

Shutdown, Turnaround & Outage Management

Wipro's Cloud Native STO Application



Shutdown, Turnaround and Outage (STO) events are critical to energy and process industries to ensure that assets perform to their intended design capability efficiently and safely. Competitive pressure, regulatory compliance and technological innovation are forcing businesses to adopt new and innovative technologies and spend millions on

strategy design, business process re-engineering and the development of IT systems. In most organizations, STO processes and the IT landscape have grown organically over many decades resulting in a multitude of point solutions. These patchwork processes have little or no integration and less capability to support any optimization and real-time visibility.

An in-depth analysis of STO operations in some of the largest O&G energy companies identified the following issues:



Lack of process standardization



Lack of a platform forcollaboration leads to communication break-down and operationalinefficiencies



Processes spread across several siloed applications leading to information loss and the inability to track STO tasks



Recalibration and adjustments of STO plans are complicated and inflexible



Lack of real-time integration across the various applications



Applications are complex and not intuitive leading to limited adoption



Lack of real-time visibility into the state of STO operations leads to inefficient and ineffective decision making, high risk and overruns

Wipro's STO application was designed to address the identified shortcomings. It is a one-stop end-to-end offering to manage STO events of any complexity. It is a cloud-native application with an architecture that offers the best-in-class availability, scalability, performance and an intuitive multi-channel user experience. Offered as a SaaS application with rapid

deployment and go-live, it seamlessly integrates with SAP ECC, S/4HANA and other third-party platforms. The solution provides real-time bi-directional integration with scheduling software such as Oracle Primavera P6 and Microsoft Project and offers a best-in-class user experience following responsive and adaptive design.

Companies that implement Wipro's STO Cloud application will achieve the following benefits:



Optimized STO processes and practices



Reduced risk exposure



Defined STO business objective events achieved



Increased safety in work practices



Reduced STO durations and extended time between successive STOs



Stronger environmental and regulatory compliance



Improved plant mechanical integrity



Improved employee morale and communityperceptions



Reduced maintenance and inspection costs



Wipro's Cloud native STO application is **SAP Partner Edge endorsed**



The STO application embodies the best practices from across the industry and is developed by Wipro in close collaboration with the SAP industry vertical and technology teams. Wipro's experience of serving O&G and energy customers for the last three decades across the globe has

helped us collate, synthesize and orchestrate the solution keeping in mind diverse customer needs. The solution is a plug-and-play cloud offering that integrates with a customer's existing IT landscape.

Shutdown, Turnaround and Outage Application Modules

Wipro's STO Could Application tightly bounds many modules covering STO processes and fully integrates with SAP S4H/ECC6 and Oracle Primavera P6.

Definition	Corporate STO Planning	Project Definition	Goals, Objective & Success Criteria	OBS	Roles & Responsibilities	WBS	Milestones	Budgeting	Resources	Calendars	Charter
Planning	Scope Mgmt.	Material Mgmt.	Services/ Contract Mgmt.	Heavy Equipment Mgmt.	Fabricated Material Mgmt	Tools Mgmt.	Isolation Mgmt.	Scaffold Mgmt.	Rigging & Lift Mgmt.	Flange Mgmt.	Weld Mgmt.
	Insulation Mgmt.	Work Package Mgmt.	Job Hazard Analysis	Risk Mgmt.	Issue Mgmt.	Action Mgmt.	Engineering Change Mgmt.	Audit Mgmt.	Meeting Mgmt.	Document Mgmt.	Monte Carlo Simulation
Execution	Execution Control Center	Permit Mgmt.	Shift Log	QA/QC Mgmt.	Safety Compliance	Incident Reporting	Incident Investigation	Work Confirmation	Hazardous Material Mgmt.	Waste Mgmt.	Training Mgmt.
Closure	Project Completion/ Settlement	Warranty Claims	Lessons Learned	Recommen- dations	Project Closure	Project Success Ranking					
Analytics	STO Reports	STO Dashboards	Activity Analysis	Statistical Analysis	Historic Projects	FMEA	FRACAS	RCFA	STO Knowledge Base		
Master Data	Technical Objects	Task Lists	Logistics	STO Master Data							
Administration	Templates Mgmt.	Risk Matrices	Standard Activities Mgmt.	Alternative Costing Structures	STO System Events Mgmt.	System Authorization Mgmt.	STO System Configurations				
Backend ERP S4H / ECC6	РМ	ММ	QA	PPM/PS	CATS	FI/CO	EHS	Linear Asset Mgmt.	DMS	Warranty Mgmt.	Asset Manager
Standard Integrations	Primavera P6	MS Project	SAFRAN	SAP MRS	ARIBA	GIS					
Other Integrations	Customers' Applications	IBM MAXIMO	Oracle EAM	Other EAMs							

Table 1: Modules included in the application to cater to STO processes



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and build future-ready, sustainable businesses. With over 250,000 employees and business partners across 66 countries, we deliver on the promise of helping our customers, colleagues, and communities thrive in an ever-changing world.

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