other systems.



Track & Trace Module for Ignition

Provide production control and track product from the raw materials to the finished state, access genealogy data, and set up a centralized operator interface for all MES information.



Web Services Module for Ignition

Configure web service operations and data types, and invoke web service operations from the HMI, SCADA or MES system to read or write data to web-services-supported systems, such as ERP.



SPC Module for Ignition

Reduce or eliminate late or missing sample collection, inaccurate sample data and other issues leading to quality problems and deliver and analyze your SPC data in real-time.



MES Enterprise Module for Ignition

Connect multiple MES Ignition Gateways across your entire enterprise to form a large, centrally managed MES solution.



Recipe/Changeover Module for Ignition

Expertly build, manage and monitor recipes and quickly and accurately change machine, process or system recipes.



With the Cirrus Link IIoT Modules, you can set up a secure MQTT message-oriented middleware infrastructure that increases data availability.



MQTT Engine Module for Ignition

Bi-directionally communicate with edge-of-network devices securely via an MQTT Server. Create one pipeline for all your IIoT data that increases data throughput and efficiencies.



MQTT Distributor Module for Ignition

Adds an MQTT server to the Ignition platform that enables MQTT clients to securely connect, publish, and subscribe to data.



MQTT Transmission Module for Ignition

Use Ignition to publish data from the edge of the network by taking Ignition tag change events and publish them as MQTT messages to an MQTT server.



AWS, Azure, IBM & Google Cloud Platform Injector Modules for Ignition

These Injector modules enable end users of Ignition to select tag data from the Ignition platform to be sent into the Amazon Web Services, Microsoft Azure, IBM Cloud, and Google Cloud Platform cloud infrastructure for analytics.



MQTT Recorder Module for Ignition

The MQTT Recorder Module receives record objects via MQTT/Sparkplug and automatically generates and populates database tables with records as they are received.

Deploy

Web-Deploy Clients to Any Desktop, Industrial Display, or Mobile Device

Ignition gets your vital real-time data to anyone, anywhere, on any device with a web browser. With Ignition's server-centric web-deployment model, you can instantly launch an unlimited number of web clients from an on-premise or cloud-based server.

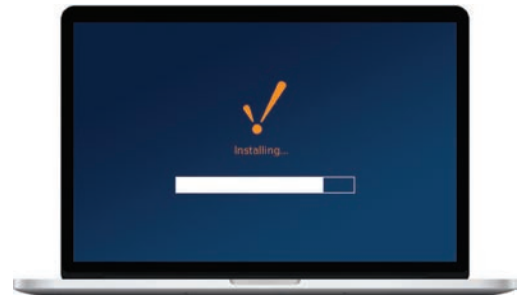


Runs on Everything

Ignition is totally cross-platform and installs in minutes onto servers, laptops, mobile phones, and embedded devices.

Quick and Easy to Install and Update

The Ignition platform is designed specifically for industrial applications so it's stable, secure, and streamlined. Getting started with Ignition only takes one simple, 3-minute installation. Install it once, in one place on the server, and then instantly deploy and update client screens to any device from one central location.



For the Plant Floor and Your Phone

With the Ignition Vision Module, you can easily create and web-deploy rich clients that are perfect for dedicated plant-floor displays and HMIs. With the Ignition Perspective Module, you can also have the tools to build first-class, mobile-responsive industrial applications that run natively in HTML5 on any device with a web browser.

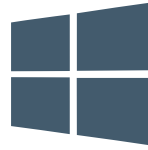


"It used to just be in the control room, but now we're able to take it down to everywhere throughout the plant, everybody in the offices, everybody on their tablets even."

– Chris McLaughlin, Vertech

Cross-Platform Clients

Ignition clients are totally cross-platform: They run on Windows, macOS, and Linux, and with the Ignition Perspective Module, clients can also run on iOS and Android. Whether on a laptop or mobile device, Ignition can go anywhere you need, to get the data you want.



Ignition Onboard

The Ignition platform is flexible enough to work on just about any device; it can even be embedded on devices on the edge of the network. That's why a number of companies are pre-installing Ignition Edge on-board their products.

Companies Onboard with Ignition Edge

These vendors pre-install Ignition Edge software on select products:

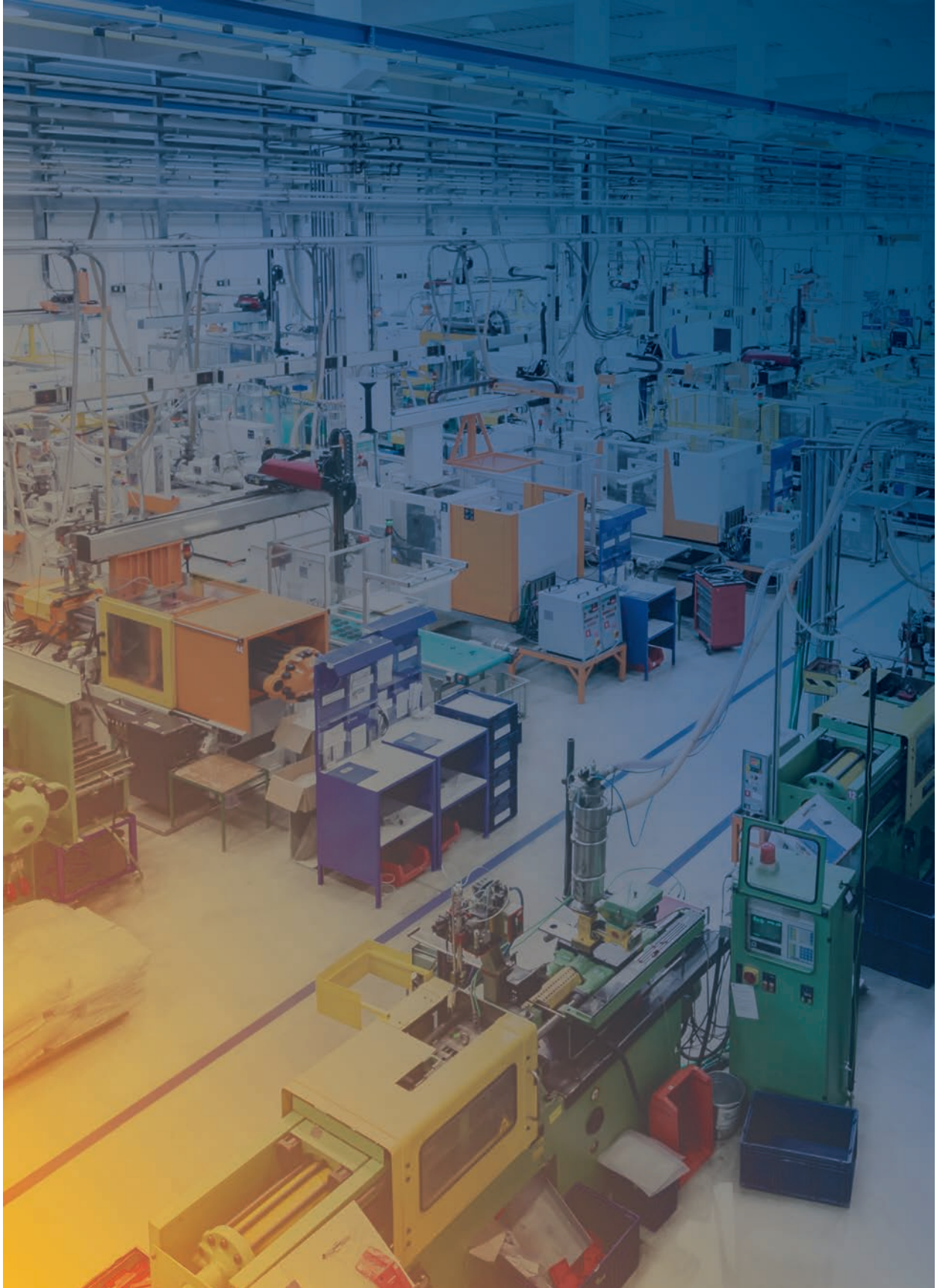
OPTO 22

FREEWAVE

B+B SMARTWORX
Powered by **ADVANTECH**

MOXA

EZAutomation
Division of **AVG**

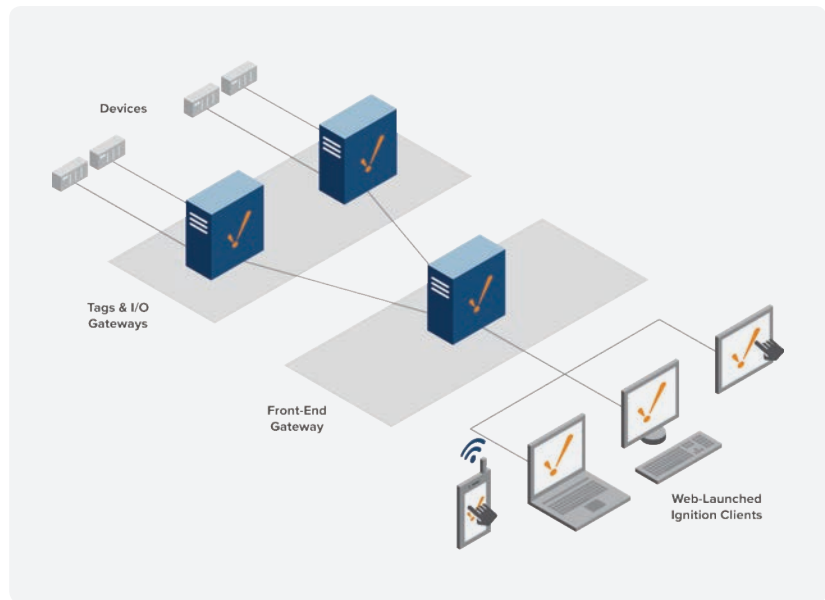


Fits Any Architecture

Ignition's server-centric web-deployment model is flexible and scalable enough for architectures of any type or size. Ignition can be configured to fit just about any architecture; here are some of the most common architectures it is used in.

