



We listen. We solve.®

SYSTEMS INTEGRATION & SCADA

Ulteig's team of System Integration professionals offers an extensive set of Supervisory Control and Data Acquisition (SCADA) and networking design services to owner/operators who need a reliable communication network capable of providing customized data, monitoring and control.

These services can be mapped out as part of an upfront collaborative effort on a greenfield site or as additions to an existing site. Our experts work with you to deliver a customized solution that meets your specific needs.

- » *SCADA Design & Integration*
- » *RTU Programming*
- » *Network Design & Integration*
- » *Custom HMI Display Development*
- » *Historical Data Collection & Custom Reporting*
- » *System Event Alerts*
- » *Alarm Scheme Design & Integration*
- » *OPC Data Integration*
- » *Synchrophasors*
- » *Custom Coding*
- » *Trending Display Configurations*
- » *System Integration Support*
- » *Data Analytics*

SCADA DESIGN & INTEGRATION

With the continued growth of technology, there is no one size fits all. Each system, client and problem have unique challenges to optimize the use of new technology. Ulteig will work with you to design a SCADA system that meets your operational and regulatory needs. Our on-site services also ensure you are never without expert support during commissioning or during times of outages. Let us help you navigate to the solution best suited for you.

NETWORK DESIGN & INTEGRATION

Need to expand your substation network to new devices? Existing network causing you CIP or operational headaches? Putting in a new substation? Ulteig has your network needs covered. From basic network configuration to SSL VPNs for remote access, Ulteig is your one stop shop.

HISTORICAL DATA COLLECTION & CUSTOM REPORTING

Access to historical data allows you to review events leading up to faults and major system events, the ability to track equipment and site conditions over time and provides the necessary infrastructure to perform a load forecasting analysis and many other reports.

Our team of experts is ready to provide clarity on the many data points your system records. Depending on your unique needs, we can build your system to review events leading up to faults and set up forecasting, accounting and neural networks (with use of additional software packages).

Ulteig works with you to deliver a fully-integrated information system containing centralized time-series and event-based data that you can use to optimize facility operations and use for all your reporting needs.

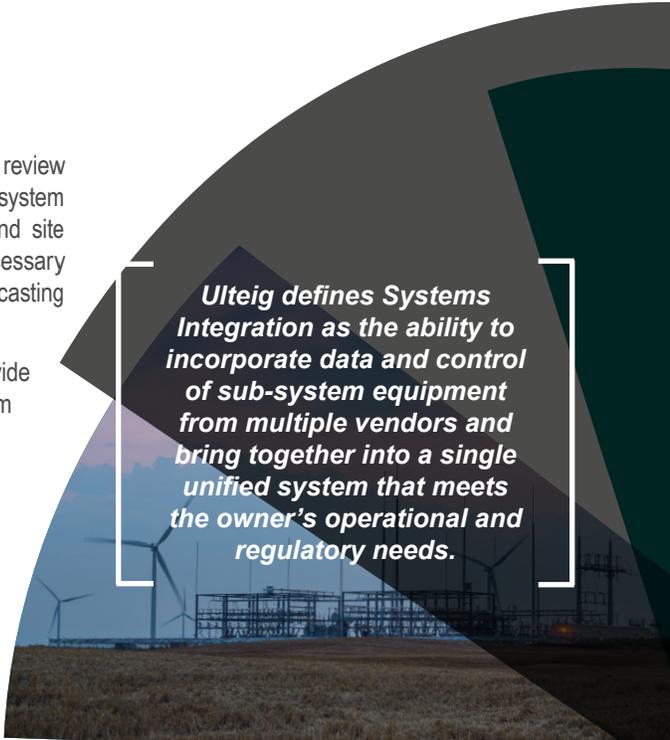
Not sure how to spec the hardware, software and sizing needed to meet your integration requirements? Ulteig's experts are ready to help.

SYSTEM EVENT ALERTS

An effective SCADA system should be configured to deploy text or email alerts whenever a significant event takes place.

With Ulteig's expertise building custom email or text alert systems to suit the unique needs of your system, our innovative solutions assist you in creating situational awareness to help you rest easy at night.

Ulteig defines Systems Integration as the ability to incorporate data and control of sub-system equipment from multiple vendors and bring together into a single unified system that meets the owner's operational and regulatory needs.



ALARM SCHEME DESIGN & INTEGRATION

It is important to define what events should or should not warrant notification. By not setting an alarm, you could easily miss a critical opportunity to address a potentially serious problem. Conversely, you may get inundated or desensitized by nuisance alarms if you decide to monitor every aspect of your operation or assign the same priority value to each of these alerts.

Ulteig works closely with you to determine what system conditions should exist to trigger an alarm. We can work with your existing system to deliver a customized alarm system that fits the needs of your project.

OPC DATA INTEGRATION

OPC is a protocol used for large amounts of data that surpass traditional protocol capabilities. Ulteig's OPC solutions allow you to access more of your system's data.

Implementing an OPC solution will provide you with more robust performance information. It is instrumental in the collection and analysis of historical process data and recommended for wind facilities, as there are often 100-200 data points per turbine. Ulteig will work with you to extract data only available via OPC from your existing system.

Already have SCADA but need to make updates or add functionality?

Give Ulteig's system integration experts a call to evaluate your existing system to determine if any of the following upgrades would help enhance your investment.

CUSTOM CODING

There's always some report or some calculation that is specific to your operation but not in your SCADA vendor's base product. Ulteig works with you to provide a custom solution, leaving us to worry about the details. From custom curtailment schemes, var control and load forecasting to energy accounting and reserve sharing, Ulteig is your one stop shop.

TRENDING DISPLAY CONFIGURATIONS

Ulteig has the expertise in display building, built for your unique needs. Our professionals have experience building trending displays based on a select subset of data points in a variety of platforms.

Our expertise crosses many different vendors' HMI software, allowing us to create a solution that gives you the ability to visualize your most important real time data.

SYNCHROPHASORS

Synchrophasors are microsecond time-stamped phasor data that can be used to determine the events leading up to a fault. The Electric Reliability Council of Texas (ERCOT) is leading the charge in requiring submission of synchrophasor data feeds.

We understand the ins and outs of Independent System Operators (ISOs) requirements and are ready to navigate this process with you at your site.

Ulteig can bring your system up to code with additional Intelligent Electronic Devices (IEDs) or develop new programming and install it on an existing substation computer using manufacturer specific software. Ulteig will install and configure this for you, setup an IIRIG B connection or Network Time Protocol (NTP) to sync the time with your existing GPS clock, evaluate the data storage requirements and then show you how to read these files before sending them off to the ISO. We make this easy so all you have to do is email a file.



ABOUT ULTEIG

Ulteig

We listen. We solve.™

Ulteig delivers comprehensive design engineering, program management and technical and field services that strengthen infrastructure vital to everyday life. Ulteig's footprint spans the nation and provides its expertise in multiple Lifeline Sectors®, including power (both electric utilities and renewables), transportation and water to a wide range of public and private clients. To learn more about Ulteig and how we can enhance the quality and efficiency of your next project, **call us at 888.858.3441 or visit www.ulteig.com**.

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