



S/4 HANA Implementation Journey

Project Unify

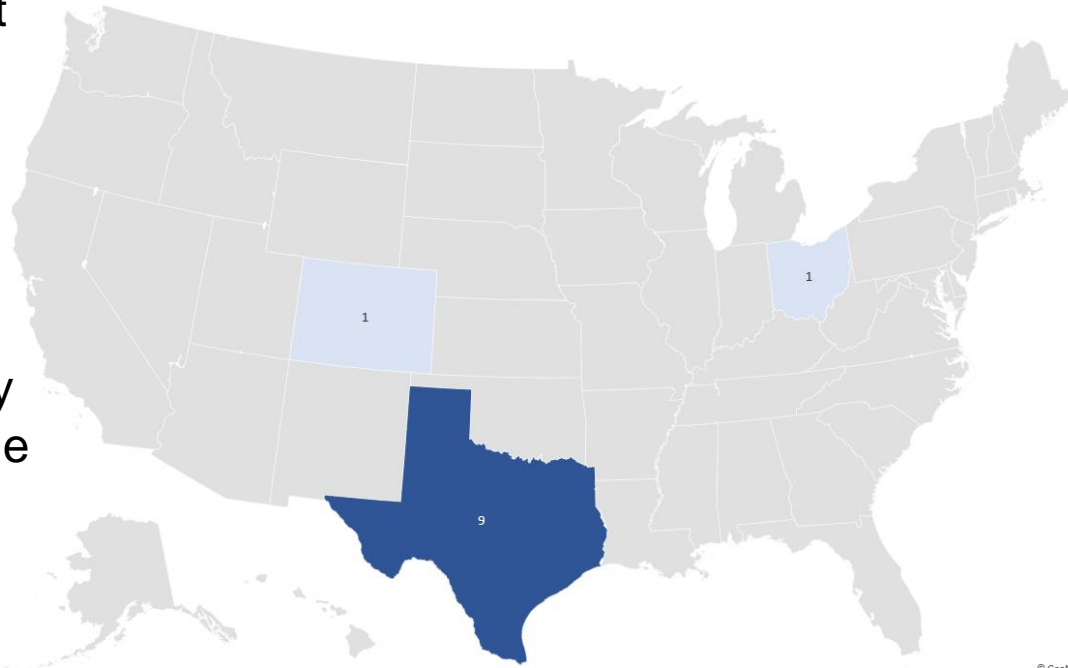


- Introduction
- Project Scope & Deliverables
- Lessons Learned
- What's Next?