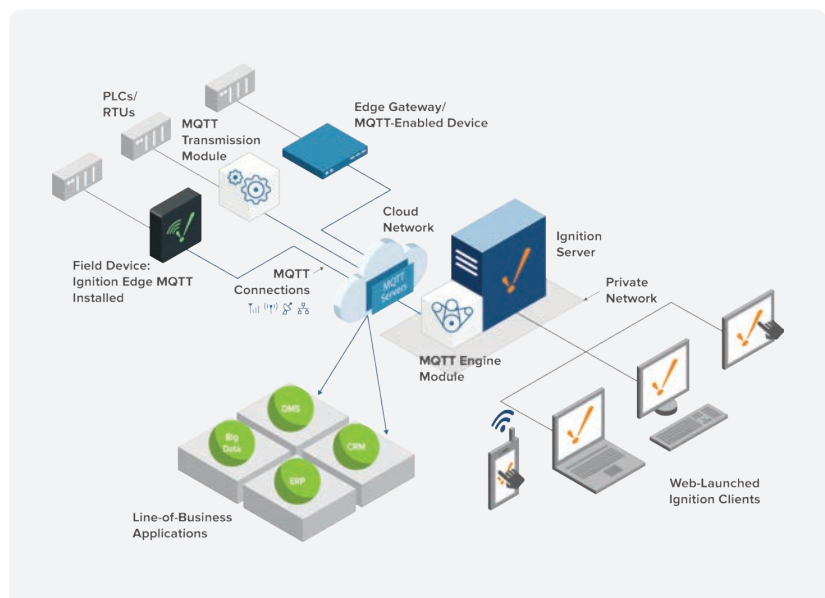
Ignition Scale-Out Architecture

The scale-out architecture links together several Ignition Gateways to form a decentralized system.



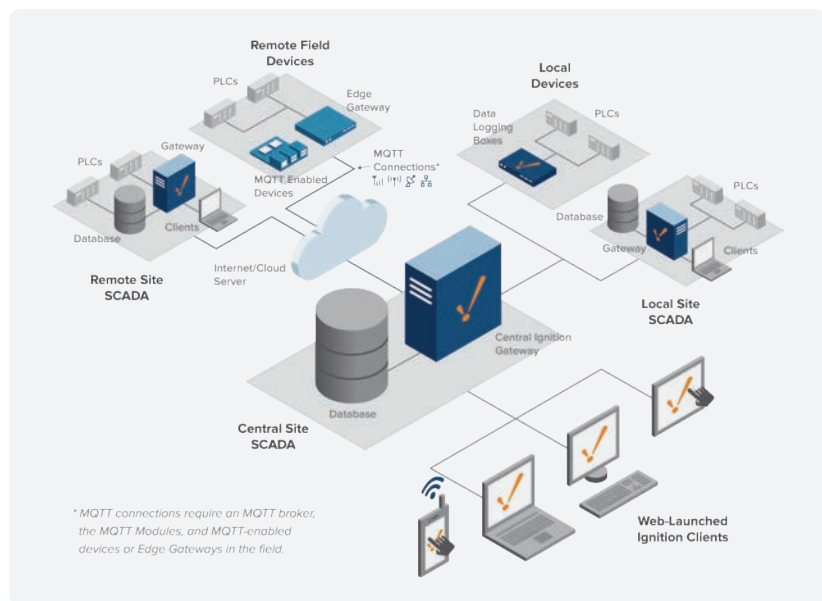
Ignition IIoT Architecture

With the Ignition IIoT architecture you can set up a secure MQTT Message-Oriented Middleware (MOM) infrastructure in the cloud, on a private on-premise network, or a hybrid of both.



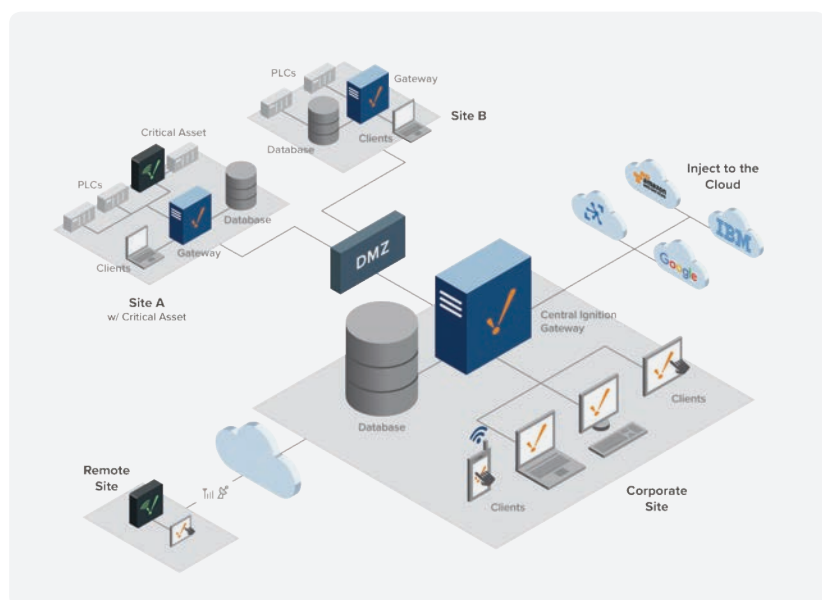
Ignition Hub & Spoke Architecture

In the hub-and-spoke architecture, multiple local and remote sites are linked together by a central Ignition Gateway.



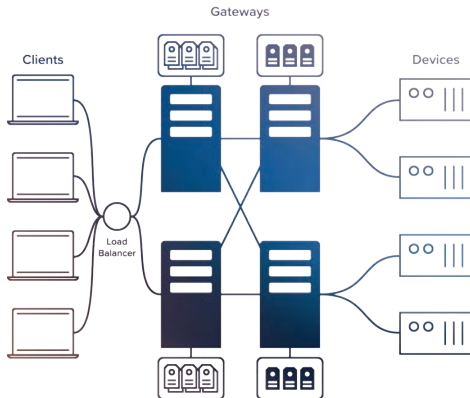
Ignition Enterprise Architecture

With the Ignition enterprise architecture, you can send data from independent local sites and remote sites up to a centralized corporate site and to cloud services.



Infinitely Scalable

Ignition is perfect for enterprise-wide implementations because it is scalable enough to handle large systems and secure enough to protect your critical data.



Unlimited Scalability

In addition to being used for smaller, centrally managed single-server architectures, Ignition can scale gracefully for use in larger distributed architectures where one Controller Gateway is used to manage multiple Agent Gateways, or in scale-out architectures where the workload is distributed between multiple Gateways.

Handle Huge Amounts of Data

The tag system in Ignition is optimized for top speed and performance in large enterprise systems. Ignition lets you handle larger amounts of data more easily and quickly than any other solution. You can even make dynamic changes during runtime and update UDTs without slowing down your system.



Easily Manage Large Multi-Site Projects

Ignition 8 has a new project system that makes it easy to define overarching corporate projects that share resources like windows, scripts, and themes that can be inherited by the local sites. Changes at the top can cascade down to all projects or be overridden and customized at each local site.

Industrial-Strength Security

Ignition provides strong security for today's world, protecting your data with ultra-secure SSL technology and support for modern cybersecurity protocols.



Built on Trusted Technologies

Ignition gives you all the tools necessary to make your system as secure as you need it to be. Ignition is built on a solid, unified architecture and proven, industrial-grade security technology, which is why industrial organizations all over the world have been trusting Ignition for years with their mission-critical systems.

Keep Your Data Secure with SSL Technology

Ignition supports modern protocols like SSL so you can seamlessly integrate your Ignition system with your existing security strategy. We know that your industrial data is vital to your business: that's why Ignition comes with the ability to safeguard your data with ultra-secure SSL technology. SSL is used by financial institutions all over the world to encrypt data and the communications channel it passes through.

Powerful Client Authentication

Ignition supports modern, web-based authentication strategies such as federated identity, multi-factor authentication (MFA), and single sign-on (SSO). With Ignition you can centralize identity management through trusted federated identity technologies such as SAML and OpenID Connect. Ignition gives you the power to assign user roles natively or to integrate with corporate network security using Microsoft Active Directory™. You can grant access to system areas for different users, and turn access on and off with the click of a button.



Keep Informed with Easy System Auditing

Ignition's built-in user auditing gives administrators incredible insights about what is happening in the system, when and where it is happening, and who is doing what. This enables you to quickly resolve issues and mitigate costly downtime incidents.

