



HEXAGON
PPM

SOLUTIONS BROCHURE

EMPOWERING YOUR DIGITAL TRANSFORMATION

INTERGRAPH SMART[®] CLOUD



Intergraph Smart® Cloud is Hexagon PPM's Software as a Service environment for delivering Intergraph Smart and SmartPlant® applications in a high-performance, secure, and reliable fashion.

Smart Cloud enables consistency of project tools in the design and operational lifecycle to better meet schedule commitments, reduce handover costs, while ensuring higher quality and integrity of data. The Smart Cloud Portal provides an intuitive, role-based interface for users to access project applications and streamlines the management of cloud environments for administrators.

Continuous optimization, coupled with 24x7 monitoring and support, gives teams more time for added-value activities without having to worry about the details of running the underlying software and infrastructure. Smart Cloud also enables data centralization for better analytics and serves as a foundational element for digital transformation initiatives.

CURRENT INDUSTRY CHALLENGES

In a world of dynamically changing market conditions, the expectations of EPCs and owner operators has not wavered. EPCs are expected to execute on-schedule, high-quality, consistent deliverables with other project partners; owner operators are expected to safely operate their facilities, produce product, and make profit. As straightforward as these responsibilities sound, there are other factors that slow down and complicate the project lifecycle:

- Teams are often distributed internally within a company and externally among vendors, subcontractors, and partners, which can complicate communications and make access to real-time project data problematic
- IT tends to prioritize corporate initiatives, lacking focus and experience with integrating new tools and capabilities into systems- tools and capabilities which would save on costs and enable faster project execution
- Organizing data and documents from multiple sources is a time-consuming endeavor, adding pressure to resources and project schedule
- Data security costs and the time spent on securing on premise hardware, networks, and user devices is growing at a pace few can keep up with

In addition to these challenges, the majority of project risk, cost, and delay occurs during the handover process. Due to lack of clear understanding on the type of information needed, how its organized, what tools and processes were implemented, and how it should be delivered, this process

is responsible for at least 40 percent of projects not meeting their schedules. Today, the reduced number and profitability of projects is forcing organizations to focus on efficiency, which is why design and operations teams are, more than ever before, moving to the cloud.

WELCOME TO THE CLOUD

The Intergraph Smart Cloud environment eliminates these industry challenges by allowing customers to take greater advantage of the fundamental benefits SmartPlant and Intergraph Smart products have to offer. The resulting drawings, data, and documents produced from these products and living on Smart Cloud are consistent and immediately accessible in a globally interconnected world of suppliers, vendors, fabricators, contractors, and partners. In this cloud environment, the information handover process is not a single event, but rather an iterative process of information sharing throughout the entire engineering and construction process.

- For owner/operators, having projects in the cloud offers many advantages over traditional implementations. Smart Cloud consolidates plant data into a single, secure location, and is available anytime – from anywhere – which helps meet the challenges of quality, consistency, and maintaining the high value of data-centric systems for large and small projects. Having a consolidated environment also provides the ability to review designs earlier, eliminating potential construction rework, and reducing material costs through economies of scale.
- Engineering contractors are expected to execute on schedule and produce consistent and high-quality deliverables. Design systems are providing an increasing level of intelligence for feeding procurement, construction, and plant systems. Smart Cloud allows all partners to be more in-sync to meet these project demands while maintaining strict safety requirements. Smart Cloud enables consistency of project tools in FEED, detail design, and operations to better meet schedule, reduce organization migration costs, ensure higher quality and integrity of data, and ease the handover process.

