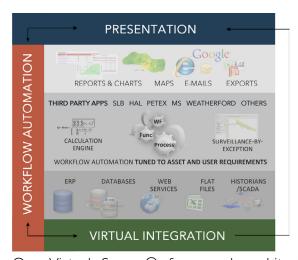


TECHNOLOGY



The One Virtual Source® framework architecture consists of three layers: virtual integration, workflow analytics and automation, and presentation. The virtual integration layer uses live data connections to link historians, ERPs, and other data sources together for interaction in the workflow automation and presentation layers. The workflow automation layer provides a complete design and run-time environment for the capture of analytics and workflow processes. Finally, the presentation layer displays the live output of the virtual integration and workflow layers in easy-touse reports, charts, maps, and other visualization tools. This flexible architecture allows the OVS framework to be scaled to virtually any type of producing field and provides configurable solutions tuned to asset and user requirements.

One Virtual Source components reflect the distinctive features of the framework and identify areas of E&P integration through workflow automation, application integration, surveillance, and data integration. One Virtual Source impacts clients of all sizes, ranging from global super majors to independent resource holders alike. Built on the .NET 4.0 framework, the flexibility and connectivity of One Virtual Source ensure solutions configured to your business and engineering needs.

COMPONENTS:

ENGINEERING WORKFLOW AUTOMATION

GLO/Plunger Lift/Rod Pump/ESP/PCP Cyclic Steam Optimization DCA vs. Production Actuals Lease Expiration

VENDOR NEUTRAL APPLICATION INTEGRATION

Prosper/PIPESIM Fekete/Saphir Mbal **Pipesim** Gap Olga Eclipse/CMG OFM WellView PEEP/Aries

ANALYTICS, **SURVEILLANCE** BY EXCEPTION™ **& OPTIMIZATION**

Wellbore Review Tool Mapping (Contour, Bubble...) Cross Plots, Gauges, Graphs, Tables... Well Sketch, Log Curves ESRI, Google Maps...

VIRTUAL DATA **INTEGRATION &** VISUALIZATION

Historians **ODBC OPC** Oracle Open Works Web Services SQL Scada Excel Native Providers

CONNECTIVITY-

INDUSTRY

Avocet Text Files OFM UrlCsv Aries UrlXls DIMS UrlXml Excalibur Witsml Rimbase Aclaro Volts Energy Components Quorum **FINDER** Decide Historians Peep OSIsoft PI WellView Active Factory **OPCDA** Procount PPDM DB **OPCHDA** P2 Energy Yokogawa **PDMS** Lowis IP2I **OpenWorks** Honeywell **OpenWells** Cygnet

DATA PROTOCOLS VISUALIZATION **DATABASE SUPPORT & APP INTEGRATION & REPORTING** Data "Wizard"

TCP/IP Oracle Web services SQL Server **XML** SQL Server SOL Express OPC MySQL SCADA Foxpro Native Excel providers Access **Applications** COM DHs **DCOM** Active X

HTMI Charts Maps Gauges Tables Grids Wellbore schematic WORD **EXCEL**

WORKFLOWS

API

Application integration -Third Party -In-House