Ignition Solutions



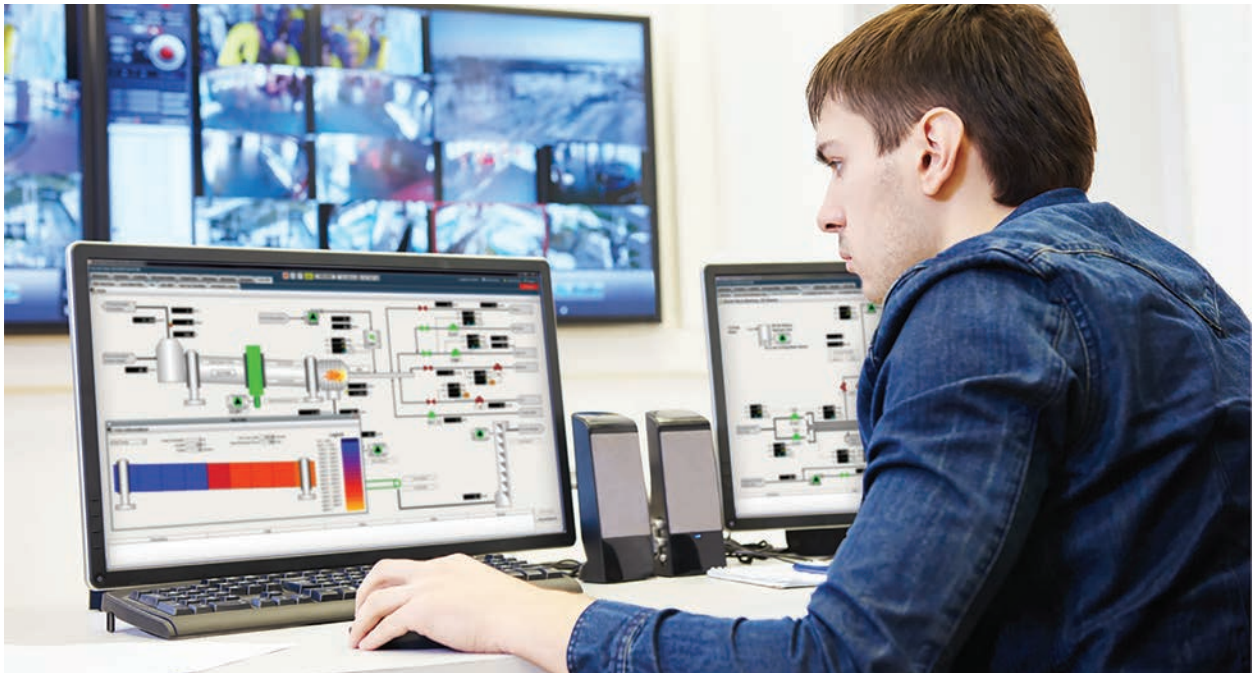
Ignition is a powerful integrated development environment with everything you need to create virtually any kind of industrial application – SCADA, IIoT, MES and beyond – all on one platform.



SCADA

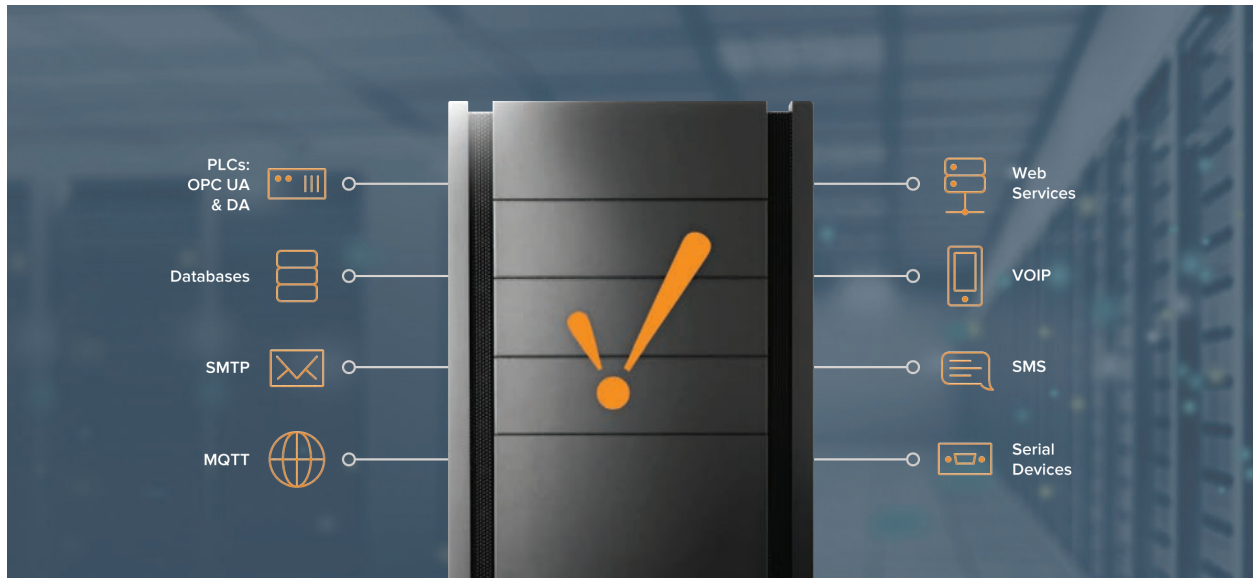
See, Control, and Analyze All Your Data, in One Place

Ignition is The New SCADA because it solves all the major pain points of traditional SCADA like strict hardware requirements and slow installations. Ignition empowers your business to easily control your processes, and track, display, and analyze all your data, without limits.



"Ignition has been a very flawless SCADA system for us ... it's been very reliable and it supports all our needs now and in the future."

– Dennis Pickle, St. Lucie West Services District



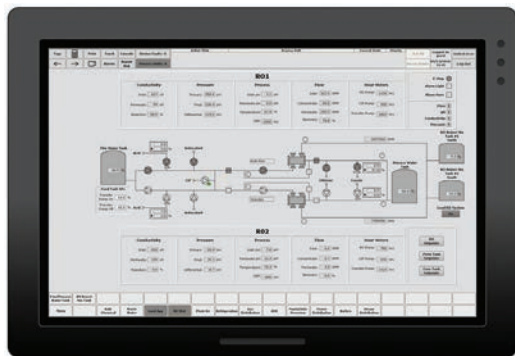
Take Data Acquisition to the Next Level

Ignition SCADA software comes standard with a comprehensive set of data acquisition tools which includes built-in OPC UA to connect to practically any PLC, and the ability to seamlessly connect to any SQL database. Ignition can also turn any SQL database into a high-performance industrial historian and connects to IIoT devices through MQTT.



True Real-Time Monitoring

Ignition is engineered to streamline data-throughput so you can see real-time tag values. Ignition's real-time monitoring gives you the power to quickly see the status of your facility, on any device.



Control Your Process with Powerful HMIs

With Ignition, you can easily start and stop processes, monitor multiple data points at multiple locations, and check the status of the entire plant floor at any given moment. Ignition comes standard with the Ignition Designer, the industry's most powerful IDE, so you can effortlessly create optimized HMI screens to do whatever you need.

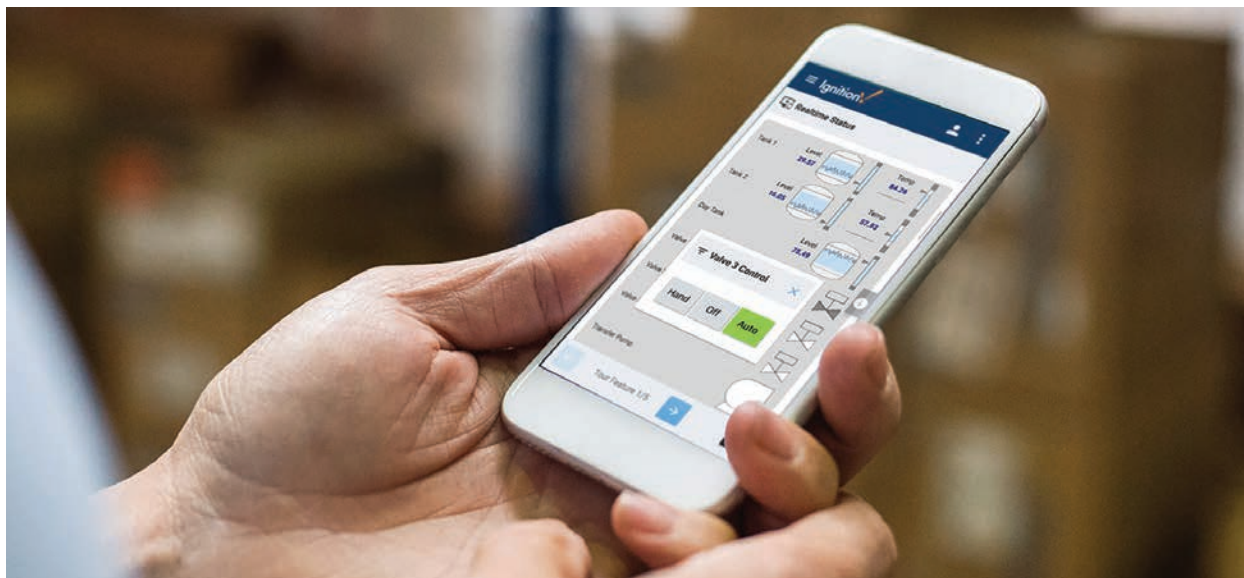
Powerful Visualization Tools

Easily create dynamic SCADA dashboards with powerful tools for data analysis. Stay on top of your business objectives with a full library of customizable charts and tables to monitor key performance indicators, see at-a-glance trending, and more.



Build Fully Mobile-Responsive SCADA Applications

Get all the tools you need to build full-fledged, totally mobile-responsive SCADA applications that put the full overview and control of your plant floor right on your phone, tablet, and desktop— all with one application.



Build Next-Generation Smart SCADA Applications

Ignition lets you leverage the power of your mobile device's intuitive touch inputs, sensors, cameras, and GPS to create the next generation of SCADA applications. With Ignition, you can create pure-web SCADA applications that use HTML5 and CSS3 to run natively inside any major web browser.

More Features

Symbol Factory

Choose from thousands of customizable graphics for your project.

Transaction Management

Easily log data, call stored procedures, and synchronize data bi-directionally.

SCADA Alarming

Easily stay aware of what's happening at your facility, wherever you are.

Industrial Historian

Turn a SQL database into a high-performance time-series tag historian.

