

# REAL TIME OPERATIONS WITH GEOGRAPHIC INFORMATION

First System to Actively Integrate GIS Data with SCADA

C Y G N E T

a Weatherford Company

CygNet® 7.2 includes the new GIS Control which delivers active integration of geographic information (GIS) with powerful operations management capabilities. *CygNet's* SCADA module is fully integrated with the ArcGIS toolset, the flagship offering from *CygNet* partner ESRI. ArcGIS is widely considered to be best-in-class. Founded on the platform strength delivered by both offerings, each system maintains its individual system of record status, thus avoiding costly data replication processes. *CygNet 7.2* is the first software solution in the Oil & Gas Industry to combine SCADA with GIS data.

## The Challenge: Separate Systems, Common Problems

Operating a distributed asset base creates unique challenges for oil and gas operators. Managing this geographic component requires active integration. For example, in the event of a pipeline rupture, major considerations involve regional geographic topography, infrastructure, and proximity to populations. With public safety at the forefront of increasingly demanding pipeline regulations, injecting geospatial context is mission critical in managing risk.

For years, the industry has searched for active integration of GIS information with Operations. But until now there have been no solutions available which unified the access to data while maintaining the data source independence. Previous solutions were produced which copied data from system to system. Cost and ongoing maintenance were untenable. The first option pushed SCADA data into a GIS database, which allowed use of the GIS mapping tools but eliminated powerful SCADA functionality like trending, alarms, and real-time data viewing. The second option pulled GIS data into SCADA, which made the SCADA functionality available but rendered unavailable the most powerful features of GIS. Underlying both of these options was the challenge of how to keep both current, at a manageable cost.

## A Better Way: Mapping Operational Assets in Real-time

*CygNet's* EIEs provide pre-built connectivity to the latest versions of thousands of industry-leading field devices out of the box, with no "heavy lifting" required. *CygNet* EOP 7.3's new native EIEs collect vast amounts of data every second through better, more flexible utilization of IP-based communications infrastructure. Release 7.3 also supports enhanced EIEs for the latest products from Weatherford, ABB Totalflow, Thermo Fisher Scientific, and Emerson RAS.