Introduction

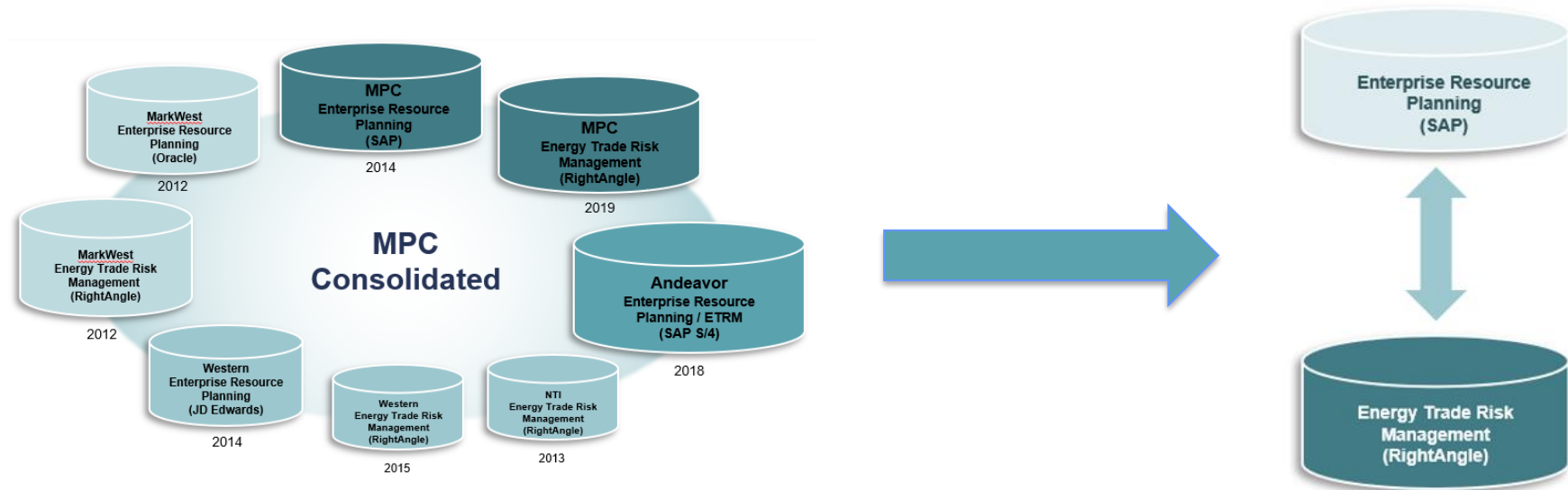


- Robert Phelan – SAP Development Supervisor
- Came to Marathon through their acquisition of Andeavor Energy in 2018
- Marathon was mostly Eastern US focused while Andeavor was mostly Western US focused, so through the acquisition, Marathon Petroleum became the largest independent Refining company in the U.S.



© GeoNames

The Project Unify Story



Prior to Unify, we had a fragmented system landscape that included four distinct ERP and four separate Energy Trade Risk Management (ETRM) systems

Previous State



Disparate and decentralized systems and processes



Increased workload and limited time for optimization due to inefficiencies



Slow to respond to issues or problems



Data and transactions are not standardized



Reporting differs, causing inefficient analysis and difficulty understanding results

Bridging the Gap

Project Unify aims to:

- ✓ Standardize business processes
- ✓ Enhance reporting functionality
- ✓ Improve visibility
- ✓ Leverage technology during negotiations
- ✓ Standardize the current platforms in order to harmonize data used to run the business processes
- ✓ Establish common set of system and process controls

Current State



Everything in one system; integrated, common tools



Easier, standardized processes



Improvements in forecasting and reporting



Less manual effort leading to faster processing



Common understanding of process and data

Vision and Guiding Principles

Our Guiding Principles follow our Vision

Implement a world-class enterprise management information system providing high-quality results enabling optimum decisions with one source of truth



Standard Business Processes



Accelerate Business Improvement



Standardize Critical Data



Lead the Change



Position for Future Technology Advances



Implement with High Quality and Reliability



Flexible and Scalable to allow Changes to Business

End State Benefits

Reporting centralizes information from multiple parts of the value chain to a single point.

Data

Efficiency

Create **job enrichment** through system leverage – today we are 'inefficiently effective'

Digital platform **accelerates benefits** arising from artificial intelligence, predictive analytics, and robotics.

Technology

Savings

Eliminate duplicate control environments **reducing risk and lowering internal and external costs**



PTP – Procure to Pay

Process of procuring materials and services including receipt and payment activities

RTR – Record to Report

Process of recording all general ledger transactions to Central Finance and consolidated reporting

EAM – Enterprise Asset Management

Process of managing and executing maintenance and repair activities including longer term shutdown, turnaround, and project activities

PFI – Product Forecast to Invoice

Process of product forecasting through invoice generation

HSC – HydroCarbon Supply Chain

Process of purchasing crude and feedstocks to satisfy refinery demands, and also the bulk activity necessary to supply the rack sales forecast demand, additional bulk sales and light product exchanges

Business Process Areas by Workstream



RTR

- Manage Financial Master Data
- Perform General Ledger Transaction Processing
- Perform Allocations
- Perform Financial Close
- Perform Intercompany Accounting and Reconciliation
- Perform FERC Accounting
- Perform Financial Reporting
- Perform Management Reporting
- Perform Debt Activities
- Perform Customer Billing and Invoicing
- Process Payment and Cash Application
- Manage Asset Master Data
- Perform Asset Accounting
- Manage Customer Information (Receivables Management)
- Manage Customer Credit (Receivables Management)
- Manage Collections and Disputes (Receivables Management)
- Perform Credit Scoring (Receivables Management)
- Perform Credit/AR Reporting
- Manage Project Master Data
- Initiate Projects
- Perform Project Accounting
- Manage Bank Master Data
- Perform Bank Processing
- Manage Rebate Master Data
- Perform Rebate Processing
- Perform Rebate Reporting