Dynamic Reporting

Create a full range of dynamic, data-rich reports and send them anywhere.

Store-and-Forward

Store-and-forward historical data so you never lose it.

HMI

HMI Software That is Powerful and Easy to Use

Ignition makes working with HMIs easy, it installs in minutes on virtually any device, and updating an HMI with Ignition is fast and painless. With the included Ignition Designer, you can build HMIs with historical trending, alarming, and more with drag-and-drop ease.



"I've used almost every major HMI package that's out there ... I wanted to pick the winner, and I feel strongly that I picked the right product with Ignition."

– John Pegram, Integrated Security Controls



Connect to Any PLC

Ignition is equipped with OPC UA so it can easily connect to third-party OPC servers. It also has available driver suites for Modbus, Siemens, Allen-Bradley, and more, so you can easily connect to virtually any kind of industrial device.

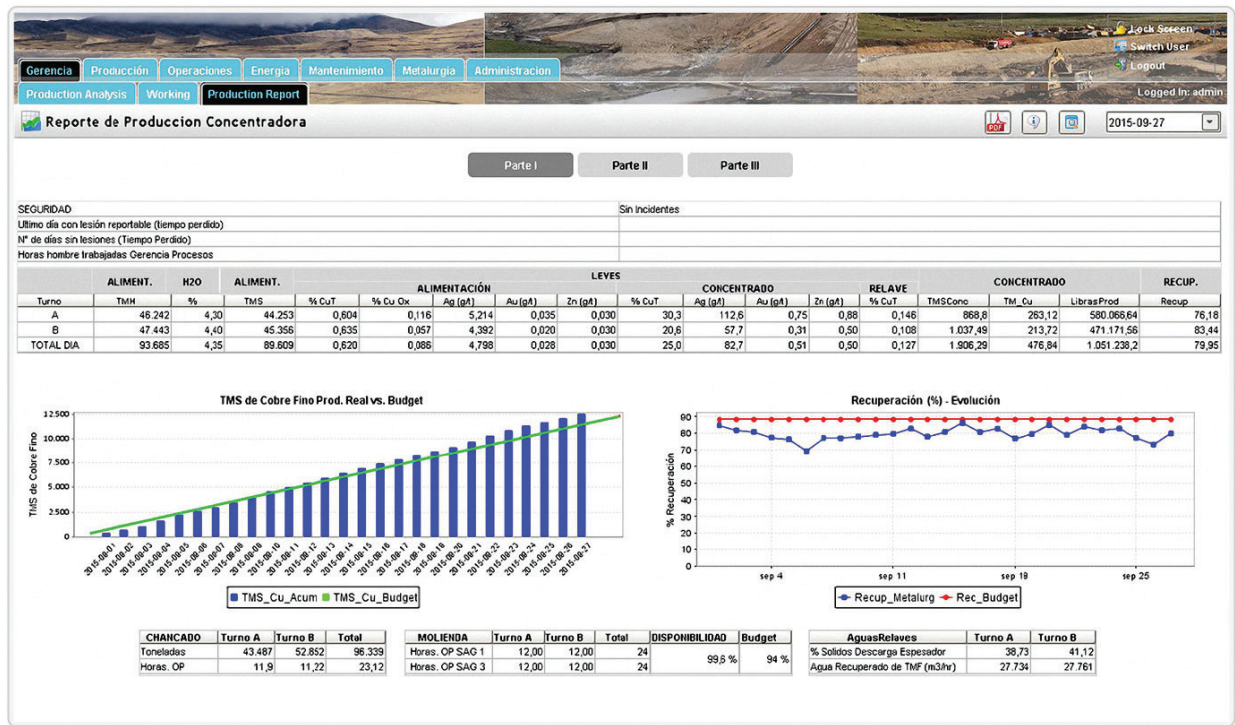
Turn Any Screen Into an HMI

Ignition works on any version of Windows, macOS, Linux, and more, so you can install it on any industrial HMI or device. With support for ARM processors, it can also run on the latest generation of efficient edge-of-network devices.



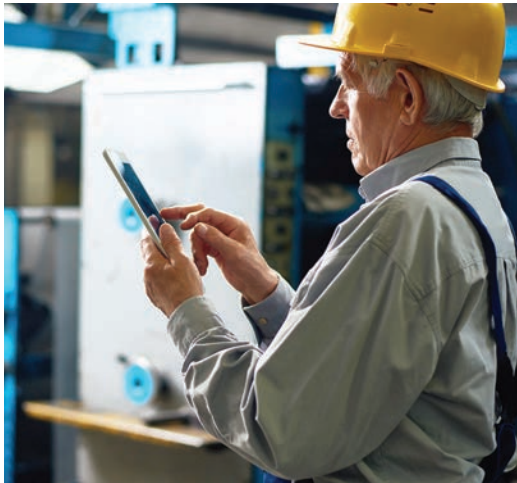
See and Control Your Processes

Quickly see the status of your machines in real-time, monitor multiple data points at multiple locations, and start and stop processes with the push of a button.



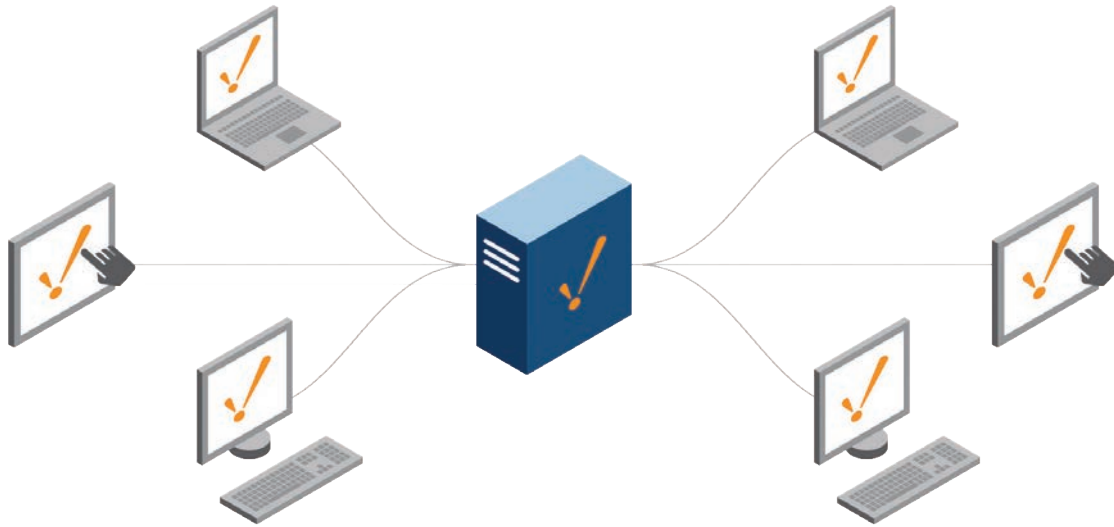
Analyze Historical Data

Easily connect to a SQL database to store and display historical data on customizable charts, tables, and graphs to view trends and track KPIs at-a-glance.



Build Fully Mobile-Responsive HMI Applications

Get all the tools you need to build beautiful, totally mobile-responsive HMI applications that put the full control of your plant floor right on your phone or mobile device. Ignition lets you leverage the power of your mobile device's intuitive touch inputs, sensors, cameras, and GPS to create the next generation of HMI applications. With Ignition, you can create pure-web HMI applications that use HTML5 and CSS3 to run natively inside any major web browser.



Enterprise-Wide HMIs

Ignition works great as a single standalone HMI software solution. Additionally, Ignition has the unique ability to connect all your HMIs together into one enterprise-wide solution that you can centrally manage, update, and deploy.

More Features

Alarm Notification

Easily stay aware of what's happening at your facility, wherever you are.

Local-Client Fallback

With a built-in data buffer, you'll never have to worry about losing your critical data.

Symbol Factory

Choose from thousands of customizable graphics for your project.

Rock-Solid Reliability

Ignition is built to just work so you never have downtime due to faulty HMI screens.

Single File Restoration

With single file restoration, you can get your HMIs back into action quickly.

Instant Installs and Updates

Install on a device or server in just 3 minutes; push updates to clients everywhere, instantly.

IIoT

Make Your Data More Accessible, Powerful, and Efficient with MQTT

Ignition IIoT by Inductive Automation is an end-to-end Industrial Internet of Things (IIoT) solution that combines the amazing efficiency of the MQTT data-transfer protocol with the unlimited data acquisition and development power of the Ignition industrial application platform.



"I've waited 17 years for a platform like Ignition to come along. Now with MQTT and Ignition, IIoT is a reality."

– Arlen Nipper, Co-Inventor of MQTT



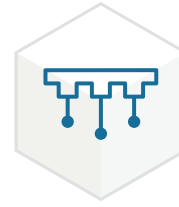
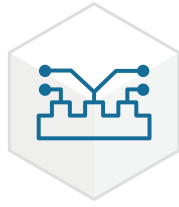
Instantly Subscribe to Your Industrial Data

By leveraging the MQTT protocol's publish-and-subscribe methodologies, Ignition decouples devices from applications and pushes the polling to the edge of the network. This creates one streamlined data pipeline that frees data to be instantly accessible to the entire enterprise, without straining data bandwidth.

