Business Scope

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023 FPS2)

Introduction

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

SAP S/4HANA Cloud Private Edition: Business Scope Outline

Introduction

Intelligent, sustainable Enterprise

SAP S/4HANA Evolution and Roadmap

Modular Application Portfolio (MAP)

2023 Delta Highlights

Finance

Sourcing & Procurement

R&D

Supply Chain

Asset Management

Manufacturing

Human Resources

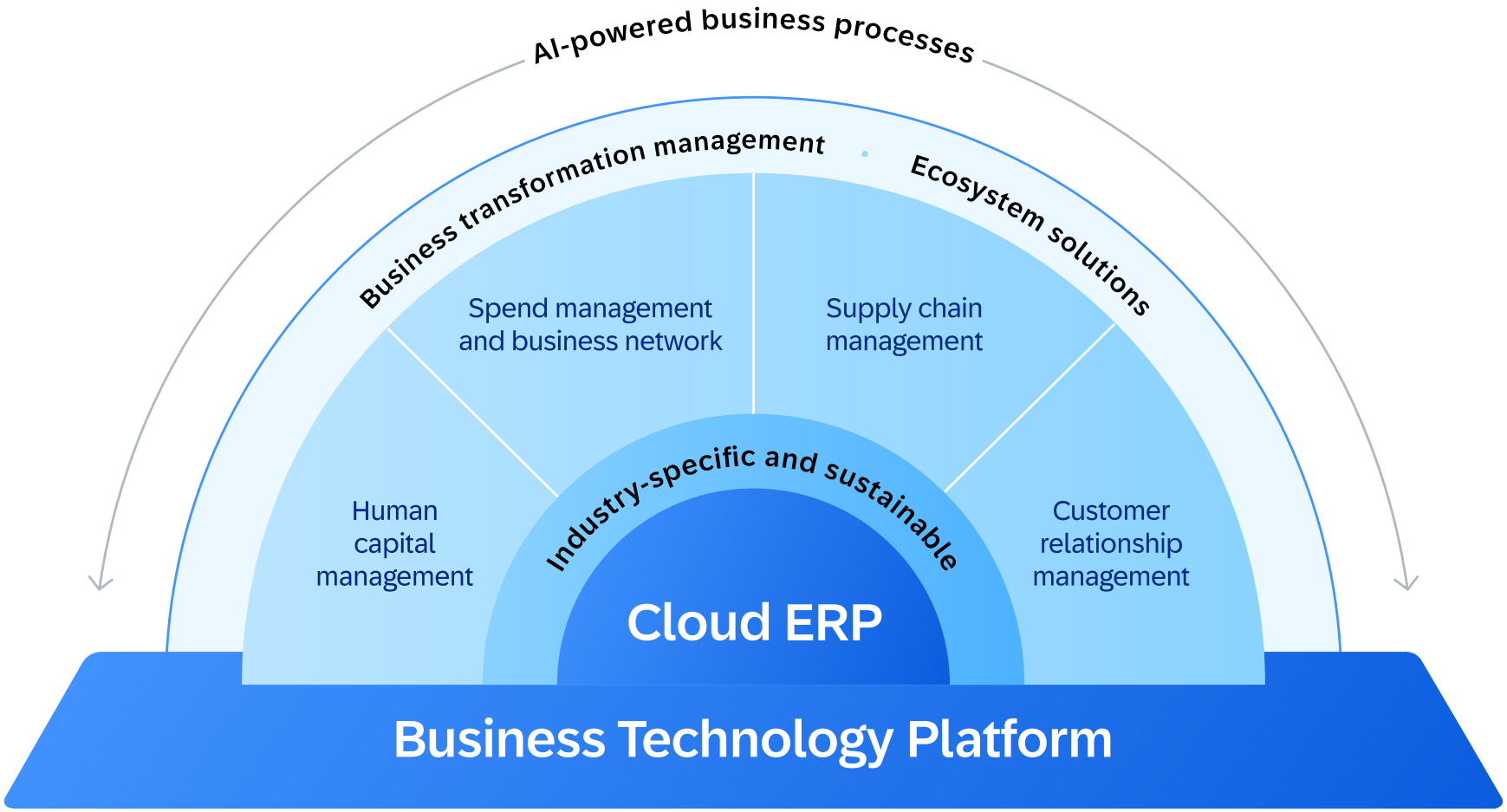
Sales

cross topics

- SAP Master Data Governance
- Responsibility management
- Intelligent situation automation
- Enterprise contract management
- Embedded analytics
- Intelligent technologies
- Migration cockpit

Service

SAP Portfolio



SAP Portfolio: SAP Business Technology Platform

Migrate and maintain relevant data,
deliver trusted master data, and keep the core clean by decoupling custom code

Integrate, optimize, and automate processes
with 2,000+ prebuilt integrations and comprehensive tools

Innovate to gain a sustained competitive advantage
with high value SAP BTP solutions including analytics and intelligent technologies embedded in SAP S/4HANA

Value Proposition:

- Secure & compliant
- Open & flexible
- Unified & simple
- Broad ecosystem
- Enterprise-grade & scalable
- Business-centric

App Development

- Process automation
- Digital experience
- Visual Low-Code / No-Code programming
- Development Operations

Integration

- Process integration
- Data integration
- API led integration
- Event based integration

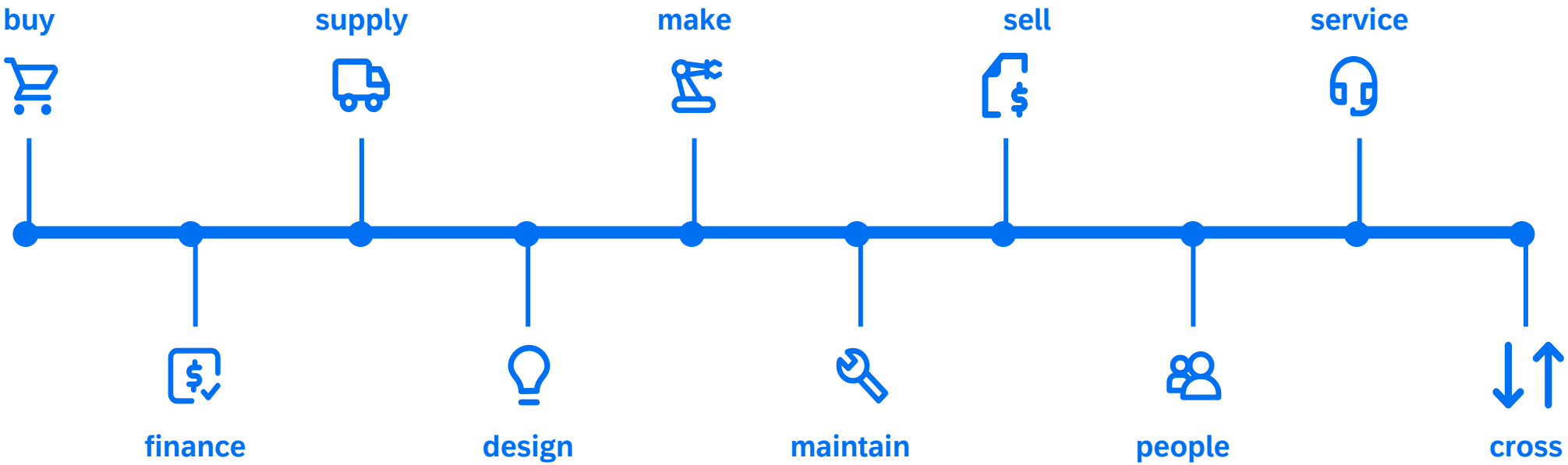
Data and Analytics

- Database
- Data management
- Data warehouse
- Analytics & planning

Intelligent Technologies

- Pre-built AI models
- Intelligent processes
- Self-learning programs
- Data security & decentral persistence

SAP Portfolio: Cloud Enterprise Resource Planning



Adapt to volatile markets and disruptions with dynamic reallocation of resources

Drive step change improvement in time and drive insight into action

Design new business models and maximize existing ones

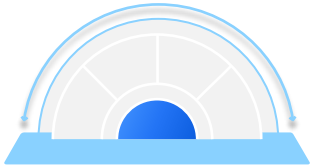
Drive real-time insight eliminating manual effort, increasing productivity

Operate as ONE for processes, operations and networks

Decide and act immediately from anywhere

SAP Portfolio: Cloud ERP: GROW and RISE with SAP

Differentiated cloud journeys



Start Fresh with SaaS Cloud ERP

GROW with SAP

SAP S/4HANA Cloud Public Edition
is a ready-to-run cloud ERP that delivers the latest industry best practices and continuous innovation

- **Run on the industry standard**
- **Accelerate business growth**
- **Keep innovation moving**

Customer Journey

Implement a ready-to-run SaaS cloud ERP that delivers the latest industry best practices and continuous innovation. This is for net new and existing customers who want to start fresh with a greenfield SaaS cloud ERP.

Modernize your legacy ERP from SAP

RISE with SAP

SAP S/4HANA Cloud Private Edition
is a tailored-to-fit cloud ERP that adapts to your organization's unique transformation

- **Run on your own standard**
- **Modernize your business**
- **Keep the control**

Customer Journey

Migrate customers to cloud by leveraging their existing ERP or deploying greenfield. This is for customers to realize **a tailored-to-fit, clean-core cloud ERP that adapts to their unique transformation.**

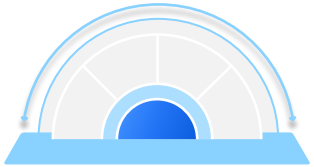
SAP Portfolio: RISE with SAP S/4HANA Cloud Private Edition

Cloud ERP
Future-proof your business with a Cloud ERP enhanced with Business AI

RISE with SAP Cloud Operations
Unlock agility with a cloud operating model

RISE with SAP Methodology
Transform and enable continuous innovation with best practice guidance

SAP Portfolio: Industry Solutions



Discrete Manufacturing

- Aerospace and Defense
- Automotive
- High Tech
- Industrial Manufacturing

Consumer

- Agribusiness
- Consumer Products
- Fashion
- Life Sciences
- Retail
- Wholesale Distribution

Energy & Natural Resources

- Chemicals
- Mill Products
- Mining
- Oil, Gas, and Energy
- Utilities

Service Industries

- Engineering, Construction, and Operations
- Media and Entertainment
- Passenger Travel and Leisure
- Cargo, Transportation, and Logistics
- Professional Services
- Sports
- Telecommunications

Public Services

- Defense and Security
- Government
- Healthcare
- Higher Education and Research

Financial Services

- Banking
- Insurance

Industry-specific features and functions
in SAP S/4HANA Cloud Private Edition

from Automotive
- Integrated Product and Process Engineering
- Packaging Logistics
- Executing Inbound Deliveries
- Just-in-Time, Just-in-Sequence
- Automotive-specific Kanban features
- Production Backflush for Discrete Industries
- Self-Billing and Evaluated Receipt Settlement
- Scheduling Agreement Processing (enhancem.)
- Vehicle Management System, Vehicle Search
- Long Material Number

from E&CO, Aerospace & Defense, Mill
- Equipment Tools Management
- Bill of Services
- MRO Maintenance, Repair & Overhaul
- Order Combi. for Prod. and Process Orders (Mill)

from Consumer Products
- SAP Direct Delivery (SDD) – Last Mile Distribution
- Catch Weight Management (incl. conversion)
- Commodity Management
- SAP Agricultural Contract Management

from Utilities
- Asset Operations and Maintenance
- Meter Logistics and Operations Services
- Intelligent Meter Reading Processing
- Bill to Cash for Energy Prosumers
- Credit and Collection Management
- Customer Interaction Center

from Oil & Gas
- Hydrocarbon Product Management
- Trader's and Scheduler's Workbench (TSW)
- Joint Venture Accounting
- Retail Fuel Network Operations
- Secondary Distribution Management

from Retail & Fashion / Wholesale
- Master Data Management for Merchandising & Fashion
- Omnichannel Merchandise and Assortment Planning
- Pricing and Promotions
- Merchandise Procurement
- Demand and Supply Planning
- Inventory Management and Order Response
- Store Commerce
- Planned and Production Order Management for Fashion
- Demand and Supply Segmentation
- Supply Assignment

from Banking
- Average Daily Balances
- Amount Field Length Extension in the General Ledger
- Multi-Currency Processes and Accounting
- Error Correction and Suspense Accounting

from Professional Services
- Commercial Project Management

from Media
- Product Master Hierarchy

SAP Portfolio: Sustainability

Combining ERP data and sustainability data

SAP Cloud ERP Business Processes	Precise & Actionable Sustainability Insights	Go Beyond Regulatory Compliance	Gain a Competitive Advantage and the Power to Act
Embed sustainability at the core of your business operations	Use trusted actuals rather than averages and estimates	Drive meaningful change and build a future-proof system	Unlock new value, opportunities, and impact at scale

Artificial Intelligence **Sustainability** **Industry Innovation**

SAP Portfolio: Business Processes

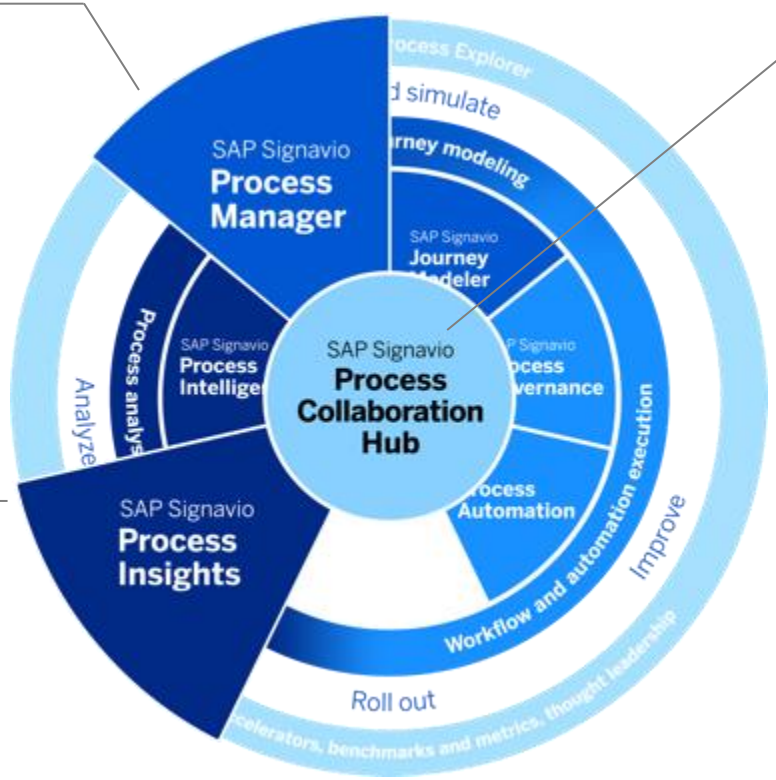
Gain the visibility needed to automate and innovate effectively

Co-create your future processes

- Collaborate with your team on improving and reinventing your processes using a single source of truth.
- Model, design, document all steps.

Identify and remove bottlenecks

- Gain instant insights into your current process performance to understand where to transform.
- Leverage recommendations to understand how to transform.



Improve your business continuously

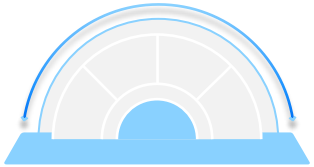
- Provide full transparency over your processes and who is responsible for which task.
- Engage all stakeholders and create a culture of constant optimization.

SAP Portfolio: 20000+ Partner Ecosystem

Microsoft Azure
Atos
seidor
T-Systems
EY
intel
aws
1218 Global HR Solutions
LTI
McKinsey & Company
Tech Mahindra
all for one Group
ABeam Consulting
accenture
BearingPoint
Capgemini
Alibaba Cloud
Deloitte.
BAIN & COMPANY
BCG
eightfold.ai
wipro
Cognizant
HCL
DocuSign
DXC TECHNOLOGY
Icertis
indra
Infosys
lsi
Hewlett Packard Enterprise
IBM
CISCO
NTT DATA
pwc
RIZING
BLACKLINE
Google Cloud
Apps Rkeytech Consulting
tcs TATA CONSULTANCY SERVICES

SAP Portfolio: Business AI

Generative AI capabilities in RISE with SAP



Relevant | Reliable | Responsible

Joule

A copilot that truly understands your business

Embedded AI

- Cloud ERP
- Supply chain management
- Human capital management
- Spend management
- Customer relationship management
- Business Technology Platform

Customized AI

AI Foundation

on Business Technology Platform

AI ecosystem partnerships and investments

ALEPH ALPHA · ANTHROPIC · aws · cohere · databricks · Google Cloud · IBM · Meta · Microsoft · MISTRAL AI_ · NVIDIA

SAP Portfolio: Business

Drive business growth with cloud ERP powered by AI

Business

Accelerate processes and optimize decisions

AI-powered processes and data-driven insights and recommendations to make faster, safer decisions

People

Multiply productivity and increase efficiency

Transform work through automation and simplified user experiences to drive business outcomes

SAP S/4HANA Cloud Private Edition

Modular Application Portfolio (MAP)

Download

	Procurement	Supply Chain	Manufacturing	Sales	Service
Modular Cloud LoB Solutions	• Guided buying • Supplier management • Business network	• Integrated business planning • Global batch traceability • Logistics business network • Transportation management • Extended warehouse management	• Digital manufacturing	• E-Commerce • Sales automation • Customer data • Marketing • Customer service	• Service cloud • Field service management • Customer relationship management
SAP S/4HANA LoB Solutions	• Central procurement • Sourcing and contract (extended)	• Advanced warehousing • Advanced transportation • Advanced order promising • Service parts distribution	• Ext. Production planning & scheduling • Ext. prod. engineering & operations • Environment, health, and safety		
SAP S/4HANA Cloud Private Edition Enterprise Management	• Operational procurement • Sourcing and contract • Supplier management • Procurement analytics • Invoice management	• Inventory • Warehousing • Delivery and transportation • Order promising • Logistics cross topics • Circular economy logistics	• Production engineering • Production planning • Production operations/options • Quality management • Manufacturing insights	• Order and contract management • Sales force support • Solution Business Management	• Service master data and agreement • Service operations and processes • Service parts management
	• Accounting and financial close • Financial operations • Cost mgmt. and profitability analysis • Enterprise risk and compliance	• Enterprise portfolio and project management	• Maintenance management	• Time sheet management • Organizational structure management	• Application lifecycle management • Intelligent business processes • Business technology platform • Extensibility framework • Sustainability solutions • Industry specifics
SAP S/4HANA LoB Solutions	• Adv. accounting, financial close • Adv. financial operations • Treasury management • Commodity management • Real estate management • Subscription billing and revenue mgmt.	• Extended enterprise portfolio and project management • Product lifecycle management • Product compliance	• Resource scheduling • Spatial asset management (linear asset management)	• HR administration • Time management • Payroll, reimbursement and rewarding • Talent mgmt. and learning management • HR strategy and planning • Travel management	
Modular Cloud LoB Solutions	• Governance, risk, and compliance • Multi-Bank connectivity • Cash application • Analytics cloud for planning	• Enterprise product development • Collaborative project management	• Asset performance management • Mobile asset management • Spatial asset mgmt. (geo framework) • Asset collaboration	• Core human resources and payroll • Time and attendance management • Talent management • Human capital analytics	
	Finance	R&D	Asset Management	Human Resources	Cross Topics

Additional license required | Additional license and implementation required

Evolution of SAP S/4HANA Cloud Private Edition

supply	Ext. Warehouse Management	Transportation Management	Service Parts Management	Adv. Variant Configuration	Stockroom Management	adv. ATP Available-to-Promise	Supply-based Confirmation	Adv. Shipping & Receiving	Greenhouse Gas Emissions in TM
make	Constraint-Based Planning	Prod. Engineering & Operations	Accelerated MRP (live)	Demand-Driven MRP	Predictive MRP	Optimized MRP	Collaborative MRP	Adv.Prod. Scheduling Board	Work Center Capacity Evaluation
design sell	Portfolio & Project Management	Product Compliance	Service Management	Direct Delivery	Sales Force Support	Solution Business	Sales Order Automation	advanced Intercompany Sales	Service with adv. Execution
finance people	Business Partner	General Ledger	Material Ledger	Commercial Project Management	Central Procurement	AI GR/IR reconciliation	Entitlement Management	HCM on SAP S/4HANA	Predictive Liquidity Forecast
foundation	SAP HANA (data base)	SAP FIORI (UX)	Intelligent Technologies	(cloud) Integration	Hyperscaler (IaaS)	SAP S/4HANA Cloud ABAP environment	RISE with SAP	2 yearly Release	Clean Core

1511 → **2023**

Delta Highlights SAP S/4HANA ⇔ SAP ECC

buy

- Central Procurement
- Product Sourcing
- Carbon Footprint in procurement
- Service Procurement
- Supplier Evaluation
- Catalog Buying

supply

- Extended Warehouse Mgmt. (EWM)
- Advanced Available to Promise
- Direct Delivery
- Advanced Shipping and Receiving
- Extended Service Parts Mgmt.
- Greenhouse Gas Emissions
- Unified Package Builder

make

- Accelerated MRP (Live)
- Predictive MRP
- Demand-Driven MRP
- Constraint-Based Planning (PPDS)
- Supply Based Confirmation
- Production Engineering and Operations (PEO)

sell

- Advanced Intercompany
- Condition Contract Management
- Solution Business
- Sales Force Support
- Sales Order Automation

service

- Service with Advanced Execution
- In-House Repair with Advanced Execution
- Item-Based Accounting in Service

key topics

- SAP HANA Database and Real-time Analytics
- State of the art SAP Fiori UI
- Intelligent Technologies
- New and updated functions
- Out-of-the-box integration

finance

- Universal Journal
- Group Reporting
- Central Finance
- Multi-Bank Connectivity
- Doc. & Reporting Compl.
- Financial Compliance Mgmt.

design

- Product Compliance
- Adv. Variant Configuration
- Software Constraints
- Change Record

maintain

- Phase-Based Maintenance Process
- Work Packs
- Asset Performance Analysis

cross topics

- Key-User and Developer Extensibility
- Responsibility Mgmt.
- Enterprise Search
- Master Data Governance
- Flexible Workflow
- Intelligent Scenario Lifecycle Mgmt.

SAP S/4HANA Cloud Private Edition Innovation Highlights 2023

2023 FPS0+1

2023 FPS2

Procurement

- Version and pricing comparison for contracts
- Controlled information access for sourcing projects
- Carbon Footprint Data in Sourcing Projects
- Manage Model Product Specifications

Supply Chain

- AI-assisted planning in Transportation cockpit
- AI-assisted creation of inbound cargo docs
- Greenhouse Gas Emission
- Adv. Shipping and Receiving in Decentral WM

Manufacturing

- Advanced Analytics for prod. Plan. / detailed scheduling
- Sales Order specific BoM and Routing (PEO)
- Evaluate Work Center Capacity
- Advanced Scheduling Board

Sales

- AI-assisted monitoring of sales order fulfillment issues
- Hybrid Sourcing in adv. Available to Promise
- Role-Based Access to Price Elements
- Product Valuation Initiated by Refund

Service

- Combined in-house repair and field service in one service order
- Non-serialized products in in-house repair
- Service with Advanced Execution
- Item-Based Accounting in Service

FPS2

FPS0 + FPS1

Finance

- Closing with Account Balance Validation
- Predictive Liquidity Forecast
- Plan-versus-actual analysis with the transfer of plan data
- Subscription Order (Integration with SAP GTS)

R&D

- Synchronization of Company Owned Phrases
- Substance Volume Tracking
- Simplified planned services in lean service procurement
- Joule support for project assistants

Asset Management

- Automatic Attachments for Output Items
- Object List Entries to Maintenance Items
- Manage Inspection Checklists (new app)
- AI-assisted maintenance order recommendation

Cross-topics

- Integration with Microsoft Teams
- SAP Collaboration Manager
- Analyze project transfers in Migration Cockpit
- AI-assisted Master Data Governance
- RISE with SAP Premium Plus
- Clean core concept
- SAP Joule Navigation

FPS2

SAP S/4HANA Cloud Private Edition, and SAP S/4HANA

Release strategy for 2023 → 2025 and definition of deliveries

2023
FPS0+1

Executive Summary

[1] SAP S/4HANA 2023 released for SAP S/4HANA Cloud Private Edition and SAP S/4HANA OP with RTC on October 11th, 2023
[2] 2 years innovation phase delivered via 3 Feature Package Stacks (FPS)
[3] 5 years standard maintenance phase (until Dec, 2030 for SAP S/4HANA 2023
[4] SAP S/4HANA 2025 planned for Oct. 2025
[5] SAP will continue to support SAP S/4HANA until 2040

SAP S/4HANA 2023

New release incl. new Technology Stack
(ABAP Platform 2023, SAP HANA 2.0 SP07* minimal version for customers)

FPS01*

28.02.2024

(technically SPS01 / SPS02)

FPS02*

Oct. 2024

FPS03*

Feb. 2025

(technically SPS03)

Mainstream maintenance

until Dec. 2030*

SPSxx* Support Package Stack
(technically SPSxx)

SAP S/4HANA 2025*

Oct. 2025
(incl. new technology stack)

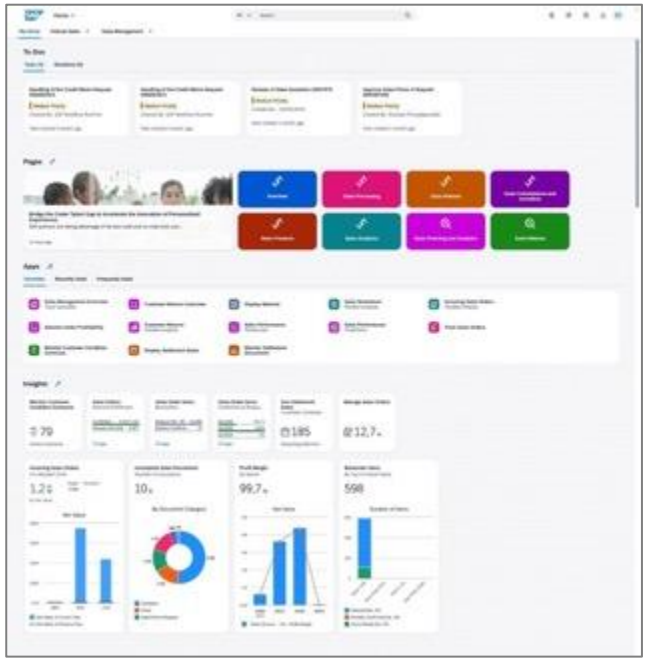
Important Links:

- Release and maintenance strategy for SAP S/4HANA
- Restriction Note
- Recommendations of the SAP HANA database for SAP S/4HANA

SAP Fiori

For an overview on all available apps see Fiori Apps Library

SAP Fiori Launchpad as **single point of entry**



Start from an individual home page:

- Role-based spaces and pages
- Customization via dedicated apps
- First insights with KPI tiles

Domain-specific information and actions

Provide overview on business relevant data

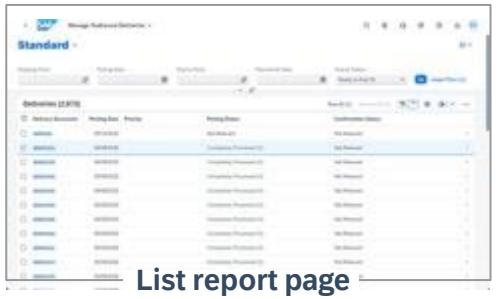
Overview page

Investigate and drill-down from:

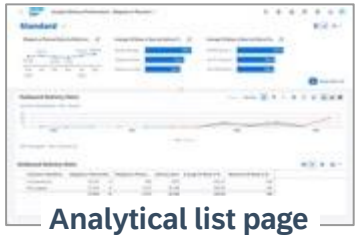
- Overview pages (graphical)
- Analytical list pages (hybrid)
- List report/worklist (list)

Enter details and explore in depth

Work on a list of business objects



List report page



Analytical list page

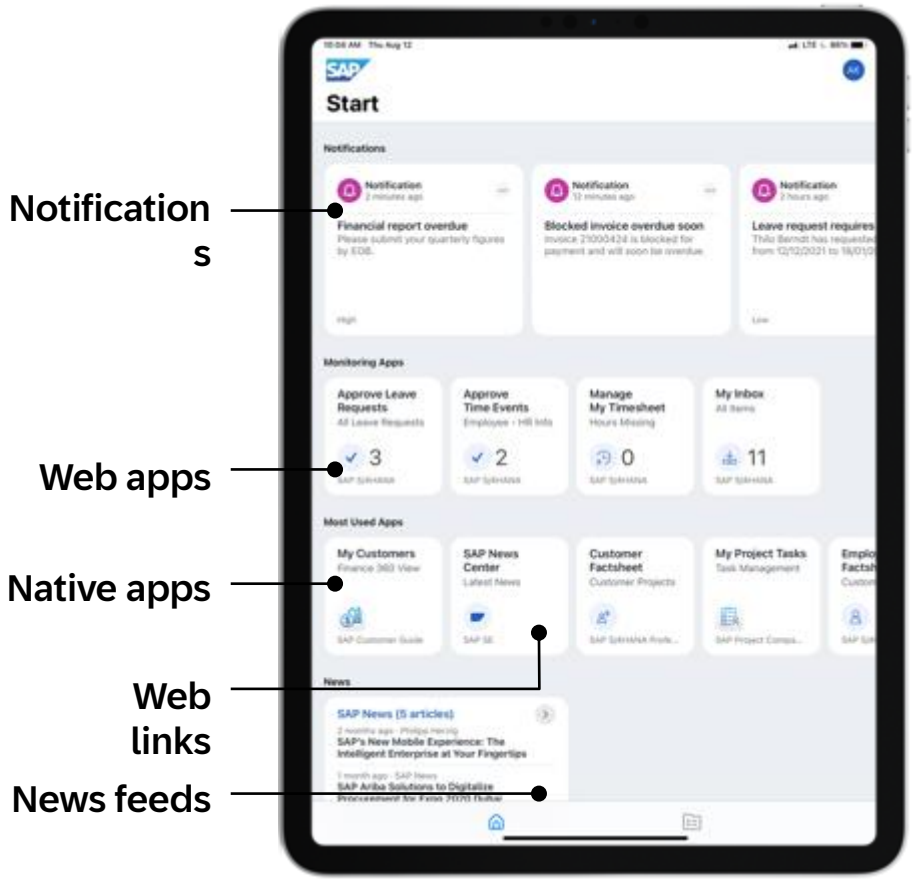
Manage individual business

Object page

Carry out transactions:

- Combined in native SAP Fiori apps
- Based on insights from embedded analytics
- With the SAP Fiori visual theme

SAP Mobile Start



Native Entry Point

- Instant **mobile access** to the Intelligent Enterprise Suite
- Native launchpad to access **native and web apps** mobile on iOS devices

Deep UX Integration

- Spotlight search for **app content**
- Widgets to **monitor** important content
- Native notification to **react instantly**

Tailored Content

- Maximized focus on role-specific topics through **persona-centric** content
- **Personalized** mobile User Experience

Improve End User Productivity

Connect Anywhere

Set Up Easily

SAP S/4HANA Cloud Private Edition: Customer References

ELECTRA MECCANICA

100% of purchases &payments moved from informal systems.