PTP

- Contract Management Ariba/CLM
- Operational Contracts / Pricing
- Strategic Sourcing in Ariba
- Supplier Qualification and Registration
- Catalog Management in Ariba
- Vendor Classification and Spend Reporting
- Process Purchase Requisition
- Process Purchase Order
- Process PO Confirmations
- Supply Chain Reporting Requirements
- Inbound Processing and Receipt Confirmation
- MRP-based Detailed Scheduling
- Outbound Processing
- Cycle Count/Physical Inventory process
- Warehousing & Storage
- Stock Transport Orders (Transfers)
- Returns Processing
- Batch/Serialization
- Refurbishment
- Process Invoice
- Managing Outgoing Checks
- Processing Outgoing Payments
- ERS / Progress Payments
- Process Close-Out Transactions/ Reports

EAM

- Plant Maintenance
- Shutdown Turnaround
- Reliability Methodology/Requirements
- Preventative Maintenance
- Document Management
- Organization Structure and Master Data
- Capital & Expense Projects

MDG

- Financial Master
- Vendor Master
- Customer Master
- Material Master

HSC/PFI

- Petrochemicals
- Asphalt
- Heavy Products
- Natural Gas
- Crude
- NGLs
- Truck Freight
- TMS
- Transaction Upload
- Allocation Manager
- Kittyhawk
- Non-RightAngle Interfaces