One Universal Platform for IIoT, SCADA and More

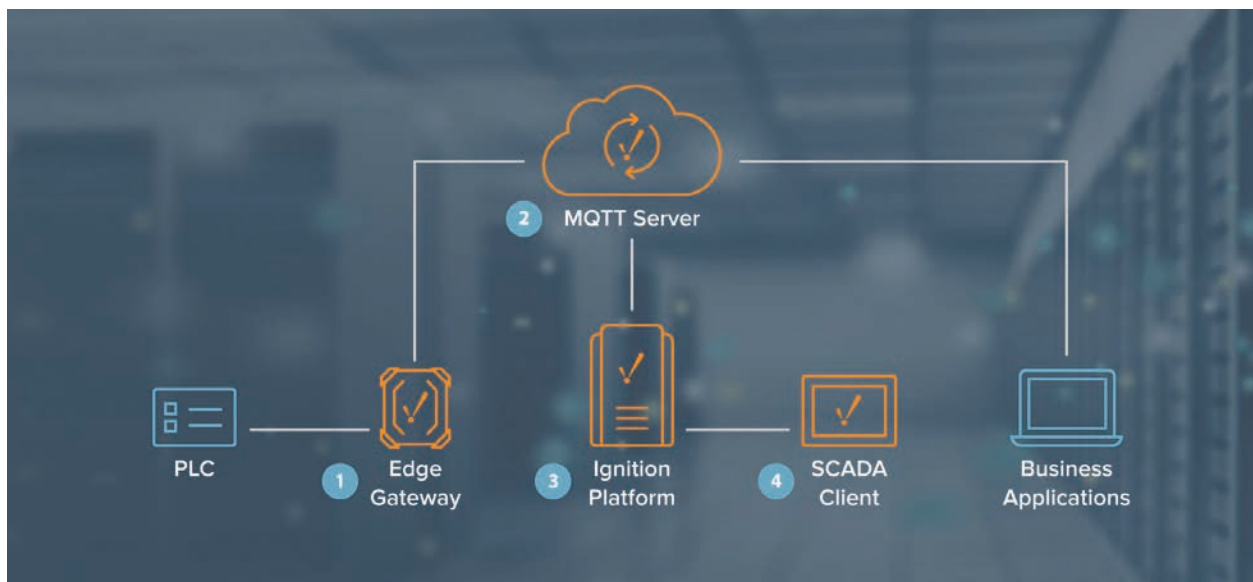
Ignition is the only IIoT platform with built-in tools for creating full-featured SCADA systems. Ignition is modular, so you can easily add fully integrated software modules for building industrial applications such as SCADA, alarming, reporting and more.





Add Integrated MQTT Software Modules

Cirrus Link Solutions is a strategic third-party module partner of Inductive Automation with years of experience developing top-quality IIoT solutions. With software modules for transmitting data from the field via MQTT, launching an MQTT server in the cloud, and connecting that data to industrial and business applications, the Cirrus Link IIoT modules for Ignition empower organizations to create one streamlined pipeline for all their IIoT data.



Ignition IIoT Architecture

Adding the Cirrus Link MQTT Modules to the Ignition platform empowers companies to set up their own IIoT solution. There are four main features to an Ignition IIoT architecture.

1. Publish Data from The Network's Edge
2. Publish and Subscribe to Data Through MQTT
3. Connect Ignition to an MQTT Server
4. Build and Deploy Ignition Applications



Flexible & Scalable Architectures: In the Cloud, On-Premise, or Both

The architecture of Ignition IIoT is flexible: you can set it up in the cloud, on a private on-premise network, or a hybrid of both. Ignition is also easily scalable so you can grow from a small system to an enterprise-wide solution with ease.

More Features

Industrial-Grade Protocol

MQTT was designed specifically to meet the demands of industrial control systems, so it's extremely lightweight (2-byte header), bi-directional, stateful, and secured with TLS technology.

Seamless Integration with Ignition SCADA

All Ignition solutions work seamlessly together for easy system integration.

Third-Party IIoT Platform Integration

Full integration with other IIoT platforms: Azure, AWS IoT, Watson IoT, Google, and more.

HMIs and Dashboards

Create high-performance HMIs and enterprise dashboards to display your data.

Exceptional Redundancy and Security

Security, disaster recovery, and high availability are native capabilities of MQTT infrastructures.

Get Mobile Access

Get mobile access to your industrial applications via smartphones and tablets.

MES

Tools for Tracking Production, Eliminating Downtime, and More

In order to ensure effective execution of manufacturing operations and improve production output, you need a manufacturing execution system (MES) solution to connect, monitor, and control complex systems and data flows on the factory floor. Ignition by Inductive Automation is the ideal platform for MES because it gives you all the tools you need to create your own customized MES solutions or you can standardize your process by using powerful third-party applications from the MES experts at Sepasoft.



"Reporting, graphs, charts, all the brewing information, information from the lab, even tracking the trucks coming in and out of the yard: we see it all in real time using the Ignition software."

— Ron Mayfield, Sierra Nevada Brewing Co.

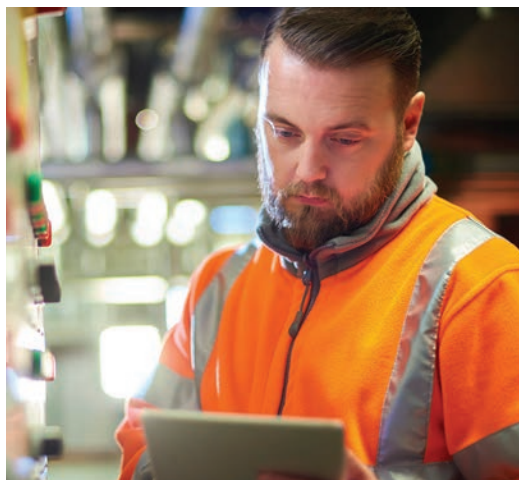


Customizing Your Own MES Solution

Using the power of the Ignition's Designer and core modules, you can develop your own MES solutions and customize it to fit your unique processes. This is a great option if you're looking to add basic MES functions such as tracking production and downtime, and adding MES dashboards to your existing SCADA system. Using this approach offers a huge amount of development flexibility and it's cost-effective because you can build your system as you go.

Standardizing Your MES Process

With pre-built applications for OEE (Overall Equipment Effectiveness) and downtime, track and trace, SPC (Statistical Process Control), recipes, changeover and more, the powerful suite of Sepasoft MES software modules offers a great option for those who are looking to standardize their MES process. The MES experts at Sepasoft built all their MES applications up to the rigorous ISA 95 standard for enterprise control-system integration. Choosing Sepasoft modules for your MES solution is a perfect option if you're looking for an out-of-the-box MES solution to standardize your operations enterprise-wide.



Improve Efficiency and Productivity

Ignition gives industrial organizations many ways to reduce unplanned downtime, cut waste, and increase productivity, which can save thousands of dollars of revenue. Find the vital information you need in seconds instead of hours so you can identify and eliminate inefficiencies quickly.

Connect to All Operational Data

Ignition software comes with a comprehensive set of tools for data acquisition, including built-in SQL-database integration and OPC UA for easy connectivity to practically any PLC through third-party OPC servers. Ignition can connect to virtually any industrial historian. Also, Ignition has software modules that enable connections to serial devices, such as scanners, scales, and sensors.



Flexible ERP Connectivity

With full SQL integration out-of-the-box, Ignition comes standard with the ability to seamlessly connect to any SQL database. Ignition also has the ability to enable connections to web services, including REST and SOAP. It's possible to connect to virtually any enterprise system, including ERP systems such as SAP, JD Edwards, and many more.

Create Dynamic MES Reports

Easily generate dynamic MES reports, like OEE, downtime tracking, production management, historical data analysis, quality assurance, and SPC. Instantly deliver your reports automatically to anyone you'd like.





Track and Analyze All Your MES Data

With Ignition, you can bring all of your important data together into robust enterprise dashboards with powerful visualization and analysis tools. By allowing you to turn raw data into actionable information and share it with your whole team, Ignition enables better decision-making across the enterprise.

More Features

Track and Analyze All Your MES Data

Bring all of your important data together into powerful enterprise dashboards.

Dynamic Reports

Create a full range of dynamic, data-rich reports and send them anywhere.

SCADA Alarming

Easily stay aware of what's happening at your facility, wherever you are.

Industrial Historian

Turn a SQL database into a high-performance time-series tag historian.

Easily Scalable

Scale from a single client installation to an enterprise-wide system with ease.

Store-and-Forward

Store-and-forward historical data so you never lose it.

Mobile

Ignition Perspective: The Plant Floor in Your Pocket

Bring new levels of visualization and accessibility to your industrial processes with the Ignition Perspective Module. Easily build full-fledged, mobile industrial applications in HTML5 for the monitoring and control of your process directly from your mobile phone. Whether for SCADA, HMI, or another purpose, the applications you build in Perspective will look beautiful, and run natively in any major browser.

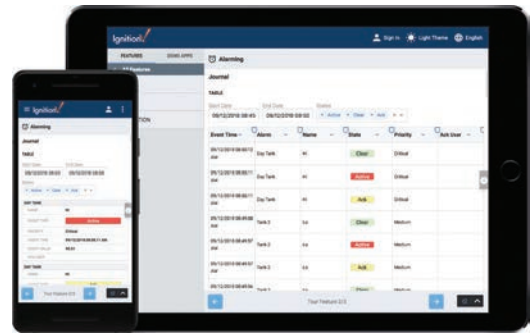


"The Perspective Module opens up the power of the web and finally gets industrial automation systems up to the level of the rest of the world. Whereas before, everyone was fighting just to get into 2009, Perspective finally takes industrial automation to 2019 and sets it up for growth from there."

– Alex Marcy, Corso Systems

Ignition Perspective Responds to You

Ignition Perspective is totally mobile-responsive. It automatically adapts to fit screens of any size, giving you a personalized view into your unique processes, optimized for whatever device you're using.

