

The Automatility DIM

Calculation Script Creation Tool

Define and standardize analyses with Calculation Scripts

Analysts define Calculation Scripts which ingest parameters, query the data source, and return the analysis results

Query Configuration Platform

Enter parameters into a Calculation Script which cleans and executes your query

Less technical employees can select a Calculation Script and provide their own parameters (which PMUs' data streams to analyze, etc.)

Query Repository

Easily look up past queries, their inputs, and download their results

Queries are then stored in the Query Repository for easy lookup, access, and reference. Downloads to Excel, CSV, and JSON are also available.

Visualization & Aggregation

Use your favorite visualization and aggregation framework to better understand your data

Visualization and aggregation abilities are enabled, allowing users to better understand their data

Problem

Limited access to both synchrophasor data and grid interrogation capabilities discourages adoption of analysis techniques, whether retrospective or future-looking

- **Steep technical qualifications** required to query the PredictiveGrid system greatly limit the number of employees able to do it
- Those who can, the Dominion Energy Analytics team, can sometimes **spend an entire day on query management** busywork instead of creating and conducting analyses.

Solution

The Automatility Data Interrogation Module (DIM)

A systems integrator which:

- **Democratizes synchrophasor analysis access**
- **Accommodates any grid-querying technology via modular design**, provided the technology employs a Python-compatible API
- **Reduces technological skill prerequisites**, administrative overhead, and data-quality efforts for Dominion employees