Release Schedule by Asset Group



Group 1

Jan 2023 Go-Live

- Eastern Refining and Marketing Locations
- All Corporate Functions

Group 2

May 2023 Go-Live

- Central US Locations
- Southern California

Group 3

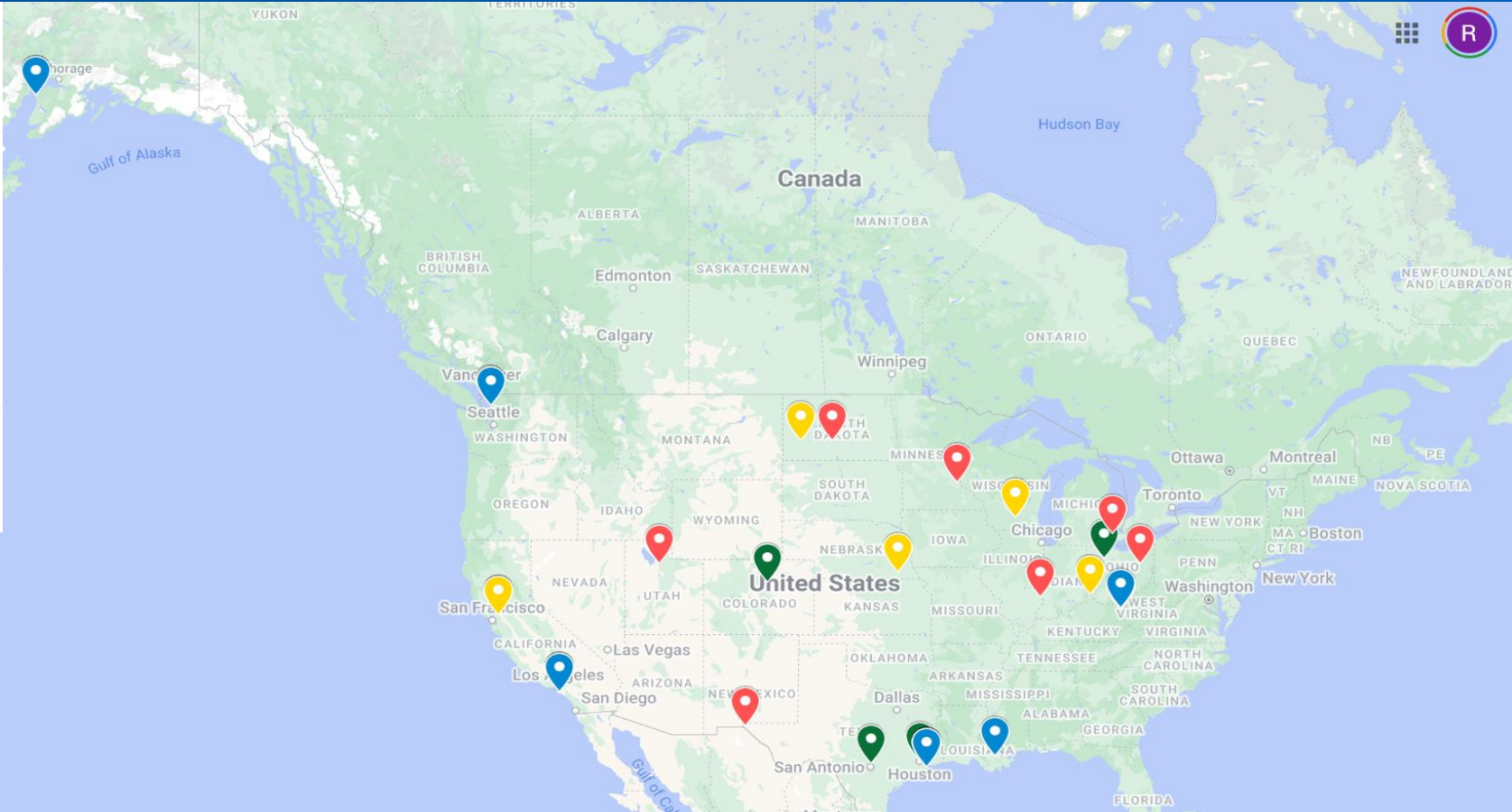
Aug 2023 Go-Live

- Northwestern Locations (WA & AK)

