

What's New With Prometheus Permitting and Safety

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PROMETHEUS GROUP | 17TH ANNUAL **USER**
CONFERENCE
NORTH AMERICA

Speaker Introduction



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Product Development Approach

- Customer-Driven Development – real world advancements from industry leading organizations
- End User Focused – easy and intuitive, drive adoption
- Process Integration – aligning maintenance, operations, and safety

What's New – Recent Developments

- Plotting Zones
- P&ID Integration
 - Drawing Markup
 - Isolation List Creation
- Lessons Learned
- Maximo Integration Expansion
- RiskPoynt/ePAS Integration



Plotting/ Exclusion Zones

- Visualize work volume per area
- Drill down into areas for further detail
- Date based zones
 - Areas for decommissioning
 - Road closures
- Exclude permit issuance in an area where there are existing permits



Maintaining P&ID's

- Manage P&ID's with isolation points
- View related records for potential P&ID revisions

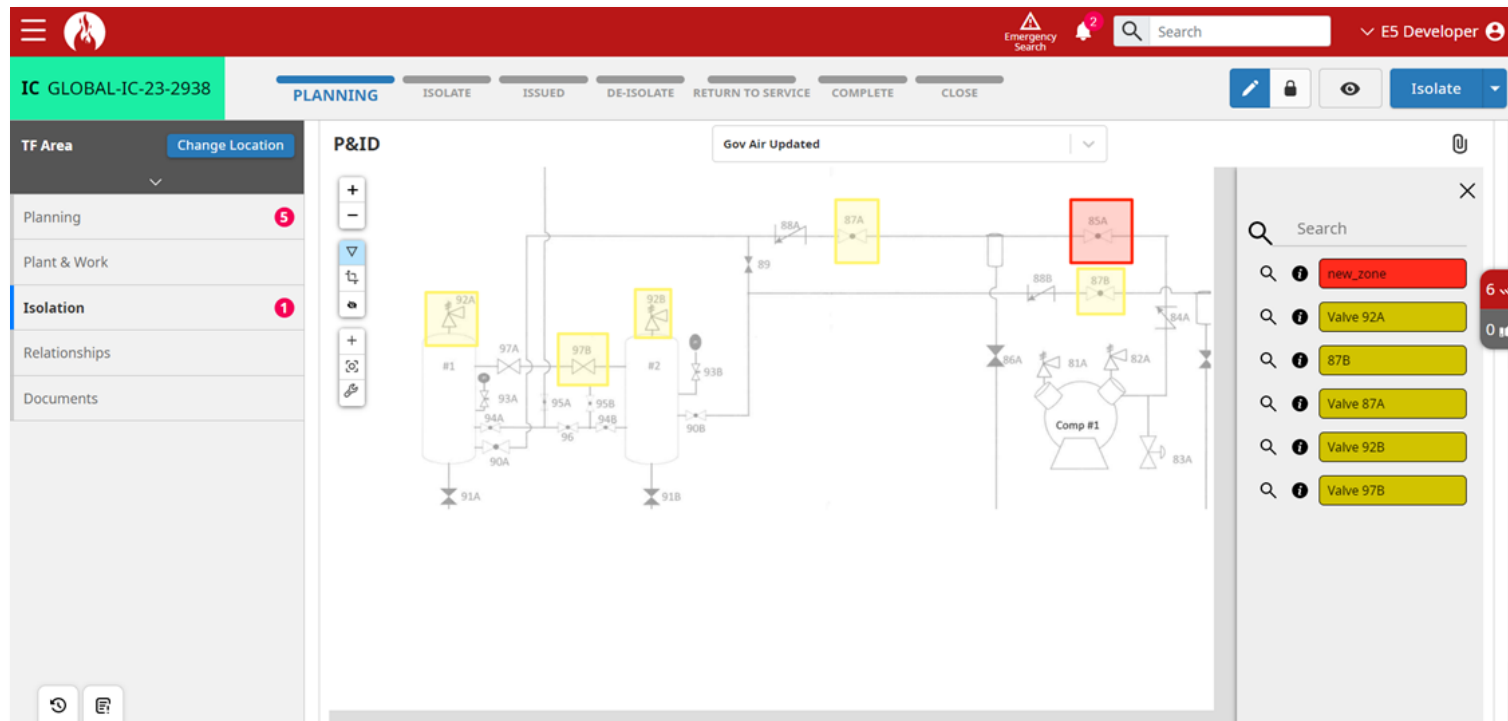
The screenshot displays the Prometheus Group software interface for maintaining P&IDs. The interface is divided into three main sections:

- Left Panel (P&IDs List):** A table listing various P&ID records. The table has columns for Name and Location. The selected record is P&ID1, located at Prometheus Group.
- Center Panel (P&ID Diagram):** A detailed P&ID diagram showing various process units, vessels, and piping. Key components include HE-0015, V-6015, HE-0025, and E-6005. The diagram is annotated with various symbols and labels, including CWS, P&ID1, and P&ID2.
- Right Panel (Search and Filter):** A search and filter panel with a search bar and a list of related templates. The search bar contains the text "Zone 2". The list of related templates includes "N/A" and several "GLOBAL-IC" entries with IDs ranging from 23-3998 to 23-3868.



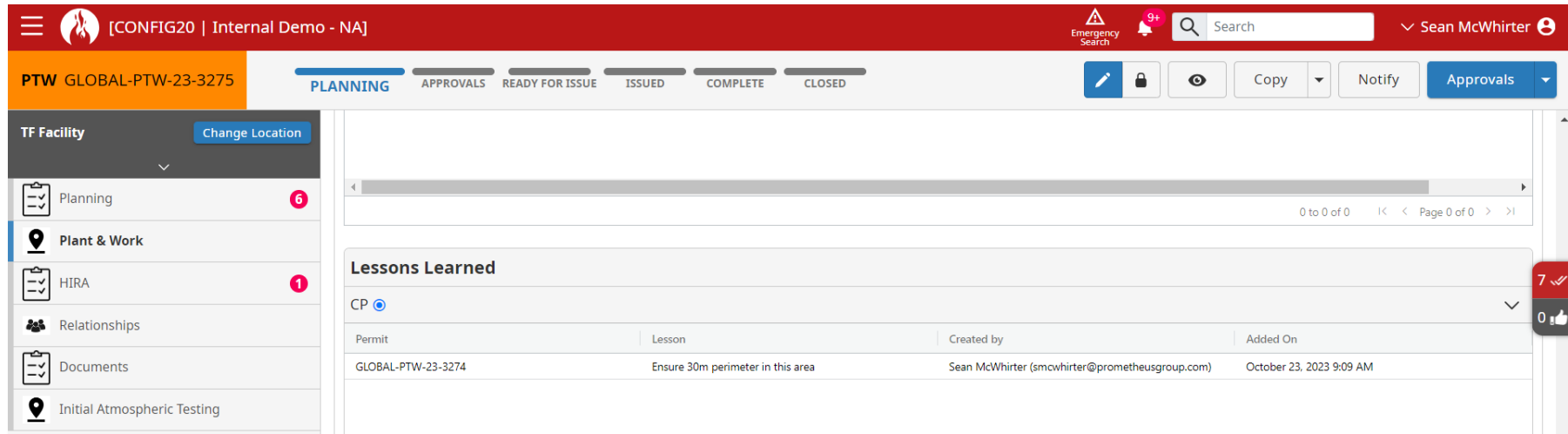
P&ID's in Isolation Certificates

- Use pre-drawn points to identify isolation plans
- Add temporary points for job specific uses
- Automatically create isolations



Lessons Learned

- E4 feature
- Relate lessons learned to plant items for simple review on permit creation
- Transfer of knowledge across plant for best practices for work permits on a particular asset



The screenshot displays a software interface for permit management. The top navigation bar includes a search bar and user information for Sean McWhirter. The main content area shows a 'Lessons Learned' section for a permit with ID GLOBAL-PTW-23-3274. The table below lists the lessons learned:

Permit	Lesson	Created by	Added On
GLOBAL-PTW-23-3274	Ensure 30m perimeter in this area	Sean McWhirter (smcwhirter@prometheusgroup.com)	October 23, 2023 9:09 AM



Maximo Integration Expansion

The image displays two overlapping software interfaces. The background interface is a Maximo Work Order (WO) details page for WO 60102, titled 'Feedwater Pump Overhaul'. It shows various fields such as Location (MOFLOOR2), Asset (7151), and Classification. A 'Create Permit (ePAS)' button is visible at the bottom left.