**SMART CLOUD HAS BEEN ENTRUSTED
WITH OVER US\$40 BILLION WORTH OF
PROJECTS IN DOZENS OF COUNTRIES
ACROSS MULTIPLE ENGINEERING
AND OWNER OPERATOR COMPANIES.**

SMART CLOUD BENEFITS

SECURITY & CONTROL

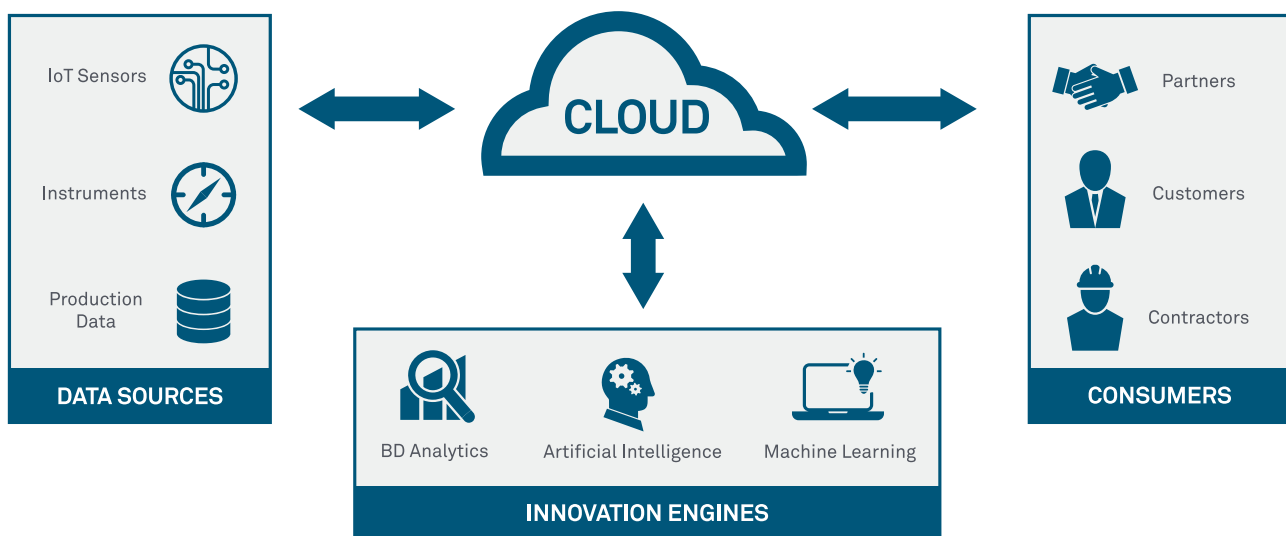
Data is 100% Secure and 100% Yours.

Outside hackers have traditionally been perceived as the biggest security threat, however, according to a 2017 study by Ernst & Young, 77 percent of security executives now consider a careless member of staff as their biggest security threat. When you include vendors, suppliers, contractors, and partners, the risk grows. Hexagon PPM understands you have intellectual property that needs protection. We provide this through our industry-leading commitment to ISO 27001, an independent standard for Cloud security involving formal auditing and certification by third-party resources. We protect your data with strong user compliance and governance, in addition to daily off-site backups. To ensure all intellectual property stays secure, information can be segregated from access at various levels. Internal departments maintain control while providing users various levels of access.

FOUNDATION FOR DIGITAL TRANSFORMATION

Your on-ramp to Industry 4.0, IoT, Data Analytics, and Machine Learning.

One of the main reasons we built Smart Cloud was to provide customers a solid foundation for their Digital Transformation initiatives. Smart Cloud is an industry-specific platform designed to offer applications and data in a centralized, scalable, and secure environment with access to the latest technology innovations that the software industry has to offer. Smart Cloud has been designed from the ground-up to enable customers to securely unify and centralize their data while being able to control access to the various organizations and groups that need to access it – be they internal consumers, partners, contractors, customers, or other third parties. Having a holistic view of the enterprise enables organizations to drive new levels of efficiency through collaboration and higher levels of safety by ensuring that everyone has access to the critical data they need to safely perform their jobs.



SUPPORT & OPTIMIZATION

Continuous optimization and monitoring with 24/7 support.