100% of vehicles managed throughout their lifecycle

4x faster quarter-end close.

More info

15% Increase in efficiency of reconciliation

15% Improvement in efficiency of warehouse management

50% Reduction in the time required for monthly closing

Modern Farming: Creating Precision Livestock Farming with a 360-Degree View of Each Cow's Data (sap.com)

10% Increase in production efficiency, catering to customer needs

25% Improved accounting and material management controls

15% Improvement in product quality
through parameters defined in processes

mahindra Rise

20% faster execution of back-order processing.

20000 tree-equivalent savings in carbon emissions

23% increase in developer efficiency

Watch the video

WATCO

>95% improvement of metrics delivery to teams, from three days to on demand

320 team members collaborating on enterprise plans

1 source of truth across 200 profit centers

HANES Brands Inc

160% reduction in data compression costs.

180% increase in data load speed.

More info

Camposol

15% Reduction in total cost of ownership

16% IT operating expense savings

100% Availability of applications and services

More info

Versuni

3,500 processes redesigned

55 country operations transformed

18 months to complete the project

Nestlé

275,000 Employees worldwide have a single point-of-entry to all SAP applications

99.97% Increased system availability with a simplified global IT infrastructure

1,200+ Terabytes of data moved to the cloud

RISE at SAP Value Stories(flippingbook.com)

SAP Customer Reviews & Stories

Sourcing & Procurement

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Sourcing and Procurement: Business area overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP Ariba
- SAP Fieldglass
- SAP Build Process Automation (iRPA)

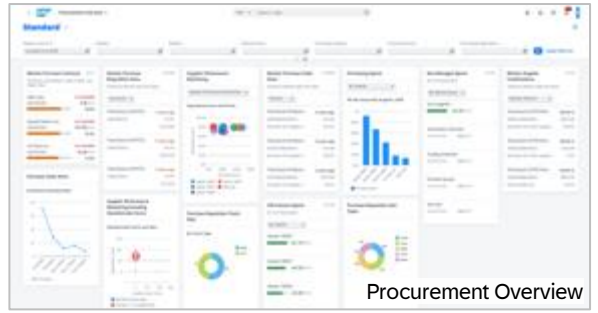
SAP S/4HANA LoB Apps

additional license

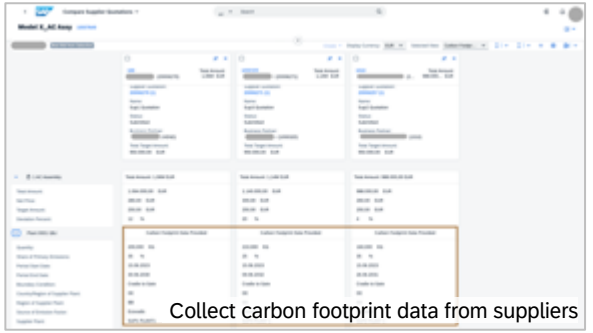
Central Procurement	***Integrate*** the SAP S/4HANA hub system with multiple SAP ERP and SAP S/4HANA back-end systems. Optionally you can leverage SAP Ariba solutions: e.g., guided buying capability and catalog.
Sourcing and Contract Management (ext.)	***Simplify*** the *direct* material sourcing process to increase savings on direct material spend and reduce the cost of sourcing operations

SAP S/4HANA Enterprise Management

Operational Procurement	***Streamline*** the buying process by integrating automated or manual function. ***Support*** human decision making by analytical visualization embedded within transactional applications. ***Determine*** the actual cost of product-based purchasing rebate agreements with suppliers.
Sourcing and Contract Management	***Ensure*** delivery of committed quantities and values. ***Find***, negotiate, and contract the most qualified, reliable sources and suppliers efficiently.
Invoice Management	***Get*** accurate invoices to accounts payable faster with electronic invoicing and automated verification. ***Improve*** the invoice processing lifecycle with higher transparency and at faster rate/pace.
Supplier Mgmt. and Procurement Analytics	***Gain*** visibility to determine the right mix of suppliers, best serve to business objectives, and reduce overall supply risk. ***Reveal*** near-real-time insights into organizational spend, suppliers, and market information.



Procurement Overview



Collect carbon footprint data from suppliers

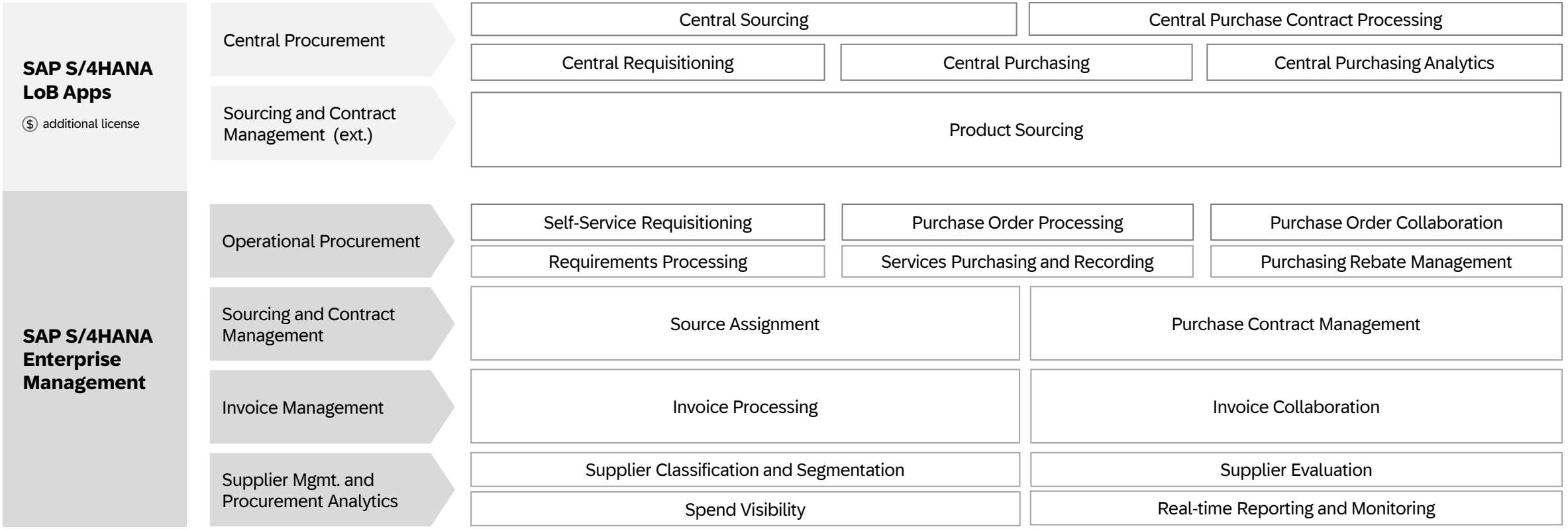
Sourcing and Procurement: Business area overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP Ariba
- SAP Fieldglass
- SAP Build Process Automation (iRPA)



Sourcing and Procurement: Operational Procurement

Operational Procurement

Self Service Requisitioning

Consumer-grade UX and cross-catalog search enabling employees to adopt procurement processes and policies.
Enhanced workflow to complete purchase requisitions.
Workflow inbox Fiori app and **notification center.**

Purchase Order Processing / Purchase Order Collaboration

Indirect and direct procurement leveraging integration with other business areas, automation and harmonized UX.
Analytical apps to monitor the status of POs.
Comprehensive business process integration with **Business Network.**
Flexible workflow enhancements like maintain deadlines in POs or **add tax dates.** Increased visibility by **including quantity delivery deficit situation** in manage purchase order Fiori app.

Requirements Processing

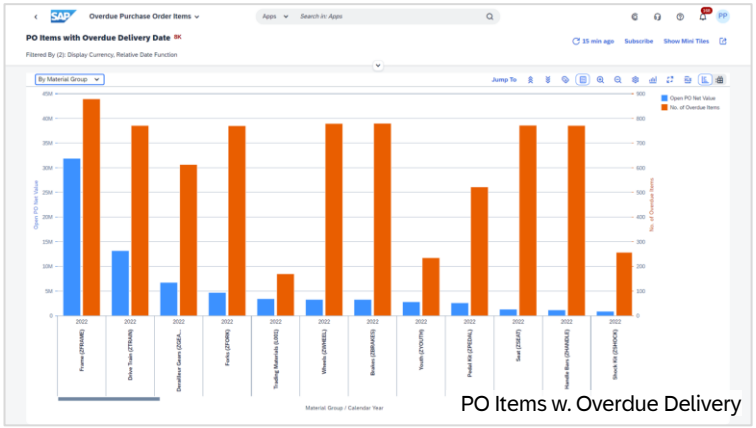
Control over automation and manual intervention where appropriate.
Human decision making supported by **analytical visualization** embedded within transactional applications.

Purchasing Rebate Mgmt.

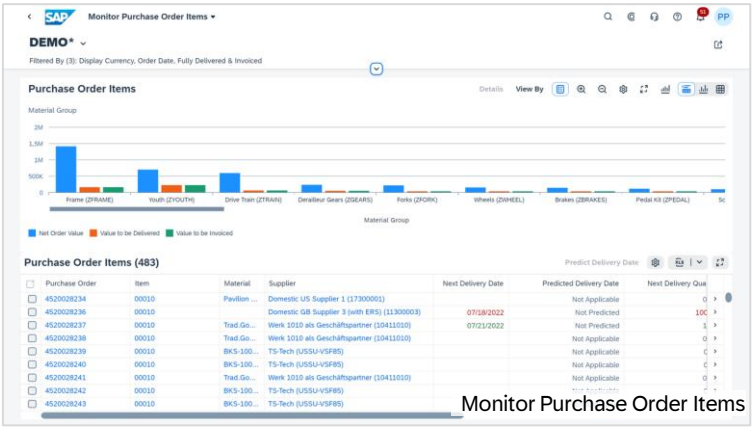
Harmonized UX for both **goods & service purchasing** processes**.**
Simplified limit (value-only) PO items to control over “unplanned” services and record details via **Fiori service entry sheet application**.

Services Purchasing and Recording

Harmonized UX for both **goods & service purchasing** processes**.**
Simplified limit (value-only) PO items to control over “unplanned” services and record details via **Fiori service entry sheet application**.



PO Items w. Overdue Delivery



Monitor Purchase Order Items

Sourcing and Procurement: Sourcing and Contract Mgmt. | Invoice Mgmt.

Sourcing and Contract Mgmt.

Source Assignment

Analytics apps to monitor RFQs and compare supplier quotations. For full online RFQ process support use **simple offline RFQ** apps **to seamlessly integrate with Sourcing** in Ariba.

Purchase Contract Mgmt.

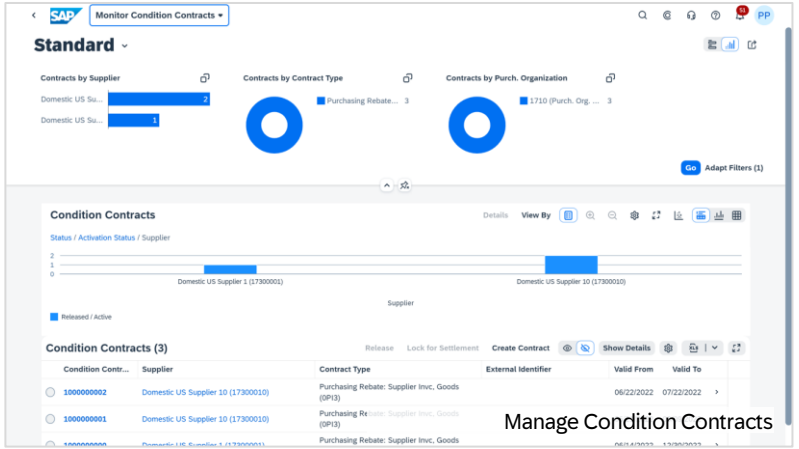
Analytic apps manage the status of contracts and agreements.
Predictive algorithm to monitor contracts to help plan contract negotiations.
Templates and mass changes to increase efficiency in managing a large number of contracts.
Unplanned Services with reference to purchasing contract.

Invoice Mgmt.

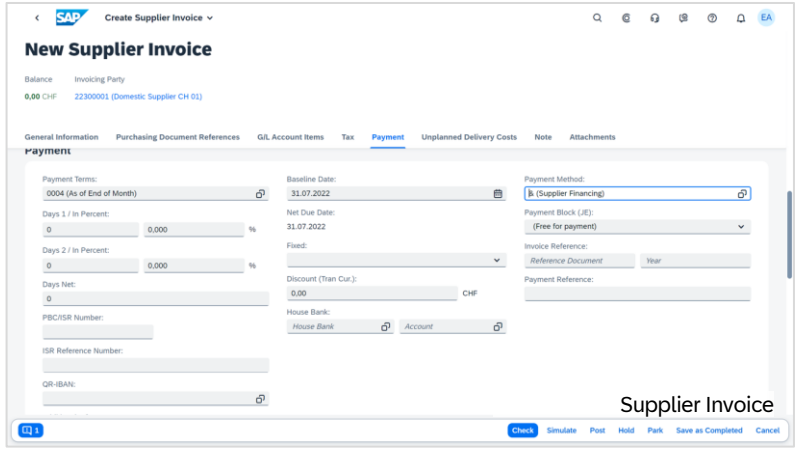
Invoice Processing

Upload of supplier invoice attachments can be implemented **fully automated** without user interaction.
Fiori apps to help manage supplier invoices and payment blocks.
Upload scanned invoice copies for manual invoice processing (optional integration with OCR via OpenText).
Native integration with Business Network

Invoice Collaboration



Manage Condition Contracts



Supplier Invoice

Sourcing and Procurement: Supplier Management and Procurement Analytics

Supplier Mgmt. and Procurement Analytics

Supplier Classification and Segmentation

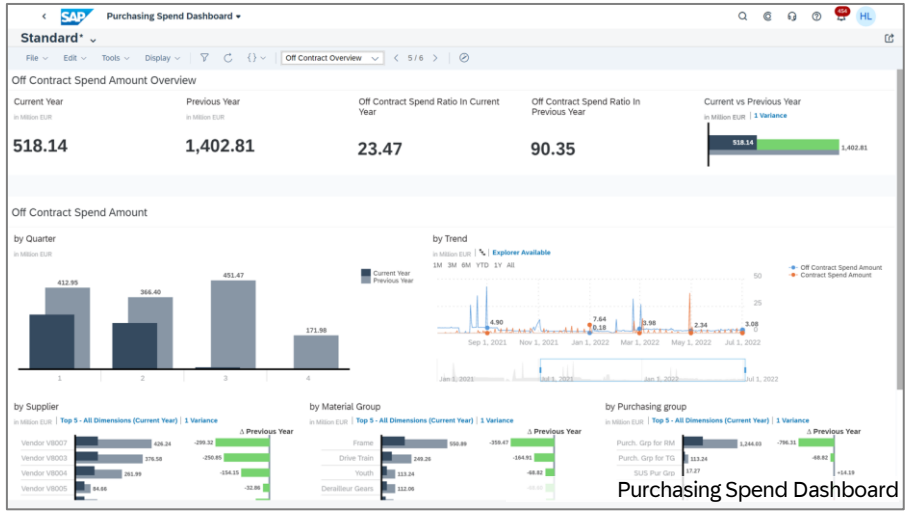
Supplier Evaluation

Spend Visibility

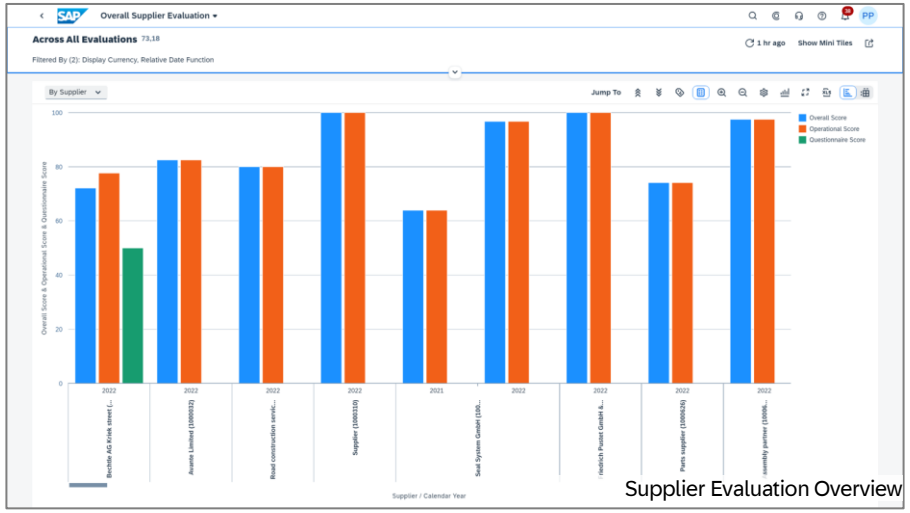
Real-time Reporting and Monitoring

Increased flexibility in supplier evaluation by defining **individual supplier evaluation criteria** like weighting and scoring.
Analyze in real-time the **parts per million score** to discuss potential activities with the supplier to improve quality.
Real-time supplier evaluation analytics automatically generated from transactional data.
Manage activities with suppliers, or internal employee survey to additional perspective on supplier evaluations.

Increased transparency about the automation rate: **high touch – low touch,** how many documents were processed manually instead of automatically.
Real-time multi-dimensional spend report that can be manipulated like “pivot table” with drill-down capability.
KPI tiles and Procurement Overview app that provide at-a-glance visualization of multiple analytical apps.



Purchasing Spend Dashboard



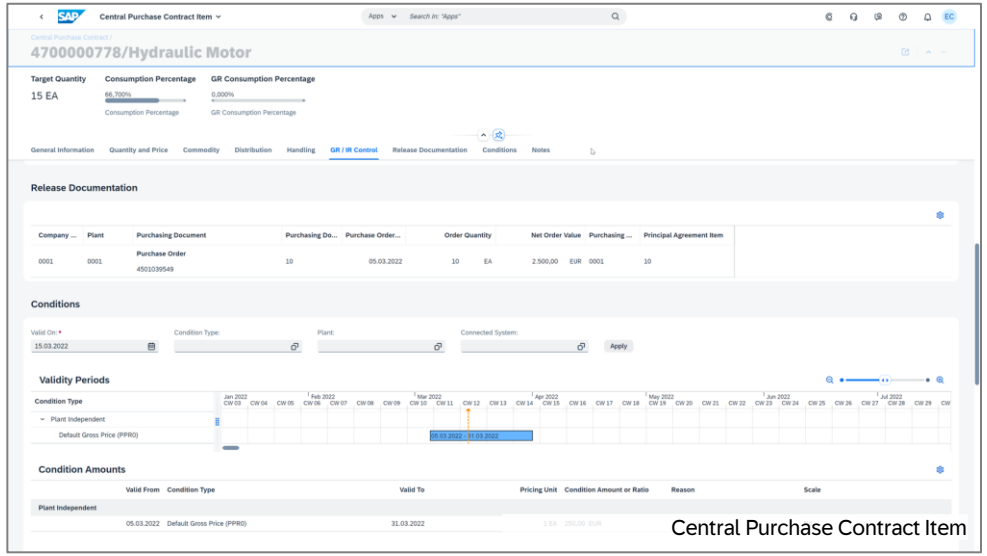
Supplier Evaluation Overview

Sourcing and Procurement: Central Procurement

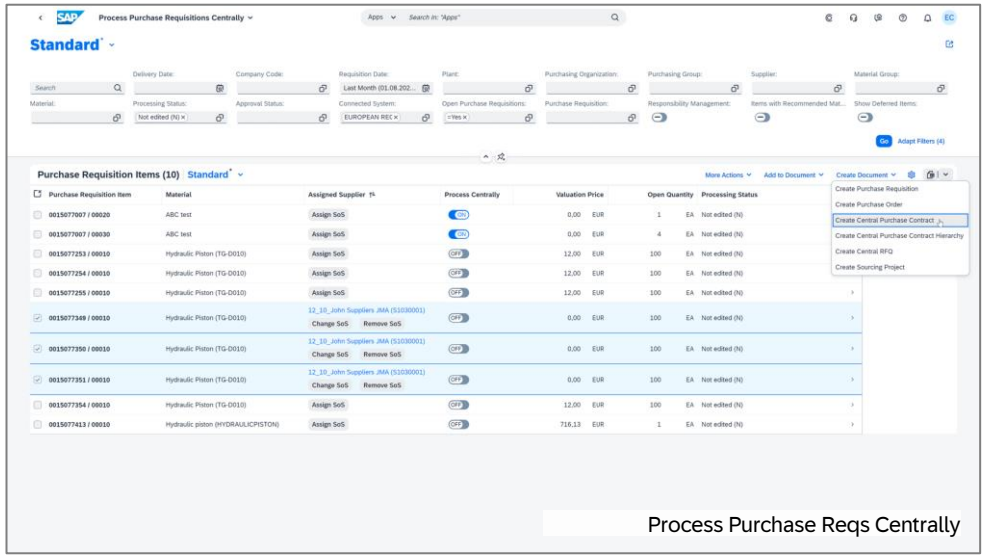
Central Procurement

Central procurement enables integration of the SAP S/4HANA hub system with multiple SAP ERP and SAP S/4HANA back-end systems. Contract management, purchasing, and requisitioning processes can be centralized with the hub system. Optionally you can leverage SAP Ariba solutions: e.g. guided buying capability and catalog. **Central Purchase Contract Hierarchy** enables large enterprises to consolidate the requirements across various business groups. **New updated source list** in connected backend system after central purchase contract distribution.

Extended functionality with **Commodity Management** Ⓢ for Procurement and Sales processing to enable advanced commodity pricing on procurement documents and support provisional, differential, and final invoices; to create commodity sales contracts priced on market quotes, automate price calculations, and streamline invoicing.
With new **Commodity Pricing** Ⓢ capabilities, key users can apply complex pricing formulas, commodity weights, and price conditions in an easy way in **Central Procurement.**



Central Purchase Contract Item

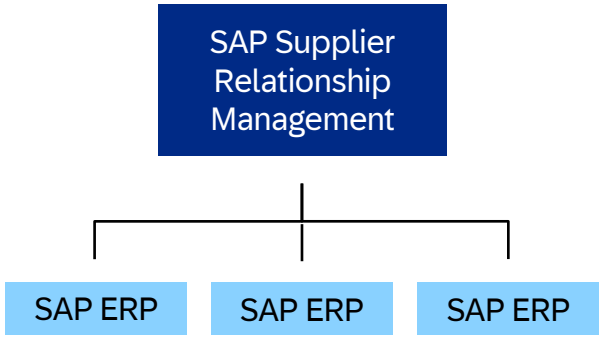


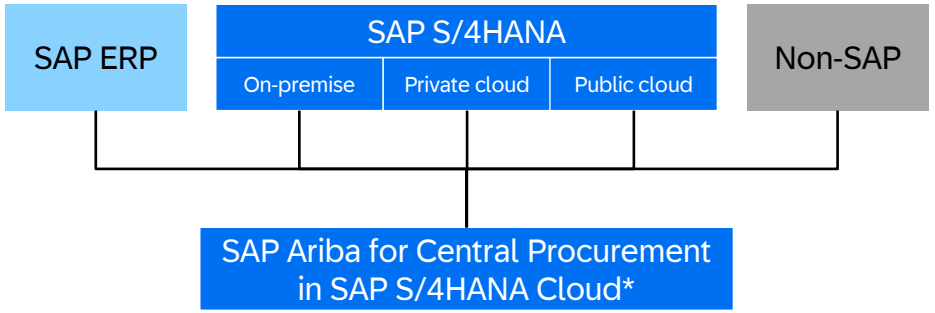
Process Purchase Reqs Centrally

Sourcing and Procurement

Transformation from SAP SRM to SAP Ariba for Central Procurement in SAP S/4HANA Cloud

Central Procurement





Centralization of procurement functions without the costs and complexities of change

Classic Scenario

- Supports multi-SAP backend installations
- Procurement backbone of every large SAP installed base customer
- End of mainstream maintenance for SAP SRM in 2025

Target Scenario

- SAP S/4HANA system acts as a central system
- Support central requisitioning, central purchase contracts, central purchasing, and central sourcing (RFQ)
- Distribution to local operational systems – all SAP S/4HANA deployments or SAP ERP (starting from SAP ERP EHP 6)

*only available in SAP S/4HANA Private / Public Cloud Edition

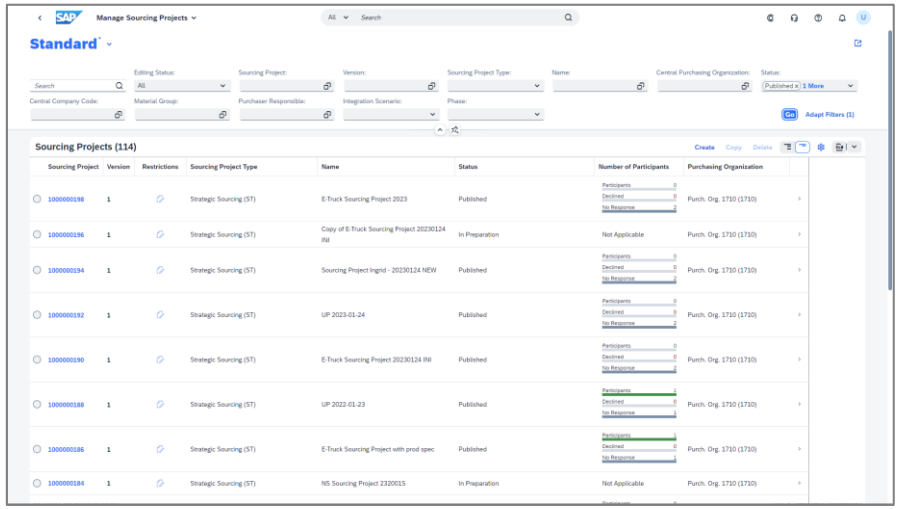
Sourcing and Procurement: Product Sourcing (extended)

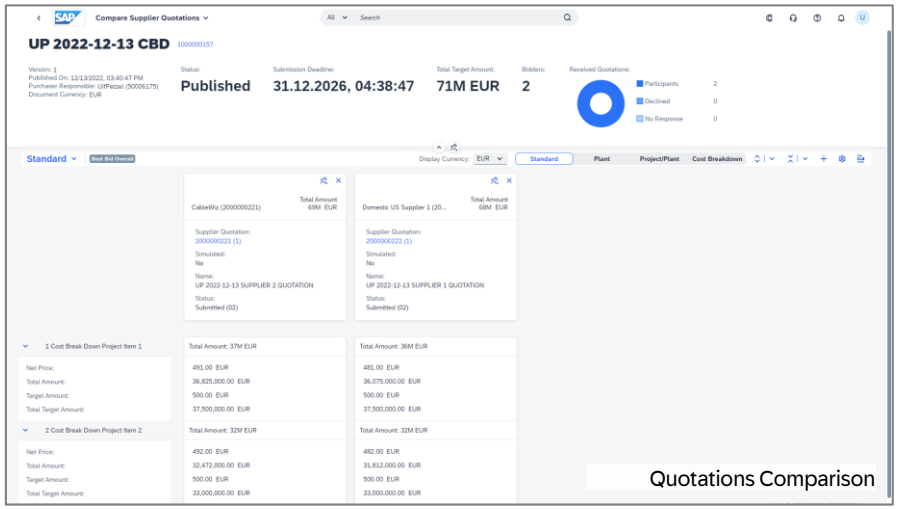
Product Sourcing

Extended product sourcing optimizes the sourcing process by organizing it into sourcing projects. They allow to invite suppliers, collect and compare key criteria (cost breakdowns, qualities, dates) in a detailed and structured format. Awarding scenarios help to simulate and analyze the outcomes of different awarding options.

