



## Data Collection, Validation, Approval and Publication

### The Challenge

Operations require a simple and consistent way to collect, validate, approve, and distribute validated discrete time based (e.g. Shift, Day, Week, Month, Year) production and operational data.

Production and operations data is often captured automatically, or manually, in spread sheets and sent to the production accounting, mass balance, or ERP systems without validation by the operators or the domain specialists who understand the data. This key production data is critical to reporting and KPIs. KPIs highlight the asset's performance. Key production reports, such as the Daily Production Report, must be timely and accurate as they are used by a wide audience such as the business itself, joint ventures, and government bodies. Minimizing manual input, ensuring accurate data, and publishing in a timely manner enables the business to make informed decisions based on a single set of approved data.

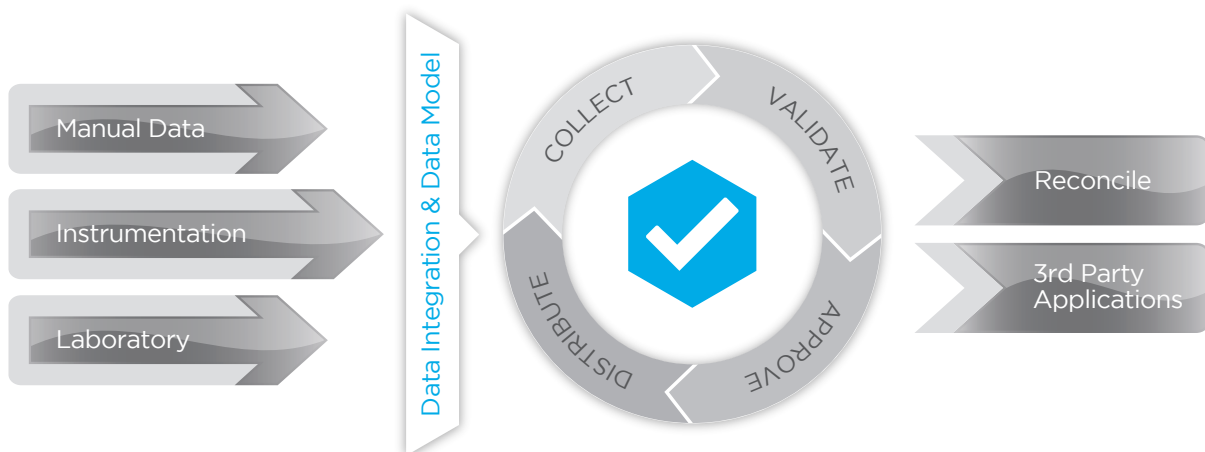
### The Solution

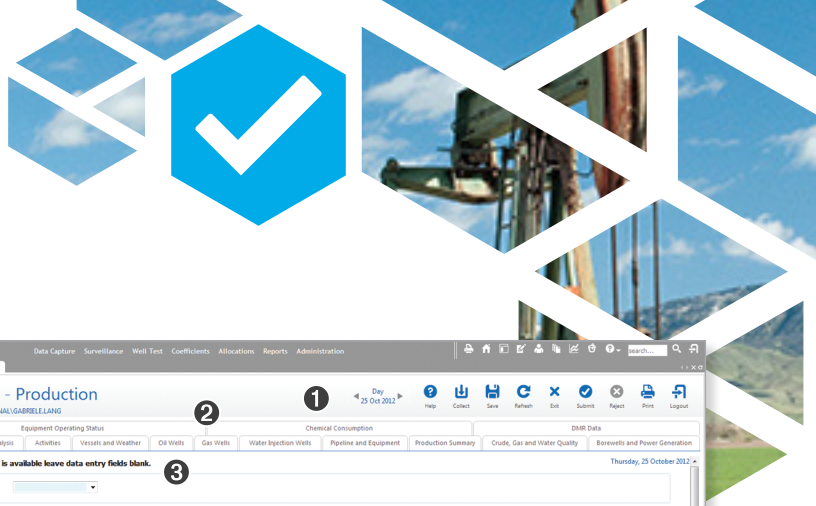
P2 Verify is a web based solution for operations personnel to collect (automatically or manually), validate, approve, and publish operational data.