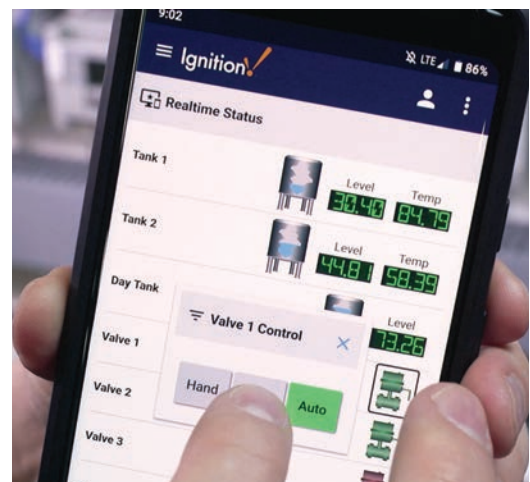


Design for Any Size of Screens

Streamline your development process with robust design components and features that enable you to design for mobile, desktop, and display screens all at the same time. With new mobile-optimized container types, you can easily customize the user experience in the Ignition Designer with a simple selection.

Real Control, With a Swipe

Ignition Perspective puts your plant operations at your fingertips. Visualize, monitor, and control systems with ease on your phone or tablet. See your whole system at a glance, and control your processes with intuitive touch commands. Experience complete, instantaneous plant-floor control with Perspective's bi-directional data binding.





Add the Magic of Mobile to Your Applications

Harness the full power of your mobile device's GPS, accelerometer, camera, barcode scanner, touch gestures, and other sensors to create the next generation of smart industrial applications. With Perspective, you can add the ability in your project to take photos of a faulty machine, easily scan a QR code into your SCADA system, tag readings in the field with GPS, pinch and zoom around a map of your site, and much more. Perspective unlocks the power of your mobile phone to open up a new world of possibilities for your industrial applications.



Unlimited Accessibility

Ignition Perspective runs on any device with a browser, including phones, tablets, laptops, desktops, and TV screens. Deployment has never been easier — you can deploy an unlimited number of Ignition Perspective clients from any location with a single click. You can even send secure web links to your application that anyone can view in a web browser. Perspective is compatible with Chrome, Firefox, Safari, and Microsoft Edge, fully HTML5 and CSS3 compliant, and does not require Java installation or plug-ins.



More Features

Leverage CSS3 for Cross-Project Styling

Use strong and flexible CSS3 styles to change the appearance or position of anything in your application, and enable changes throughout the entire system.

Instantly Update Your Applications

Data is delivered directly to a Perspective application over a persistent communications channel so that any visualization or tag changes show up instantly in your application.

Use Any Major OS — Even iOS and Android

Ignition Perspective clients can run on any major OS and run natively on iOS and Android with the Ignition Perspective App.

Alarming

Build Advanced Alarming Systems with Drag-and-Drop Ease

Filter, escalate, and route alarms with drag-and-drop graphical pipelines.

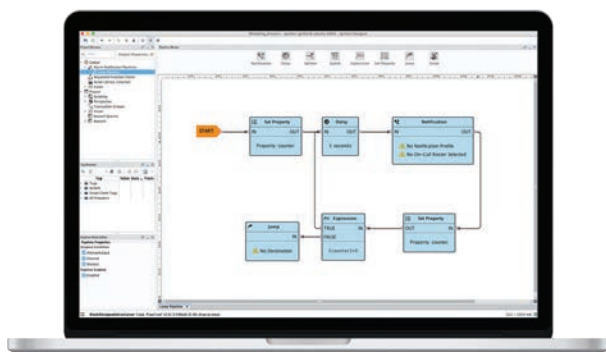
Produce comprehensive analytics and reports on alarms and user actions.

Fast to install, easy to use, and infinitely scalable, Ignition is an unbeatable alarming solution at an incredible price.



"The opportunities for what this system can do are endless."

– Hugh Roddy, Chobani

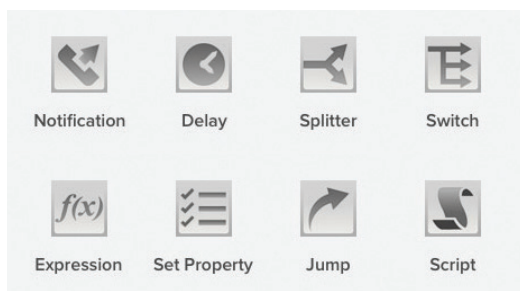
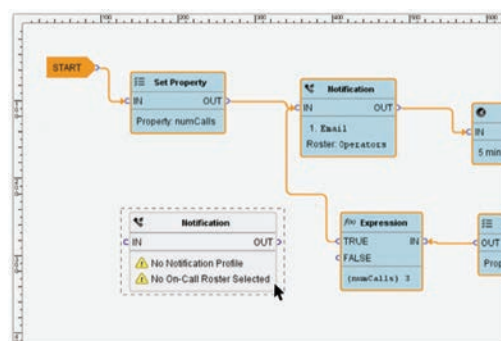


Build Any Kind of Alarming System

With powerful, easy-to-use tools for development and connectivity, Ignition is ideal for building virtually any kind of alarming system. Ignition is perfect for alarm notification, SCADA alarms, remote monitoring, and event notification.

Drag-and-Drop Alarm Notification Pipeline Builder

Quickly configure alarms, pipelines, or any other aspect of the system with drag-and-drop ease with Ignition's innovative graphical alarm notification pipeline builder. Even create and configure thousands of alarms simultaneously with multi-editing functionality.



Develop Advanced Notification Systems with Ease

With the freeform alarm notification pipeline builder, you can simply drag and drop blocks to create custom pipelines for conditional routing, splits, escalation, and multiple other alarm notification methods. Pipelines are instantiated per alarm and persistent so you never miss an alarm.

VoIP Support

Ignition supports VoIP, which is easy to install and use, Ethernet-based, and provides IP telephony capabilities for a fraction of the cost of a Dialogic card. If your organization already has a VoIP system, Ignition connects to it easily. Through VoIP, Ignition can connect to SIP Gateways, and Skype, providing budget-friendly options for voice, and text-based alarm notifications.













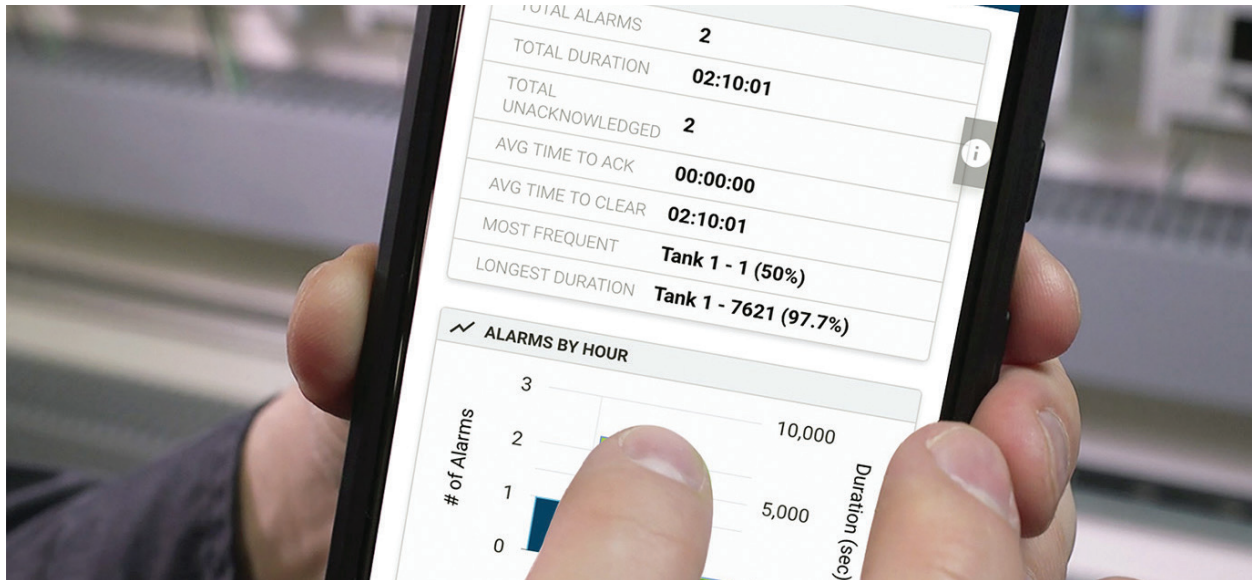
Reliable 2-Way Notification

Receive and acknowledge alarm notifications via email, voice (over VOIP), or text (Twilio). Separate notification pipelines are available for active, clear, and acknowledged alarm states and every step, action, and user reaction is logged and timestamped for accountability purposes.

Dynamic Customizable Alarms

Alarms support shelving, notes, separate pipelines for different alarm states, dynamic custom messages by alarm notification method, time and value deadbands, consolidation and more. Each alarm has multiple properties with values that can be assigned dynamically so you can customize your system. Customized alarms can be based on criteria such as users, schedules, tag type, and much more.

