

From Spreadsheet to Running SCADA: How a Mid-Size Gas Producer Rebuilt Their Upstream SCADA in a Fraction of the Time



MITSUBISHI ELECTRIC
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Days

Not Weeks

Full system configured & imported from a single Excel workbook

One

Display Template

Dynamic aliasing renders correct data for any selected lease or well

Zero

SCADA Rewrites

Lease acquisitions & divestitures managed with spreadsheet edits

THE CHALLENGE

A mid-size domestic gas producer was replacing a legacy SCADA that had grown organically over 15 years — different display formats per field, inconsistent alarm thresholds, no unified historian naming, and no practical path to exporting the existing configuration.

Every well, separator, meter run, and compressor lived in a custom display built by whoever was on the project. A new lease meant weeks of engineering. Acreage acquired from another operator meant rebuilding from scratch.

The operator needed a system that could scale with their acquisition strategy — not one requiring a full re-engineering effort every time a deal closed.



THE SOLUTION

PCD introduced GENESIS SCADA built around the AssetWorX Bulk Asset Configurator — which lets an engineering team define the entire system in Microsoft Excel and import it directly into GENESIS in a single operation.

Equipment Class templates were built in AssetWorX for each asset type: wellhead, separator, meter run, compressor, tank battery. Each class defined all properties — real-time tags, historian tags, and alarm configurations including setpoints and deadbands.

Legacy tag data was exported and massaged in Excel to match the ClassInstantiation sheet format — one row per asset, with name, hierarchy path, equipment class, and parameters. A ClassAlarmDefinitions sheet configured alarms and historian tags for each property. A single import populated the complete asset tree — hundreds of wells and facilities — with AlarmWorX64 alarm areas and Hyper Historian tags created and linked automatically.

DYNAMIC GRAPHICS WITH GRAPHWORX64

With the asset tree in place, the team built one display template per asset class — not one per site. GraphWorX64's Global Aliasing System resolves data sources at runtime based on the asset selected in the Asset Navigator.

When an operator clicks a wellhead, the single template dynamically populates with that well's pressures, temperatures, flow rates, alarms, and trend history — no separate file needed. The Clone Dynamic adapts display objects to the properties in the selected asset, so a 3-well pad and a single producer render correctly from the same template.

THE RESULTS

- Full system — tags, alarms, historian — imported from Excel in a single session
- New lease acquisition: engineering time reduced from weeks to hours
- Divestitures: delete rows from the spreadsheet and re-import
- One display per asset class replaces hundreds of per-site displays
- Consistent alarm and historian config across every site from day one

HOW IT WORKS — GENESIS AssetWorX Bulk Configuration Workflow

1

Export from Legacy

Export tag list & config from existing system to CSV or Excel

2

Build in Excel

Map to Bulk Asset Configurator format: asset path, class, parameters, alarms, historian

3

Import to GENESIS

One import creates asset tree, alarm areas & historian tags simultaneously

4

Build One Template

GraphWorX64 display with global aliases & clone dynamics — built once, used everywhere

5

Manage via Spreadsheet

Add, remove, or rename assets by editing Excel & re-importing — no SCADA engineering required

Ready to build your upstream SCADA from a spreadsheet?

PCD represents GENESIS SCADA with AssetWorX for O&G producers across Texas and the Rocky Mountain region. Contact us to see how the Bulk Asset Configurator works on your data.

Key Capabilities

- AssetWorX (ISA-95 hierarchy)
- Bulk Asset Configurator (Excel import)
- AlarmWorX64 (auto-generated alarms)
- Hyper Historian (auto-linked tags)
- GraphWorX64 (global aliasing + clone dynamics)
- Asset Navigator (runtime browse)