Procurement projects for specific plants, negotiation processes and supplier lists are also supported in a structured way.

Flexible workflows for sourcing projects, awarding scenarios, and supplier lists ensure that the respective documents in the approval process are processed by the right assignees.



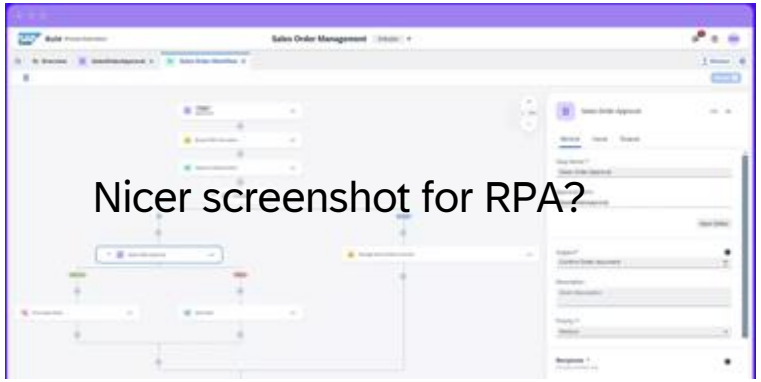


Quotations Comparison

Sourcing and Procurement

SAP Build Process Automation - integration with SAP S/4HANA

- Mass Confirmation of Purchase Orders (48K)
- Manage Catalog Items from Excel (529)
- Create Purchase Requisitions from Excel (48M)
- Mass Creation of Business Partner (4MZ)
- Business Partner Master Data Check (4FB)
- Mass Maintenance of Quality Info Records (6NX)
- Manage Source Lists from Excel (4TK)
- Manage Purchasing Info Records from Excel (4W3)

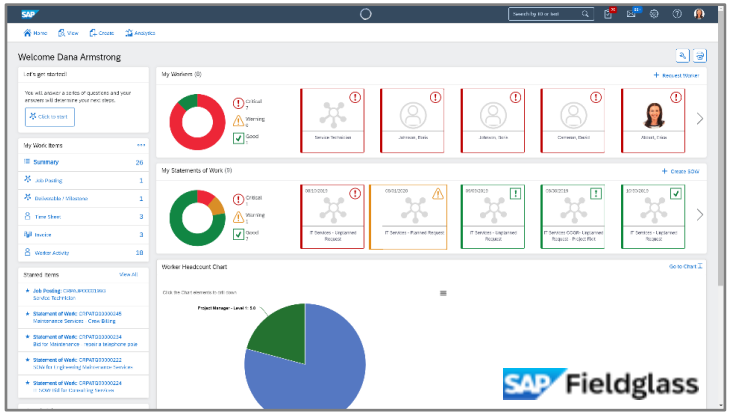


SAP Fieldglass

Extend the reach of digital core and effectively manage your external workforce. Find the right mix of talent to create competitive advantage.

SAP Ariba

Lean service integration with Ariba Network and the guided buying capability: Guidance for employees requesting planned services and Electronic exchange of purchasing documents for lean services with suppliers on Ariba Network

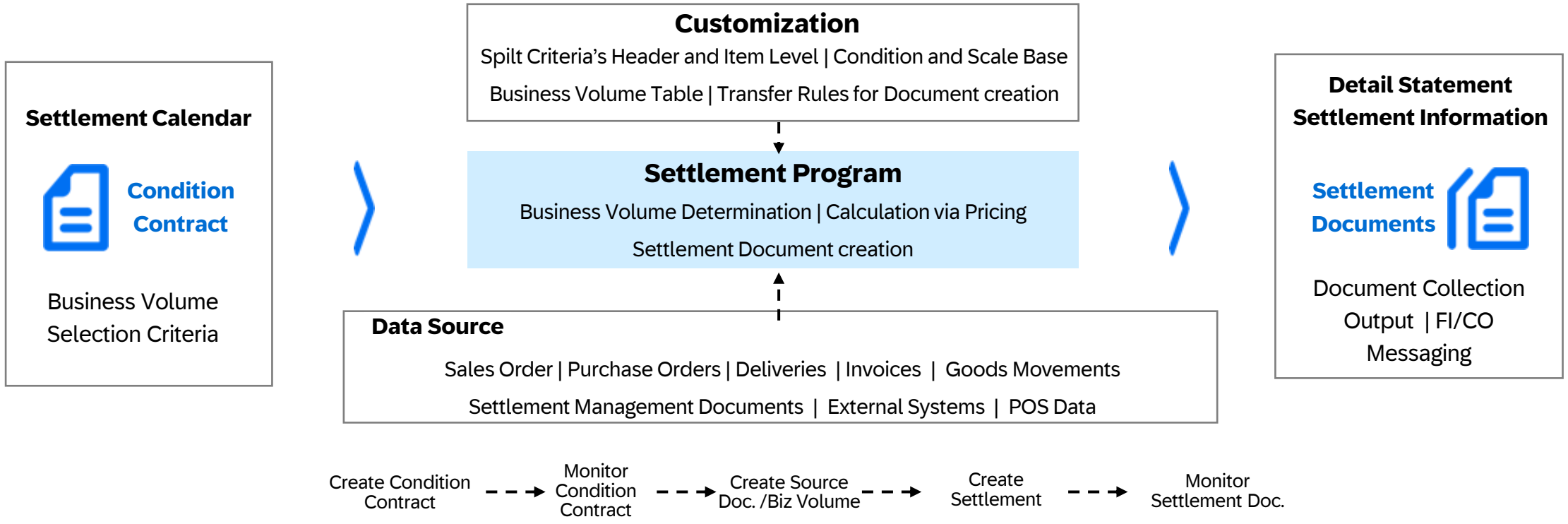


Condition Contract Settlement via Settlement Management

Operational Procurement

Condition Contract Management in SAP S/4HANA (SAP Note 2481672) uses **Central Contract Administration** as the single point of entry for contract data and contract related conditions for

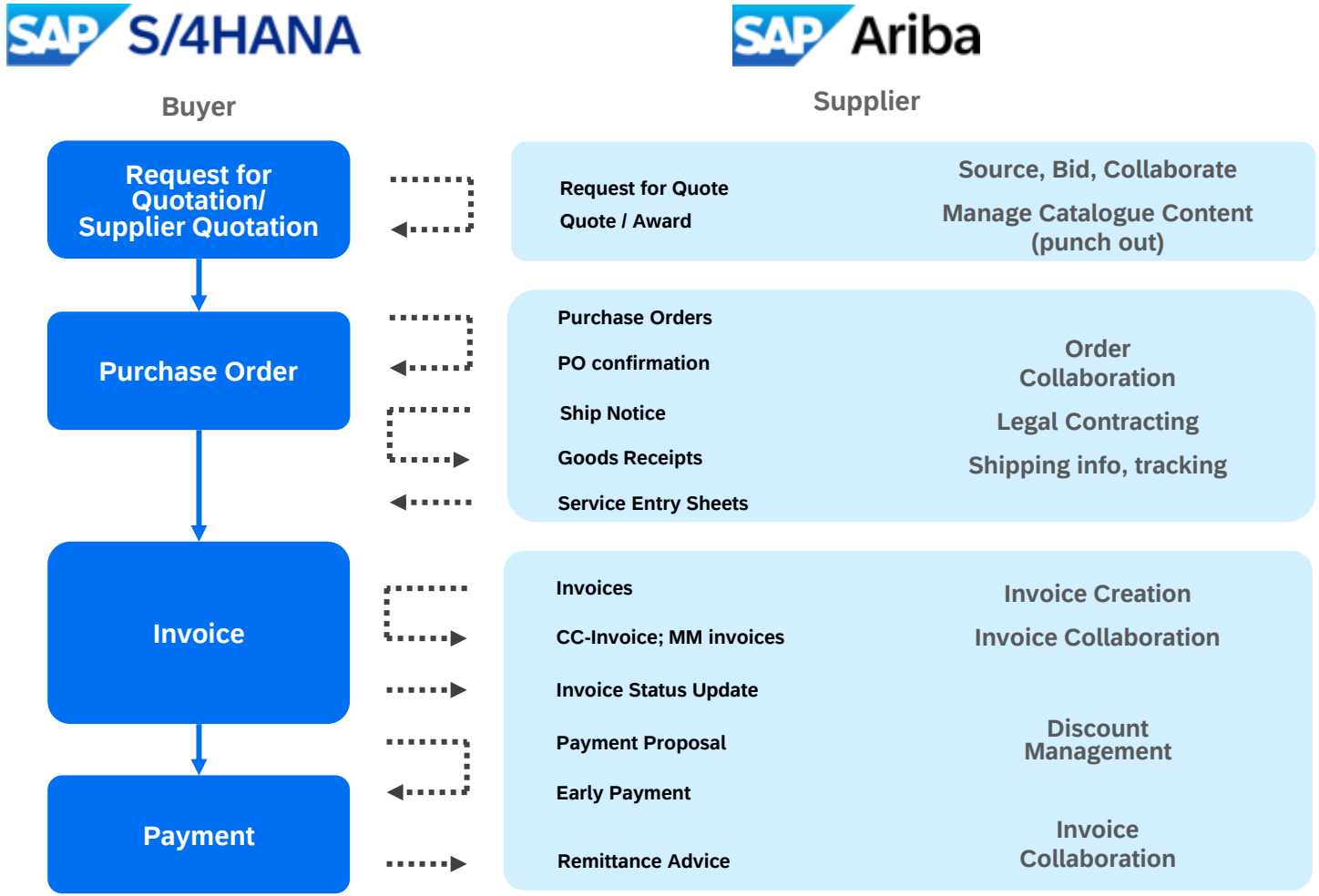
- Full support of business volume related scenarios
- Calendar based settlement
- Accrual conditions can be defined independent from settlement conditions
- Intuitive data entry of settlement information with full transparence of involved documents



Sourcing and Procurement: **Out-of-the-Box Integration**

SAP Ariba - Example integration scenarios

- Leverage Business Network and the intuitive guided buying capability integrated with SAP S/4HANA core procurement processes.
- Leverage digital handshakes between the buyer and supplier to take more control of your business network in procurement.
- Generate sourcing request out of SAP S/4HANA and conduct sourcing events within Ariba. Bring the outcomes back to SAP S/4HANA core procurement processes as info records or contracts.
- Resources:
  - Central entry page
    https://help.sap.com/docs/SAP_FIELDGLASS_INTEGRATION/ce64fd359a2248a08e04b92fdf5b6cce/e0e648df314849cc872c96b996df6e65.html
  - S/4HANA documentation
    https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE/754a46a305c642559f21625ca2744170/593e4f56c10fc74ee10000000a44147b.html



Sourcing and Procurement: Delta Scope Highlight 2023
Mass creation/change of model product specifications

2023
FPS0+1

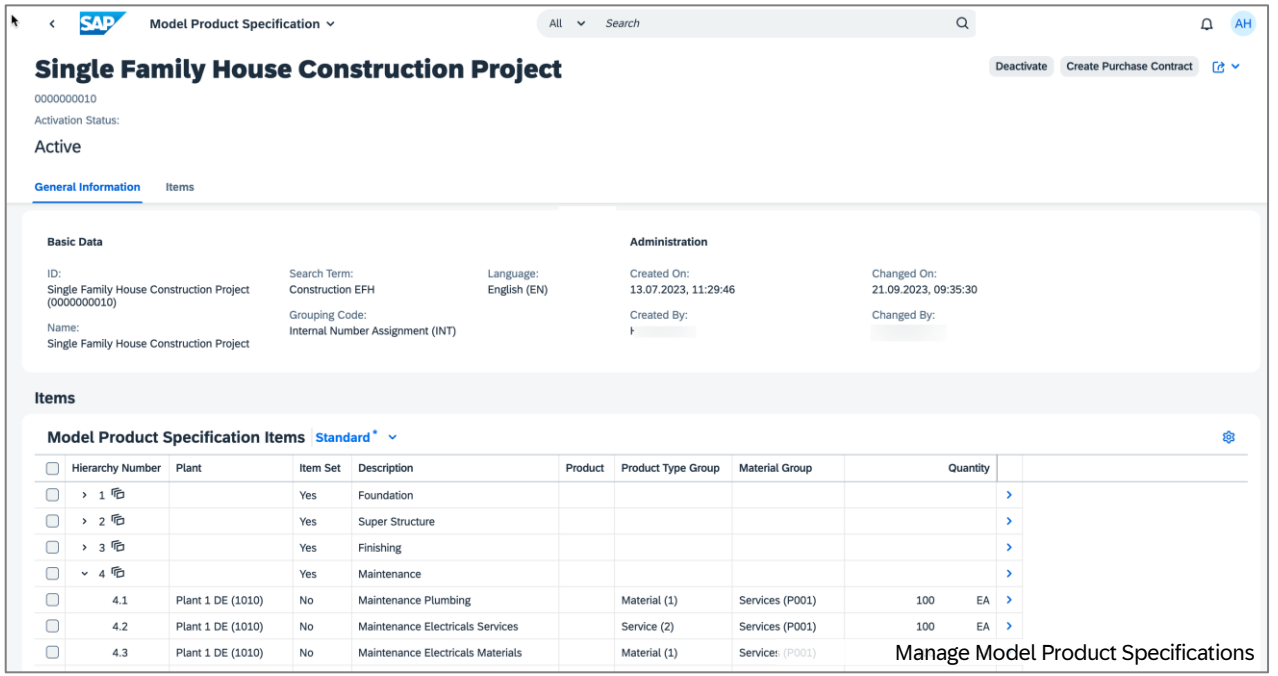
Manage Model Product Specifications

Purchase Contract Management

- Model product specifications are used for engineered services processes, where often mixed hierarchies of products and services need to be procured. Example: construction services.
- Model product specifications can be defined as templates and (since release 2022) copied into purchase contracts. There, procurement-related data is being added to the engineering-focused structure.
- Mass creation/change of model product specifications, based on spreadsheets, is now possible with up to five levels of item hierarchies, comprising products and/or services and free text.

Benefit

- Easy maintenance and re-use of to-be-procured hierarchical structures



Manage Model Product Specifications

Sourcing and Procurement: Delta Scope Highlight 2023

Manage carbon footprint data from suppliers during direct material sourcing

2023
FPS0+1

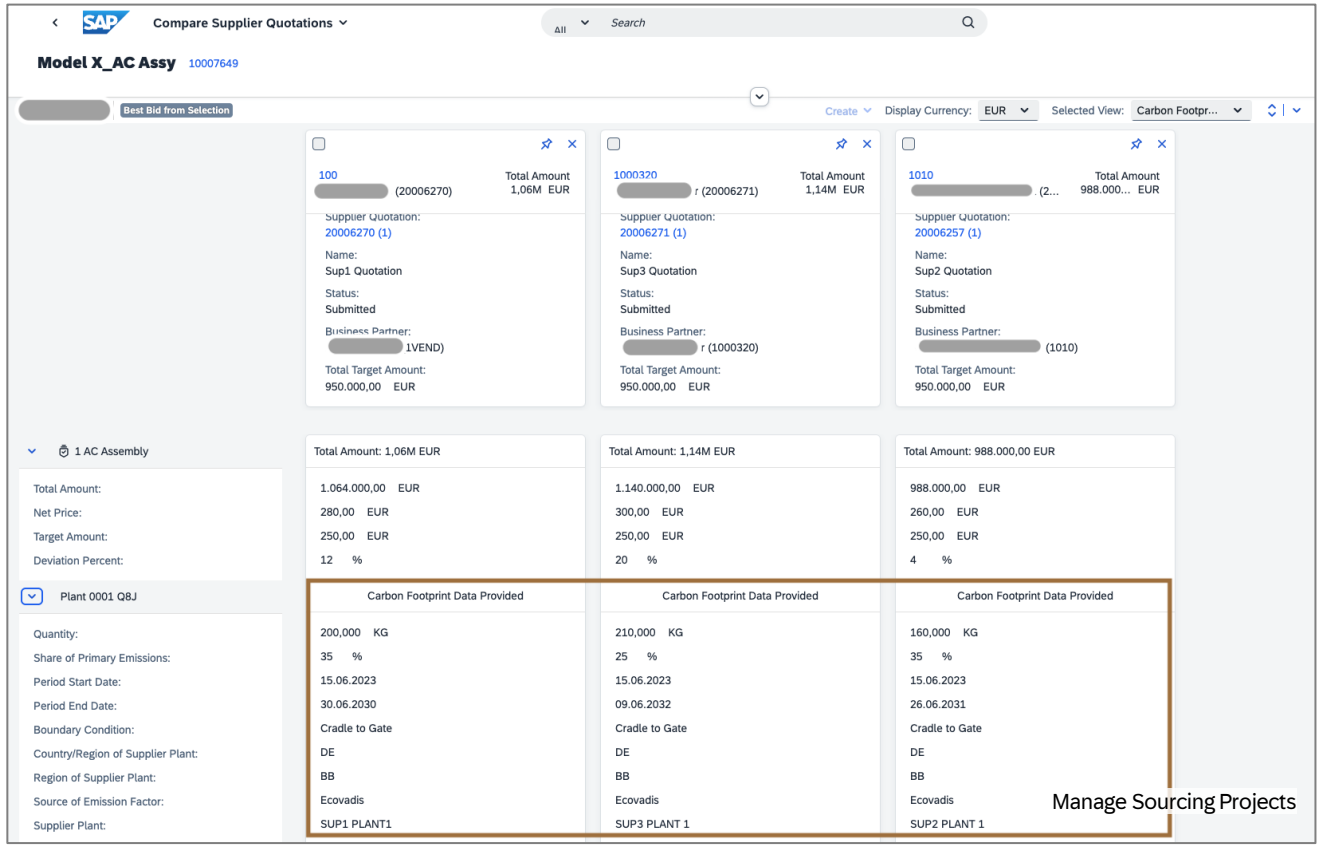
Carbon Footprint Data in Sourcing Projects

Product Sourcing

- Sourcing manager requests carbon footprint information for the items that are sourced through sourcing projects
- Suppliers provide carbon footprint information at the item level through their quotations
- Sourcing manager can compare carbon footprint information submitted by multiple suppliers to choose carbon conscious suppliers for award decisions

Benefits

- Ease collecting scope 3 emission information during the sourcing process directly from suppliers
- Increase visibility to carbon footprint information during the sourcing process to help organizations to choose carbon-conscious suppliers



Sourcing and Procurement: Delta scope summary

2023 FPS2

Central Procurement

- **Material group recommendation** based on machine learning algorithm analyzing matching demands in previous backend purchase orders
- **Mass change** of standard fields in centrally managed purchase requisitions using a dedicated SAP Fiori app in **online** mode (not spreadsheet-based)
- Configure **inquiry steps** within the **approval workflow** for centrally managed purchase orders:
- Central Requisitioning: Guided buying with replication before approval (FPS2)
- Parked supplier invoices in document flow of central purchase requisitions (FPS2)
- Searching of central contracts based on backend outline agreement numbers (FPS2)
- On-hold support for centrally managed purchase orders and requisitions (PFS2)

Product Sourcing (extended)

- Collecting and managing **carbon footprint data** from suppliers
- Product sourcing **overview page**
- **Mass management** of sourcing-project line items using a standard Microsoft Excel template
- **Initiation of negotiations or awarding scenarios** directly from the quotation-comparison application
- **Situation-based notification** of submitted supplier quotations
- Information accessibility for **sourcing project contributors** (FPS2)

Self-Service Requisitioning / Requirements Processing

- Integration of the **Storage Location** field into self-service purchase requisition and derivation of delivery address from it
- **Inbound interface for supplier confirmations** within a single, central system referencing purchase orders that reside in the connected systems
- Extension of **Copy to Other Items action**: GL account, goods recipient
- **Extension** of the **central purchase requisition replication** to the connected backend with: Goods / invoice receipt indicators, requestor / author of requisition, technical key of Web service
- Contract item references for limit line items in professional Reqs (FPS2)
- Automatic generation of purchase orders from the enhanced limit requisition (FPS2)
- Take-over of custom document types in Process Purchase Requisitions app (FPS2)

Supplier Evaluation

- Support for the **factory calendar in supplier evaluations** for accurate and comparable evaluation results

Service Purchasing and Recording / Purchase Contract Management

- **Mass creation/change of model product specifications** from spreadsheets, with up to five levels of item hierarchies, comprising products and/or services and free text.
- Versioning in purchase contracts: ability to compare versions (FPS2)

Link: Detailed blog with all Procurement innovations in release 2023

Supply Chain

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Supply Chain: Overview

Suite LoB Solutions

additional license

additional installation

- SAP Integrated Business Planning
- SAP Warehouse Insights
- SAP Global Batch Traceability
- SAP Business Network for Logistics
- SAP S/4HANA Extended Warehouse Management (side by side for Hub Deployment)
- SAP S/4HANA Transportation Management (side by side for Hub Deployment)

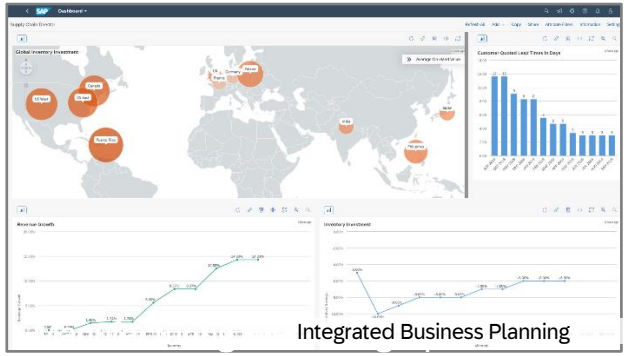
SAP S/4HANA LoB Apps

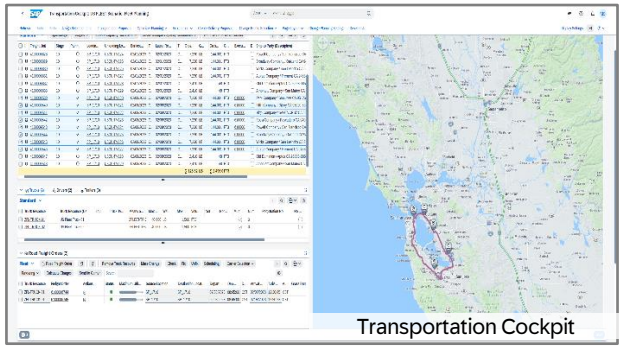
additional license

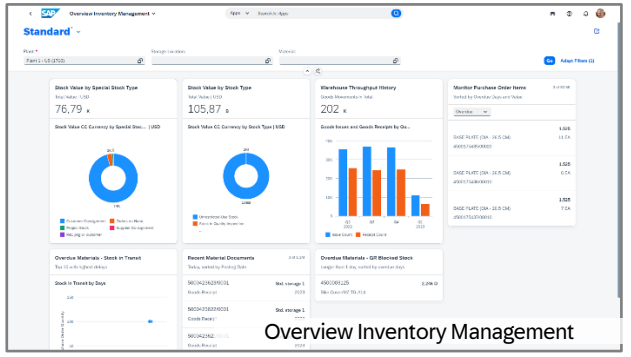
Service Parts Distribution	***Plan*** service parts inventory accurately across distribution networks, based on parts volumes, velocity, and segments; strategically calculate trade-offs between costs and service.
Advanced Warehousing	***Deliver*** the optimal order by leveraging features like cross-docking, workforce management, slotting, inventory optimization, and support for transit warehousing as well as connectivity to warehouse automation equipment.
Advanced Transportation	***Improve*** transportation efficiency by holistically managing all inbound and outbound freight.
Advanced Order Promising	***Commit*** to orders quickly and accurately by automatically considering the relevant stock in real-time, while protecting business priorities and profitability goals.

SAP S/4HANA Enterprise Management

Inventory	***Track and control*** inventory and stock quantities in a transparent manner and ensure a streamlined material flow across all in and outbound logistics operations.
Warehousing	***Store and handle*** your goods and materials efficiently. Improve asset usage, increase throughput and support accurate on-time order fulfillment with a maximum of transparency.
Delivery and Transportation	***Orchestrate*** all delivery demands, plan and run your transports, using functionality for basic agency billing and subcontracting. Ship the right products to the right place at the right time.
Order Promising	***Determine*** accurate estimates of delivery dates during order creation & changes considering material availability based on actual stock information to enhance customer satisfaction.
Logistics Cross Topics	***Manage*** Batches, Serial Numbers and Handling Units to increase efficiency and improve compliance across your shipping and warehousing operations.
Circular Economy Logistics	***Track and manage*** re-usable items like packaging materials or empties along their lifecycle in logistics processes to distribute responsibility and costs among the involved parties.


Integrated Business Planning


Transportation Cockpit



Overview Inventory Management

Supply Chain: Business area overview

Suite LoB Solutions

additional license

additional installation

- SAP Integrated Business Planning
- SAP Warehouse Insights
- SAP Global Batch Traceability
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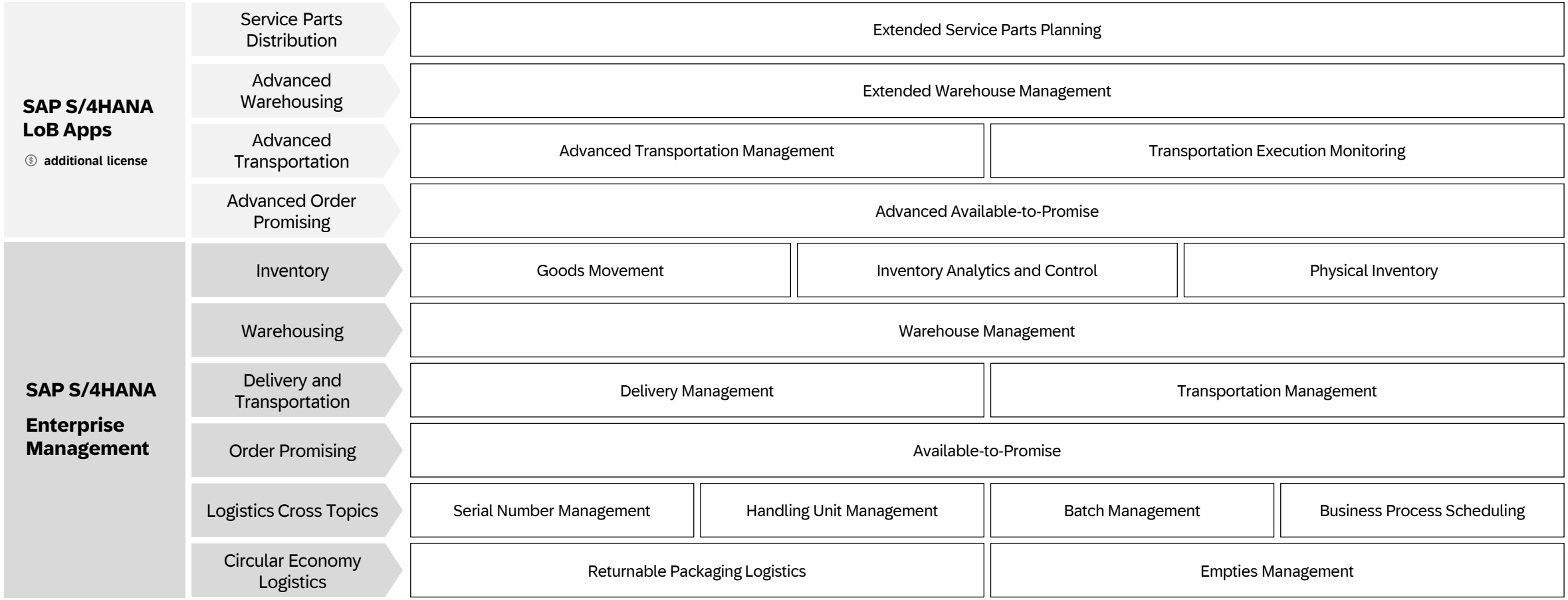
- SAP S/4HANA Extended Warehouse Management (side by side for Hub Deployment)
- SAP S/4HANA Transportation Management (side by side for Hub Deployment)



Supply Chain: Inventory and Warehousing

Inventory

Goods Movement

Use simplified GI postings for transfer and scrapping.
Experience real-time, high-volume processing using sensor data.
Benefit from locking elimination and material ledger valuation.
Use simplified apps for
- Goods Receipt for PO
- Initial entry
- Goods Receipt without reference

Inventory Analytics and Control

Experience the power of simplification by using state-of-the-art analytical apps, which take full advantage of the simplified data model incl. 40-digit mat-no. and the power of the HANA database. Optimize inventory and material flows based on real-time information.
Use simplified apps for
- Dead Stock Analysis
- Slow or Non-Moving Materials

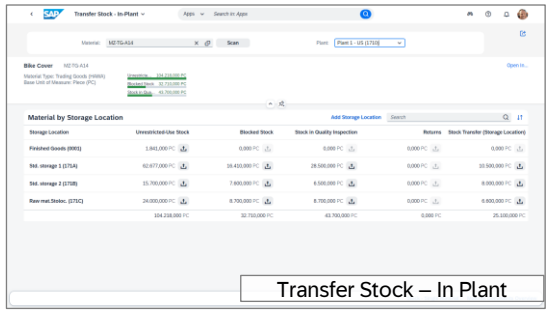
Physical Inventory

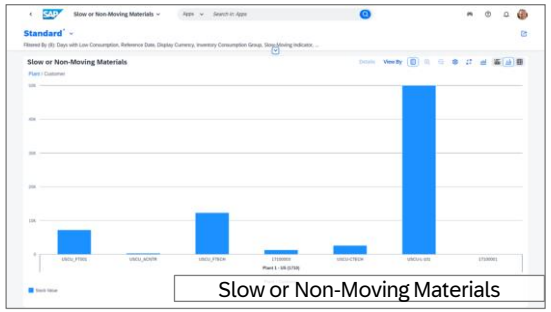
Enable real-time reporting on your warehouse stocks and inventory.
Record the physical quantities of your warehouse stocks (own stock and other stock types).
Enable faster and more-efficient inventory adjustments.