Display Path	Name	Active Time	Activated By	Act Time	Current State	Priority
 Machine 0	High Alarm	3/20/16 2:10 PM			Active, Unacknowledged	Critical
 Machine 0	High Alarm	3/20/16 6:12 AM	admin	3/20/16 4:00 PM	Active, Acknowledged	Critical
 Machine 0	Low Alarm	3/20/16 6:55 AM	admin	3/20/16 10:15 AM	Active, Acknowledged	Medium
 Machine 0	Low Alarm	3/20/16 6:57 AM	admin	3/20/16 10:15 AM	Active, Acknowledged	Medium
 Machine 0	High Alarm	3/20/16 8:00 AM			Cleared, Unacknowledged	Critical
 Machine 0	Low Alarm	3/20/16 8:12 AM			Cleared, Unacknowledged	Medium
 Machine 0	Low Alarm	3/20/16 11:45 AM			Cleared, Unacknowledged	Medium
 Machine 0	Low Alarm	3/20/16 6:55 AM			Cleared, Unacknowledged	Medium
 Machine 0	Low Alarm	3/20/16 11:50 AM			Tripped, Unacknowledged	Medium
 Machine 0	Low Alarm	3/20/16 10:42 AM			Cleared, Unacknowledged	Medium
Details						
Clear Pipeline						
Deadline						
Active delay (seconds)						
Clear delay (seconds)						
Terroring Source						
Ack Mode						
Notes						
Is Shaved?						
Shed Expiration						
events						
In Use Active						
mode						
MFCID00ab-00f5-4127-9147-a66087683045						
Abuse Gateway						
<div> <div>Acknowledge</div> <div>Shelve</div> </div>						



Build Fully Mobile-Responsive Alarming Applications

Get all the tools you need to build full-fledged, totally mobile-responsive alarming applications that put the full power to see and respond to alarm notifications right on your phone or mobile device. Ignition lets you leverage the power of your mobile device's intuitive touch inputs, sensors, cameras, and GPS to create the next generation of alarming applications. With Ignition, you can create pure-web alarming applications that use HTML5 and CSS3 to run natively inside any major web browser.

More Features

Mobile Clients Without Apps

See and acknowledge alarms, and more, from any mobile device — no app necessary.

Powerful Alarm Analysis & Reporting

Use powerful analysis and dynamic reporting tools to get the most of your alarming system.

Remote Alarm Provider

Send and acknowledge alarms from a remote location through a central Gateway.

Seamless Integration with Ignition SCADA

All Ignition solutions work seamlessly together for easy system integration.

Instant Installs and Updates

Install on a server in just 3 minutes; push updates to clients everywhere, instantly.

Totally Cross-Platform

Works on Windows, macOS, Linux and more.

Reporting

Easily Create Dynamic, Database-Driven Industrial Reports

With Ignition, you can easily pull together all your data and create any kind of industrial report with ease. With powerful tools for visualization and more, create reports in any major format and automatically deliver them to anyone.



"The Ignition software has given us a number of advantages from a business standpoint as well as an operational standpoint."

– Kevin Bouchard, Enerchem International Inc.

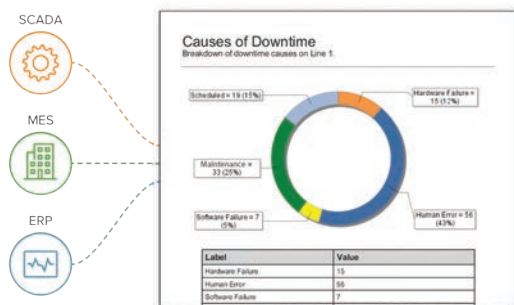


Build Any Kind of Industrial Report

With powerful, easy-to-use tools for building dynamic, database-driven PDF reports with pixel-perfect layouts, Ignition is perfect for creating virtually any kind of industrial report, including: SCADA reporting, industrial project reports, production management reports, OEE and downtime tracking, SPC reports, QA reports, compliance reports, historical data analysis reports, and more.

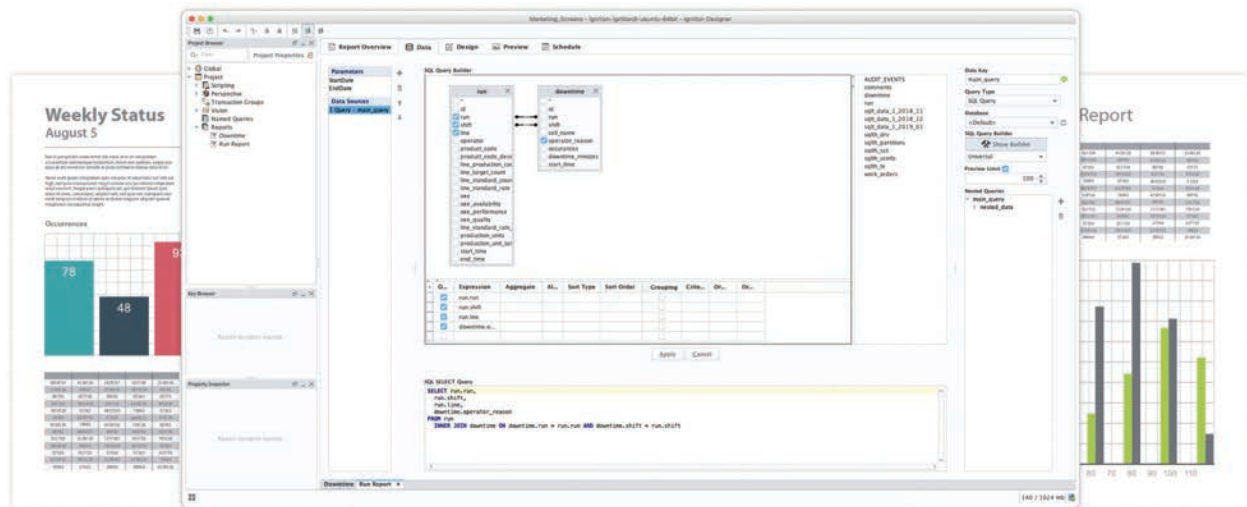
Connect to All Your Data

Ignition is a cross-platform communications hub built on trusted IT standards so it can connect to all your data. Ignition has full SQL-database integration built right in, and it can connect to practically any PLC through OPC UA, and to ERP systems through web services, so you can access data from virtually any industrial device or enterprise system. Plus, Ignition comes standard with unlimited tags, and device and database connections, so you won't break the bank doing it.



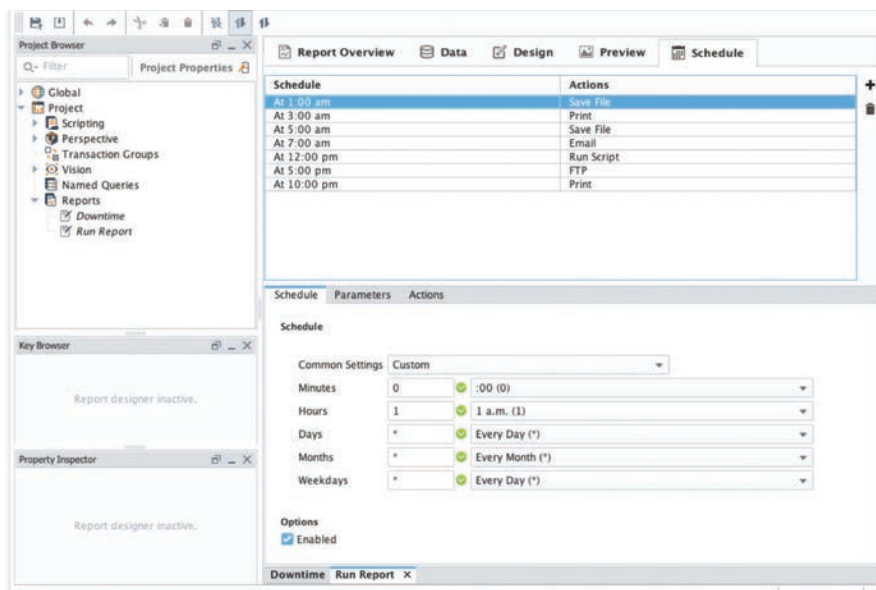
Combine All Your Data Together

Ignition combines all your data from multiple sources — SCADA, MES, ERP, and more — with powerful report-building tools into one integrated development environment. Pull together and combine your data from across your enterprise into one report, so you can see and stay connected with your processes like never before.



Get Incredible Insights with Query Tools

Ignition empowers you to ask your data more questions, which leads to better-informed decisions. Build complex SQL queries easily using the drag-and-drop query interface. Also, its query structure lets you correlate relational data and process-historian data seamlessly.



Easily Set Up Automatic Reporting

In addition to running reports on-demand you can also easily schedule reports to run automatically, or on event triggers, whether or not your client is open. You can also schedule reports to be delivered automatically via print, email, or as a file to save or upload to a chosen location.



Build Fully Mobile-Responsive Reporting Applications

Get all the tools you need to build full-fledged, totally mobile-responsive reporting applications that put the overview and analysis of your plant floor right on your phone or mobile device. Ignition lets you leverage the power of your mobile device's intuitive touch inputs, sensors, cameras, and GPS to create the next generation of reporting applications.

More Features

Export to Any Format

Easily export reports in PDF, HTML, CSV, RTF, JPEG, PNG, and XML file formats.

Backwards-Compatibility

Easily import existing reports and convert legacy reports.

Seamless Integration with Ignition SCADA

All Ignition solutions work seamlessly together for easy system integration.