P2 Verify is a web application that allows users to capture operational data both manually and automatically from disparate data sources such as data historians, databases, etc. Configurable validation rules prevent erroneous data before it can reach the business. A configurable approval workflow ensures the correct people review and approve data before it is submitted for use in other applications.

P2 Verify allows data items to be grouped into logical approval areas, thereby allowing multiple departments/areas to capture, validate, approve, and publish data for use within the business. Each data area and associated approval workflow is secure, thereby ensuring only specific users can enter, change, and approve data. The solution supports both a distributed and a centralised architecture which can be important when supporting low bandwidth networks between the field and the office.

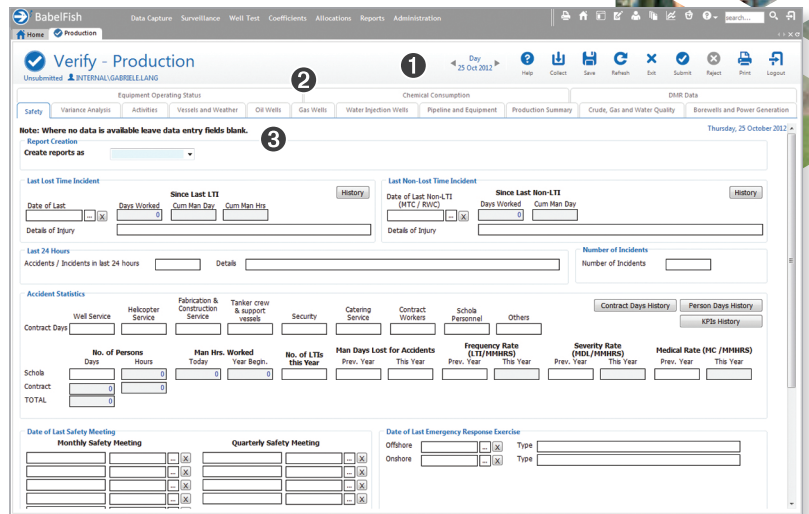
Inputs ————— Process ————— Distribute





## P2 Verify

- 1 The Verify Tool Bar allows users to change the report date, manually collect data, save, refresh, exit edit mode/enter edit mode, submit, reject, print and log out.
- 2 Use tabs to create logical groupings of data entry items.
- 3 Use labels, text boxes, combo boxes, date/time pickers, buttons, dynamic and static tables to design an intuitive data entry page.



## Key Features

- Supports automatic and manual data capture.
- Group data into intuitive tab pages and business areas such as departments.
- Automatic conditional application of validation rules.
- Highlight erroneous data and stop submission if mandatory data has not been captured.
- Configurable and secure approval workflows with automatic email notification.
- Ability to trend individual data items.
- Supports distributed and centralised architecture.
- Trigger execution of external processes such as production allocations and report creation when a certain stage in the workflow is reached.
- Distributes data to P2 Reconcile and 3rd party applications.
- Time aware layout version control.
- Full audit trail.

## Solution Benefits

- Automatic collection of data minimizes operator time and reduces errors associated with manual data entry.
- Validation of data at the source and approval workflow increases data integrity.
- Intuitive interface simplifies the data capture, validation, and approval process.
- Time aware layout version control ensures historical data capture interfaces are retained.
- Access from the corporate intranet based on security permissions.

## Technology Vitals

P2 Verify has a three-tier structure comprising of a web based client platform utilizing AJAX and Javascript, a Server platform using Windows Server 2008 R2, and .NET Framework to provide interoperability and processing. Cached data and configuration information is stored in Microsoft SQL Server or Oracle database.

Contact P2 Energy Solutions, [enquiries@p2energysolutions.com](mailto:enquiries@p2energysolutions.com), for more information or for a demonstration.

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