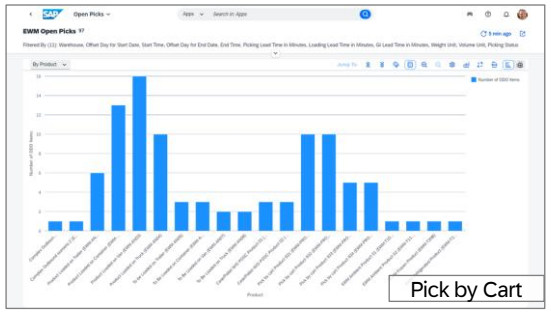
Warehousing

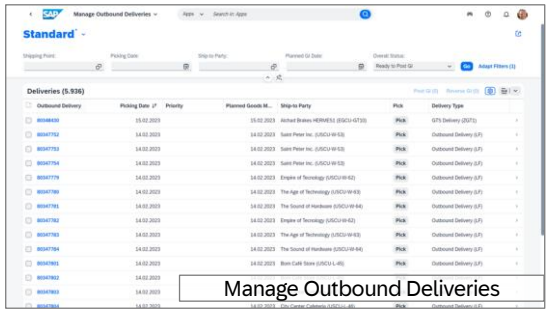
Warehouse Management

Leverage embedded EWM to perform standardized inbound & outbound processing with internal movements, physical inventory and reporting in one system (master data, customizing & UX).
Track alternative quantities with integrated Catch Weight Management.


Transfer Stock – In Plant


Slow or Non-Moving Materials


Pick by Cart


Manage Outbound Deliveries

Supply Chain: Delivery and Transportation

Delivery and Transportation

Delivery Management

Execute and confirm on transportation demands from all sources (Sales Order, Purchase Order, Stock Transport Order) in an automated fashion. Leverage **electronic collaboration** to accelerate the process and **avoid redundancies** and human error.

Transportation Management

Leverage **embedded Transportation Management** to handle **freight agreements** and **delivery-based charges** as well as basic bookings, **plan and carry out** your transports, use functionality for **basic agency billing** and **subcontracting** as well as **dangerous goods** management. error.

Supply Chain: Order Promising, Logistics Cross Topics, Circular Economy

Order Promising

Available to Promise

Available-to-Promise: new ATP algorithm based on HANA embedded in mass component check in production.
Improve percentage on-time delivery.
Leverage just-in-time scenarios for inbound and outbound.

Circular Economy Logistics

Returnable Packaging Logistics

Track shipping and receiving of returnable packaging materials to and from business partners. Gain visibility in materials distribution and reduce overall volume of materials by integrating logistics information into a single version of the truth.

Empties Management

Track empties to and from business partners, capture detailed data, accurately record high-volume transactions for empties returns and connected deposits.

Logistics Cross Topics

Batch Management

Various industries – particularly the process industry – have to work with homogenous partial quantities of a material or product throughout the logistics quantity and value chain.
Efficient management and processing of batches in all of a company's business processes.

Serial Number Management

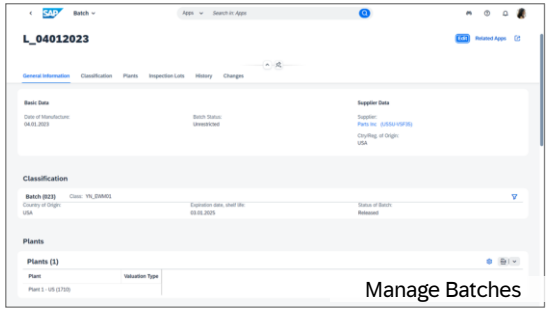
Identify and differentiate between individual items of material
Integrated with diverse processes incl Plant Maintenance, Production Orders, Sales & Distribution, Quality Management, Inventory Management & Physical inventory, Repetitive manufacturing & Purchasing.

Handling Unit Management

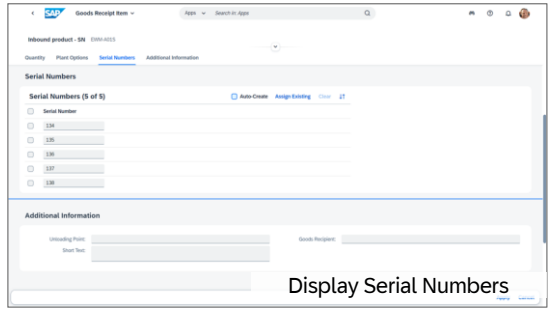
Leverage reflect packing-based logistics structures
Optimize logistics processes and track the movements of entire handling units and the materials they contain rather than tracking each material individually.

Business Process Scheduling

Flexible and configurable scheduling framework that you can use to schedule logistical activities of different business processes.



Manage Batches



Display Serial Numbers

Supply Chain: LoB solutions

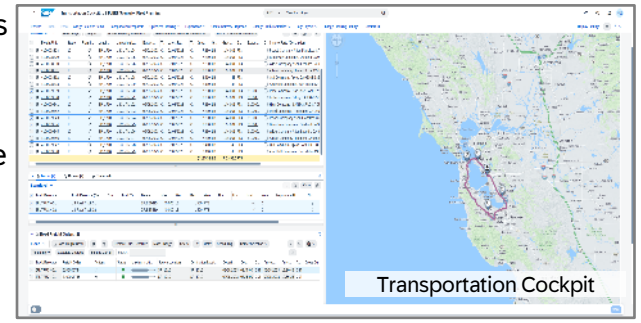
Advanced Warehousing

Extended Warehouse Management with SAP S/4HANA supports all levels of warehouse complexity. Use the **extended functionality** of **SAP S/4HANA Warehouse Management to optimize all warehouse operations** with no data duplication and reconciliation efforts.

EWM Open Picks

Advanced Transportation

Embedded Transportation Management provides **best-of-breed functionality** seamlessly integrated into the digital core, streamlining processes and reducing the need to replicate data to a decentralized TM system. SAP S/4HANA offers modern transportation management to customers, who want to leverage **enhanced transportation** functionality. The new deployment option also allows customers to run advanced transportation management processes embedded in SAP S/4HANA removing the necessity for costly data replication and additional hardware.

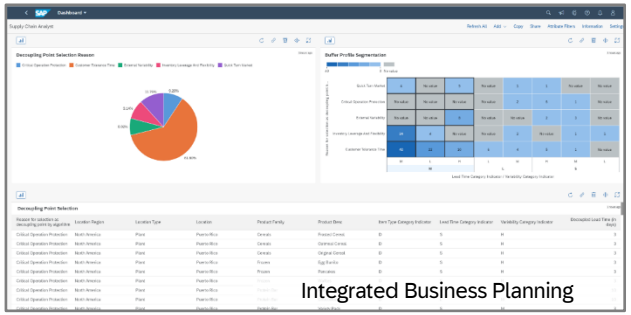

Transportation Cockpit

Advanced Order Promising

Advanced Order Promising/ATP is a new functionality to optimize the complete Available to Promise process with simplified UI in a harmonized flow. The solution comprises **Availability Check, Backorder Processing, Product Allocation & Release for Delivery.**

Service Parts Distribution

Extended Service Parts Planning (eSPP) provides planning functions specific to service parts and transparency throughout the supply chain, right from the moment demand occurs through to the delivery of the product. It allows to plan inventory across a distribution network based on the part volume, velocity, segments, and other practical business rules. It further supports out of the box business process collaboration for the suppliers.


Integrated Business Planning

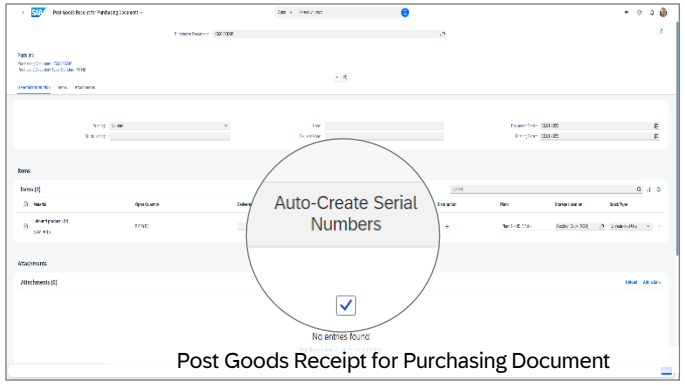
Additional Suite Solutions in Supply Chain

For Superior Planning and Extended Supply Chain Functions, you can also integrate into:

- SAP Integrated Business Planning
- SAP Global Batch Traceability
- SAP Business Network for Logistics
- SAP S/4HANA Extended Warehouse Management & SAP S/4HANA Transportation Management (side by side for Hub Deployment)
- SAP Warehouse Insights

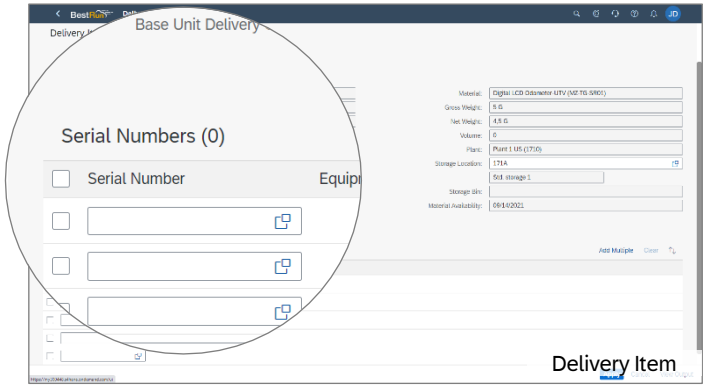
Supply Chain: Serial Number Handling in SAP Fiori applications

Inventory



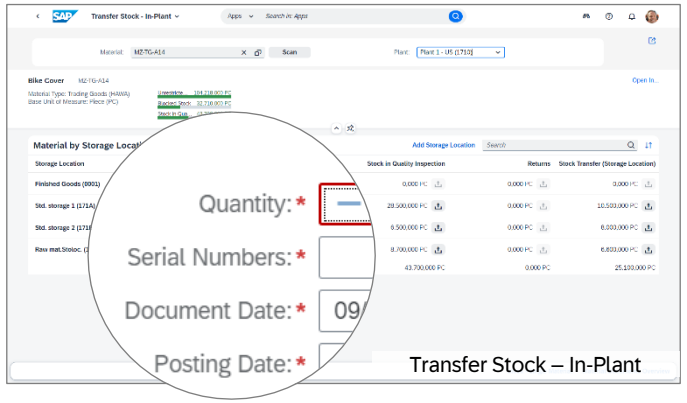
Assign (auto-created) serial number to a material during goods receipt.

Display a list of serialized items in stock for a particular material.



Enter serial numbers of picked materials during goods issue process.

- Track a material from the **very beginning** of the internal logistics process
- Streamline the tracking process by creating serial numbers **automatically**
- Keep a **transparent picture** of the serialized materials in stock



Indicate serial numbers during stock transfers within and across plants

- Ensure that serial numbers are correctly maintained in **internal goods movements**
- Consider serial numbers **during picking** to track the material until the Goods Issue
- Track a material along the internal logistics process in a **transparent and intuitive** way

Supply Chain: Mobile counting app for physical inventory

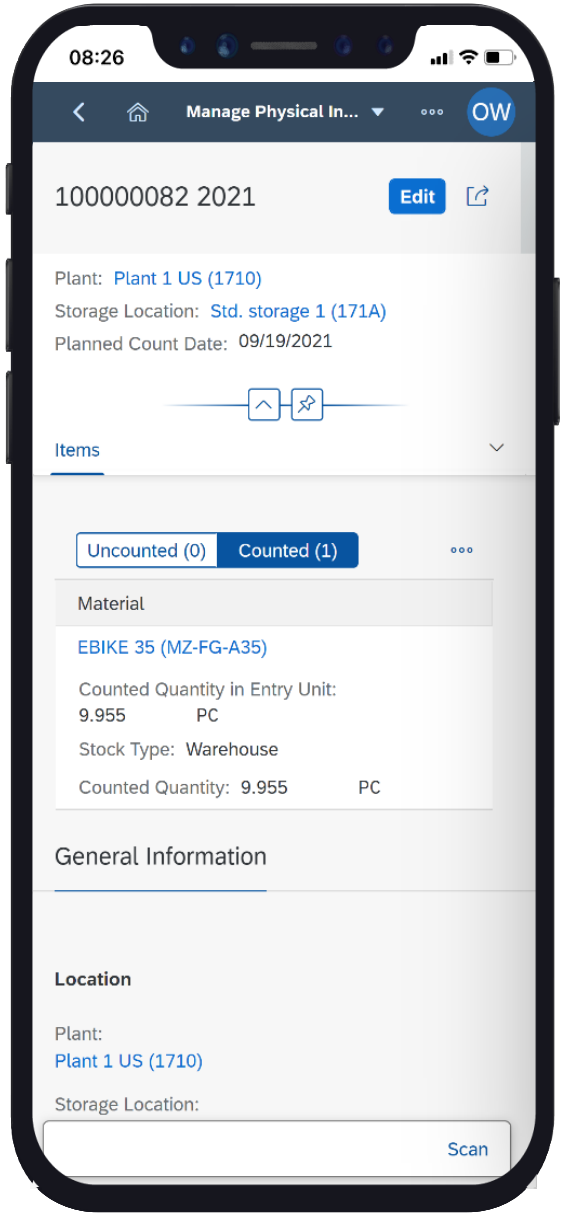
Create Physical Inventory Document → Print Physical Inventory Sheets → Perform Physical Count of Stock → Enter Physical Counts → Report Differences → Post Inventory Documents

(1) Open Physical Inventory document worklist

(2) Scan material to open the correct PI document

(3) Enter counting results and save

(4) PI document item is marked as counted



- Run physical inventory process **end-to-end** in one system
- Enter counting results **via mobile device** in the moment of counting
- Leverage device camera or external scanner for **scanning** the material to be counted

Supply Chain: Situation handling in physical inventory

material / bin blocked for goods movements

Create Physical Inventory Document → Print Physical Inventory Sheets → Perform Physical Count of Stock → Enter Physical Counts → Report Differences → Post Inventory Documents

When to start counting?

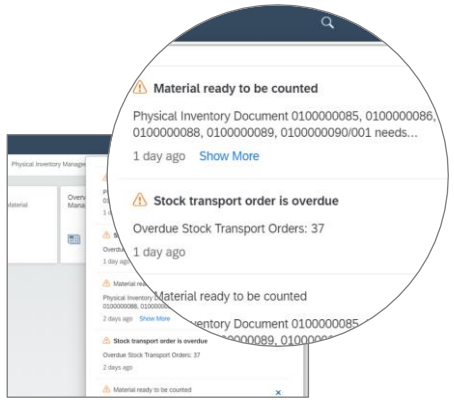
Communication lags between inventory manager and warehouse clerks
→ **Inefficient timing**

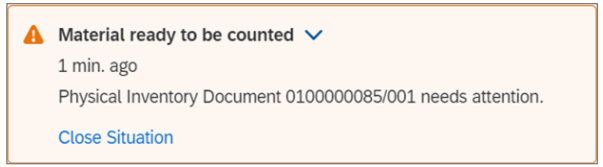
Difference identified?

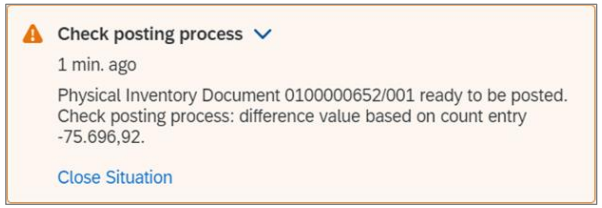
Manual identification of differences
→ **High manual effort**
→ **Error prone**

When to post?

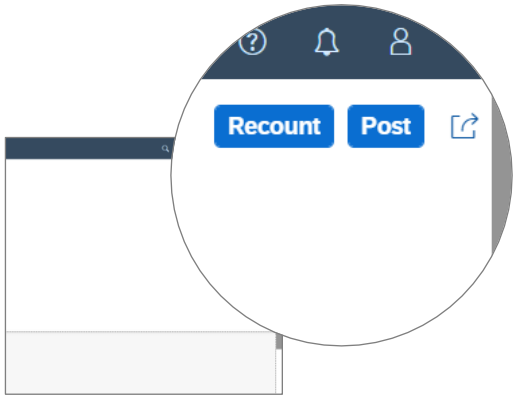
No fallback in case of delayed or forgotten posting
→ **Process interruptions (e.g. blocking of material)**







Situation Handling provides **contextual information proactively** and offers **resolution proposals** to optimize the critical steps of the **physical inventory process.**

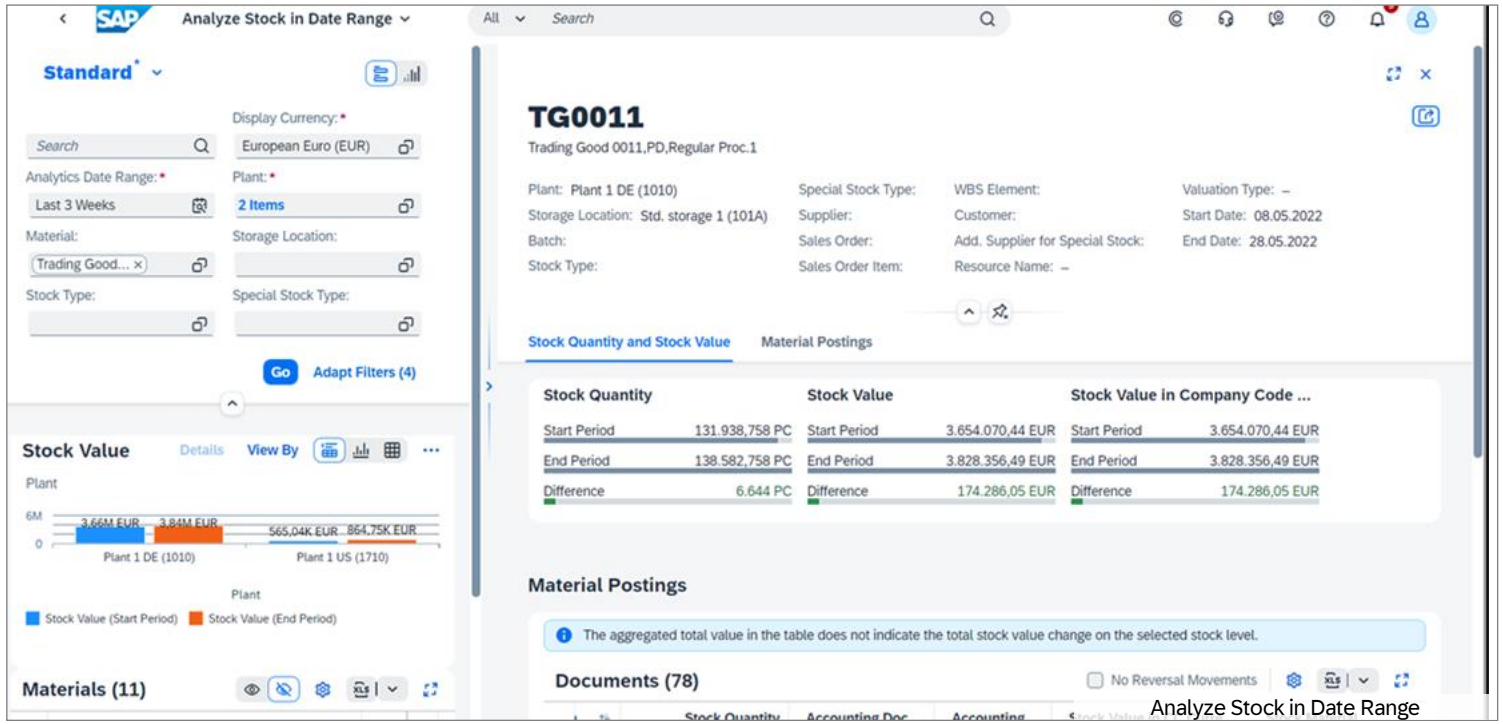


Supply Chain: Analyze stock in date range

Inventory

2023
FPS0+1

- Analyze and monitor goods movement postings for one or more materials in a defined date range
- Obtain a comprehensive analysis of all goods movements that happened within the defined date range
- Track goods movement postings based on material documents
- Pre-delivered use case–specific variants like Stock Quantity, Supplier Consignment Stock delivered for quick time to value
- Availability of all stock-identifying fields as dimensions and Additional KPIs (such as absolute and relative posting differences)
- Increased depth of analysis through aggregation and disaggregation of measures based on selected dimensions
- Scheduling of export to Microsoft Excel is now supported



Supply Chain: Warehouse Management
Supporting all levels of complexity

Modular Cloud LoB Solutions

additional license

additional installation

Leverage Decentral SAP S/4HANA EWM for

- High volume warehouses
- Independent operations, versioning, upgrades
- Material Flow System (MFS)

High Volume fulfillment Center

SAP S/4HANA LoB Apps

additional license

Extended Warehouse Management

- Inventory Management Optimization (e.g., Slotting)
- Inbound Process Optimization (e.g., Deconsolidation)
- Outbound Process Optimization (e.g., Waves)
- Labor Management (incl. Processors, Shifts, Time & Attendance, Travel Distance, Standards, Tracking and Monitoring)
- Distribution Equipment
- Material Flow Control
- Yard Management (e.g., TU handling, DAS)
- Value Added Services
- Kitting
- Cross Docking
- Warehouse Billing
- Integrated Load Planning
- Improved Package Builder & Stock Consolidation
- Just-in-Time (JIT) processes

Optimize warehouse operations

SAP S/4HANA Enterprise Management

Warehouse Management

- Inventory Management
- Inbound Processing
- Outbound Processing (incl. change of deliveries)
- Internal Warehouse Movements
- Physical Inventory
- Reporting
- Enhanced QM Integration in SAP

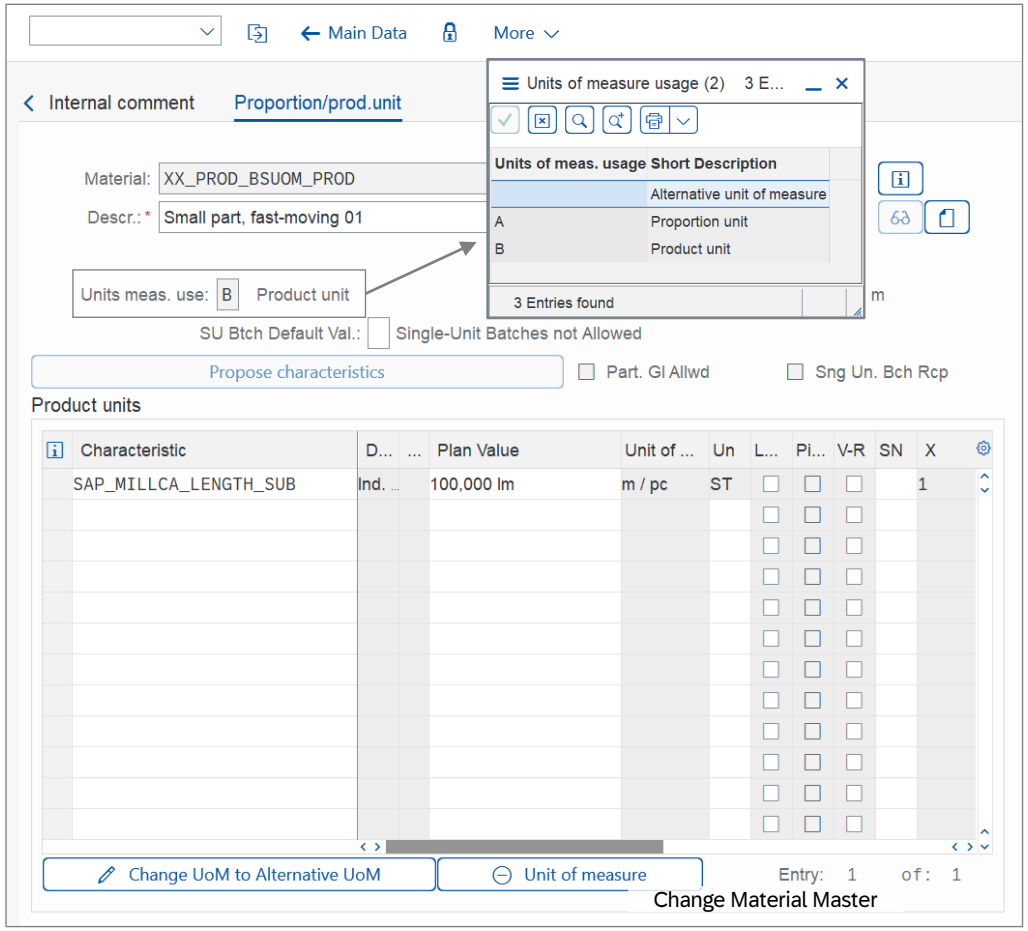
S/4HANA with EWM:

- Pick-by-Cart FIORI App (Pick small quantities, multiple customers in one run, or into same parcel)
- ASR-based basic integration with embedded TM

Transparency and control

Supply Chain: Advanced Warehousing
Batch specific unit of measure

- SAP Extended Warehouse Management (EWM) enhanced with the ability to support batch-specific units of measures
- Batch specific unit of measure enabled to cover different warehouse processes- inbound, outbound and internal warehouse processes
- Diverse scenarios supported including - processing goods receipt, synchronous good receipt, quality inspection, advanced production integration, physical stock and others
- Batch specific unit of measure currently supported in embedded warehouse management scenarios



