

How Inductive Automation Uses Ignition

Leveraging The Platform's Flexibility & Rapid Development To Solve A Variety Of Pain Points

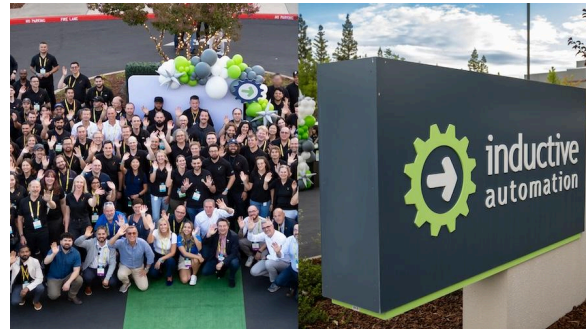
Most people think of Ignition as software for SCADA or industrial automation, but there's a lot more to the platform than that. Ignition is a toolbox for building whatever kind of application your organization needs. Here at Inductive Automation (IA), we have found plenty of everyday uses for Ignition because it allows us to create customized tools that generate tremendous value.

When we recognize the need for a new application, Inductive Automation still evaluates Ignition against other products on the market, but in some cases, using Ignition makes the most sense, whether that is due to our unique requirements or the speed with which an application can be implemented and updated.

In one form or another, everybody at Inductive Automation is impacted by Ignition. Below, discover a few of the ways we leverage our own software platform.

Building Automation System

When IA moved into our 56,000-square-foot headquarters, we inherited an old HVAC system, controlled by commodity HVAC software. Offices were over 10 degrees off setpoint at all times, compressors broke regularly, and heaters constantly reset unbeknownst to the control system, resulting in melted wires and visible damage. The system needed to run 24/7 because some



In one form or another, everybody at Inductive Automation is impacted by Ignition.

offices would never recover from a shutdown.

It was IA Founder & Executive Chairman of the Board of Directors Steve Hechtman who had the foresight to run the HVAC on Ignition, which was unorthodox, given that specialized HVAC software already existed. His decision, however, proved to be the right one. Commodity HVAC controls would have narrowed the system's visibility too much to isolate the root cause of each issue. Additionally, this commodity software required an external technician to make changes, resulting in slow, expensive, and sometimes ineffective solutions.

In contrast, Ignition empowered IA staff with its ability to historically log every datapoint, build ad hoc dashboards to investigate issues, and rapidly make changes and refinements. Ignition's visibility helped us discover thermostats wired to the wrong

rooms, incomplete ducting, failing contactors from faulty logic, short-cycling heating and cooling modes that were undetectable in the previous software, and more. Ignition also allowed us to review historical trends and rethink the air handler sequencing to mitigate runaway cooling of interior offices.

Now our HVAC is so efficient and responsive that IA can shut down every night and weekend, resulting in significant energy savings without sacrificing employee comfort during operating hours. Using Ignition on our HVAC also allowed us to test and refine our [BACnet Driver](#) before we released it publicly. Overall, the building automation system has given IA the visibility and flexibility to make rapid, informed changes, on our own schedule.

Lobby Sign-In

The Lobby Sign-In application at our Folsom, California headquarters is built in the Ignition Perspective Module, meaning that front desk staff can use iPads to check in guests, vendors, and trainees. The application opens with a “Welcome to Inductive Automation” screen, then gives four option tabs to choose from: Interview, Meeting, Training, and Other.

For in-person training classes, trainees can easily find or input their names. The application saves their information for the week, which makes each subsequent sign-in quicker because they don't have to re-enter their information.

The application efficiently keeps a roster and helps track who is in the building at any given moment, ensuring a secure

environment for everyone. One of the application's standout features is the ability to look up anyone who has checked in on our CRM and generate a lobby sign-in report.

IA's Sales Engineering Division has made plenty of updates to the application for an easier check-in experience, including the ability to configure different greetings and sign-in methods. They have also uploaded the project to the [Ignition Exchange](#).

