
Inductive Automation Ignition as SCADA platform for Water and Wastewater Treatment Processes

Ignition is an industry software platform for developing visual applications for the purpose of an HMI, SCADA or as a general data acquisition and reporting service. Ignition comes as a modular software package that can be customized to the customers' needs whether it is a large- or small-scale application. This allows the cost to be minimized by not forcing the customer to purchase software they don't need.

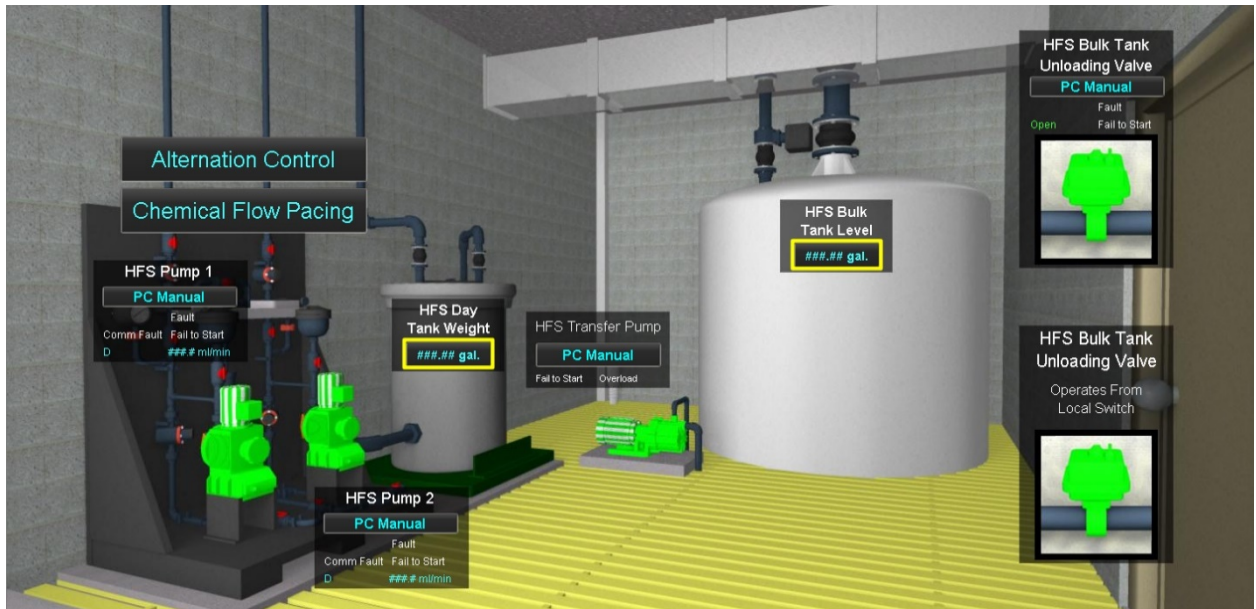
We were tasked with the complete migration of a large existing SCADA system originally developed in the Wonderware Software Suite to the Ignition platform. This included: server configuration and customization, database conversions, data historian conversions, screen conversions, tag database conversion, security conversions, system alarm and response, and data reporting. Additionally, we were tasked with the creation of a mobile client that could be utilized on a series of iPads and Tablets.

The Wonderware conversion required the in depth understanding of the Wonderware software suite to allow us to reverse engineer the system in place and be able to deliver a solution that not only replaced the existing system but would also exceed the current performance and capabilities.

Below are screenshot examples for the system:

The control screens indicate device status through color animations and highlighted areas of concerns with flashing border colors. Manual pump and valve controls are done via popups that display the controls and extended information about the device.

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Pump Name Display

Alarms **Disable**

Alarm 1 **Disabled**

Alarm 2 **Disabled**

Alarm 3 **Disabled**

Auto Mode Amps **0.0 A**

Manual Mode Power **0.0 kW**

Start Speed **0.0 rpm**

Stop Speed SP **0.0 rpm**

Close Window

High Service Lead lag Control

NOTE: DO NOT CHANGE LEAD/LAG WITH PUMPS RUNNING

High Service South Pump 1	Lead	Lag	Standby
High Service South Pump 2	Lead	Lag	Standby
High Service North Pump 4	Lead	Lag	Standby
High Service North Pump 5	Lead	Lag	Standby