The foreground interface is a Permit Request (PR) form for PR ND-PR-24-4, currently in 'PLANNING' status. A red arrow points from the '2nd Floor, Main Office' location field in the WO details to the 'Change Location' button in the PR form's 'General Details' section. The PR form includes fields for Work Order Number (60102), Work Order Description (Feedwater Pump Overhaul), Permit Requester (Wilson), Supervisor (Richard Almendarez), and Job Description. It also has 'Start Date' and 'End Date' fields.



RiskPoynt/ ePAS Integration

- Gain insight into status of safety barriers while developing job level risk assessment
- Providing visibility into cumulative risk during:
 - Permit Authorization
 - Issuance of Permits
 - Shift Handover

The screenshot displays the RiskPoynt/ePAS software interface. The top navigation bar includes 'PLANNING', 'APPROVALS', 'READY FOR ISSUE', 'ISSUED', 'COMPLETE', and 'CLOSED'. The left sidebar shows navigation options: 'Prometheus Group Locations', 'Change Location', 'Planning', 'Plant & Work', 'HDBA', 'Relationships', 'Documents', and 'Initial Atmospheric Testing'. The main content area is titled 'Cross Reference' and contains a table with columns for 'Cross Reference Type', 'Conflicts', 'Potential Conflicts', and 'Shared Items'. Below this is a detailed table of cross-references with columns for 'Plant Item', 'Conflicts With', 'Item', 'State', and 'Cross Reference Type'. To the right, there is a 'Summary' section with a 'Risk Assessment' dashboard showing various metrics and a 'Color Key' for risk levels (Green, Yellow, Orange, Red). The dashboard includes a circular gauge and a list of metrics such as 'Structural Integrity', 'Protection Systems', 'Structural Energy', 'Water Containment', 'Ignition Control', 'Detection System', 'Protection System', 'Production System', 'Emergency Response', 'Unlocking System', and 'Environmental Impact'.

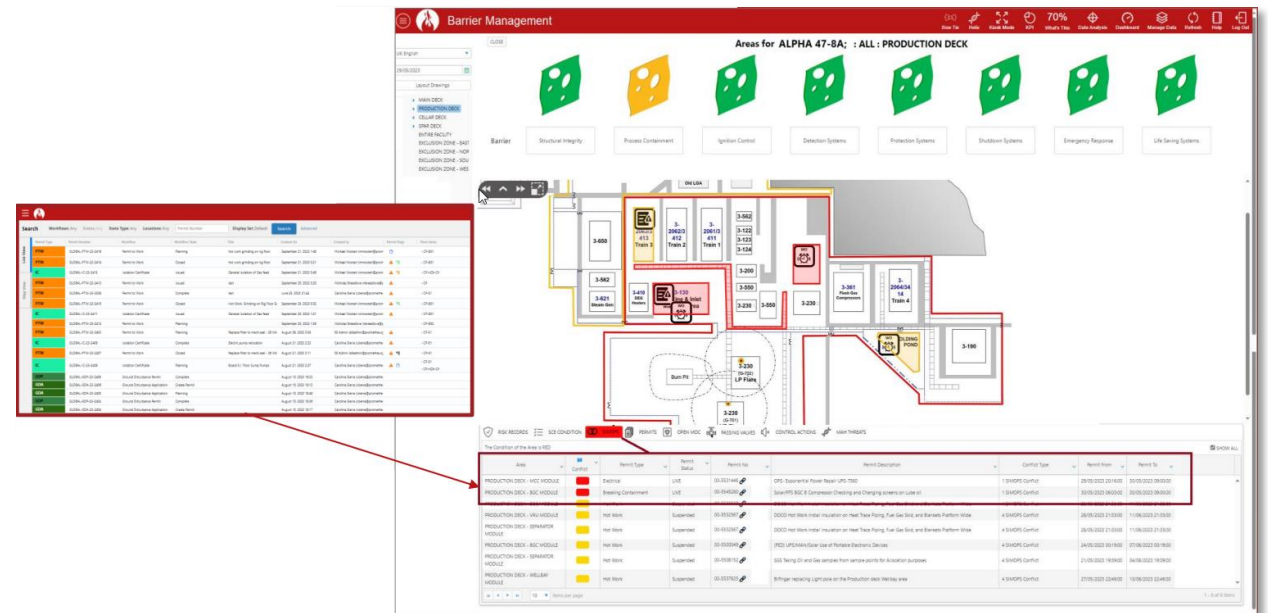
Cross Reference Type	Conflicts	Potential Conflicts	Shared Items
Plant Item to Plant Item	0	0	45
Plant Item to Isolation	0	0	4
Isolation to Plant Item	0	0	0
Isolation to Isolation	0	0	0
Total	0	0	49

