



SMARTPLANT® ENTERPRISE POWER SOLUTION (KKS-ENABLED)

Accelerating SmartPlant® Enterprise Deployment in KKS-Centric Projects and Plants While Reducing Implementation Efforts

The new Intergraph® SmartPlant Enterprise Power Solution (KKS-Enabled) offers pre-configuration for power plant builders and owner operators who want to use SmartPlant Enterprise for:

- Design and construction
- Safe and reliable plant operation
- Life-cycle management of the engineering design basis
- Handover and regulatory compliance

SmartPlant Enterprise Power Solution (KKS-Enabled) builds on SmartPlant Enterprise’s proven and widely used product suite with features tailored to the needs of the power industry, such as out-of-the-box Kraftwerk Kennzeichen System (KKS) integration and SmartPlant Reference Data-driven specifications for SmartPlant P&ID. The solution offers many benefits, including standardized and accelerated implementation and reduced implementation cost.

KKS libraries are recognized as an industry standard for consistent and systematic classification of power plants. By delivering pre-defined KKS content for the SmartPlant Enterprise Power Solution (KKS-Enabled), Intergraph enables clients to more easily benefit from the software’s existing capabilities and expedites the engineering process for those clients who adhere to these specifications.

SmartPlant Enterprise Power Solution (KKS-Enabled) offers pre-configured KKS integration and data management capabilities for EPCs and O/Os who perform engineering and design projects for power generation or distribution projects.

INNOVATIVE SOLUTION

The widespread industry adoption of SmartPlant 3D, SmartPlant Foundation, SmartPlant P&ID, SmartPlant Instrumentation, SmartPlant Electrical, and SmartPlant Reference Data makes SmartPlant Enterprise Power Solution (KKS-Enabled) a next logical

step in streamlining enterprise engineering information throughout the concept, design, construction, operations, and maintenance life cycle of power plants.

Take advantage of SmartPlant Enterprise Power Solution (KKS-Enabled) to:

- Gain a robust, value-adding, and accelerating starting point for the implementation of SmartPlant Enterprise
- Benefit from more efficient collaboration between:
 - Owners
 - EPCs
 - Nuclear reactor suppliers
 - Other suppliers
 - Regulatory agencies
- Collaborate with global industry leaders to gain a competitive advantage

KEY BENEFITS

- Speed up ROI of SmartPlant Enterprise in KKS-centric power projects and plants through accelerated implementation
- Reduce implementation cost through pre-configuration

SOLUTION SCOPE

- KKS naming rules and properties for SmartPlant 3D
- Libraries with DIN equipment, hangers and supports, and cable catalogs for SmartPlant 3D
- KKS integration via SmartPlant Foundation
 - Typical KKS-based plant breakdown structure (PBS)
 - PBS mapping for SmartPlant Engineering Manager (SmartPlant P&ID and SmartPlant Electrical)

- PBS mapping for SmartPlant 3D
- KKS-based schema extensions (SmartPlant Foundation)
- SmartPlant P&ID tool mapping extended to KKS properties
- SmartPlant Electrical tool mapping extended to KKS properties
- SmartPlant 3D tool mapping extended to KKS properties
- Reference data integration (SmartPlant Reference Data and SmartPlant P&ID)
 - SmartPlant P&ID internal catalog for specifications and components managed by SmartPlant Reference Data
 - Component and specification data management

PREREQUISITES

SmartPlant Enterprise Power Solution (KKS-Enabled) is a powerful implementation template built upon the power of SmartPlant Enterprise. The following are required to use the solution:

- SmartPlant 3D, SmartPlant P&ID, or SmartPlant Electrical
- SmartPlant Foundation
- KKS libraries for SmartPlant P&ID and SmartPlant Electrical
- SmartPlant Reference Data (strongly recommended)

For customers who intend to use SmartPlant Enterprise Power Solution (KKS-Enabled) in combination with SmartPlant Enterprise for Owner Operators Core or SmartPlant Enterprise Core, we recommend you implement SmartPlant Enterprise for Owner Operators Core or SmartPlant Enterprise Core before installing and implementing SmartPlant Enterprise Power Solution (KKS-Enabled).

BENEFITS

- Establish best industry practices
- Repeat success stories
- Leverage lessons learned
- Reduce implementation risk
- Shorten implementations
- Accelerate ROI
- Reduce implementation efforts and costs
- Improve inter-company collaboration

CAPABILITIES

- Power industry practice plant breakdown structure for SmartPlant Enterprise
- Integration schema extensions tailor-made for use with KKS
- Required KKS tool mappings for SmartPlant 3D, SmartPlant P&ID, and SmartPlant Electrical
- KKS-compliant naming rules for SmartPlant 3D
- Integration between SmartPlant Reference Data and SmartPlant P&ID

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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