

# Modernizing industrial control with web-based interfaces in Ignition

## CUSTOMER



Inductive Automation develops and supplies industrial automation software. The Ignition platform is the company's flagship product. It enables the creation of human-machine interfaces, supervisory control and data acquisition systems, and various automation applications. The platform is widely used in manufacturing, energy, and utilities.

 [inductiveautomation.com](https://inductiveautomation.com)

## ORGANIZATION SIZE

201–500 employees

## COUNTRY

USA

## INDUSTRY

Industrial automation software

## PRODUCT USED

JxBrowser

## Challenge

Whether it is tracing luggage in the airport conveyor system, controlling the operation of the oil refinery, or producing your favorite soft drink — modern industry relies heavily on the ability to obtain, monitor, and control data of their devices and processes.

To address this need, Inductive Automation has developed Ignition — an innovative industrial control software for the supervisory control and data acquisition (SCADA) space.

In a conservative and strictly regulated industrial environment, the Inductive Automation developers searched for a way to provide their clients with a way to collect, store, and display their data in a meaningful and manageable way.

The team decided to go for the web-based approach to modernize the user interfaces of their platform. This posed the challenge of ensuring compatibility with the older software industrial control used by many companies.

## Solution

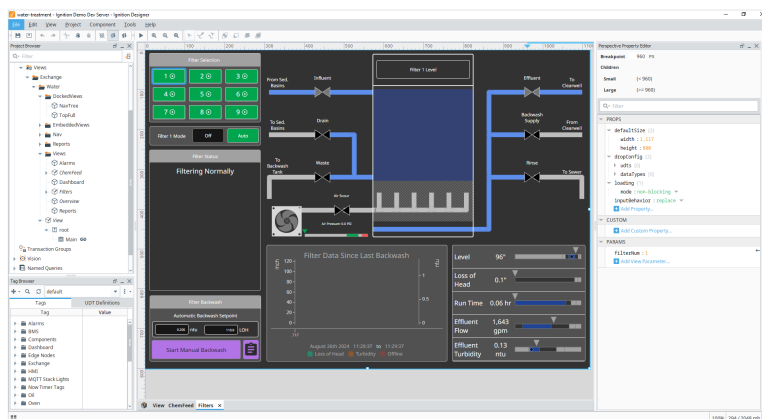
Inductive Automation chose JxBrowser as a way to display web components in a Swing-based implementation and to render the complete user interface in the JavaFX version of their application's client runtime.

This allowed the team to enhance the Ignition with an ability to provide the client data on visually complex customizable screens.

The integration also ensured a way to provide the platform's users with access to the operating system functionalities, such as authentication and sensor integration, through interaction between the JavaFX application and native layers using WebSocket communication. Which facilitated compliance with industry standards and security requirements.

## Results

The hybrid solution developed by Inductive Automation became a significant landmark in the industry, bridging the gap between traditionally used software and cutting-edge visual data representation.



Modern web-based interfaces helped Ignition stand out among conventional offerings, planting the company's flag on the future for supervisory control and data acquisition software, which has a user interface.



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