Notes App

Sales Engineering is always creating [new projects](#) in Ignition and helping integrators build their own solutions. Sales engineers have always had a way of tracking notes, but now with the Notes App, they can derive some analytics from it.

When sales engineers meet with customers, one common question is, “What are the big things you're seeing? What is trending lately?” The Notes App can create a word cloud based on the terms that sales engineers have recorded from their calls, giving insight into what the Ignition community is interested in. This offers a convenient way to gauge general interest in certain topics right now and over time.

Architecture Builder

Sales engineers build architectures for customers every day. Before they implemented the Architecture Builder, they had to build architectures manually, with basic digital drawing tools. Naturally, because each architecture was essentially drawn by hand, there were variations from engineer to engineer. To solve this problem,

the Sales Engineering team needed a way to be consistent, fast, and add additional Ignition-specific context.

The Architecture Builder has a drag & drop editor that allows sales engineers to build out architectures quickly. The application lets engineers move servers around, choose modules, as well as create a bill of materials and pricing quote for the entire architecture. The Architecture Builder gets to a place of real value because more than just giving customers the quote or the architecture, it can additionally provide hardware recommendations based on the architecture and system size.

Zendesk Display Dashboard

IA's Support Division helps customers with their Ignition systems every day. And Ignition helps Support do that in a number of ways.

The Zendesk Display Dashboard gives Support managers and team leads a quick overview of their teams. They can filter and set audio notifications to check in when a call exceeds 45 minutes to ensure a speedy resolution. The dashboard also shows what Support staff is doing at any given time, whether they are on a call, researching, or just sending an email.

The application has available and unavailable tabs, so managers and leads know who they can assign emergency tickets to. The dashboard is integrated with Slack to display live status, showing who is out sick, in a meeting, or on their lunch break. In any of those cases, instead of being in the available tab, they will be

automatically moved to the unavailable tab. These tabs can also be filtered by team, position, or shift.

Project cards display the number of tickets in each respective queue in Zendesk: Open Problem for unassigned tickets; Special for enterprise customers; Tech Triage for tickets that haven't been triaged yet; No-Contract tickets; and Suspended tickets. By clicking on any of these, the application will show general information about the ticket, including the current assignee, subject, time history, and links to any relevant Slack conversations with the Development Division.

Thread & Slack Stats

One of the more difficult tasks that Support has to do is look through thread dumps because they don't always know what these threads are supposed to be doing or what they are responsible for. The Thread Stats feature has collected hundreds of thread dumps and parsed them for key metadata about each thread pool. This gives Support a resource for understanding what normal behavior looks like so they can better identify what is acting abnormally.

Slack Stats is another integration with Slack. When Support staff run into a roadblock while troubleshooting an issue, they reach out to the Dev Slack channel or just start a general support channel to ask questions. This project monitors those individual messages and makes sure they're being answered in a timely manner. If they haven't received a reply in 30 minutes, it will trigger an alarm.

CRM

A few years after its founding, Inductive Automation was looking at different CRM systems. However, since Ignition's unlimited licensing is so unique, we realized that any other CRM would need to be completely customized to suit our needs. IA decided that building an in-house CRM would provide the exact application that we wanted as well as allow for continual improvement.

These days, Inductive Automation upgrades the CRM to every new version of Ignition, with a dedicated team for implementing updates. Like any company, IA faces a variety of business challenges and having an application built in Ignition lets us solve them faster. IA needs to be agile and this application allows us to be exactly that.

The CRM synthesizes both Ignition visualization modules, with the bulk of the application built in Vision and the executive dashboards in Perspective. The CRM lets the Sales team easily manage not only the organizations and companies that IA does business with, but also quotes, invoices, and license keys.

IA lets the CRM be the single pane of glass that pulls data together into one place, and because it's built in Ignition, the CRM can integrate with other business intelligence tools as well. The CRM interfaces with our accounting software, our marketing lead generation tool, and helps us stay ADA-compliant. IA uses the CRM not only for our ordering system so the Sales team can create quotes and orders and manage licenses, but also as a reporting tool.