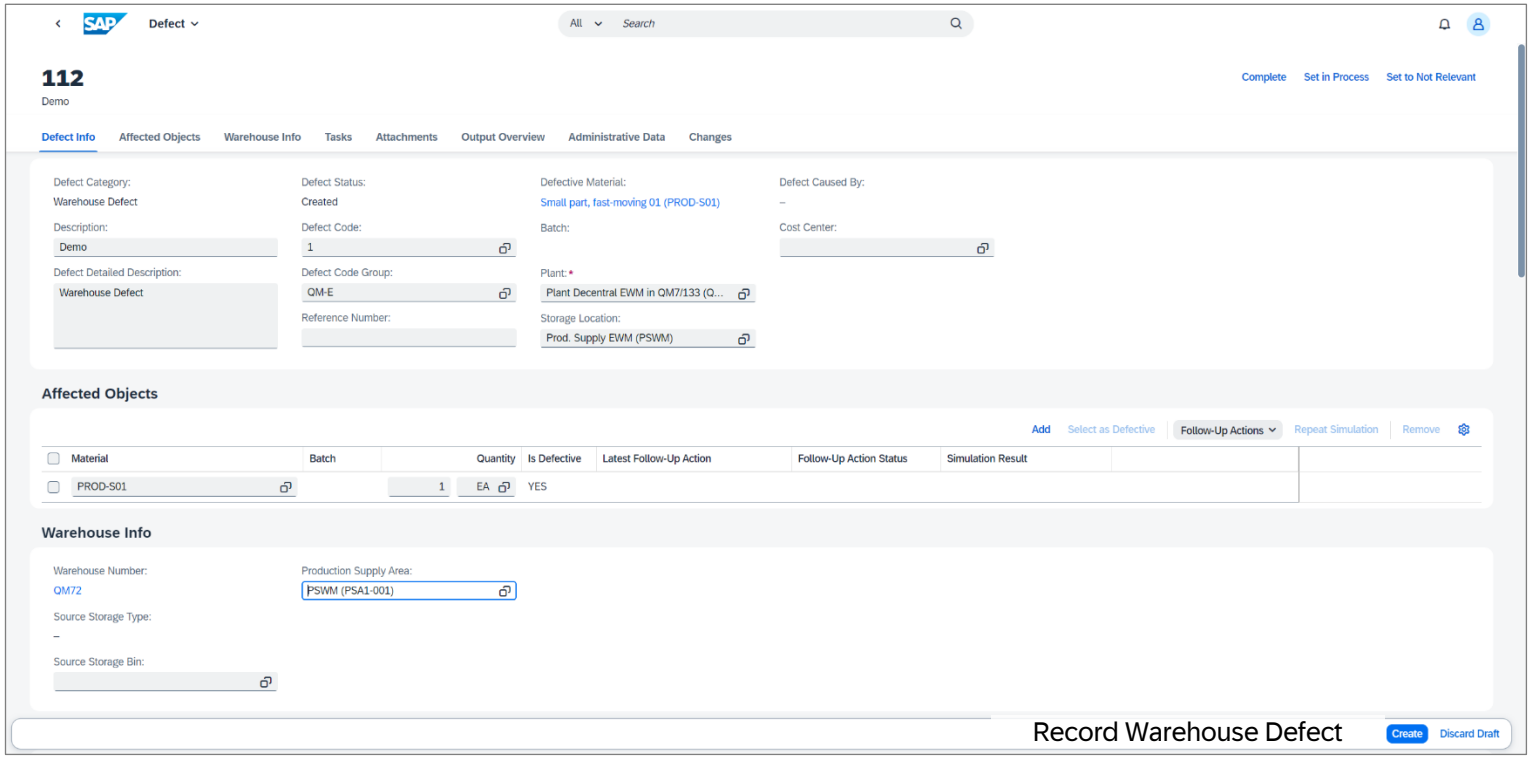
Change Material Master

Supply Chain: Advanced Warehousing
Integration to defects and notifications in decentral EWM

Advanced Warehousing

2023 FPS0+1

- New solution to handle defects / defective parts in EWM managed warehouses or PSAs
- Record, follow-up, and analyze defects found in components during production or in products in the warehouse
- Based on both defect and quality notification
- Stock assignment - EWM-specific postings for the defective material, for example, to blocked stock or quality inspection stock
- Follow-up actions triggering stock postings (in EWM) for one or multiple materials

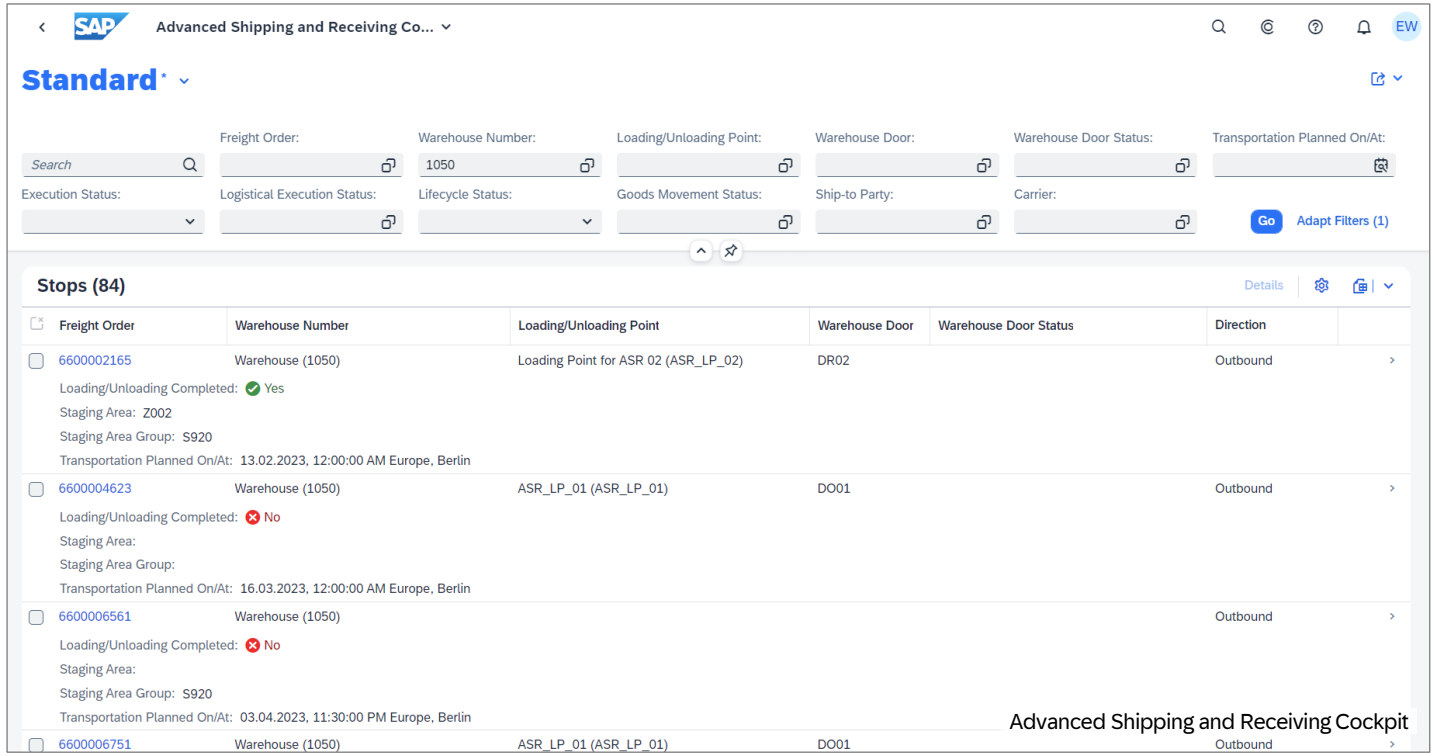


Supply Chain: Warehouse Management
Advanced shipping and receiving cockpit

Warehousing > Delivery and Transportation > Advanced Warehousing

2023 FPS2

- Fiori based app to cater to the role of EWM clerk to support Advanced Shipping and Receiving process - support for both EWM and IM Warehouses
- Overview of multiple (un)loading points of different freight orders, indicate whether a vehicle arrives at or departs from a door
- Indicate the staging area, staging area group, staging bay and loading of the goods on stop level
- Navigation to Load or Unload app for details and actions
- Support for wave creation and Outbound “streaming” process - ability to start loading parts of a delivery even when not all pick-and-pack tasks are complete



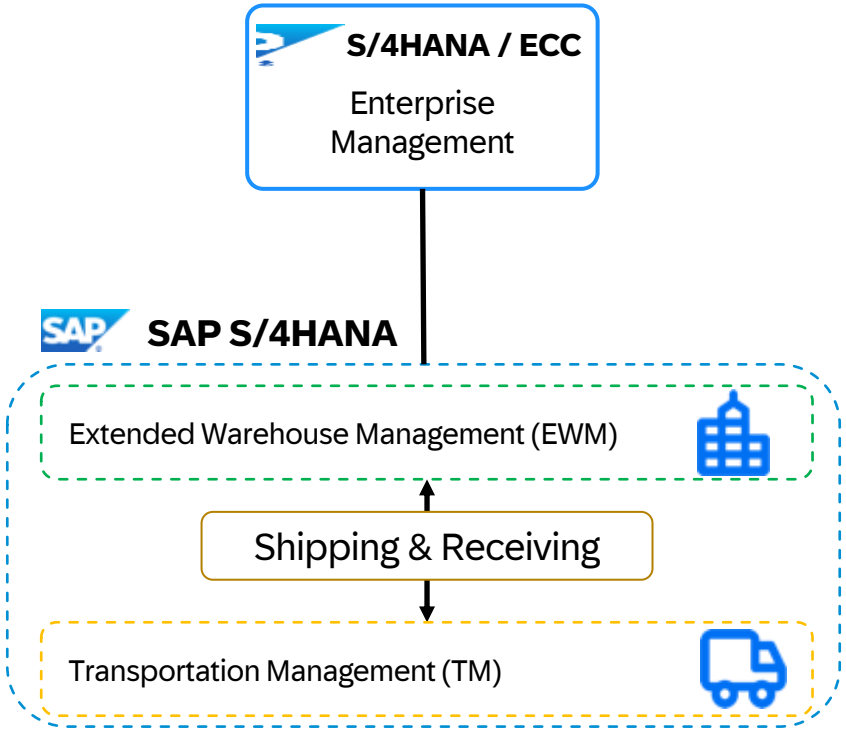
Advanced Shipping and Receiving Cockpit

Supply Chain: Advanced Warehousing
Decentral advanced shipping & receiving

Advanced Warehousing | Advanced Transportation | 2023 FPS0+1

Adv. Shipping and Receiving in Decentral WM

- Enable Advanced Shipping and Returns process in the Decentralized SAP Extended Warehouse Management (SAP EWM) with local Transportation management capabilities
- Execute transportation logistics independently in the decentralized EWM and TM system once the deliveries have been transferred from the enterprise management system.
- Enablement of outbound delivery process leveraging the Freight Order and catering to both EWM-managed and IM-managed storage locations.
- Simplified communication between the components by leveraging the harmonized data model
- Out of box integration to to SAP S/4HANA (or ECC Ehp7+) Enterprise Management environment

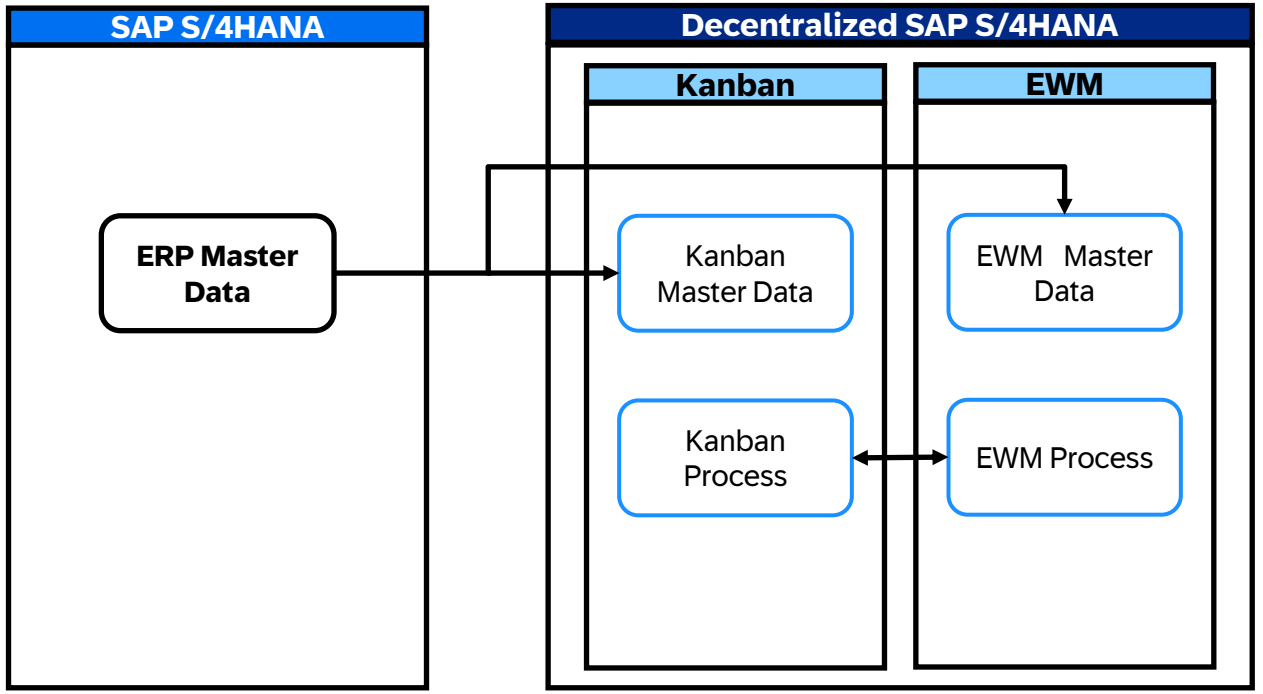


Supply Chain: Advanced Warehousing
Decentral EWM integration with kanban

Advanced Warehousing

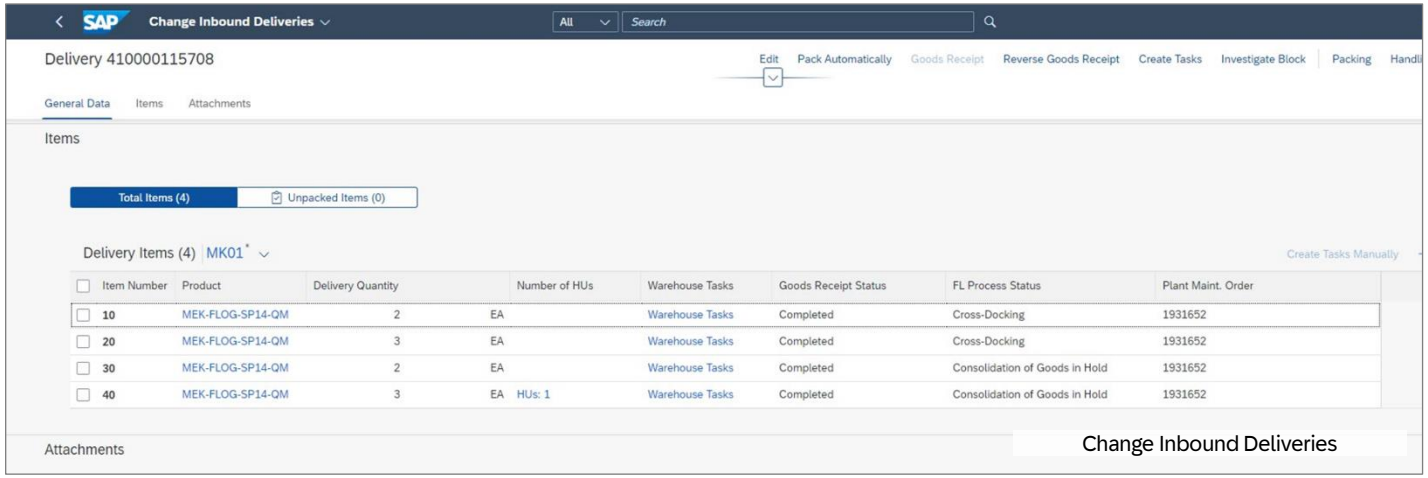
2023 FPS2

- Simplified KANBAN framework without deliveries for decentralized Extended Warehouse Management (EWM) in SAP S/4HANA.
- Kanban to trigger replenishment requests from your warehouse and create warehouse tasks to move the products from a source storage location managed by decentralized EWM to a production supply area (PSA).
- Easy replication of data incl Kanban control cycle and Kanban event to the decentral EWM.
- Complete the replenishment by creating and confirming warehouse tasks from these warehouse requests.
- Limited to internal replenishment only.



Supply Chain: Warehousing
Field logistics cross docking

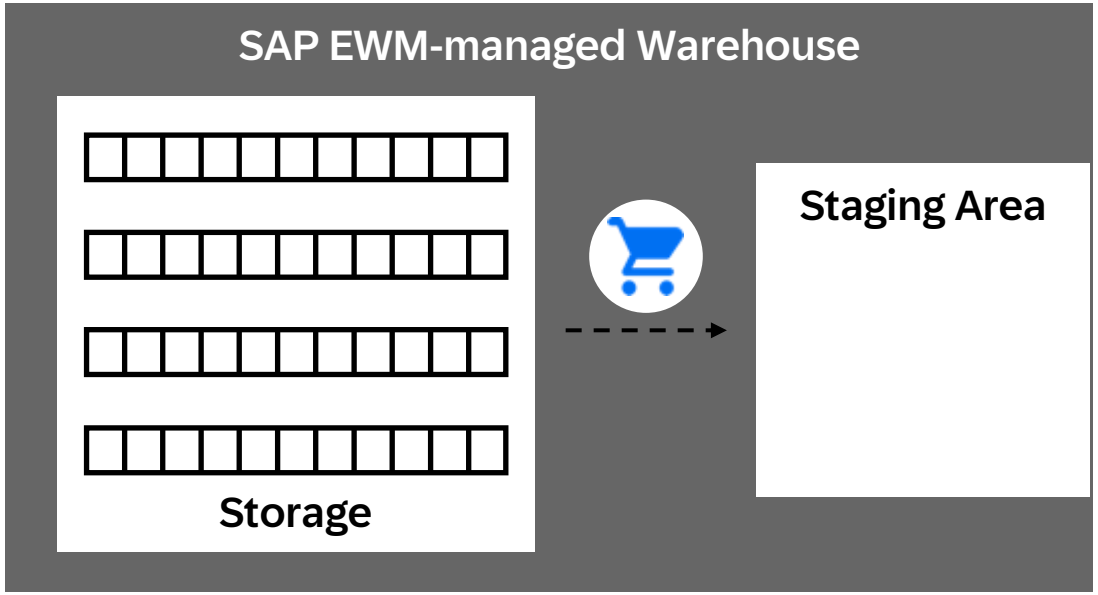
- Reduce stockholding costs by reducing the time in storage in the warehouse
- Minimize unnecessary load transfer activities in the warehouse
- Support cross-docking in an intermediate warehouse if a vendor sends goods through an intermediate warehouse to a plant
- Support consolidating goods in an intermediate warehouse in case different vendors send goods at different dates through an intermediate warehouse to a plant
- Support for nested handling-units in cross docking
- Integrate supply and returns processing with plant maintenance, materials management, procurement, warehouse management at base, and logistics



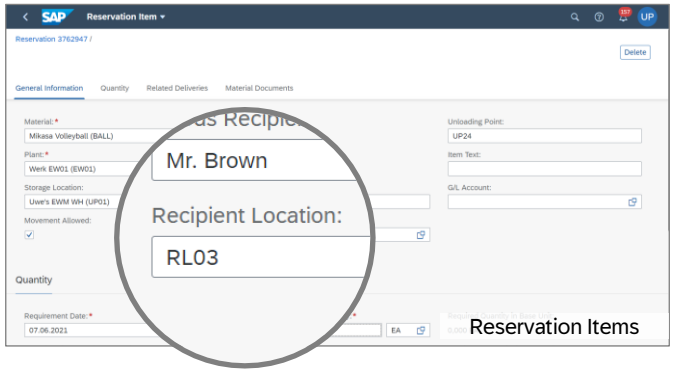
Change Inbound Deliveries

Supply Chain: Warehousing
Integration with Asset Management (Plant Maintenance)

Maintenance Order / Manual Reservation

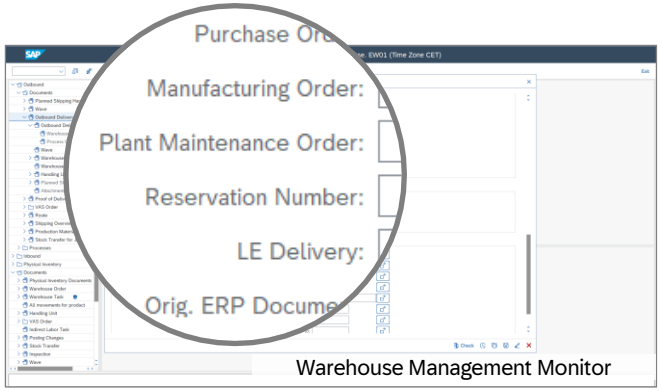


Maintenance operations using staged spare parts



Run enterprise asset management operations that involve EWM-stored spare parts seamlessly

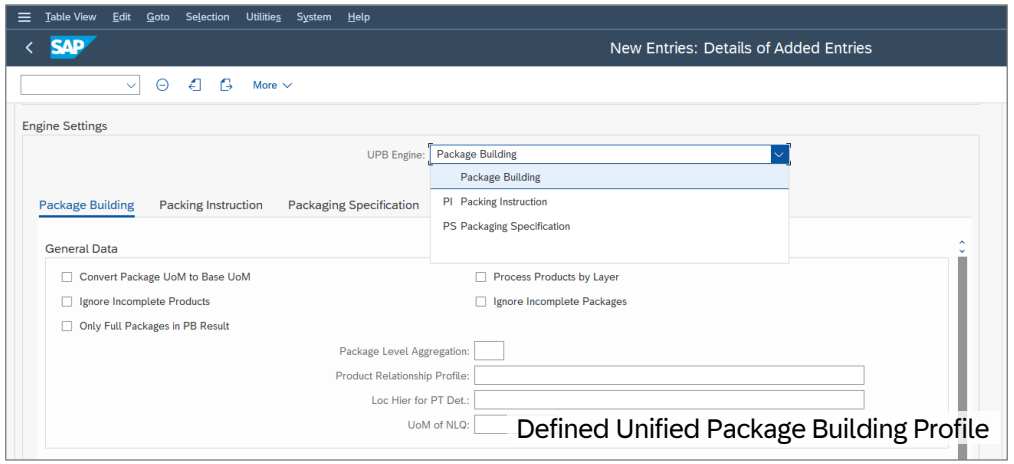
- Staging based on **maintenance order** / manual **reservation**
- **Recipient location** to determine correct staging area
- Adaption of **Warehouse Management Monitor**
- **Unplanned goods issue** with reference to PM order



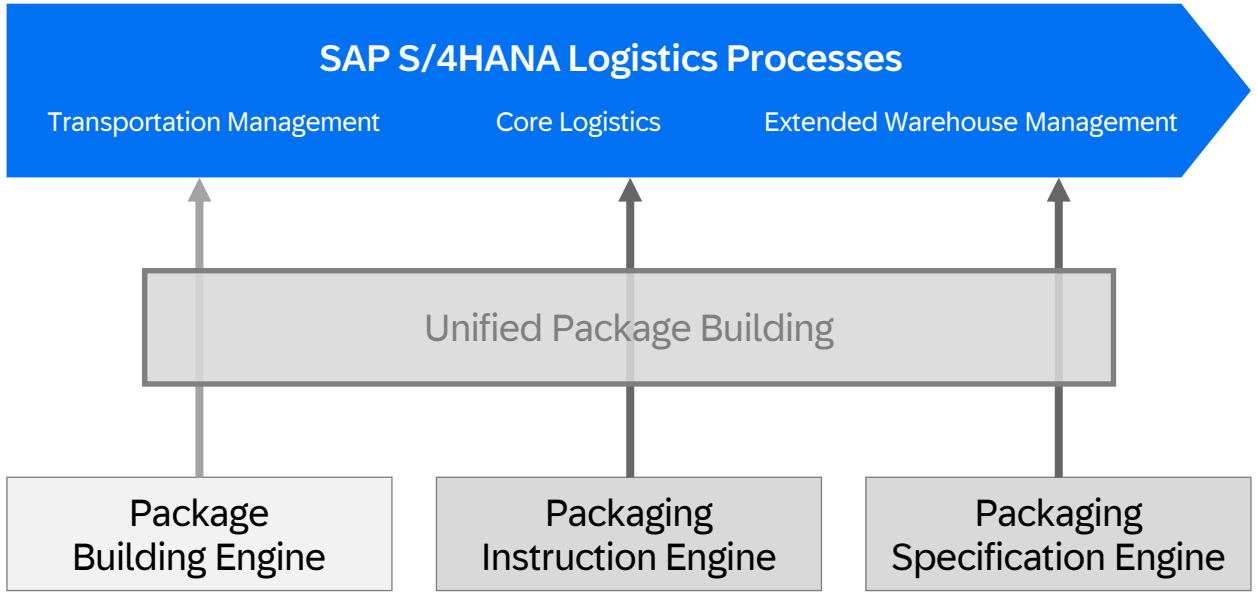
Supply Chain: Warehousing
Unified Package Builder

Warehousing

- Build packages according to different available **packaging master data and engines**
- Use existing packaging settings **more flexibly** in a broader range of business processes
- Leverage the **optimization capabilities** of Package Builder Optimizer in additional scenarios
- Create related **business documents** on the fly via Unified Package Builder



Defined Unified Package Building Profile



Processes consuming UPB in 2023 release

SAP S/4HANA Transportation Management

- Freight unit creation: for e.g sales orders/forwarding orders, based on capacity documents

SAP S/4HANA Extended Warehouse Management

- Packing in outbound delivery process/ posting change/stock transfer, RF receiving from production, deconsolidation and repacking in inbound deliveries

SAP S/4HANA Logistics General

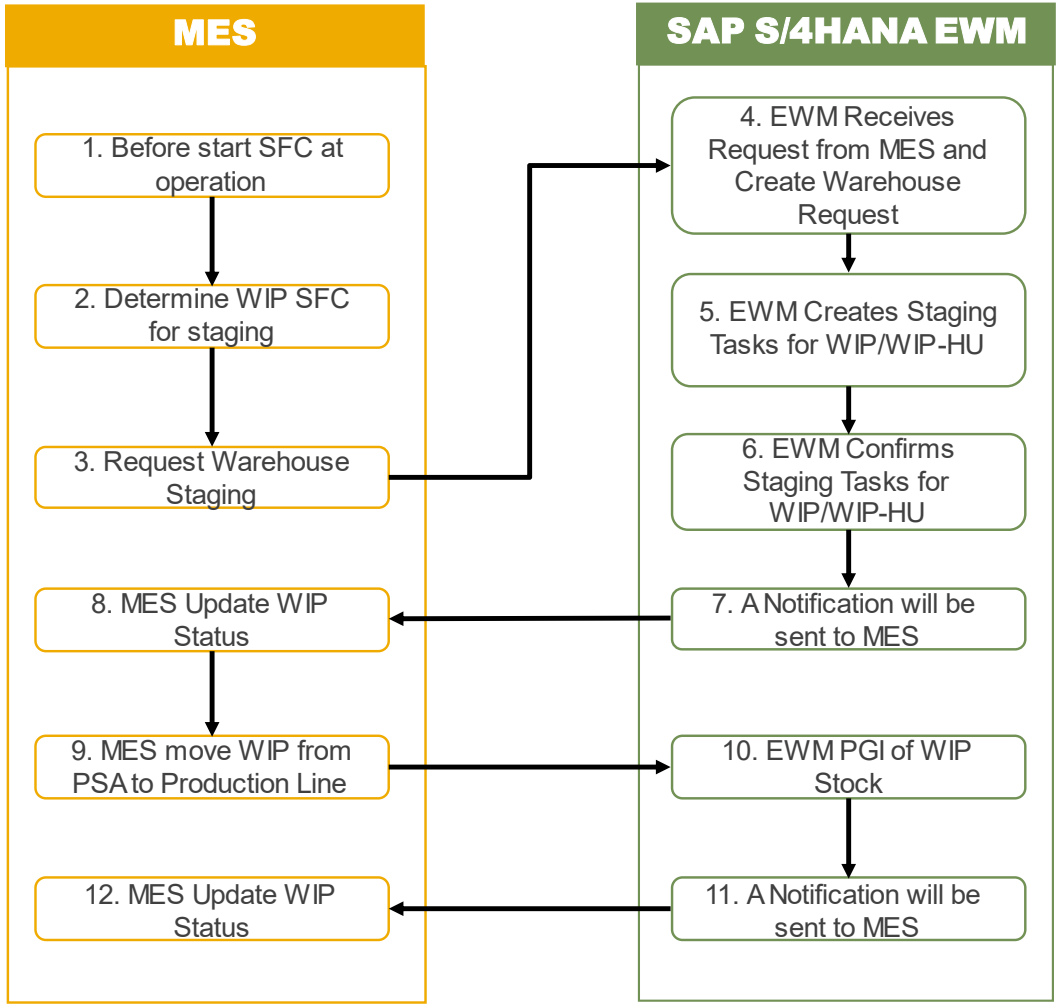
- Packing in deliveries - outbound/inbound, discrete/repetitive manufacturing, handling units from stock