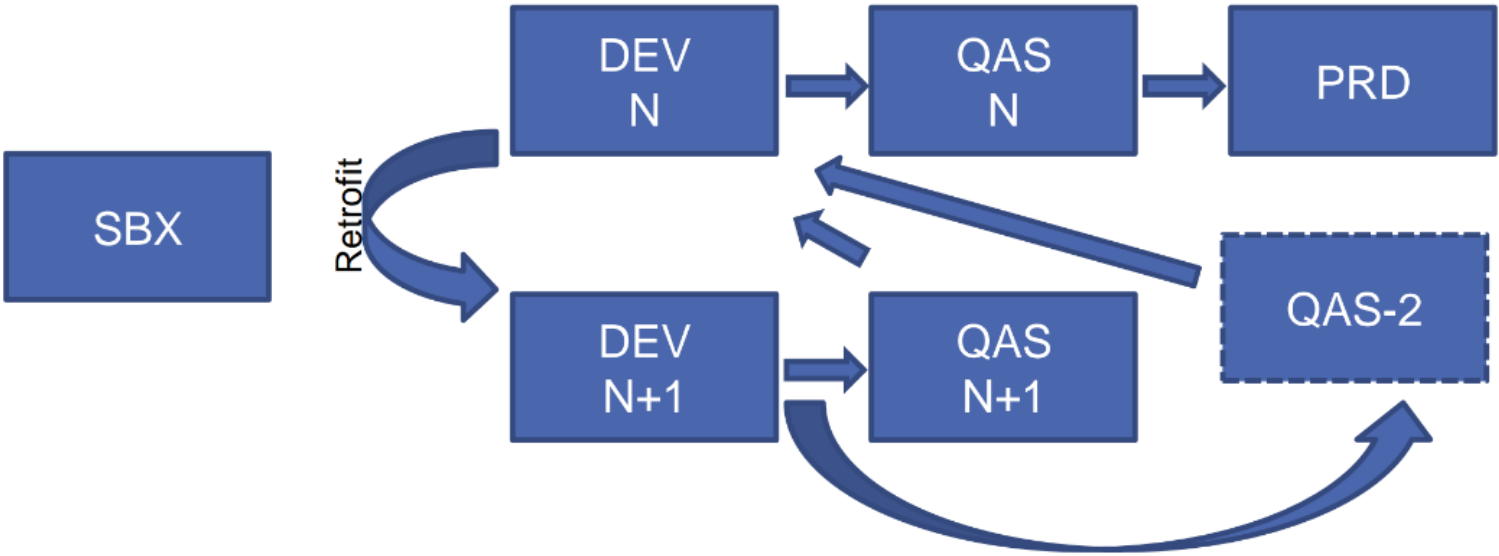
Release Schedule by Asset Group



- Office Locations
 - All items
- Refinery Locations
 - All items
- Marine Locations
 - All items
- Renewables Locations
 - All items



SAP Landscape Design



Project Unify

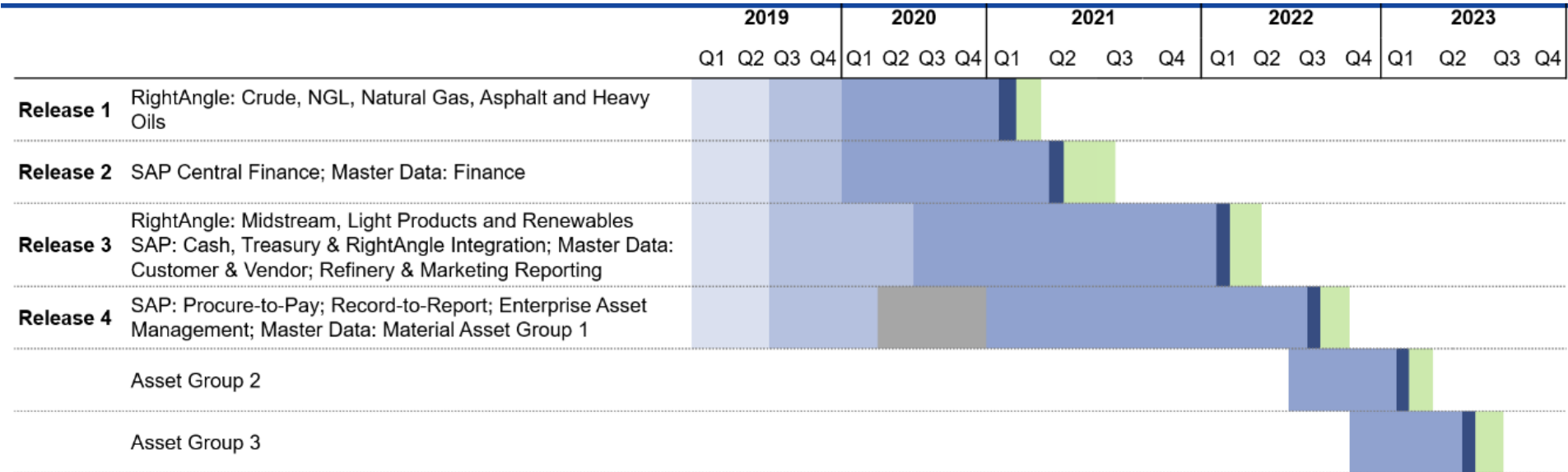
By the Numbers



Feasibility	Implementation	Testing	Go Live
165 Workshops 710 Gaps Identified	18,000 Build/Config Items 523 RICEFW Objects 42,494-man hours of development work 16,000 Business Requirements 11,500 Defects 4.1 MM Data Records Converted	22,209 Test Cases Passed 51,000 Test Runs	5,040 Hypercare Tickets 1,000 Facilitated Sessions 13,000 Training Attendees 11,000 Virtual Training Classes Taken
3.3 Million Hours Worked			
965 People Assigned to the Project (MPC Employees and Contractors)			

Lessons Learned

Multiple Release vs. Big Bang Go-Live





- Pros/Cons

- Resource needs – need more for Released otherwise burnout
- Development – same workstream spanned multiple releases. Working on new Dev at the same time as PRD Support for Release go-live
- Testing
- Coordination
- Conducting business in multiple ERPs simultaneously
- Fewer concurrent support items
- Interim Processes/interfaces

- Full backing of senior leadership
 - I've worked at companies in the past where we've asked for 4 developers for 6 months for a project but were then told we have 2 developers for 4 months to get it done.
 - Junk gets moved to PRD and it's much more difficult to clean it up once the data is there.
- Realistic Timelines are critical
- Data, Data, Data
 - We took advantage of the “pause” during COVID to really focus on cleaning up master data. We had two major delays in the project, and both were data-related.