All of our training courses are connected to the CRM. When someone signs up for a training course, the CRM creates the order and registers that person to the class. The CRM also lets us adapt quickly to new situations. For example, when we sell tickets for the Ignition Community Conference, we use the CRM to track attendees' dietary restrictions.

License Portal

The License Portal fulfills a need that is specific to Inductive Automation. Ignition's server-centric licensing lets organizations choose the architecture that's right for them, but it also means that there's no off-the-shelf solution for managing Ignition licenses.

The application, which is built in Perspective, allows for IA employees, integrators, end users, and Authorized Ignition Distributors to manage Ignition licenses, and view certification statuses, quotes, and invoices. They can search for specific licenses by criteria like license key, location, status or role, edition of Ignition, and more.

The application displays which customer a license is associated with, plus all related modules and activation history as well as all the developers in an organization and their current certification status. Beyond just seeing licenses, the License Portal also gives the ability to add additional context to licenses by setting and/or editing a location, and adding descriptive notes or searchable tags.

The other critical feature of the License Portal is the ability to view quotes, pay

invoices, and generate new licenses. This aspect of the application is particularly useful for Ignition distributors around the globe because they can quote and place orders directly through the License Portal. It gives distributors autonomy, which is especially important for locations with dramatic time differences from our headquarters in California. Being able to independently process and order for their customers eliminates the sometimes multi-day process of ordering using the traditional route.

Quoting Tool

Before Inductive Automation acquired the assets of iControls and launched Inductive Automation Australia (IA AU), iControls was the official Ignition distributor in Australia. iControls acted as a middle entity between end users and IA. As a result, they sometimes had difficulties translating quotes to local currencies and different types of markets, due to IA's unique business model, not to mention various discounts and nuances of licensing. Prior to implementing this application, translating a quote from the IA website required three people to input the exact same data, so IA AU developed the Quoting Tool in Perspective to improve the sales process.

IA AU wanted to keep HubSpot as a single source of truth, integrating it with the Quoting Tool to bring in important pieces of data like company type, certification level, managed accounts, NDAs, and more.

The Quoting Tool lets Sales create a quote by selecting a combination of gateways and edge products in addition to support and training packages, plus an option to add a

completely customized product for special cases. The tool also transparently displays the discounts applied to each part of the quote in addition to the exchange rate for the chosen currency. Once the quote is created, it is saved as a searchable template to expedite the process of building complex quotes or updating an existing one.

IA AU also wanted to address the quoting workflow. Each quote enters a track and trace mechanism as it progresses through the various steps of internal review and approval. Once the quote is approved, the document is ready to be deployed and downloaded by the sales representatives to send to the end user. IA AU is currently working to integrate the Architecture Builder with the Quoting Tool to automatically send the quote and architecture diagram together.

The Quoting Tool has provided an easier path for members of the Sales team to do their jobs, reducing mistakes while gathering data and setting goals for continuous improvement.

Share Your Unique Ignition Projects

Inductive Automation has pain points just like any company. Our approach is to look for solutions in the platforms that we already use, but if they lack specific functionality or interoperability, then we leverage Ignition to make the platforms we already have even more effective.

With its open-ended design and inherent flexibility, Ignition can solve pain points for any organization no matter the industry, so we want to hear your success stories. Share your projects with us and let us know how

Ignition is helping your business and your customers.

[Submit a case study application](#)

[Share your project with us on LinkedIn](#)

At Inductive Automation, our mission is to create industrial software that empowers our customers to swiftly turn great ideas into reality by removing all technological and economic obstacles. By cross-pollinating IT and SCADA technologies, we created Ignition software, the first universal industrial automation platform with unlimited potential for SCADA, IIoT, and MES applications. Today, Ignition is empowering industrial organizations around the world with the industry's best software tools and support. For more information, visit inductiveautomation.com.



inductive
automation.

800.266.7798
inductiveautomation.com