



3DEXPERIENCE®

ENERGY, PROCESS & UTILITIES
**SAFE PLANT OPERATION & MAINTENANCE
INDUSTRY SOLUTION EXPERIENCE**



**IMPROVE PERFORMANCE OF OPERATIONS AND MAINTENANCE ACTIVITIES
FOR EFFICIENCY, SAFETY, AND COMPLIANCE**

How can asset-intensive companies improve plant production and reduce outages, while enhancing worker and equipment safety and regulatory compliance? The **Safe Plant Operation & Maintenance Industry Solution Experience**, powered by Dassault Systèmes **3DEXPERIENCE®** platform, helps companies securely control, configure, and manage plant information and enable advanced solutions to increase plant performance and safety. It combines detailed execution-level project management with key deliverables for validating resource-optimized schedules. Movement of entire equipment structures can be simulated in a virtual 3D space to help eliminate interferences, ensure adherence to safety protocols, and avoid unplanned outages due to unforeseen circumstances or equipment conditions.

Key Benefits:

- Improved safety and productivity thanks to consistent and traceable change management of asset information
- Higher asset reliability and lower outage durations thanks to improved maintenance and deliverables planning
- Enhanced asset maintenance planning thanks to validated 3D time-based simulation

CONTINUOUS PLANT INFORMATION INTEGRITY SHARED AMONG ALL PROJECT STAKEHOLDERS

More than 10 percent of employee time is spent searching for accurate information, with no control or guarantee of finding the right versions. Enforcing change management and providing timely notifications can use up another 10 percent. Preparing reports and documents for meetings can take yet another 10 percent. All these tasks can erode almost one-third of user productivity, shrinking return on assets every time someone looks for information!

Organizing all plant information in a Single Source of Truth, the Safe Plant Operations & Maintenance Industry Solution Experience provides consistency and traceability. Combined with effective change management, it helps ensure that information is reliable, up-to-date, and secure. Stakeholders can access an accurate, customized view of the data, based on their functional needs.

TAKING THE ESSENTIAL STEP TOWARDS CORRECT, SAFE, AND ON-TIME MAINTENANCE ACTIVITIES

Planning, document management, and execution systems are typically separate and disconnected. Detailed tasks and critical review gates are not connected with key deliverables necessary for their completion. Safety systems are not validated for planned shutdown, startup, and partial outage states, and are not easily factored into resource-optimized plans. All this disconnection increases the risk of unplanned delays and improper safety during actual maintenance.

Safe Plant Operation & Maintenance solution connects deliverables to key tasks, meetings, and milestones. It enables the move to invisible governance by automatically broadcasting project status to all stakeholders as work is completed. Regulatory certification processes are improved by controlling activities and the timely release of critical documents. Safety and quality is improved using integrated system simulation to visualize and calculate the safety states and fault trees of components.

ENHANCED LIFE EXTENSION REBURISHMENT FOR INCREASED PLANT OPERATIONAL AVAILABILITY

As equipment ages and experienced personnel retire, knowledge about proper and safe equipment replacement procedures can be lost. In some cases, large equipment may never have been replaced before, and new procedures need to be fully understood to avoid unplanned delays or critical safety situations

Safe Plant Operation & Maintenance solution provides advanced 3D time-based simulation technology to verify the movement of equipment and resources during maintenance. It simulates critical and complex worker tasks and choreographs multiple workers working together for efficiency and safety.



Virtual optimization of maintenance tasks

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.



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