



## CASE STUDY

### About Itron

Itron is a world-leading technology and service company based in Liberty Lake, Washington, that assists utility customers with the management of energy and water resources.

With over 8,000 customers in more than 100 countries, Itron safely, securely, and reliably delivers critical infrastructure services to communities around the world.

Its products and services include smart networks, software, services, meters, and sensors that help utilities and cities better manage energy and water.

See [itron.com/it/company/who-we-are/about-us](http://itron.com/it/company/who-we-are/about-us) for more information.

## Challenge: Accurate Data Needed

Itron needed a tool that would ensure their customers could always know exactly how much energy they were consuming. The concern was that their various applications' configurations weren't always in sync.

To retrieve data from Itron's meters and send it to their Customer Information System (CIS) required a custom, time-consuming process of extracting, formatting, and identifying the appropriate action data should take. As a result, their CIS, an online tool utilized by customers to see their energy usage, wasn't fully accurate because it didn't provide real-time meter readings.

An on-demand tool that would quickly sync accurate real-time meter readings and analytics to their CIS was essential for Itron to continue to provide excellent customer service.

Ideally, changes made in the CIS would be analyzed then translated into formats that could be used across multiple internal and external systems, including Itron's connected meter reading solutions and their analytics collection systems.

## Solution: Sync Configurations

As a system integrator with significant experience working with Itron, and the utility industry in general, IntelliTect was selected to implement the meter data adaptor. This adapter would simplify the process of keeping connected systems in sync with the CIS by connecting to and extracting configurations from the CIS, analyzing the configurations, and generating necessary configuration files.

The meter data adaptor would interpret the input file and generate the necessary XML files with three different variations:

- Baseline Configuration
- Removals from the Configuration
- Additions and Updates to the Configuration

IntelliTect reviewed the requirements, presented an architecture design, and delivered a solution that would process up to 100,000 records in under five minutes.

## Results: An Integration Platform

Before IntelliTect created the adaptor, Itron was unable to quickly deliver data to downstream applications. The process required a custom, time-consuming process of extracting, formatting, and identifying the appropriate action data should take.

Itron's new adaptor saves countless hours of development time by managing the analysis of the data. Now, it only sends out the necessary changes to their customers' application. Combining custom-code and open source packages, IntelliTect produced a product that exceeded the company's expectations.

Utilizing agile methodologies (see [intellitect.com/developmentprocess](http://intellitect.com/developmentprocess)), IntelliTect implemented more functionality while staying under budget. The adaptor created a simple integration platform between Itron's customer CIS, their meter data collection engine, and their analytics platforms. With less time needed to process data, Itron's resources are now free to focus on higher priority tasks.

## IntelliTect

IntelliTect provides high-end architecture consulting, full life-cycle software development, and training that enables our clients to solve their most challenging problems. Our expert principal and senior engineers specialize in the latest technologies, including Cloud Computing (both [AWS](#) and [Azure](#)), Big Data, Machine Learning, and Artificial Intelligence (AI), [.NET Development](#), [Azure DevOps](#), [Office365/SharePoint](#), and Enterprise Application Integration. For more info, go to [intellitect.com](http://intellitect.com).

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## Skills and Services

Software Development  
Integration  
Strategy  
Project Management  
ALM/DevOps  
Architecture  
.NET/C#  
SQL

“*The product is going to bring value, not only in marketing, but all across delivery! There was not a lot you could do better...*”

*Error Logging was really impressive because [we] were able to figure out from the logs what was wrong – self-diagnosis.*”

Project Analyst, Itron