Supply Chain: Advanced Warehousing

Work in progress management with manufacturing execution system

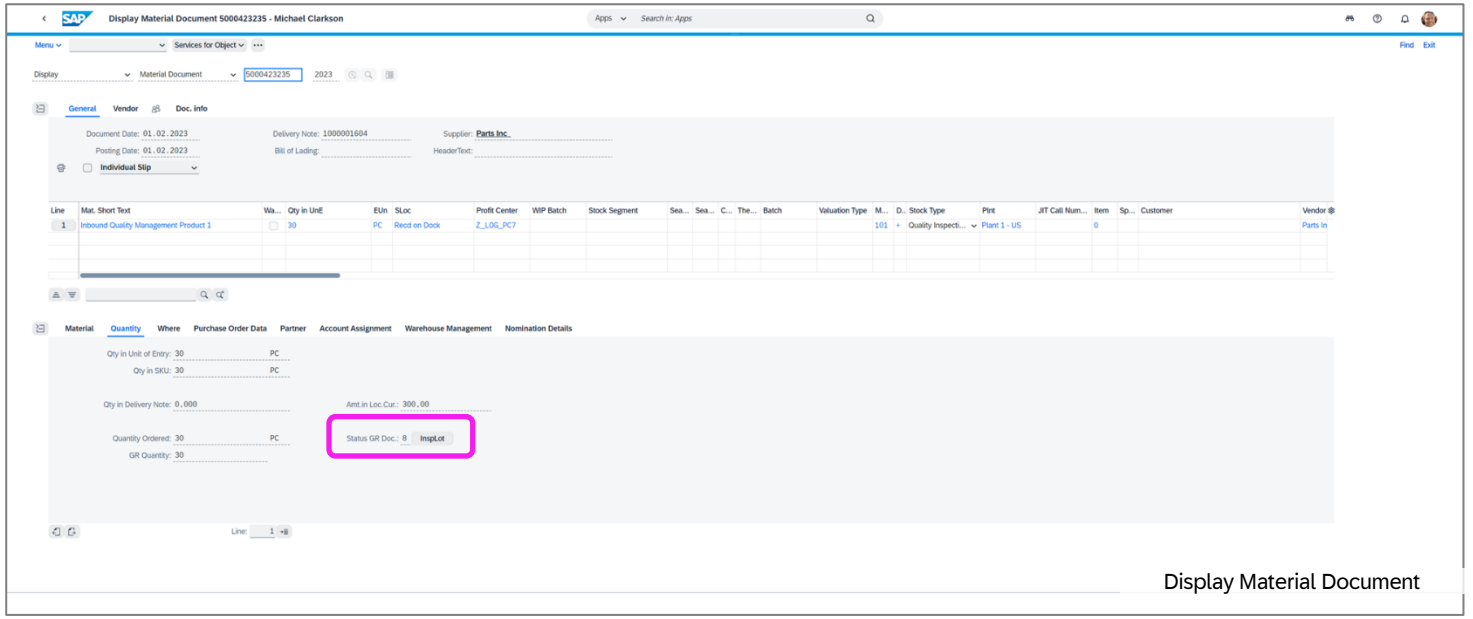
Advanced Warehousing | Extended Warehouse Management

- Increased efficiency and transparency in Work in Progress (WIP) Management with the integration between SAP S/4HANA EWM and Manufacturing Execution Systems like SAP Digital Manufacturing Cloud
- Production advancement of the WIP with or without a container to the warehouse for temporary storage
- Ability for production to request staging of WIP from the warehouse to the production work center according to their own requirements, such as date and time or allowed capacity in the production supply area
- Recording of key-production information, such as shop floor control (SFC) or WIP number, on each piece of WIP stock
- Provision of accurate stock details of WIP in a warehouse
- Provision of the receiving or staging process status of WIP
- Increased accuracy of WIP Monitoring by manage WIP as stock on SFC level



Supply Chain: Warehousing
Quality inspection with synchronous goods receipt

- Improve integration for materials in quality inspection and accomplish massive simplification compared to inbound delivery related processes
- Quality inspection with synchronous goods receipt postings on an S/4HANA managed storage location
- Creation of inspection lot when a goods receipt is posted for a product that's inspection-relevant
- Enable synchronous goods receipt postings for materials requiring quality inspection for goods receipt from production as well as from external sources
- Goods receipt processing in SAP EWM that considers settings for certificate processing in QM at goods receipt (for example, requirement for confirmation of a certificate at goods receipt)

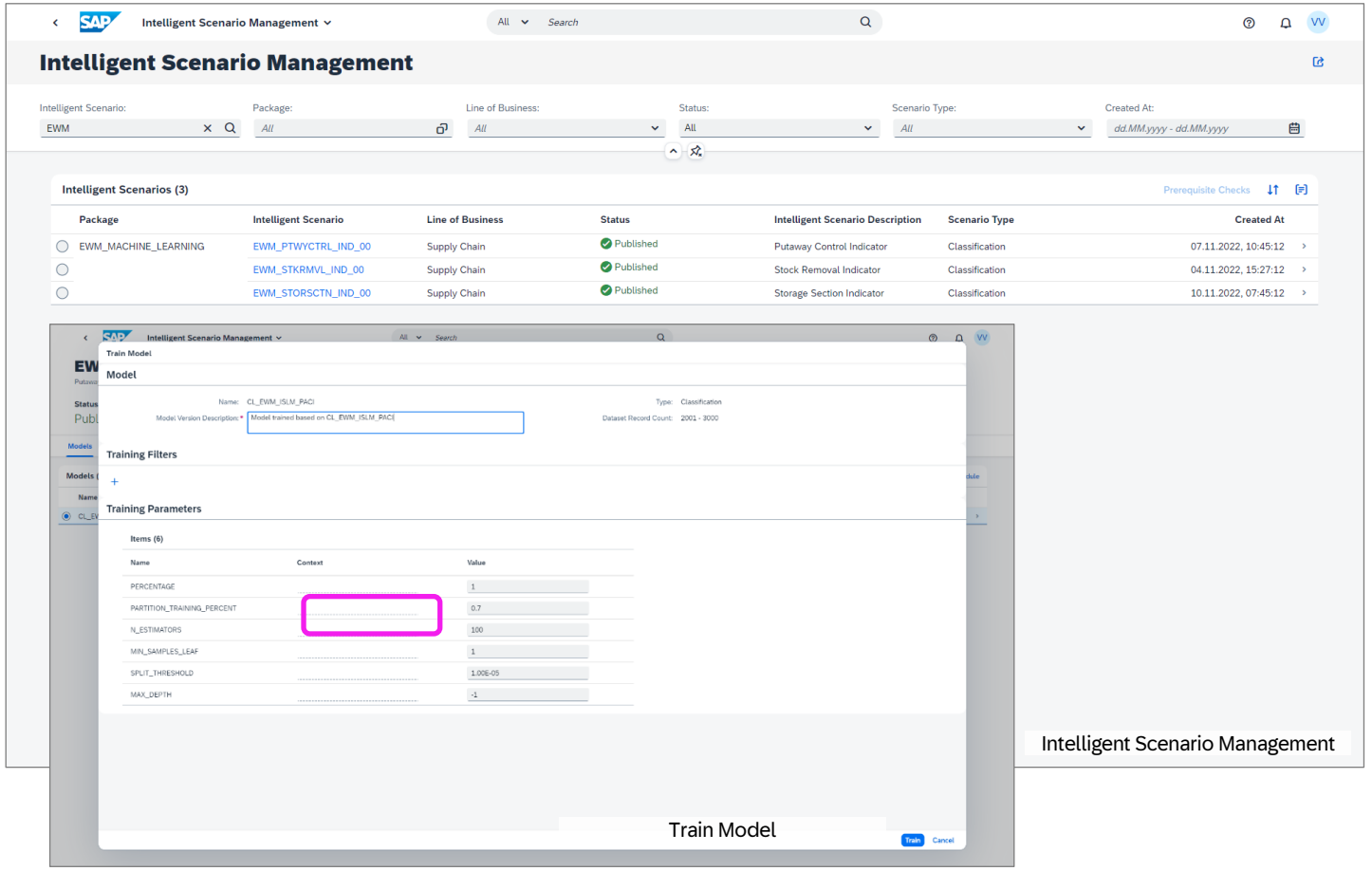


Display Material Document

Supply Chain: Advanced Warehousing
Slotting by machine learning

Advanced Warehousing | Extended Warehouse Management

- Derive slotting rules automatically from the warehouse setup and product master
- Leverage machine learning algorithm and generate a statistics-based model from representative input data
- Leverage the machine learning to and determine the three indicators of storage concept for your product. - Putaway control indicator, Stock removal control indicator and Storage section indicator
- Reduce the effort of initial setup, with lower implementation effort to derive slotting rules automatically from the warehouse setup and product master



Intelligent Scenario Management

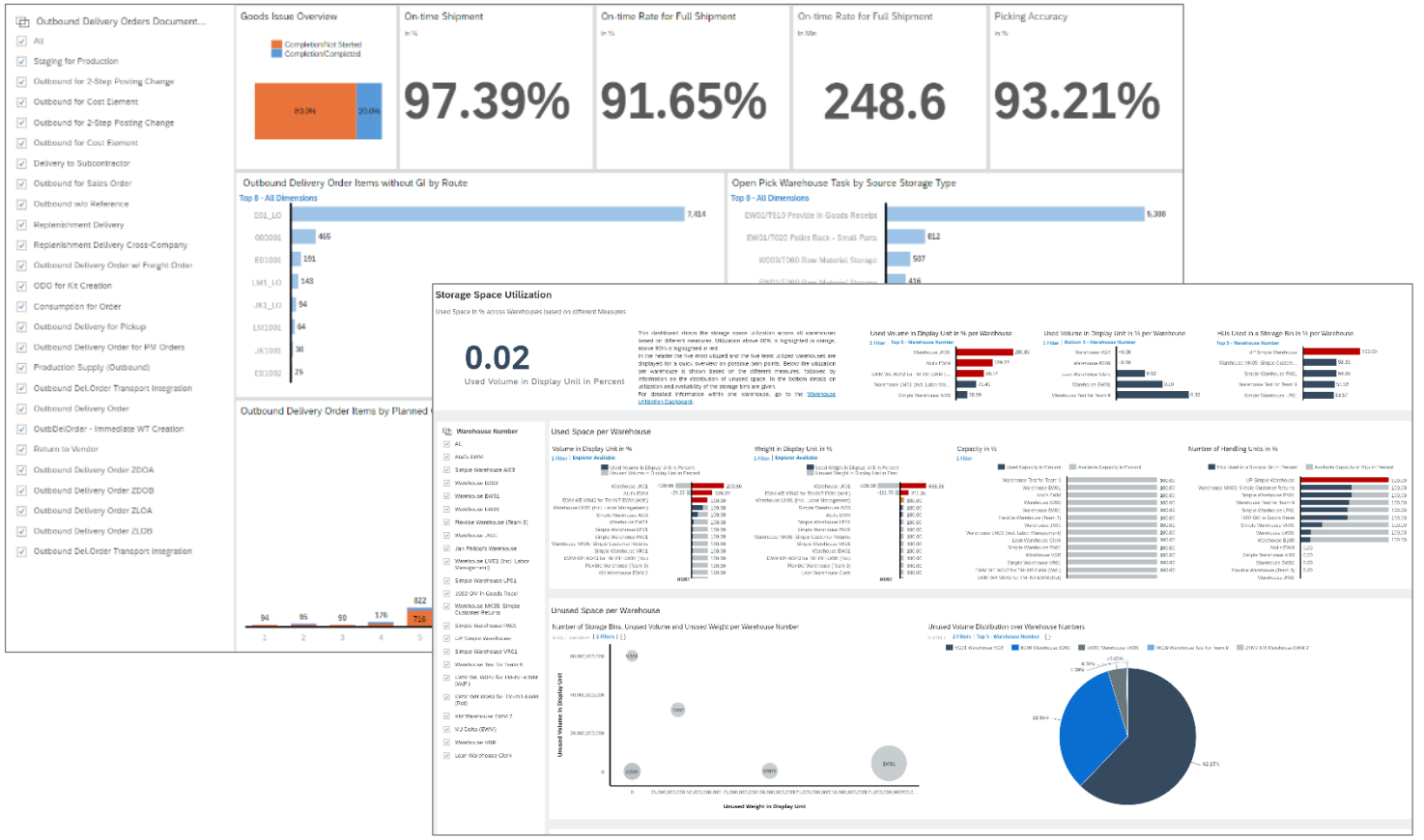
Train Model

Supply Chain: Warehousing

Warehousing | SAP Analytics Cloud

SAP Analytics Cloud (SAC) business content for warehouse management

- Drive efficiency through insights for the warehouse clerks in monitoring the inbound/outbound situations in warehouse for their daily work
- Availability of SAP Analytics Cloud (SAC) business content for EWM
- Dashboard to monitor the inbound/outbound situation in the warehouse
- Inbound processing related content includes Goods Receipt Overview, On Time Receipt, On Time Receipt in Full, Receiving Duration per Inbound Delivery Item, Putaway Accuracy
- Outbound processing related content includes Goods Issue Overview, On Time Shipment, On time shipment in full, Internal order cycle time per ODO item, pick accuracy
- Flexibility to download the SAC content and adjust the KPIs based on specific requirements



Supply Chain: Transportation Management
Supporting all levels of complexity

Modular Cloud LoB Solutions

- additional license
- additional installation

Leverage Decentral SAP S/4HANA TM for

- Transportation hub approach
- Independent operations, versioning, upgrades

Enhanced Transportation Model through Hub approach

SAP S/4HANA LoB Apps

- additional license

Advanced Transportation Management

- Strategic Freight Management
- Service Order Management
- Combined Inbound / Stock Transfer / Outbound Transportation Process
- Driver Management
- Advanced Charge Calculation
- Carrier / Service Billing
- Planning:
  - Order and Delivery Based Planning Process
  - Transportation Cockpit
  - Vehicle Scheduling Routing Optimization
- Gantt Chart
- Transportation Proposal
- Automated Carrier Selection / Carrier Ranking List
- Load Consolidation / Load Planning (3D Visualization)
- Package Building
- Professional Tendering Management
- EWM Integration (via services)
- Integration with
  - Event Management
  - Global Trade Service
  - Descartes

Optimize Transportation Processes

SAP S/4HANA Enterprise Management

Transportation Management

- Main Parts of the Transportation Network
- Freight Agreements
- Charge Management
- Separated Inbound / Outbound Freight Order / Booking Management (Delivery based)
- Basic Transportation Planning (POWLs / manual Freight Unit Selection)
- Transportation Execution without Event Management
- Freight Settlement Management
- Basic Agency Billing
- Direct Tendering for Service Agents (Subcontracting)
- Dangerous Goods Management
- TM Output Management
- TM Analytics
- ASR-based basic integration with embedde EWM

Shipping Transparency and Control

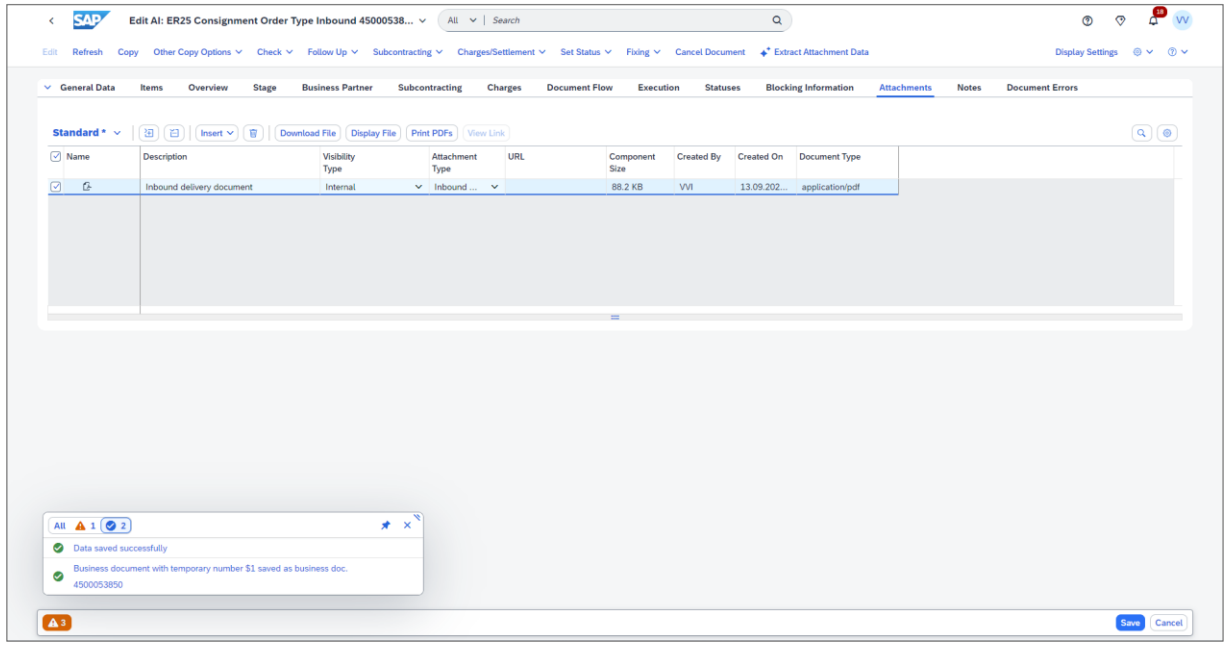
Supply Chain: Advanced Transportation Management

Creation of inbound cargo documents based on the shipment document

2023
FPS2

AI-assisted
creation of inbound cargo docs

- Improve operational efficiency and saving valuable time by automating the checking of delivery notes by AI technology
- Expedite the process of unloading freight by significantly reducing manual checks at the gate
- Flag exceptions in freight orders by enabling clerks in the back office to focus on handling the exceptions
- Significant reduction in the hours spent on manual checks and waiting times for trucks



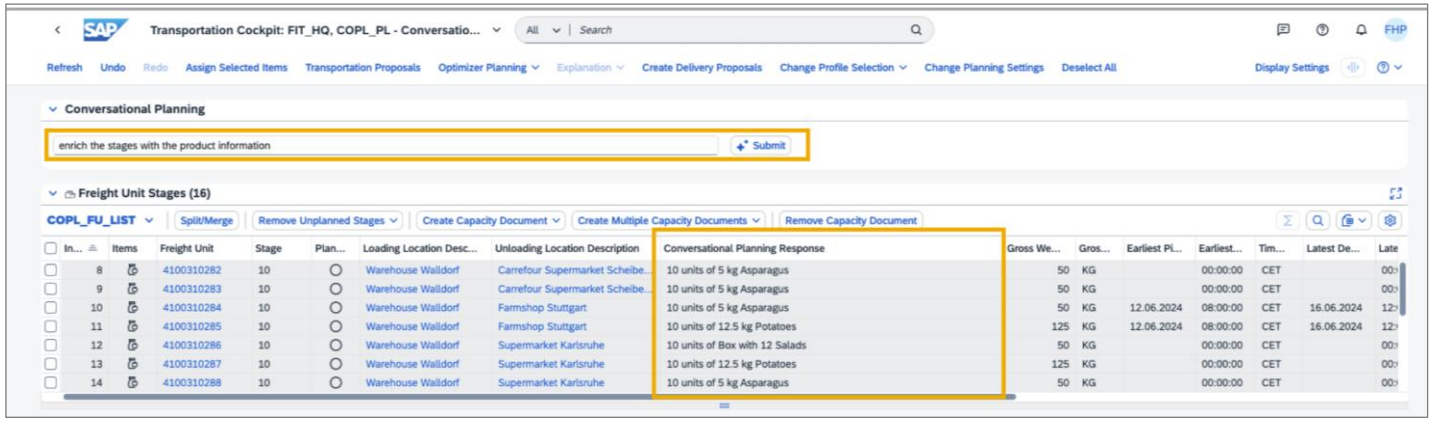
Supply Chain: Advanced Transportation Management

Conversational planning in the transportation cockpit

Advanced Transportation | Adv. Transportation Management | 2023 FPS2

AI-assisted planning in Transportation cockpit

- Enhance efficiency in transportation planning by enabling the end user to carry out various planning operations in the transportation cockpit using natural language.
- Conversational planner enables planning of freight units on freight orders, trucks.
- Natural language can be used to plan trucks on freight orders
- Gain additional insights & save time by leveraging the AI based response on queries on various lists & hierarchies like freight unit, road freight order and truck resource lists



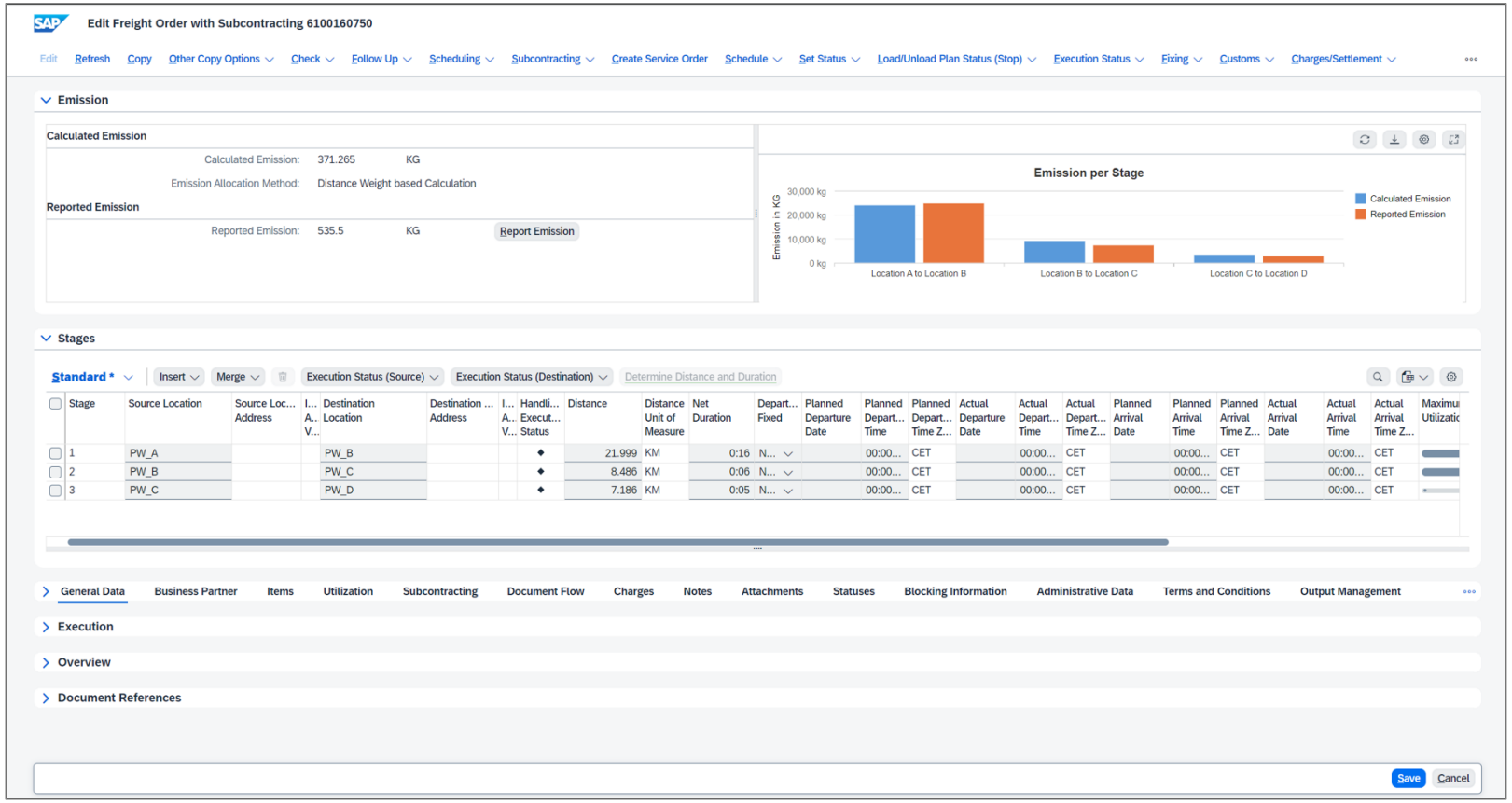
Supply Chain: Advanced Transportation Management

Greenhouse gas emissions

Advanced Transportation | Adv. Transportation Management | 2023 FPS0+1

Greenhouse Gas Emission

- Enhanced support for sustainability through enabling of greenhouse gas calculations
- Emission parameters can be set based on vehicle types
- Emissions for road freight orders are calculated during manual planning and automated vehicle scheduling and resourcing.
- Intuitive reporting through freight orders and cockpit

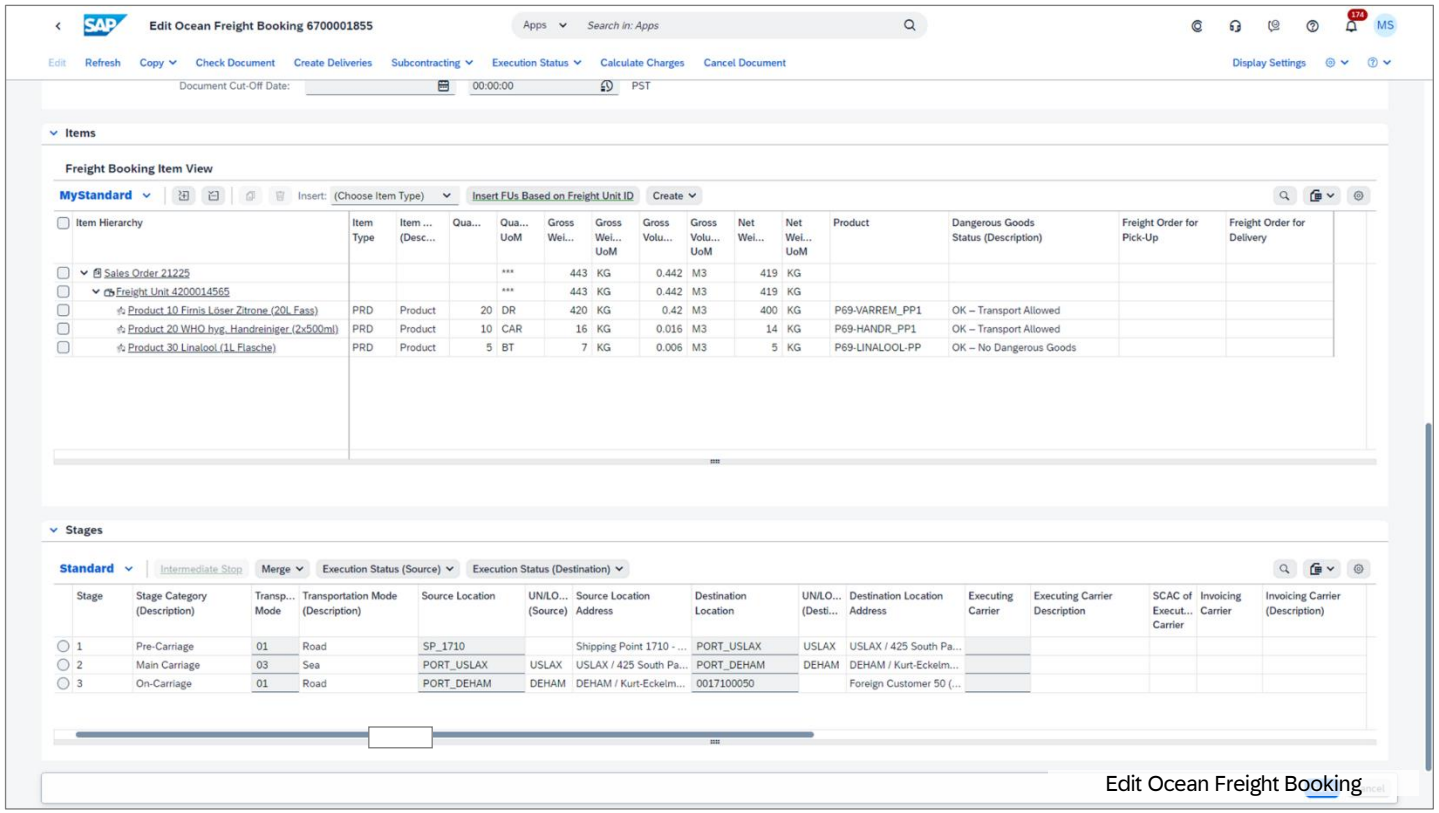


Supply Chain: Advanced Transportation Management

Logistics Integration with Product Compliance

Advanced Transportation | Adv. Transportation Management

- Save time and reduce risks through the ability to prevent planning of noncompliant transportation demands
- Logistics Integration with Product Compliance - Dangerous goods checks in rail, ocean and air cargo freight bookings
- Checking of all compliance-relevant products to determine whether rail, ocean or air cargo transport processing is allowed as it pertains to dangerous goods regulations
- Prevent execution of transports containing noncompliant products
- Blocking of transportation demand and freight orders/bookings if no compliant transport is possible