Close Window

Name

Description

Mode

Auto **0.0%**

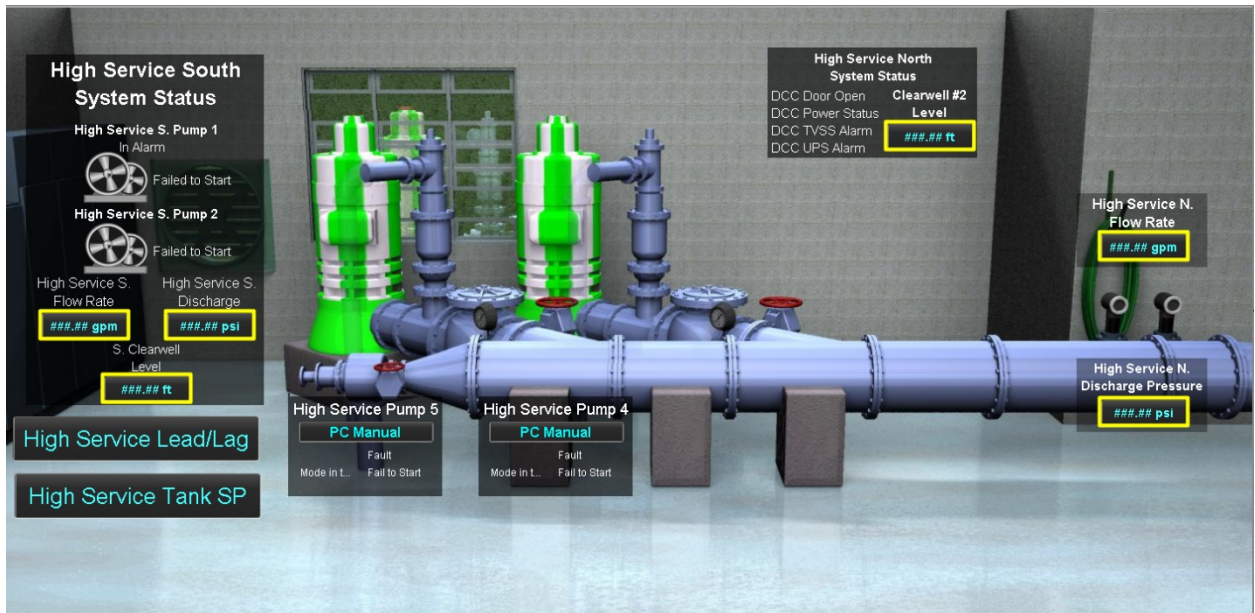
Close

Open

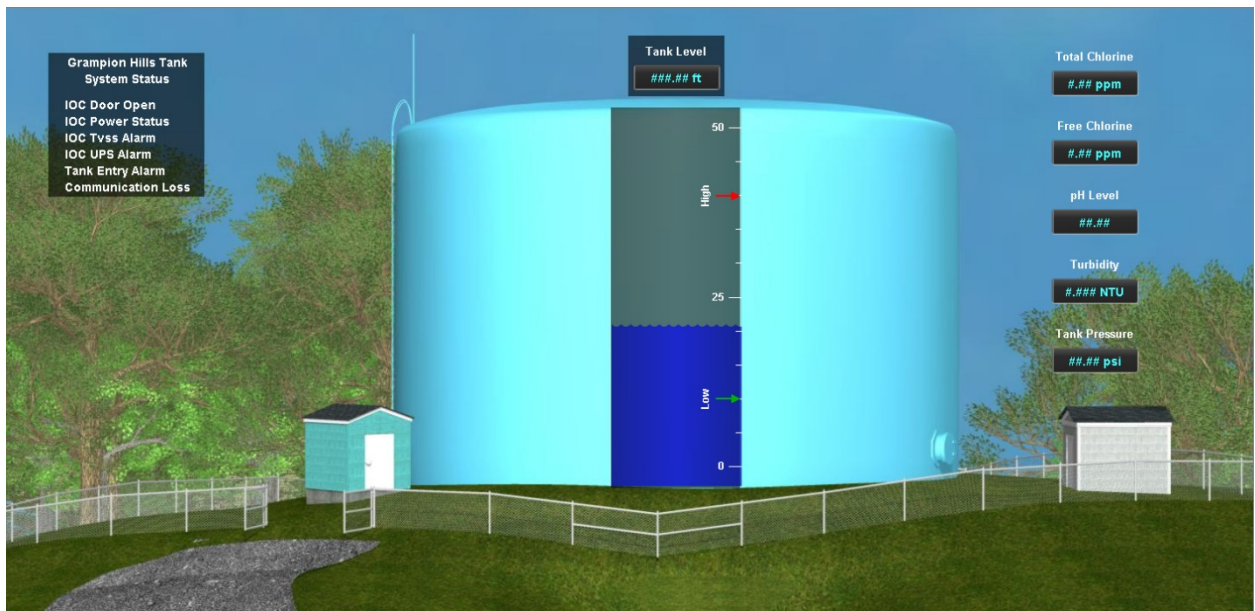
! Opening/Closing the device may cause personnel injury and/or equipment damage/failure

Close Window

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Tank fill animations appear as overlays with slideable High and Low indicators.



Trending and reporting is done through a customized chart that allowed notes for events to be entered and logged.

INDIANA

MICHIGAN

OHIO

Outbound Technologies



Outbound

Technologies

Summary:

OTI worked with the customer's IT department to improve on the system security user control by utilizing an active directory to centralize user accounts. This greatly simplified the user account control in the application.

OTI delivered a solution while working closely with the customer to empower the customer with the knowledge and capabilities of the new system with on-site training, support and remote support.



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