Plant Item	Conflicts With	Item	State	Cross Reference Type
CP-E1	GLOBAL-C-23-2187	ELEC Pump Isolation	Return to Service	Plant Item to Isolation
CP-E1	GLOBAL-C-23-2206	Pump Isolation	Issued	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2206	Structure repairs area 1	Isolate	Plant Item to Isolation
CP-E1	GLOBAL-C-23-2260	Board 3 Floor Sump Pumps	Planning	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2379	Group Isolation List Floor Sump Pumps	Isolate	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2380	Electric sump-isolation	Planning	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2394	Board 1 Floor Sump Pumps	Planning	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2400	Board 1 Floor Sump Pumps	Planning	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2404	Board 1 Floor Sump Pumps	Planning	Plant Item to Plant Item
CP-E1	GLOBAL-C-23-2448	Isolate	De-Isolate	Plant Item to Isolation
CP-E1	GLOBAL-C-23-2150	ELEC Pump Isolation	Approved	Plant Item to Isolation
CP-E1	GLOBAL-C-23-2246	Board 3 Floor Sump Pumps	Create	Plant Item to Plant Item
CP-E1	GLOBAL-PTW-23-2361	Isolate	Approved	Plant Item to Plant Item
CP-E1	GLOBAL-PTW-23-2194	Multiphase Pump	Complete	Plant Item to Plant Item



RiskPoynt/ ePAS Integration

- SIMOPS check against degraded operational barriers (safe-guards)
- Live validation of mitigation strategy – e.g. isolation of equipment that is actively relied on as a part of a hazard mitigation
- Visualize overall cumulative risk with permitting and isolations





Permitting & Safety Roadmap

2024

ePAS Web

- Mass Template Control
- Cumulative Risk and Barrier Integration
- Real-Time Mapping Enhancements
- Contractor Push Notifications
- Plotting Enhancements
- 3D Model Integration
- Prometheus STO Integration

ePAS Mobile

- Plotting Support
- Work Party Sign-on and Recipients Enhancements
- Paperless Contractor Permits
- Extended Location Support

2025

ePAS Web

- Customer Controlled Workflow Management
- Extended Admin Controls
- Customer Controlled Report Configuration
- Master Data Integration
- Cause Mapping

ePAS Mobile

- Geofencing and Location Automation
- Integration with Client SCADA and Historians
- STO-Execution Integration

BEYOND

Additional Development

- Integration with Wearables
- Automated Atmospheric Readings
- Platform Integration
- Industry Benchmarking

This is the current state of scheduling and may be changed by Prometheus Group at anytime for any reason without notice. © Prometheus Group, Proprietary & Confidential

Demonstration



Thank You!

Questions?



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