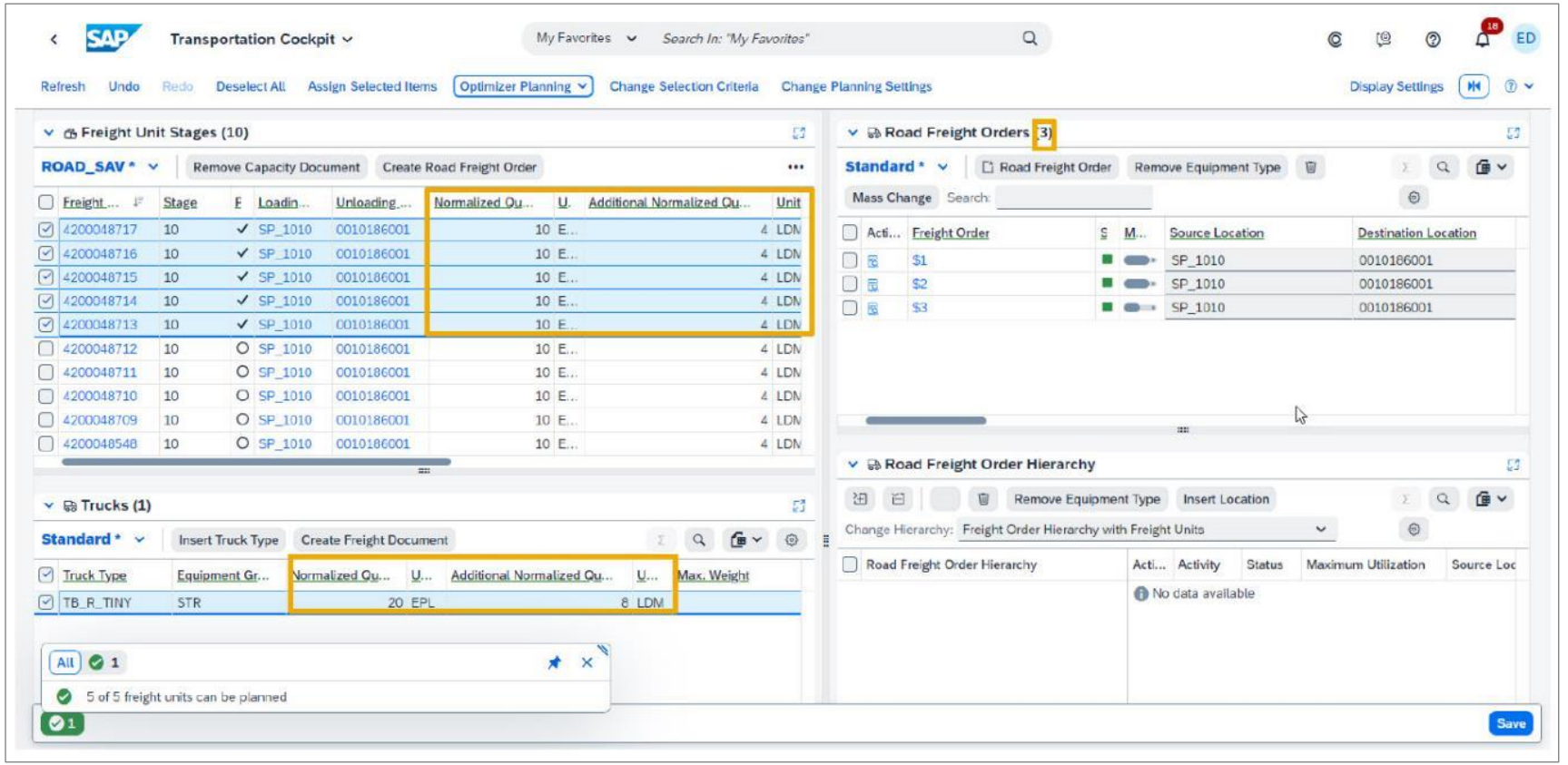


Supply Chain: Advanced Transportation Management

Enhanced charge calculation capabilities

Advanced Transportation | Adv. Transportation Management | 2023 FPS0+1

- Enhanced charge calculation capabilities through improved integration and execution processes
- Charge calculation capabilities in SAP S.4HANA Transportation Management are enhanced by enabling normalized quantity and additional normalized quantity in charge calculation & subcontracting
- Normalized quantity indicates the consumption of e.g. loading space for a transportation resource
- The additional normalized quantity can (e.g. be used to model loading meters)

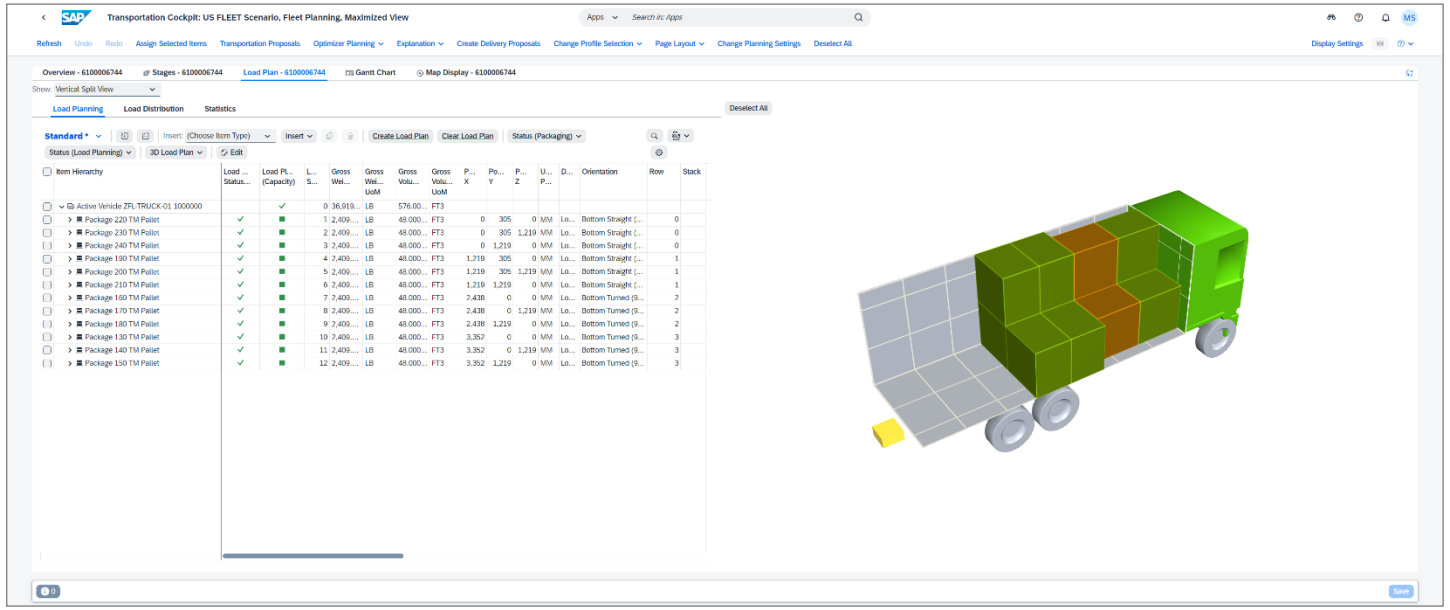


Supply Chain: Advanced Transportation Management

Improved package building & load planning

Advanced Transportation | Adv. Transportation Management | 2023 FPS0+1

- Minimize the number of pallets while considering constraints such as package attribute, product stacking rules, customer specific requirements, height limits
- Leverage new Consistency Checks for Package Building Constraints
- **Enhancements** for **package building** including support for cylindric product shapes in package building optimizers
- Maximize utilization of containers by considering various constraints such as dimensions, vehicle attributes, stacking rules, loading sequence, flexible split deck
- **Enhanced optimization** approaches for automatic load planning incl grid-based Row-stack for homogeneous loads and Free positioning for heterogeneous goods
- Accomplish Manual Load Planning and gain flexibility by creating Multiple Load Plan PDF Files in Batch Run



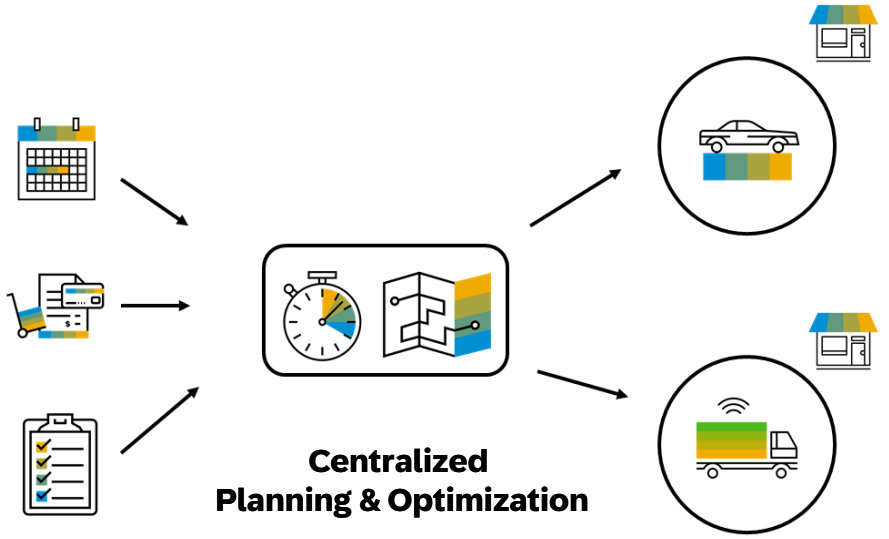
Supply Chain: Transportation Management
SAP Direct Delivery

Delivery and Transportation | CP: Direct Distribution

Last mile delivery

Provides planning and optimization capabilities for trucks, routes and the building of packages:

- Considers service activities together with logistics tour planning
- Builds optimal route thanks to tour optimization engine
- Allows for fully flexible tour planning or fixed route planning



First Last Mile Delivery scenario supported:

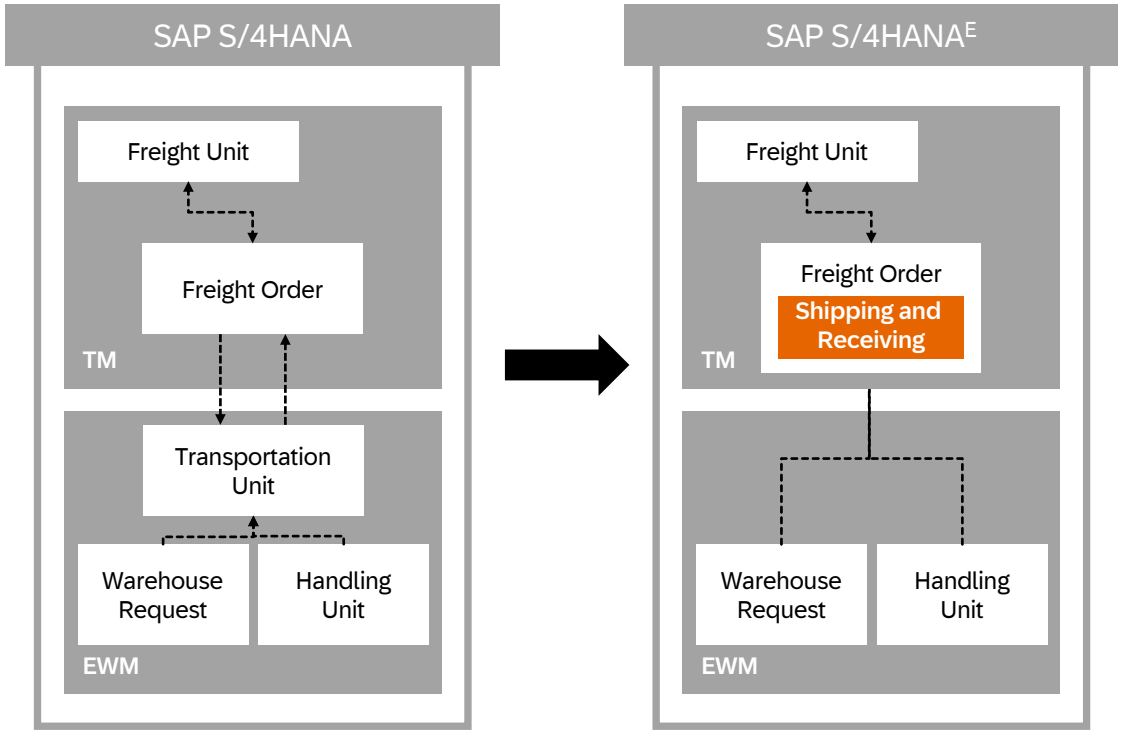
- Delivery driver scenario in which a personal truck fleet is used to deliver pre-ordered goods to stores, vending machines, and other points of sale
- Supports combination resources, specific loading patterns as well as vehicle/combination incompatibility for e.g., side- versus backloading locations

Supply Chain: Advanced Transportation Management

Warehousing | Delivery and Transportation | Advanced Transportation

Advanced Shipping and Receiving (ASR)

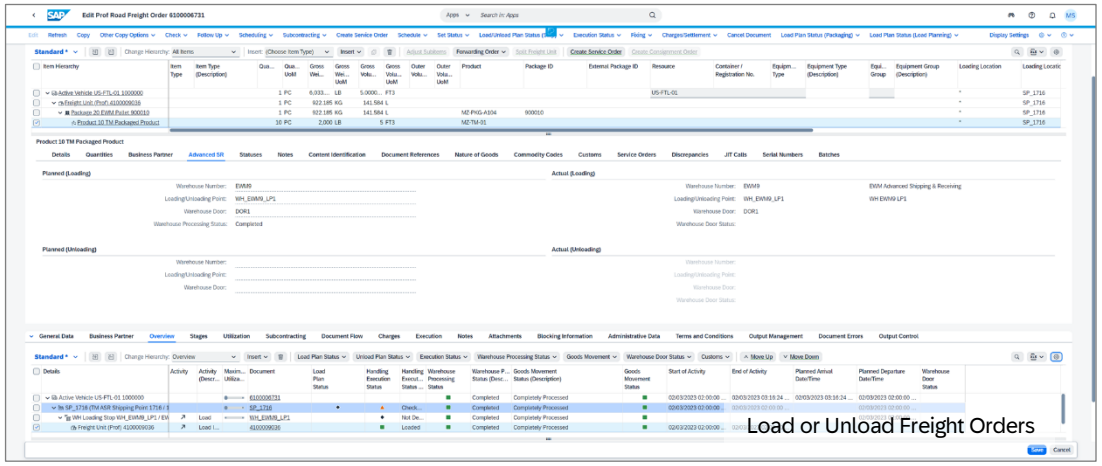
Integration between SAP S/4HANA EWM & SAP S/4HANA TM



Integration based on **Transportation Unit**

Integration based on **Freight Order**

[E] EWM and TM embedded in one SAP S/4HANA system.



Load or Unload Freight Orders

Basic integration approach for EWM and TM

- **Improved TCO** through reduction of object redundancy (Integration without Transportation Unit object)
- **Enhanced scalability** enabling **high volume** retail and e-commerce scenarios
- **Holistic process transparency and steering** through enhanced freight order UI with warehousing fields and actions
- **Adapted warehouse transactions** (new/extended RF, GUI and SAP Fiori transactions) for a seamless process flow
- **New TM data model and objects** (consignment and loading / unloading point) to bundle inbound and outbound operations (e.g., on a single truck) $
- Increased flexibility with new scenarios like **multi-warehouse** or **loading and unloading from IM- or EWM-managed** storage locations $

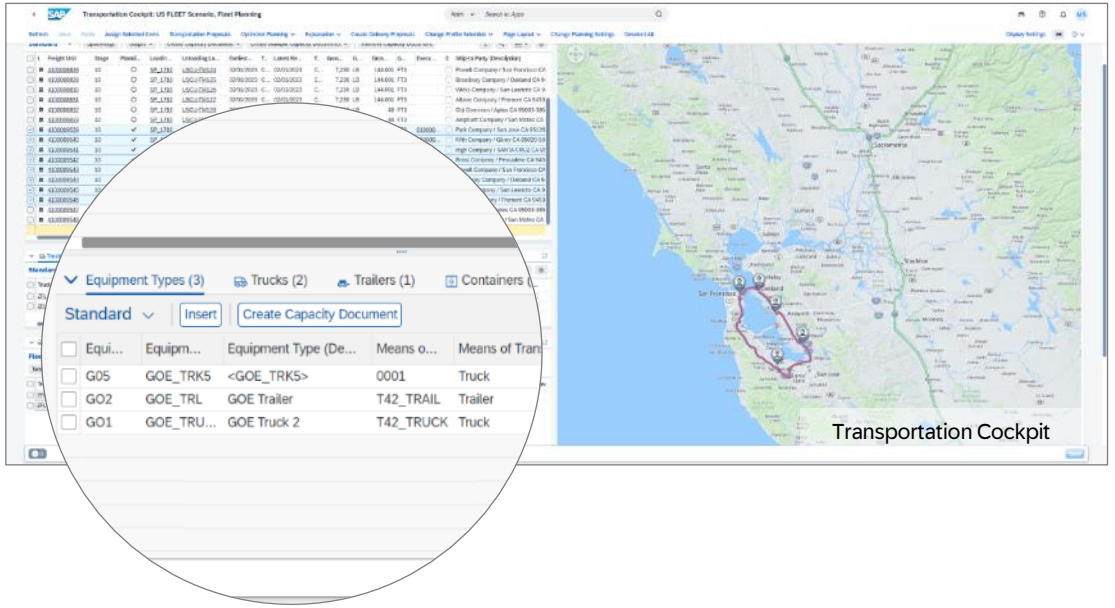
Supply Chain: Advanced Transportation Management

Advanced Transportation | Adv. Transportation Management

Transportation planning based on equipment type

- Leverage vehicle types and transportation unit types for transportation planning:
  - Manual planning in Transportation Cockpit
  - Manual planning with Gantt Charts
  - Load Planning and Consolidation

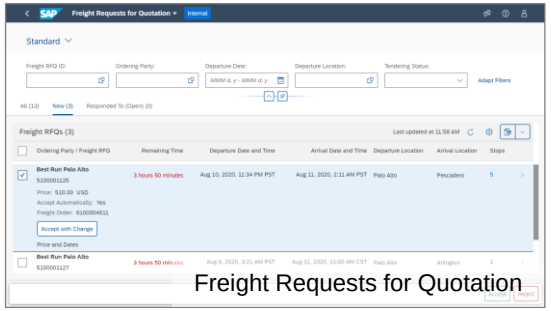
→ Most natural approach to planning in the context of subcontracting.

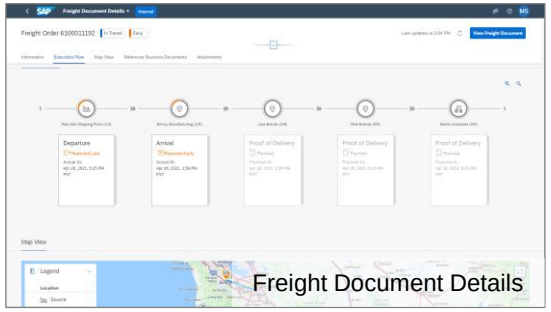


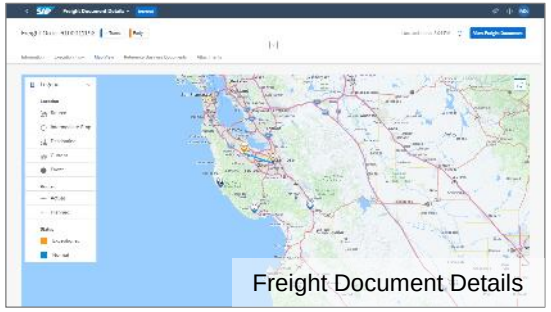
Planning based on Resource

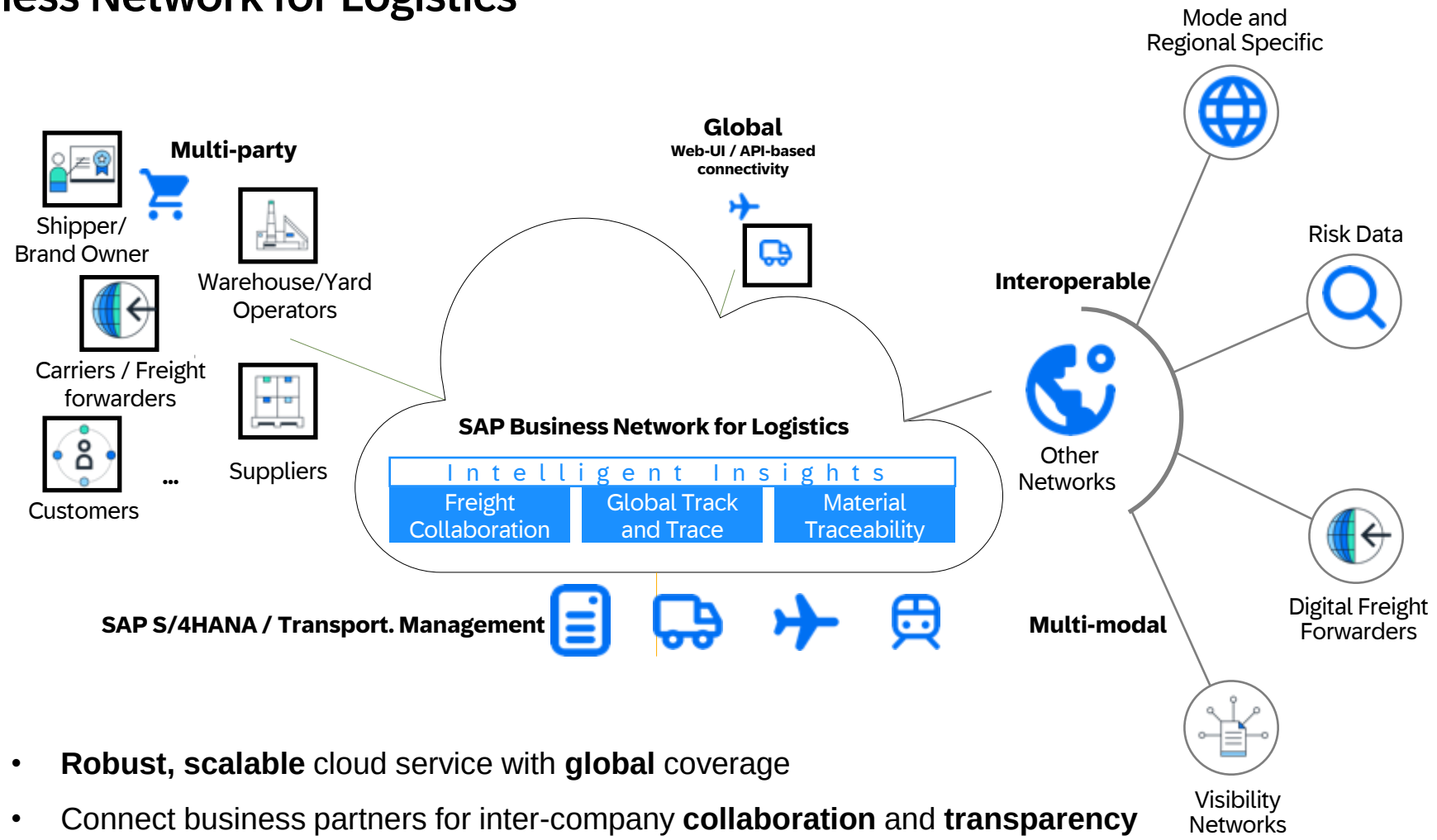
Planning based on Equipment Type

Transportation Management
Integration into SAP Business Network for Logistics


Freight Requests for Quotation


Freight Document Details


Freight Document Details



- **Robust, scalable** cloud service with **global** coverage
- Connect business partners for inter-company **collaboration** and **transparency**
- **Standardized** services for logistics collaboration and insights

Supply Chain: Order Promising
Supporting all levels of complexity

Modular Cloud LoB Solutions

additional license

additional installation

Integrate with Global ATP (SAP SCM)

- Capable to promise and complex algorithms like location & product substitutions, multi-level ATP

SAP S/4HANA LoB Apps

additional license

Advanced Available to Promise

- Backorder processing with intuitive requirement classification
- Last minute confirmation changes via Release for Delivery App
- Product allocation check for both sales and capacity constraints
- Intelligent and automated selection of best confirmation considering alternative plants and substitutable materials
- Review Availability Check Results for Sales Orders
- Protect supply for key customers during shortages
- Advanced transportation scheduling (integration SAP TM) [R]
- Supply creation-based confirmation (integration with production) [R]

Order Promising Optimization

SAP S/4HANA Enterprise Management

Available to Promise

- Mass enabled fast availability check
- Basic allocation check
- Manual material determination
- Semi-manual plant substitution
- Material-/plant-based backorder processing for sales orders
- Simple transportation and shipment scheduling

Basic Order Promising

[R]This is the current state of planning and may be changed by SAP at any time without notice.

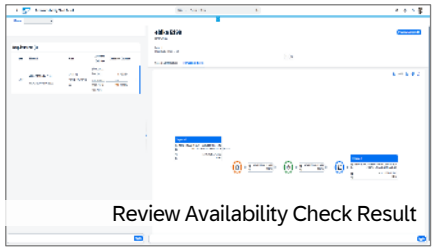
Supply Chain: Advanced Available-to-Promise overview (1/2)

Advanced Order Promising

Product Availability Check (PAC)

Promise what and when you can deliver accurately in real-time.

- Time phased mass enabled check (parallelization)
- Supply consideration: current and future supply elements
- Demand consideration: sales orders (SO) & stock transport orders (STO)
- Checks on plants, distribution centers, sub-locations and batch level
- Supports Product Allocations (PAL) and Alternative Based Confirmations (ABC)
- Review Availability Check Result App
- oData APIs for Product Availability
- Support Scheduling Agreements with delivery schedules (call-offs)

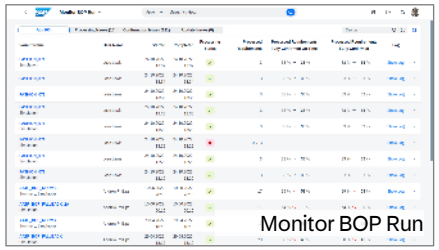


Review Availability Check Result

Back Order Processing (BOP)

Order confirmation based on business priorities and changes in the demand or supply situation.

- BOP setup- requirement segmentation and classification Win, Gain/Improve, Redistribute, Fill and Lose
- Easy to use 'select option tool' for configuring BOP segments
- Customizable filter and sorter for BOP segments
- Fiori based BOP Results Monitor
- Automated exception handling with BOP fallback variants
- Supports Product Allocations (PAL), Alternative-Based Confirmations(ABC) and Supply Assignment Run
- Support Scheduling Agreements with delivery schedules (call-offs)



Monitor BOP Run

Product Allocations (PAL)

Prevent single customer from buying the entire available quantity and other requests not being satisfied.

Confirm orders against capacity constrains.

- Simple and flexible Product Allocation setup and maintenance with time dependent assignment to material / plant
- Hierarchical / sequential allocations (Logical 'OR' for PAL constraints)
- Simultaneous multiple allocation checks (Logical 'AND' between PAL constraints)
- Excel download and upload for mass maintenance
- oData APIs for importing / exporting allocation quantities from external systems
- Capacity based Product Allocations
- Easily maintain and extend the characteristic catalogs for PAL

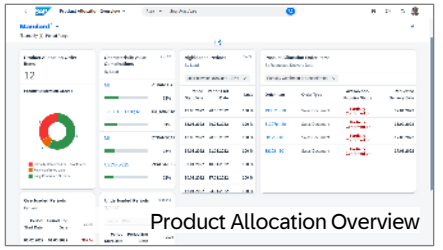
ATP Analytics

Analyze and monitor Product Allocation data to understand the product allocation situation.

After Supply Assignment Run, analyze the Supply and Demand situation to take necessary actions.

In the Product Allocations Overview App.

- Drill down and analyze the product allocation situation for product allocation objects, characteristic value combinations in different periods.
- Drill down into order items and identify all consumed product allocation quantities and the order in which the quantities have been consumed



Product Allocation Overview

Online Order Promising • Mass Order Processing • Manage Business Priorities • Manage Shortages • Supply Assignment • Fast Re-plan

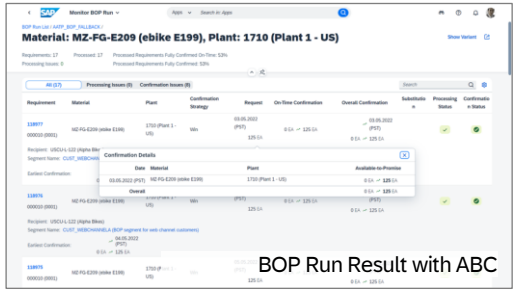
Supply Chain: Advanced Available-to-Promise Overview (2/2)

Advanced Order Promising

Alternative-Based Confirmation (ABC)

Check for all possible alternatives to confirm a requirement when, for example, the availability of the requested material-plant combination is insufficient to confirm the original requirement.

