



SMARTPLANT® ENTERPRISE FOR OWNER OPERATORS OPERATING PLANT SOLUTION

The Intergraph® 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

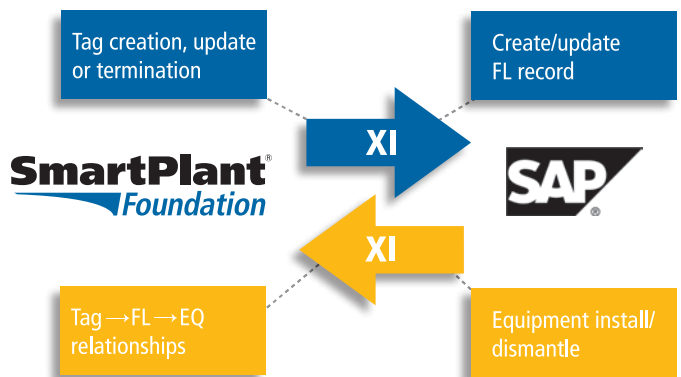
Maintaining the accuracy of essential plant engineering, maintenance, and operations information is crucial to safe and efficient plant operations. Traceability of plant changes and auditability of the management of change (MOC) process is essential to demonstrate compliance with regulatory requirements.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

This solution supports the synchronization of information between the engineering design basis in SPO and maintenance systems to provide ensured consistency. Intergraph plans to extend this functionality to other leading maintenance systems in later releases.

Tags created, updated, or terminated in the design basis will trigger an automated update of the corresponding functional location in SAP® EAM using SAP NetWeaver® XI. Similarly, when you install or replace equipment against a functional location in SAP EAM, you’ll receive an update of the corresponding data in SmartPlant

Foundation which holds the links between tag, functional location, and equipment.

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 creating notification records in the plant maintenance system. You can also perform the impact assessment of engineering change. During the planning of engineering change, plant engineering must anticipate the MOC implications of planned plant change. The Web portal will assist you 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.



The Management of Change for Operations business package offers automated, bi-directional synchronization of data between the engineering design basis and SAP PM.

PLANT INFORMATION BROWSER

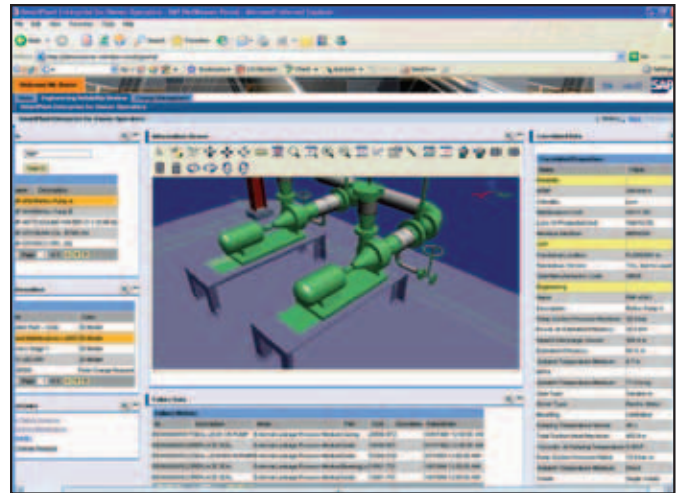
The Plant Information Browser business package provides seamless access to plant design data, maintenance data (from ERP systems), reliability data (Meridium), DCS data, etc., via a common, intuitive, role-based Web portal. Data is available via drill-down of the plant structure, structured queries, 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 you must accomplish to achieve successful plant operations. The SPO portal is specially designed to help you perform these work tasks. A maintenance engineer can 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 can use a tag number to 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 you could purchase incorrectly specified replacement equipment. This can cause unnecessary, costly plant inefficiencies and unplanned outages. SPO Plant Information Browser will help you 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:

- Turnaround Planning
- Lock-out/Tag-out
- Permit to Work
- Process Safety Integration
- Intelligent Manuals



The Plant Information Browser business package provides seamless data access through a common, intuitive, role-based Web portal.

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph

PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

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