Ignition Gets Data Flowing for Water District

Ignition is the Perfect Fit for Western Municipal Water District

Replacing a full supervisory control and data acquisition (SCADA) system is a big undertaking, and for Western Municipal Water District, Ignition proved to be the best tool to get the job done.

The SCADA system at Western Municipal Water District's southern California wastewater plant was no longer sufficient for their needs, so they asked Trimax Systems Inc. to implement a new solution. As a well-respected systems integration company, California-based Trimax takes pride in offering great integration services coupled with exceptional value to their customers.

Ignition Software Comparison

When Western Municipal approached Trimax Systems Inc. they requested that Trimax look into Ignition as a possible SCADA solution. Chris McLaughlin, director of operations at Trimax, recalls the request: "Western Municipal asked us to do a comparison between Ignition and Wonderware – the SCADA software we normally used. We were not familiar with Ignition at that point so our first thought was that there was no way Ignition was going to be better for the job than what we already had in mind.

"We did a 14-point, side-by-side comparison of the most important features that a good SCADA system needs to have; stuff like cost, capabilities, and compliance with modern IT standards. After we finished putting the list together we were surprised to see that Ignition was the clear winner. We realized that we should use Ignition for the Western Municipal project, as well as every other project we do."

After Trimax evaluated and recommended Ignition, Western Municipal was convinced that they had found the right solution to their SCADA troubles. Armed with Ignition, Trimax began solving problems at one of the wastewater plants located in the district.
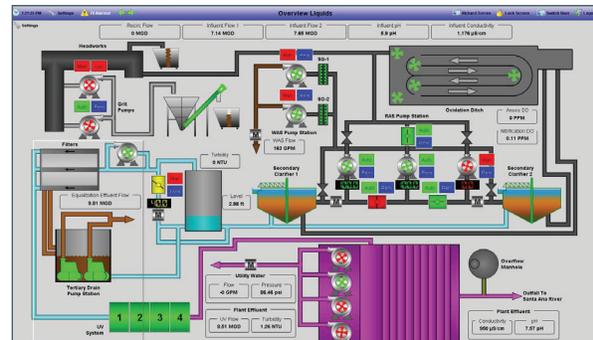
Finding a New District Standard

Western Municipal was seeking a new system that had the ability to display multiple, full-featured

SCADA clients on different devices such as computer workstations, mobile devices and operator interface terminals (OITs). The OITs were located in the field, so having remote access to devices was a vitally important requirement for the new SCADA system.

A unified SCADA system for all their facilities was also highly desired, so the solution needed to be powerful and flexible enough to become a new standard across the entire district. This was a tall order – and they entrusted it to Trimax.

Unlimited Access

One major pain point of the plant's old SCADA system was the limitation on where, how and by whom SCADA screens were accessed. McLaughlin said this was especially problematic in the case of certain control panels.

With Ignition, HMI screens can be accessed throughout the entire facility.

"Before we put in Ignition the only way to check on the control panel was to have someone physically go out to look at the control panel's OIT, then that person had to radio to someone else to tell them what was happening," McLaughlin explained. "Now with Ignition that entire process has changed."

Ignition doesn't put restrictions on how many people can be given access to the SCADA system. Ignition's web-based architecture allows unlimited clients to be launched on any device equipped with a web-browser;

Trimax Systems Inc. Case Study

plant employees can view SCADA screens where and how they want.

McLaughlin reports: "We put in new IPCs (industrial personal computers) as panel views all around the plant, so now – using Ignition – people can access the system from their desktops, on the plant floor or even on their mobile devices."

Server-Centric Simplicity

In the plant's old SCADA system, the control panel OITs had limited visibility and functionality because they ran a very basic software application that was native to the OITs. It was important for the new system to have the ability to display full-featured SCADA screens at the control panels, as well as at multiple other locations across the plant. Thanks to Ignition's open, server-centric architecture this was not only possible; it was also simple to do.

Once Ignition is installed on one server, clients can be instantly deployed without limit. This allowed Trimax to create a SCADA project in one place and share it all around the plant.

McLaughlin explains the benefits of this for the Western Municipal project: "Now with Ignition they (Western Municipal) can see exactly the same screens anywhere throughout the plant, and even remotely. The whole system is right in front of them so they can see and control the system for the entire plant from any location they want. We also saved a lot of project development time using Ignition because we only had to create one project for the entire plant and we only have to make changes to it in one place and it updates everywhere."

Cross-Platform Compatibility

Across the Western Municipal Water District a mishmash of different SCADA programs were being employed at different sites ranging from well-established systems to small, proprietary, custom-built applications. The combination of these systems was downright confusing and as a result the communication between different sites was much less than optimal. Ignition was used to cut through the confusion and get the entire plant on the same system.

Ignition's cross-platform compatibility allows Ignition to run equally well on any operating system, including Windows®, Mac or Linux. This flexibility made Ignition a perfect solution to unify the various systems at the wastewater plant and beyond.

McLaughlin explained: "It was very important to Western Municipal that the new SCADA solution we implemented be a unified SCADA system. A big part of the job was forming a plan to standardize their SCADA across the entire district for years to come. It was crucial that the new system not only work at the first plant, but that it be flexible enough to work at all their plants throughout the district. Ignition was instrumental in making this plan work."

"...we tell people to consider Ignition; we know once they see it they are going to love it."

– Chris McLaughlin
   Director of Operations, Trimax Systems Inc.

Bright Futures

Thanks to the expertise of Trimax Systems Inc. and the power of Ignition, Western Municipal Water District now has the SCADA system they needed and a solid plan to move forward.

McLaughlin summed up their client's status with this: "Western Municipal is very happy with their new Ignition SCADA system. In fact, they have already started expanding the use of Ignition to two other facilities. They are moving forward with the plan to make Ignition the SCADA standard across the entire district."

Trimax Systems also has a bright future with Ignition. Since the completion of this project they have done multiple projects with Ignition and have become certified by Inductive Automation as an Ignition Premier Integrator.

For Chris McLaughlin there is little doubt on what Ignition has done for Trimax: "Ignition has definitely had an impact on us and our clients. Now, it's part of our process that whenever we spec a new project we tell people to consider Ignition; we know once they see it they are going to love it."

Trimax Systems Inc. is a worldwide systems integrator, specializing in all areas of industrial automation with a high level of expertise in system design, software development, start-up and training. Trimax's expertise in integration services can provide everything needed to take a project from conception to start-up.
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