Most companies assume adopting a cloud service will increase risk for their organization, partners, and suppliers, and hesitate to make the transition. To take the risk out of this transition, we provide a dedicated team of experts to guide you through the initial use of the Smart Cloud service to put your team at ease and to ensure your success. Early-implementation support identifies issues, shares best practices, and removes barriers to adoption. Hexagon PPM is your partner to make your cloud implementation successful. Once you are up and running, we will maintain and monitor your global infrastructure. Regardless of the type of issue – network, hardware, or software – our unparalleled Smart Cloud service team is available 24/7 to solve your problem.

AGILITY & FLEXIBILITY

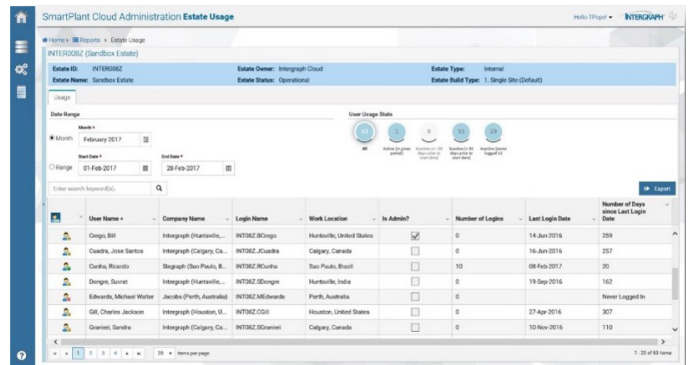
Faster Start-up. Compressed Schedules. Lower Cost.

Project managers have told us that it can take months to become fully operational, which eats into the schedule. Additional provisioning for peak usage leads to idle resources and increased costs in both infrastructure and man-hours. With Smart Cloud, you gain agility to rapidly start up, compress schedules, and scale your resources up or down to meet your needs. Smart Cloud also offers the ability to leverage local knowledge across multiple global offices. Smart Cloud is accessible from virtually any type device with no changes to your IT infrastructure.

THE INTERGRAPH SMART CLOUD PORTAL

Your focus is on time-on-tools, not IT tasks. The Intergraph Smart Cloud Portal is a globally accessible intuitive user interface designed to ease navigation and streamline the management of your Cloud environment and enables faster project startup, compressed schedules, and cost savings.

- Real-time usage reporting
- Application access level control
- Self-service estate & user management
- Integrated support filing & tracking
- Monitoring & Alerts



The screenshot displays the 'SmartPlant Cloud Administration Estate Usage' page. It includes a navigation sidebar, a header with estate details (Estate ID: INTSR0002, Estate Name: Sandboxes Estate, Estate Owner: Intergraph Cloud, Estate Status: Operational, Estate Type: Internal, Estate Build Type: 1, Single Site (Default)), and a main content area. The main area features a 'Date Range' selector (Month: February 2017, Range: 01 Feb 2017 to 28 Feb 2017) and a 'User Usage State' section with four circular gauges. Below this is a table with columns: User Name, Company Name, Login Name, Work Location, Is Admin?, Number of Logins, Last Login Date, and Number of Days since Last Login. The table lists several users, including Grego, Bill; Cuschi, Jose Santos; Gueho, Ricardo; Gueho, Daniel; Edwards, Michael Walter; GSE, Charles Jackson; and Gueho, Daniel.



Ask your account manager how Smart Cloud can deliver projects faster, cheaper, and with less risk.

MORE THAN SOFTWARE AS A SERVICE (SAAS):

Intergraph Smart Cloud is more than just another cloud offering. Our service is tailored to the architecture of Hexagon PPM products and provides the expertise for ongoing scaling and maintenance. With data centers located on multiple continents, our goal is to provide the optimal performance and reliability you expect.

“I must say, the Intergraph Smart Cloud Portal is one of Hexagon’s most intuitive tools, yet requires minimal training, which is an ideal combination.”

Chetan Nyalkalkar
Shell

ABOUT HEXAGON PPM

Hexagon PPM is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.