# Chevron Achieved a Breakthrough Using Fusion Data Hub to Transfer Time-Series Data to the Azure Cloud

Chevron Time Series Services ensures Operational Technology (OT) data is in Chevron's data lake and made available across the enterprise. Fusion's role is in connecting and transferring OSISoft PI data to Azure Time Series Insights. The data is then synchronized to Chevron's data lake, ideal for analysis, trending, and updating at scale.

## Overview

Strong partnerships are needed to achieve innovative, scalable, and automated results. Automation and feedback loops are critical for reliability and continuous improvement. Fusion, along with Microsoft, provided the technology that enabled Chevron to create a data super-highway of information. It allows Chevron to address data challenges at scale while solving the complexity of getting the data moved, stored, and curated in a reusable manner. The data is uncompromised, unbiased, and complete. Today, Chevron is deploying technology across the enterprise that enables the business to increase productivity and lower operating costs maximizing ROI.

## Challenges

Like many companies, data is a top challenge for Chevron. It is often hard to find and gain access to operational data. When access is obtained, the data is often inconsistent or incomplete. It lacks quality and standardization across business units. To take advantage of time series data, Chevron would need to provide its data scientists and engineers with easily retrievable operational data and engineer data management processes that could facilitate continuous improvement of data quality, context, and standardization. Moreover, the scale of transformation that Chevron was attempting required new thinking and new solutions.

**Data Blockers:**


INSUFFICIENT DATA

DATA ACCESS

DATA STANDARDIZATION

DATA QUALITY

LACK OF CONTENT

## Solution

Fusion solves the age-old problem of cost-effectively extracting time-series data while minimizing security risk and transferring the data reliably to the customer's Azure tenant. Time-series data is foundational for many digital solutions, including digital twin, GIS visualization, connected worker, data science, analytics tools, and process control.

"Each of these solutions has the potential to improve operational efficiency, lower operating costs, and increase revenue, ultimately giving Chevron a competitive advantage," said Russell Crawford, a Real-time and time-series data Product Owner at Chevron.

By using Fusion, Chevron can ingest PI history, AF models, tag metadata, and stream data from PI to Azure Time Series Insights, landing all this data in Chevron's data lake. Metadata enhances the context for a given use case by joining it with other data from the data lake. Making time series data readily available for analytics, artificial intelligence, and machine learning is a significant milestone for Chevron Time Series Services.

Data completes its journey, from an on-premise data historian to Fusion's role deploying the data to the cloud that enables the enterprise OT platform. Fusion helps Chevron maximize production output, improve revenue growth, and achieve sustainability.

### Data Moved

**3.5 Million**
tags

**10 Years**
of historical data

**50,000+**
events per second

> By teaming with Fusion and Microsoft to connect and also automate the complex data, we are able to unlock the insights to help Chevron deliver on higher returns and lower carbon for our energy future."
>
> -- **Ellen Nielson**
> Chief Data Officer, Chevron

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We would love to show you how Fusion Data Hub removes operational technology (OT) data constraints to help your organization achieve industrial intelligence.

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