

SmartPlant® Enterprise for Owner Operators Operating Plant Solution



The SmartPlant® Enterprise for Owner Operators (SPO) Operating Plant Solution builds upon the SPO Core Solution and provides business packages supporting common, critical work processes for the operating plant. To help you manage the engineering design basis and ensure seamless interoperability with the maintenance system in operating plants, two SPO Operating Plant Solution business packages are currently available, Management of Change for Operations and Plant Information Browser.

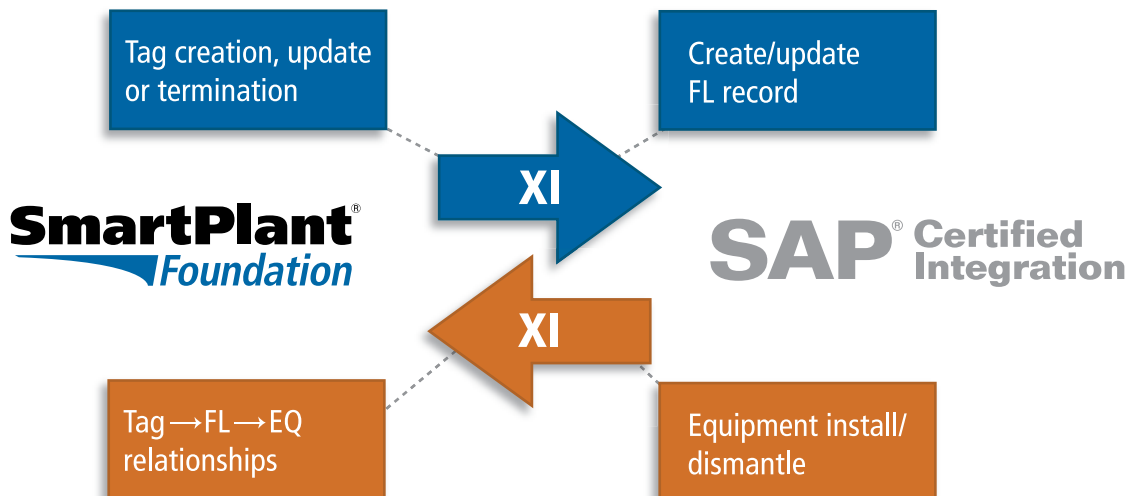
MANAGEMENT OF CHANGE FOR OPERATIONS

Maintaining the accuracy of essential plant engineering, maintenance, and operations information is crucial to safe and efficient plant operations. Traceability of plant changes and auditability of the management of change (MOC) process is essential to demonstrate compliance with regulatory requirements. The Management of Change for Operations business package is designed to provide rigorous MOC of engineering information with full traceability and audit trail.

The synchronization of data between the engineering design basis and maintenance is currently available for SAP®. Intergraph plans to extend this functionality to other leading maintenance systems in later releases.

Where tags are created, updated, or terminated in the design basis, this will trigger an automated update of the corresponding functional location in SAP EAM using SAP NetWeaver® XI. Similarly, when equipment is installed or replaced against a functional location in SAP EAM, this will trigger an update of the corresponding data in SmartPlant Foundation in which links between tag, functional location, and equipment are held.

The MOC process includes the process of review, authorization, design, and approval of changes by engineering in the engineering design basis. It also addresses the process of notifying maintenance to perform changes by creation of notification records in the plant maintenance system. The integration with SAP has been certified by SAP as “Powered by NetWeaver.”



The impact assessment of engineering change can also be performed. During the planning of engineering change, plant engineering must anticipate the MOC implications of planned plant change. The Web portal will assist the engineer in assessing the plant items affected. The linking of affected plant items to changes also facilitates the assessment of change impacts with other ongoing or pending changes.

PLANT INFORMATION BROWSER

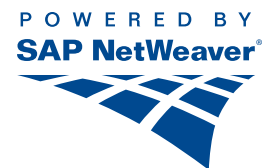
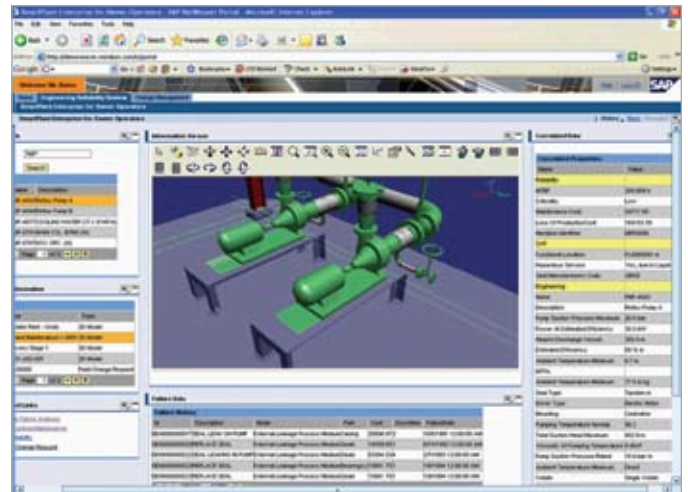
The Plant Information Browser business package will provide seamless access to plant design data, maintenance data (from ERP systems), reliability data (Meridium), DCS data, etc. via a common, intuitive, role-based Web portal. Data will be available via drill-down of the plant structure, structured queries, or from 2D/3D graphical navigation of the plant. The current version provides access to engineering data and data in SAP EAM. Later releases will expand the scope of data to other operations and EAM systems.

Intergraph recognizes the variety of roles that must be accomplished to achieve successful plant operations. The SPO portal is specially designed to help users perform these work tasks. The maintenance engineer will be able to seamlessly access data in the maintenance system, reliability system, and engineering design tools and then interrogate the system by functional location or equipment number. A plant engineer will be able to use a tag number to seamlessly access design data, maintenance data from the ERP system, data from the DCS, and reliability data.

For example, SPO Plant Information Browser can facilitate the correct replacement of equipment. As plants age, equipment is replaced by similar equipment, which is in turn replaced by similar equipment. As time passes, the original design basis for optimized plant systems can become "lost" or the plant design may change. If access to the latest plant design is not available, there is a risk that incorrectly specified replacement equipment may be purchased. This can cause unnecessary, costly plant inefficiencies and unplanned outages. SPO Plant Information Browser will help maintenance personnel find the correct, current design criteria that apply for the equipment to be replaced.

Additional business packages are envisioned for future releases of the SPO Operating Plant Solution, including:

- Brownfield Data Capture
- Brownfield/Greenfield Data Verification, Transformation, and Loading
- Engineering Assistant for Maintenance
- Engineering Assistant for Reliability
- Engineering Assistant for Safety
- DCS Change Management
- Intelligent Manuals
- Plant Optimization Assistant



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and protecting critical infrastructure and millions of people around the world.

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