- You **need** a process for everything, and everyone needs to follow those processes
 - Streamline onboarding!!! This is crucial as you will have many dozens to many hundreds of contractors on your project.
 - System Access Requests, Role Authorizations, Code Reviews, Transports
 - Good Communication is key – you need everyone to know when a server is coming down for maintenance
- Standardize Trackers for easier reporting
- Centralized and **Easy-to-Access** Project Documentation
 - SharePoint / Teams Sites etc...
- Automate as much as possible using appropriate tools
 - This takes time up front but will save you a ton of ongoing effort and time
 - Automated Testing
 - Automated Code Reviews
 - Transports
 - We even have a RICEFW ID Generator

- Choosing a quality partner is important
 - Labor shortage coming out of COVID
- People and Change Enablement – do not forget this!!
 - Traveling Roadshows, cheat sheets, knowledge base articles -> AI (MQ)
- Take care of employees on the project
 - This will be a multi-year endeavor & they will see off-project employees taking advantage of open positions and/or promotions.
- Realize people have their own lives outside of work & may not be able to work extended hours/weekends for long periods of time.

Now that we're LIVE, what's next?



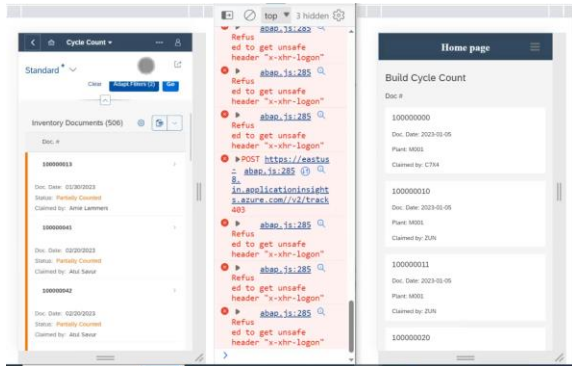
- UPGRADE!
 - Our brand-new instance is 4-years old
 - Planned upgrade completion Q2 2024
- Clean Core migration
- BTP – The future of SAP Development
 - Working with SAP Max Attention to help upskill our developers
 - Currently 91 services available
 - <https://discovery-center.cloud.sap/serviceCatalog>

What does the future look like?



Near-Term

- Citizen-developer tools to automate processes and build mobile applications
- Drag and drop tools with standard SAP integrations
- Building governance




Fixed Asset Acquisition Approval




Set approval process in place for Fixed asset acquisitions to track and monitor transactions before actual document postings in S/4 HANA system.

Manage Asset Retirement




Automates the deactivation of equipment, work orders, notifications, maintenance plans, and retirement of an asset.

Fixed Asset Transfer Approval




Automate the approval process for Inter-company and Intra-Company Asset transactions.

Manage Asset Creation Requests




For SAP S/4HANA and SAP S/4HANA Cloud enables to automate asset creation in a flexible and transparent way.

Mass Update Asset Master Data




Automates Mass Update of Asset Master data based on user pre-filled Excel input files

Intelligent Workflow For Asset Maintenance




Automate Asset Maintenance planning to reduce manual efforts and speed up the asset maintenance process with end-to-end performance visibility.

Leased Asset Termination Approval



Automate approval process for Right of Use (RoU) asset retirement due to early termination of contract.

Fixed Asset Write Off Approval



Get multi-level approvals on the selection of the Fixed assets for write-off due to various reasons at the time of expiration of useful life.

What does the future look like?



Current POC

- After hours material checkout

After Hours Warehouse Log

****Completion of log is required by the Shift Lieutenant accompanying material requestor.**
The Shift Lieutenant must remain with requestor(s) at all times within controlled areas.**

Requestor Name _____ Date _____
(Print) (Last, First)

Shift Lieutenant Name _____ Time _____

Work Order # _____ SAP Reservation Entered? Yes / No

List all items taken. Use additional sheets if necessary.