Edge Computing

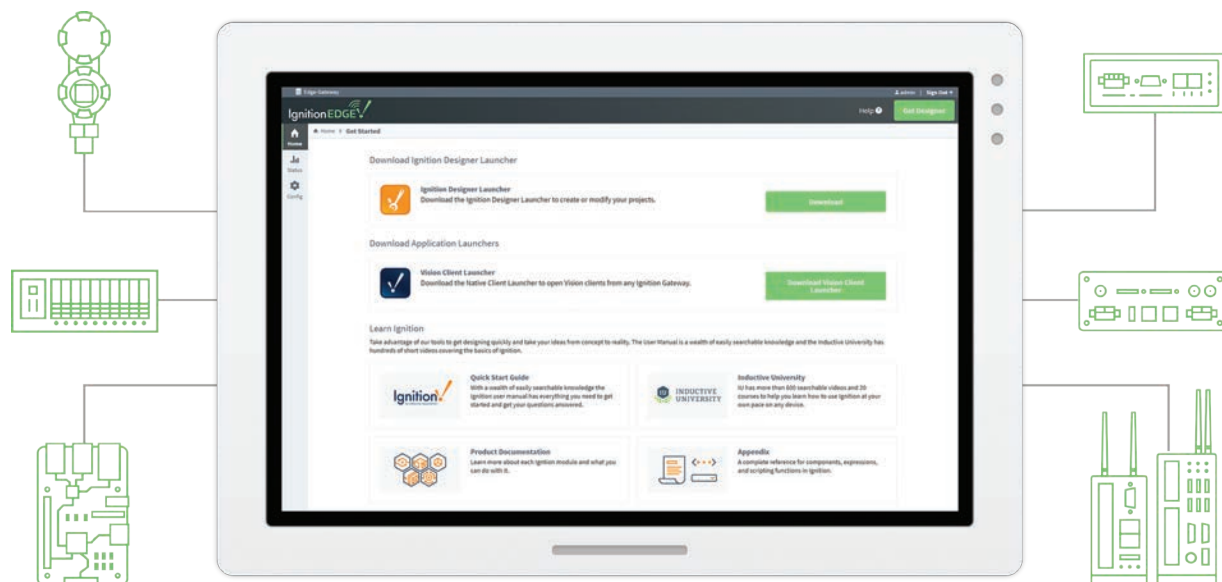
Data Collection and HMI Software for the Network's Edge

Capturing and visualizing critical data at the remote edge of the network can be difficult and expensive. Ignition Edge by Inductive Automation® is a line of lightweight, limited, low-cost Ignition software solutions designed specifically for embedding into field and OEM devices at the edge of the network.



"Having the power of Ignition extend down to edge devices in the field offers a disruptive approach to how industrial network infrastructures are designed, deployed, and managed."

— Arlen Nipper, Co-Inventor of MQTT



Install on Virtually Any Device

The Ignition Edge solutions work on Linux, any version of Windows, on macOS, and more, so you can install them on virtually any industrial device, even on a Raspberry Pi.

With support for ARM processors, Ignition Edge can also run on the latest generation of edge-of-network devices.



Access Data from PLCs & OPC UA Servers

For easy PLC connections, all Ignition Edge solutions come with unlimited tags and are equipped with OPC UA, along with drivers for Modbus, TCP, and Siemens, and the Allen-Bradley suite of drivers. Other drivers supported by Ignition, such as DNP3 and Modbus RTU, can be added onto Ignition Edge solutions for an additional cost.

Poll Data at the Source

Ignition Edge makes edge computing easy. Install Edge right onto, or next to, devices on the plant floor or in the field so you can process data as close to the source as possible. This allows you to make device data the one source of truth, improving data reliability and reducing latency.

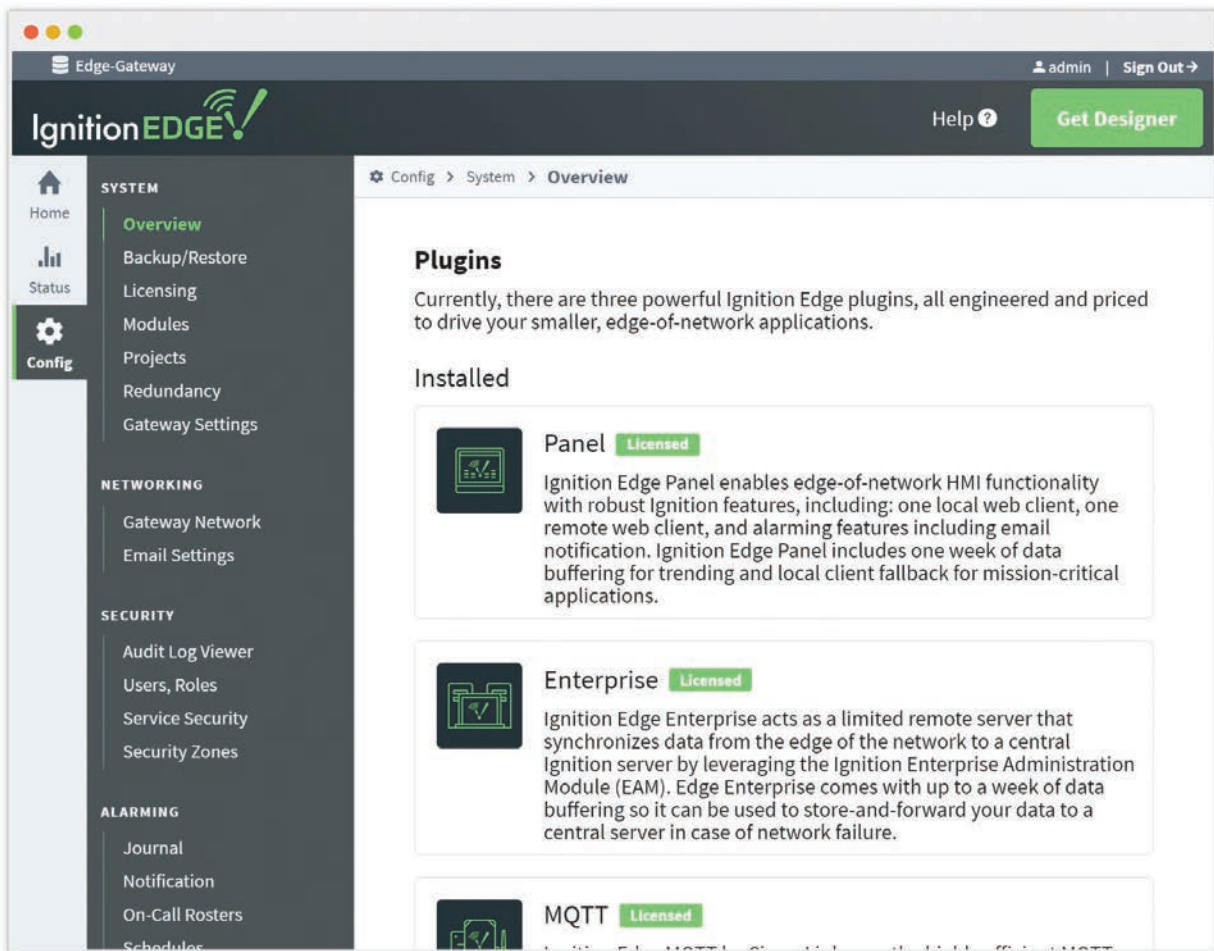


Ignition Edge is powerful, MQTT-enabled, and designed specifically for embedding on industrial devices. That's why a growing number of OEMs offer products that come standard with Ignition Edge onboard.

Companies Onboard with Ignition Edge

These vendors pre-install Ignition Edge software on select products.





Ignition Edge Solutions: Mix and Match 3 Ignition Edge Solutions



Ignition Edge MQTT by Cirrus Link:

Turn any device into an edge gateway that publishes data to an MQTT broker.



Ignition Edge Panel:

Create a standalone HMI at the edge of the network with a one-week data buffer.



Ignition Edge Enterprise:

Use as an Agent Gateway that can synchronize data to a central Ignition Gateway.

Cost Of Ownership





"Using the 'infinite clients' Ignition feature, we could create new clients without spending any additional money."

– Alexis Nazareno Chialvo, Autex



Return on Investment

Powerful Software at an Unbelievable Value

Not only does Ignition offer the most advanced, comprehensive technologies on an open platform, but its unlimited licensing model allows companies to grow their systems over time at significantly less cost than other options in the industry.



"We haven't used any capital funding since deploying Ignition ... Ignition has freed up our resources to help me address the issues of my aging infrastructure, control my SCADA costs, and create a sustainable SCADA solution."

– Henry Palechek, Information & Process Control Supervisor, Water District in California



Unlimited Innovation = Unlimited Savings

With limitless tags, clients, and connections for the affordable cost of one server license, companies can put more time and money into innovating cost-saving solutions instead of exorbitant software costs.



"We went from spending 160 hours per month and hundreds of thousands of dollars creating and checking our reports to about 4 hours per month ... now they are automatically generated by Ignition."

– **Nicholas Graue, Public Utilities Engineer, Park City Utilities**

Pay Only for What You Need

Ignition is modular, so you only need to pay for the functions you need. This approach makes it easy and affordable to build the exact system you need and buy new features only if and when you need them.



"I would recommend Ignition to companies that are looking for a software solution that is highly customizable, rapidly deployed, not a huge licensing cost for multiple instances of it."

– **Jonathan Swisher, Systems Analyst, Sierra Nevada Brewing Co.**

Who Uses Ignition

Ignition by the Numbers

Thousands of companies worldwide in a wide variety of industries depend on Ignition every day.

48%

Fortune 100 companies
using Ignition

100+

Countries with
Ignition installations

15+

Years in
the industry

-
- Thousands of installations in 100+ countries
 - 1,900+ integrators worldwide
 - 28% of Fortune 500 companies use Ignition
 - Highly diversified customer base across many industries
 - Inductive Automation has about 100 employees
 - Profitable every year since 2008
 - No outside investors

Top Industries



Food & Beverage



Manufacturing



Oil & Gas



Water &
Wastewater



Transportation





Download Ignition

Discover the Unlimited Power Of Ignition



Download Ignition Today at:
inductiveautomation.com

To learn more about Ignition, contact:

Inductive Automation / Toll-Free: 1-800-266-7798 / Outside US: 1-916-456-1045

Email: sales@inductiveautomation.com

Companies that Trust Ignition



Morgan Stanley

FUJIFILM



L'ORÉAL



Try the Online Ignition
Demo Now!

Scan this QR code with your phone or visit demo.ia.io



1-800-266-7798
inductiveautomation.com