Let's do a demo!

Curious to see how the Flowstate LDS might work on your system?

Here's how you can get a sample of solution performance
and the implementation process in just 1-2 months!

STEP 1

ENGINEERING REVIEW

A successful demo starts with a short engineering review to discuss your system and the specific scope of the project.

STEP 2

DATA SUPPLY

We have a short list of data needs, including 3-8 weeks of operational data in a CSV fie. If you have historical data, we can start reviewing immediately. (Details on back.)

STEP 3

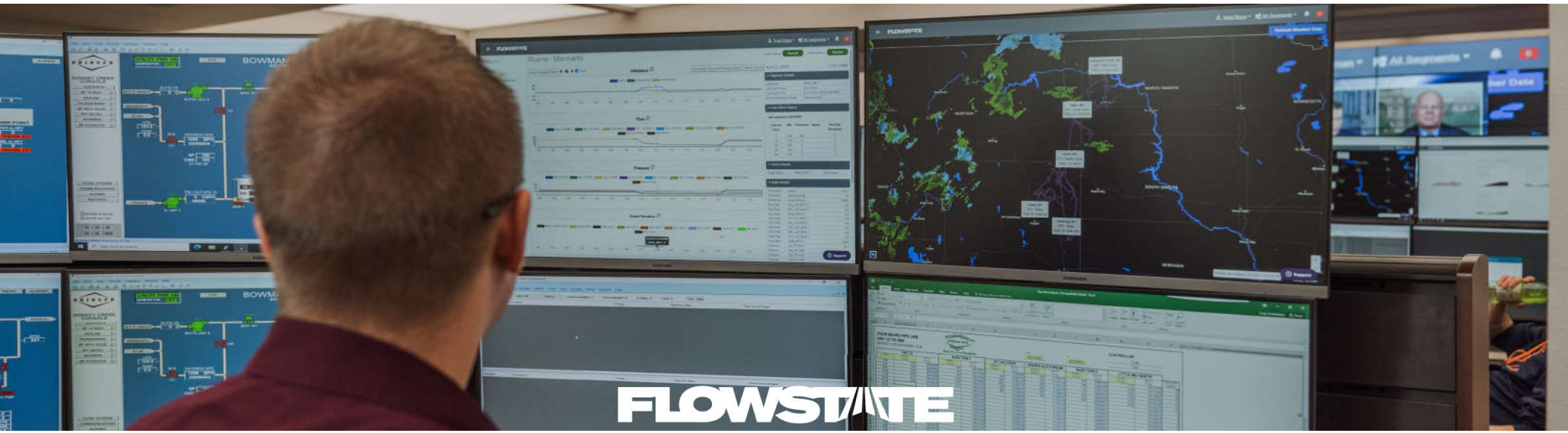
MODEL BUILD

Barring issues with data or operations in the data set, the segment will be analyzed, and a model can be built in 1-2 weeks.

STEP 4

DEMO IN CLOUD

Your demo segment and leak detection models can be configured in our cloud installation of the LDS where you can see how the solution might work on your system.



Minimum Requirements

Here are our minimum requirements to deliver a solution:

What is needed to get started?

- For creating models:
  6-8 weeks of continuous, operational data (less for demo)
- For operational use:
  access to real-time instrumentation data

What data is needed?

At a *minimum*, the following tags are needed:

- Flow rate at all inputs and outputs of the segment
- Density (API gravity) for all multi-grade lines
- Pressure for No-Flow/Shut-in and Leak Location

What sample rate is needed?

This depends on the goal.

- For alarming capability – sample rate of 1 per 60 sec or less is ideal
- For leak location – 1 per 10 sec or less is needed
- For Line Balance only – no scan rate requirement

Additional Requests

These additional items will improve performance or provide additional capabilities.

Additional Data Inputs

- Line pressure at all inputs (improves DL model and is needed for leak location or no-flow monitoring)
- All status tags (reduces false alarm rate)
  - Pump run status
  - Control valve set point
  - Pump rate set point
- Any instrument that can provide insight into the pipeline operations.
  Examples:
  - Pump RPM
  - VFD Frequency
  - DRA rate and status
  - Additional pressures (other than mainline)
  - PLC status / Comm Fail
  - Fluid Temperature
  - Control Valve Position

Leak Location Needs

The following are required for leak location or no flow monitoring

- All pressure transmitters along the pipeline (minimum at input & output)
- Data scan rate of 1 per 10 sec or less (improves accuracy)
- Pipeline alignment sheet & elev profile

Data Connectivity

- Data sample rate of 10 sec or less
- Preferred OPC-UA compatibility

Installation Requirements

- Data sample rate of 10 sec or less
- Preferred OPC-UA compatibility

Helpful Documentation

The following items will help us better understand your line and be more successful in providing a solution for you.

- Pipeline Elevation profile (Including any laterals/injection lines) – Prefer .xls
- Pipeline centerline – Prefer .kmz or .geojson
- Mainline Block Valves & Pressure Transmitter Locations (coordinates if on ROW) – Lat/Long
- List of relevant tags – Prefer .xls
- Drawings (P&IDs, Alignment sheets, plan drawings etc.) - PDF
- Pipeline Design Info (Fluid type, Density, Size, MOP, fill volume etc.)