Material Number	Description

Change Preventive Maintenance Order 1200278614: Central Header

Order: PREY 1200278614 GPZ_COND BYPASS SPRAY PMP 1.24M

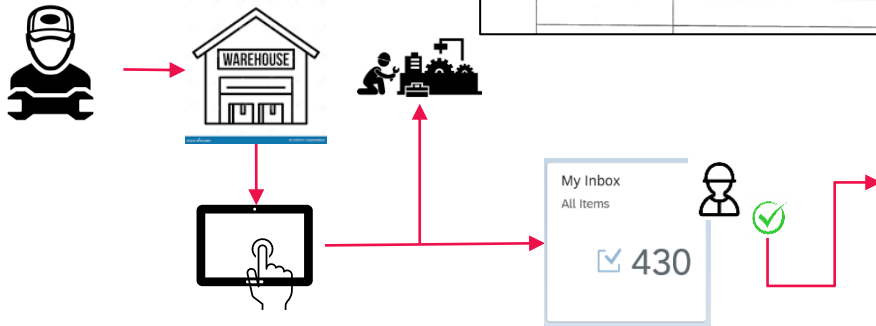
System Status: REL CSER IMAT PRC SETC RZBS INCH

Person responsible: Planner GEP: MCH / R170 CNTRL MECH PLANNER

Dates: Bsc start: 04/17/2019 07:00 Priority: 2 Routine

Reference object: Equipment: 10000784351 CONDENSATE BYPASS SPRAY PUMP 1_1460

First operation: Operation: COUPLING INSPECTION - 24M



What does the future look like?



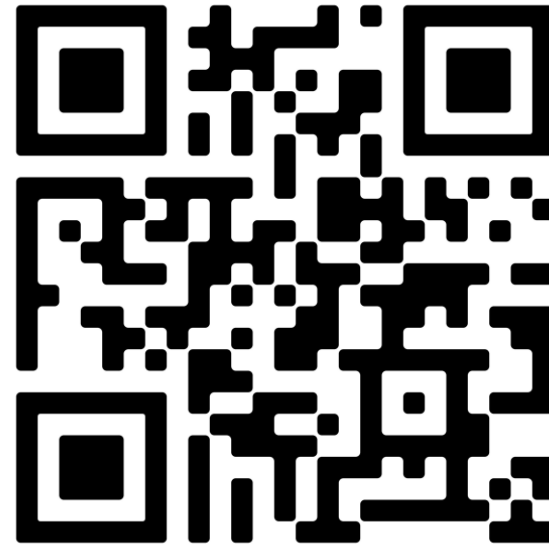
SAP Build Work Zone Advanced Edition

- Secure login & single sign-on
- Access to any number of SAP and non-SAP systems
- Integration of custom applications
- User-specific personalization

The screenshot displays the SAP Build Work Zone Advanced Edition user interface. The interface is highly personalized and features a top navigation bar with options like 'Home - Welcome', 'Search', and 'Workflow & Inbox'. Below the navigation bar, there are several cards and widgets. A prominent card titled '2023 Strategy' features a large image of a man pointing at a screen displaying data. Other cards include 'My Goals', 'New Orders', 'My Time Off', 'Integration Center Monitoring', 'Monitor Workflows', 'Org Chart', and 'Performance Management'. A 'Project Summary - General Expenses' card shows a bar chart with data points for Q1, Q2, Q3, and Q4. The interface also includes a 'Notification Summary' and 'Upcoming Travels' section. Callouts point to various features: 'Navigation' (top left), 'Working/Project Groups' (top center), 'Profile and personalization' (top right), 'Search' (top center), 'Workflow & Inbox' (top right), 'Cards ("Widgets")' (middle left), and 'Applications' (bottom left).

- Integration of unstructured content (web content, documents, texts, images and video).
- Interactive workspaces ("Collaboration Rooms" or "Workspaces"), which can be created by the users themselves!

- rwphelan@marathonpetroleum.com



Contact Info