- Trigger during sales order creation and/or Backorder Processing (BOP)
- Dynamic selection of alternative : Best fit vs First fit
- Multiple alternative determination rules (Max-Earlier Confirmation, Full Confirmation, On-Time Confirmation)
- Support manual selection of alternatives
- Supports partial plant substitution, additional hard constraints to limit the number of substitutes and optimize logistics processes



BOP Run Result with ABC

Supply Assignment Run

Ensure an optimal assignment of supply to the open requirements and distribute available supply to the respective sales orders, or stock transport orders.

- Perform Supply Assignment Run for relevant materials in Backorder Processing (BOP)
- Flexibility to consider future supplies within a specified horizon, rules to sort supplies, and option to retain or delete previous assignments.
- Insight to Action tool to evaluate the assignment situation and to enable the user to take manual actions like create/change existing assignments, create outbound deliveries
- In Supply Assignment Overview Apps do flexible and detailed analysis of supply and demand situation for different dimensions and KPIs, in both graphical and tabular formats

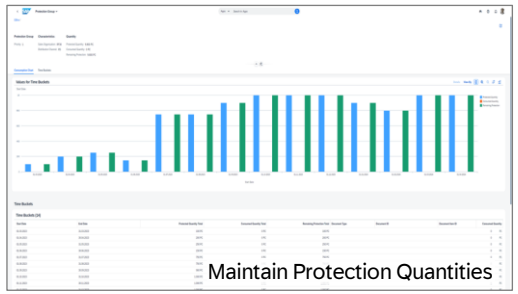
Supply Protection

Helps companies to provide minimum guarantee to priority customers in supply shortage situation.

Protect quantities of a material of a specific plant against other demands.

Supports both horizontal and vertical protection.

- Time period enabled
- Support Scheduling Agreements with delivery schedules (call-offs)
- Support of Planning Level at Plant, Plant/Storage Location or Plant/Pool Segment level
- Option for restricting demands dependent on the remaining protection


Maintain Protection Quantities

Interactive ATP - Release For Delivery

Intuitive and informative fast re-planning.

Impact analysis while confirming changes.

- Visualize constraints imposed by delivery groups
- Visualize the time zone of the delivering plant
- Fiori based interactive changes to sales order confirms amounts before releasing the orders to delivery
- Impact simulation of current ATP situation
- Direct navigation to Sales Order

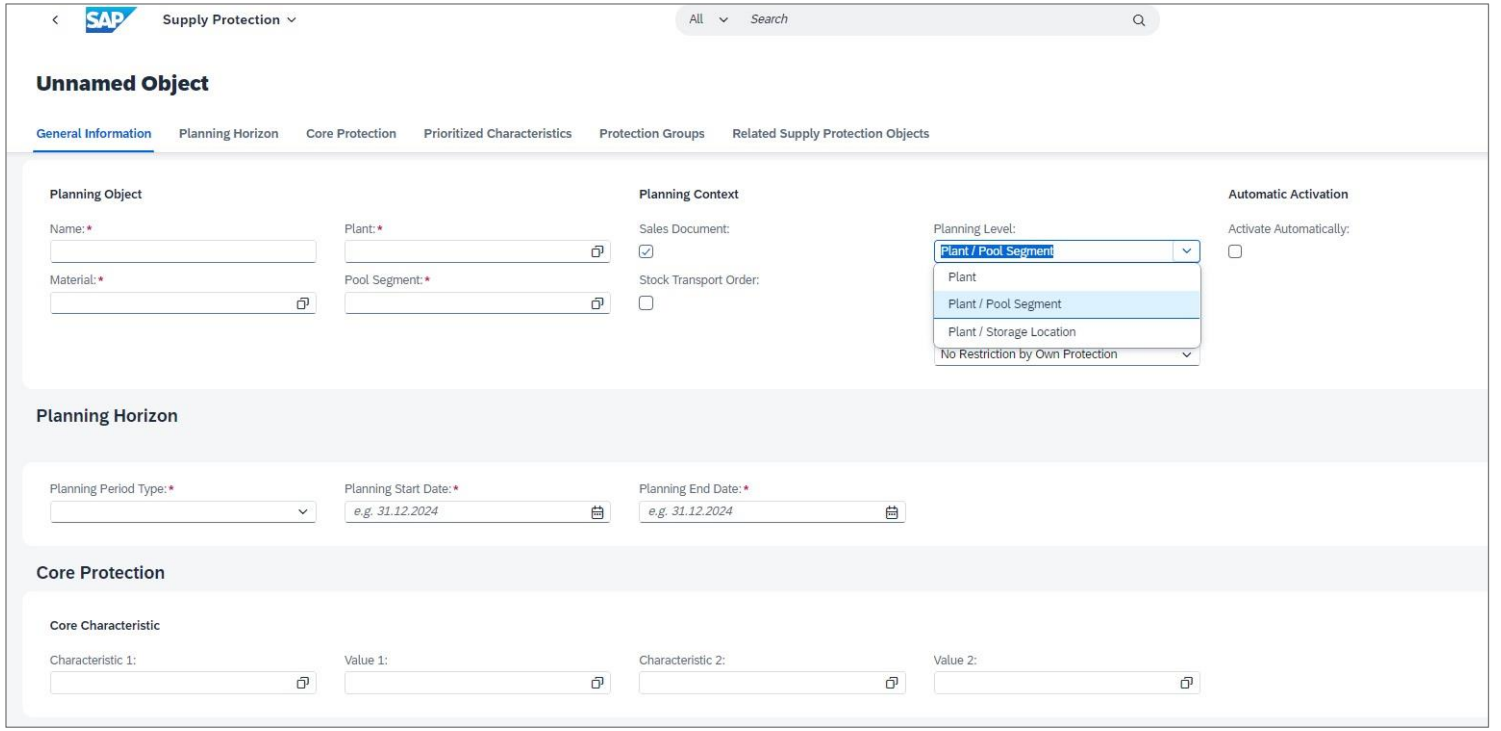
Online Order Promising • Mass Order Processing • Manage Business Priorities • Manage Shortages • Supply Assignment • Fast Re-plan

Supply Chain: Advanced Available-to-Promise
Supply protection enhancements

Advanced Order Promising

2023 FPS2

- Ability to define supply protection at the combination of a material with a plant.
- Increased flexibility to define supply protection at lower planning levels:
  - Plant / Storage Location- relevant demands are supplied only if the demand includes the specific storage location maintained.
  - Plant/Pool segment- relevant demands are met only if the demand includes the specific pool segments defined e.g. like a certain grade quality grade of a product.

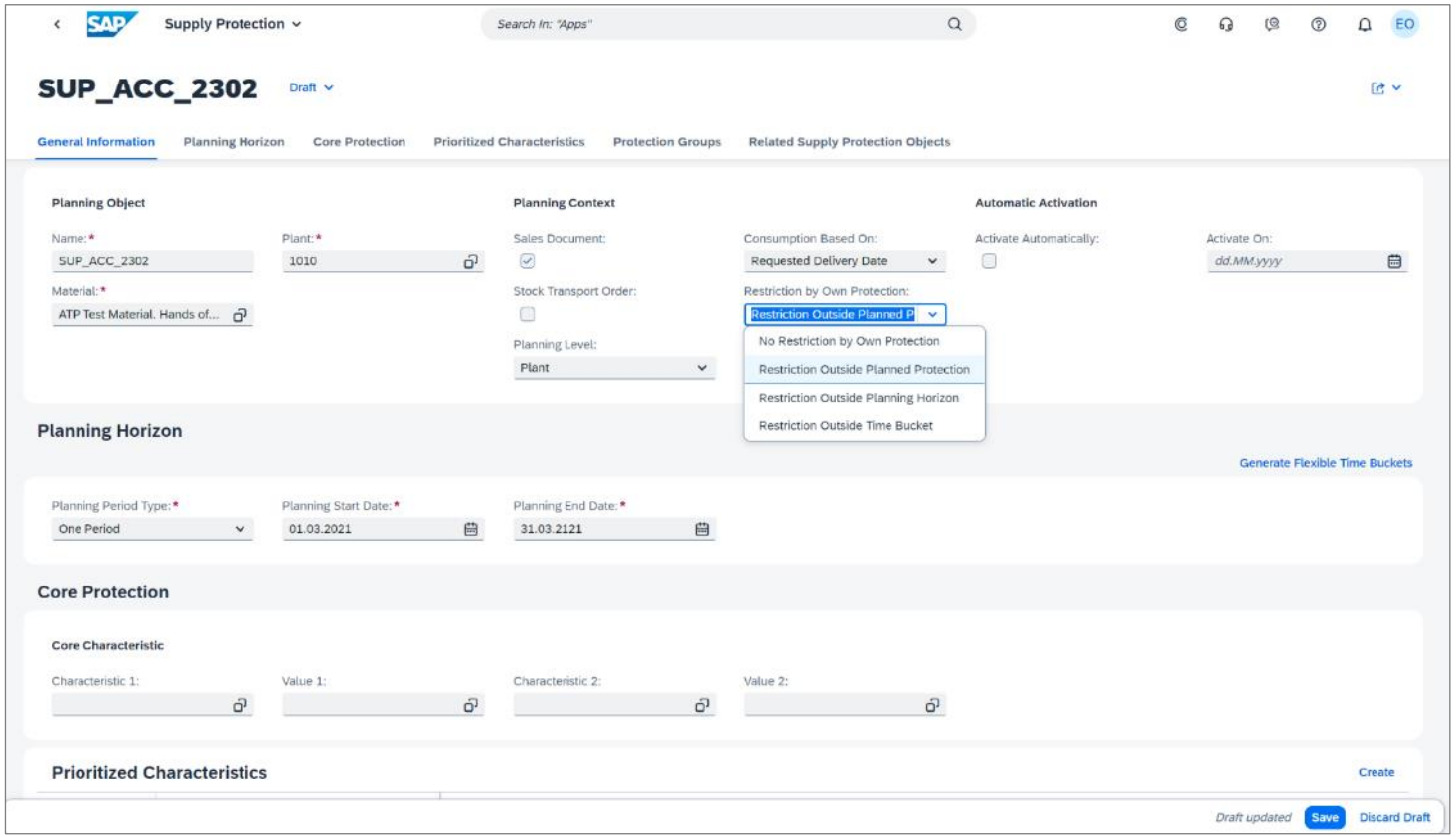


Supply Chain: Advanced Available-to-Promise
Supply protection enhancements

Advanced Order Promising

2023 FPS2

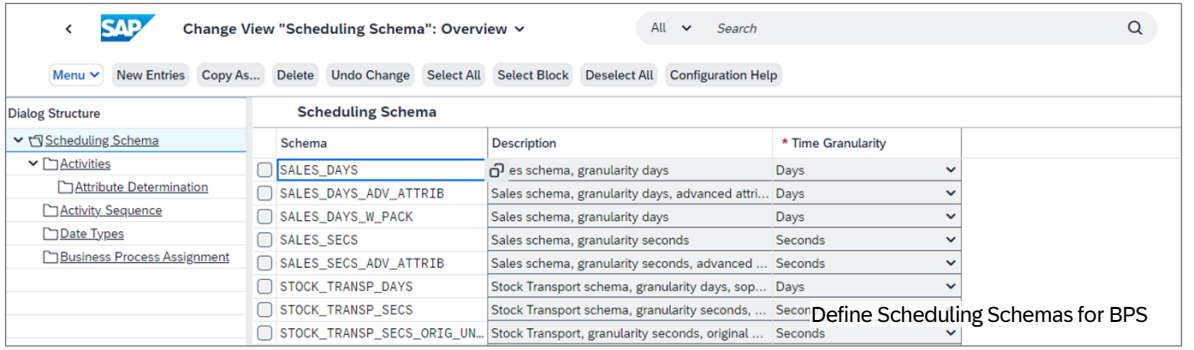
- Increased flexibility for defining protection with the new option to define the Supply protection with the setting “restriction outside planned protection”
- Enables one to define a check for whether a demand is covered by the remaining protection of the related time bucket or whether it exceeds the remaining protection
- Newer logic helps to ensure that even lower priorities will get at least minimum quantities
- Supply protection that can be defined on the level of the material-plant combination as well as specifically for a selected storage location



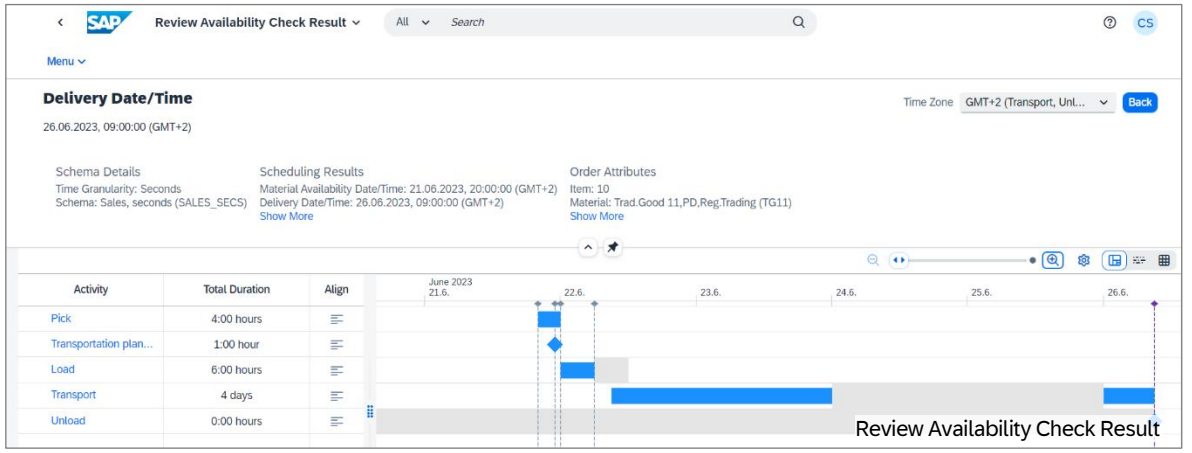
Supply Chain: Available-to-Promise

Business process scheduling – enhanced support for business processes

- Business process scheduling (BPS), flexible configurable scheduling solution in SAP S/4HANA
- BPS provides a framework to define, schedule logistical activities of different business processes
- Decouple business documents (for example, a sales order in the sales order scheduling process) from a concrete scheduling application
- Supports various business processes – Sales, Outbound Delivery, Stock Transport, Available to Promise
- Pre-delivered BPS schemas, which consume existing scheduling configurations based on shipping point and transportation route
- Delegation APIs for adding custom scheduling logic and accordingly calculating start and end dates of one or more scheduling activities
- Calculate all logistically relevant date types like material availability date, goods issue date, transport duration, transportation requirement routing & scheduling(TM integration), loading and unloading date based on the most-accurate durations and working times for the involved activities and entities (like picking, loading, transporting, and unloading)



Define Scheduling Schemas for BPS



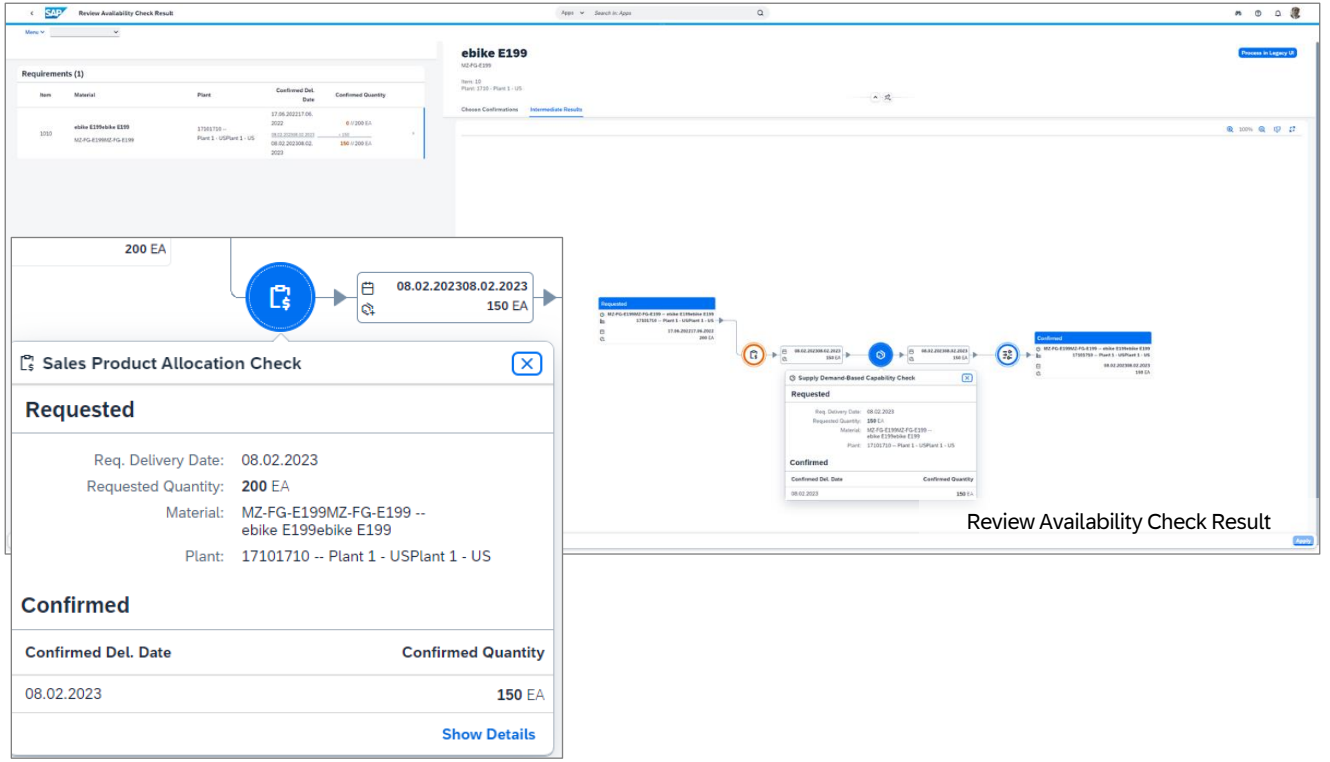
Review Availability Check Result

Supply Chain: Advanced Available-to-Promise
Review availability check results

Advanced Order Promising

2023 FPS0+1

- Review availability check results with an intuitive SAP Fiori User Interface
- Understand in detail how the system calculates a confirmation
- Visualize the path from a request to a confirmation result in a network graph, before applying a confirmation result
- Navigate into further consumption and confirmation details in the case of Product Allocations
- Select from a set of calculated alternatives in case of Alternative Based Confirmation
- Edit capabilities including of fixing of dates, quantities and deletion of confirmations to



Transparency **Flexibility** **User Experience**

Supply Chain: Advanced Available-to-Promise
Supply creation-based confirmation

Advanced Order Promising | Advanced Available-to-Promise | 2023 FPS0+1

- Enhanced capability to confirm sales order requirements by initiating supply creation in SAP S/4HANA Production Planning/Detailed Scheduling (PP/DS)
- Integration between SAP S/4HANA Advanced Available-to-Promise (aATP) and Production Planning and Detailed Scheduling (PP/DS) in SAP S/4HANA.
- Enables confirmations of sales order requirements when the available quantity of the requested product is insufficient
- Check done for material availability and triggering supply creation for a requirement if necessary.
- Supports Make-to-Order , Make-to-Stock scenarios and ABC at Finished Product level
- Supports Block Planning and Characteristic Dependent Planning (CDP)

Supply Chain: Advanced Available-to-Promise
Supported features overview in aATP and PP/DS

Advanced Order Promising | Advanced Available-to-Promise

Customers now have the flexibility to choose relevant check type

Availability Check Type	Production Planning-Based Availability Check (PPAC) with Supply Creation	Product Availability Check (PAC) with Supply Creation
Production Scenarios	Make-to-Order Make-to-Stock	Make-to-Order Make-to-Stock without fixed pegging*
Supported Features in aATP	Sales Product Allocation Capacity Product Allocation	Sales Product Allocation Capacity Product Allocation BOP executing only PAC**
Supported Features in PP/DS	Multilevel supply planning Finite/infinite planning Time-continuous and bucket-oriented capacities Alternative sources of supply Re-creation of supply elements (Make-to-Order and Make-to-Stock with fixed pegging) MRP areas (of type storage location) Redistribution of supply elements Fixed pegging	Multi-level supply planning Finite/infinite planning Time-continuous and bucket-oriented capacities Alternative sources of supply Re-creation of supply elements (only Make-to-Order) *** MRP areas (of type storage location)

* Fixed pegging in not supported with PAC.

** Supply Creation is not triggered during BOP run, only PAC is executed.

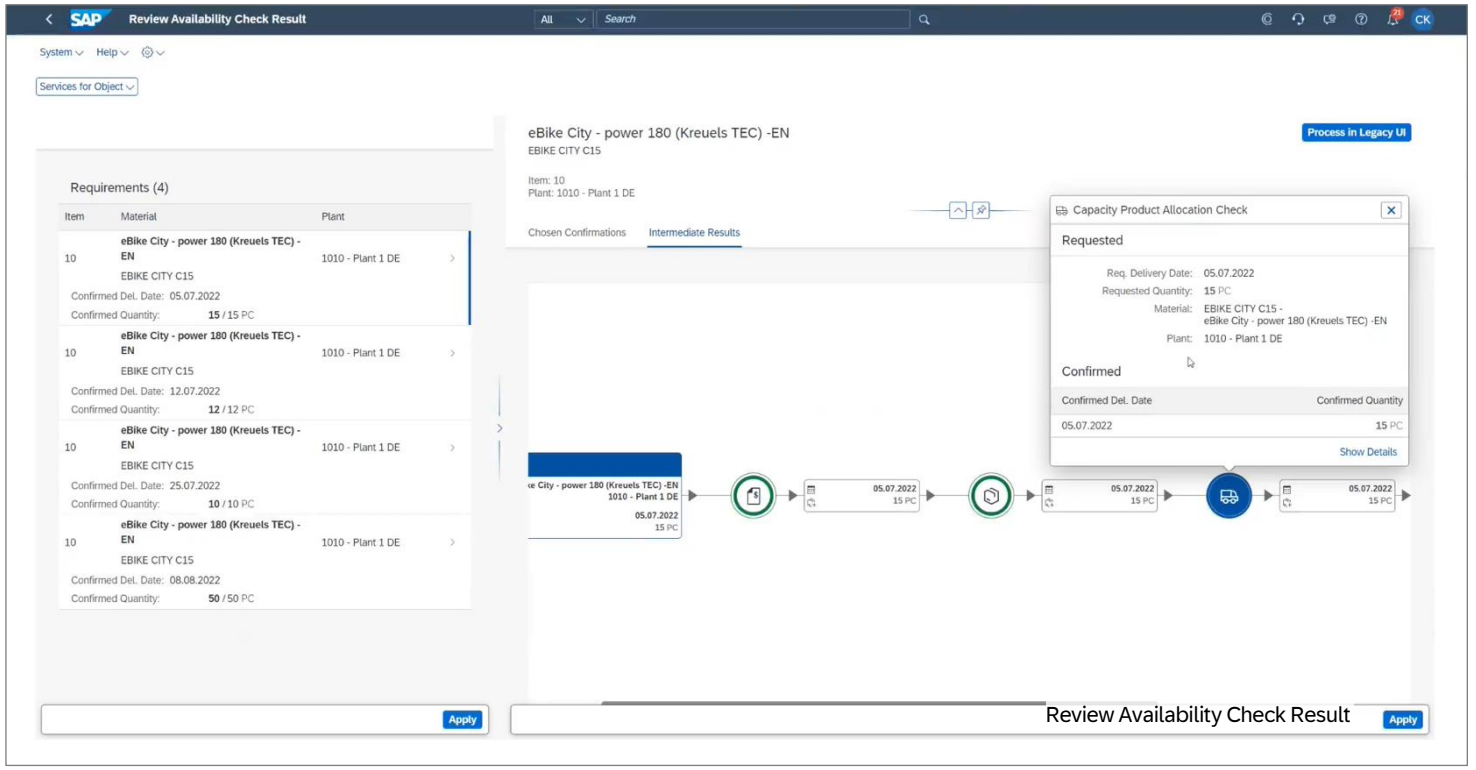
*** As fixed pegging is not supported with PAC, it is not possible to recreate supply elements in Make-to-Stock scenarios.

Supply Chain: Advanced Available-to-Promise

Availability checks for sales scheduling agreements with call off

Advanced Order Promising | Advanced Available-to-Promise

- Sales Scheduling Agreements with Delivery Call Offs are now supported in Product Availability Check, Product Allocation, Back Order Processing and Supply Protection
- Get reliable confirmations within the context of scheduling agreements with call-offs
- Ability to execute availability checks at the scheduling line level within a line item for scheduling agreements



Supply Chain: Service parts distribution
Extended Service Parts Planning

Service Parts Distribution | Extended Service Parts Planning

Capture & manage demand

Capture and manage demand for **location products** to generate a **demand history**. Load sales order data & stock transfer order data.

Forecasting

React flexibly to demand changes .
Determine the best **forecast model** for a location product. Use **stability rules** to prevent too rapid changes to the forecast model.

Inventory Planning

Plan the **optimal stock** of location products. Calculate the **economic order quantity** in combination with the **safety stock** for each location product.

Distribution Requirements Planning (DRP)

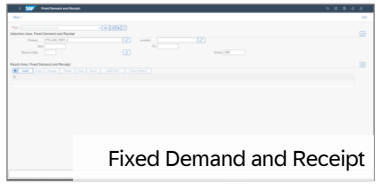
Determine the demands of all locations within the **bill of distribution (BOD),** round & aggregate them along the BOD to the entry location. Create **scheduling agreement releases** & **purchase requisitions**.

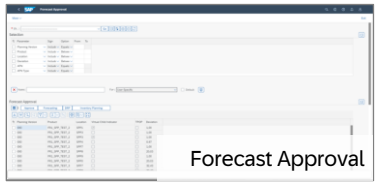
Deployment

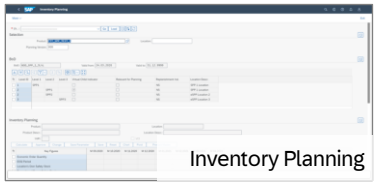
Determine the **distribution of goods** within a BOD, and decide how to distribute the goods and, if necessary, initiate this within the BOD.

Inventory Balancing

Balance **excess** and **shortage** at individual locations. Can be scheduled as a **periodical service** or automatically triggered by **events.**

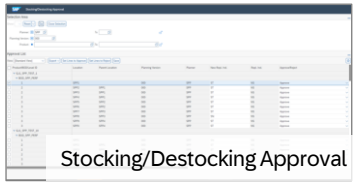

Fixed Demand and Receipt


Forecast Approval


Inventory Planning

DRP Matrix

Deployment Logs


Stocking/Destocking Approval

SAP Note 3343332 - Release information & restrictions for Ext. Service Parts Planning in SAP S/4HANA 2023
SAP Note 2912293 – eSPP Product Substitution
SAP Note 2940185- S/4HANA eSPP – IBP Integration

Supply Chain: Delta scope summary

2023 FPS2

Advanced Order Promising

- Enhanced supply protection with restricting demands dependent on the remaining protection
- Enabling Business Process Scheduling (BPS) for Stock Transport Orders through configuration based on stock transport catalog
- Business Process Scheduling considers the transportation duration maintained in TM master data during scheduling of sales orders (FPS01)
- Flexibility for the definition of protection with the additional ability to define the supply protection at plant/pool segment level (FPS02)
- Integration of TM based scheduling into sales order scheduling enabling determination of accurate order promising dates (FPS02)

Advanced Warehousing

- Support for Advanced Shipping and Receiving (ASR) in decentral warehouses - integration of advanced shipping and receiving processes in decentralized deployment
- Support for repetitive manufacturing and introduction of a simplified Kanban framework without deliveries for decentralized extended warehouse management in SAP S/4HANA
- Support for batch specific units of measure in the extended warehouse management (FPS01)
- Advanced shipping and receiving: outbound streaming, automated creation of freight orders (FPS02)

Advanced Transportation

- Greenhouse gas emission calculation for road freight including the comparison between planned and reported emissions
- Support for Advanced Shipping and Receiving in decentral warehouse with local Transportation management capabilities
- Enhancements for package building
- Reverse auction where the carriers can revise their bids until response deadline (FPS01)
- Inbound cargo documents based on Large Language Model (FPS02)
- Conversational planning in the transportation cockpit based on Generative AI (FPS02)

Inventory

- Enhanced barcode scanning including support for the composite barcodes based on international GS1 standard various SAP Fiori apps for to process of inventory adjustments
- Inventory Analytics and Control enhancements including consignment stock reporting and automating email notification to suppliers
- Extensibility enhancements to various inventory management related business objects

Warehousing

- **Automatic packing, picking, and put away of multiple handling units**
- Enable Record Warehouse Defect app in decentral EWM on S/4HANA
- Handle defects / defective parts in decentral EWM managed warehouses or PSAs

Delivery and Transportation

- Manage Incoterm Location as Transportation Management (TM) Location and enable better integration with SD, MM, and LE in the context of incoterms
- Automatic triggering of proforma customer invoices and customer invoice (FPS01)

Manufacturing

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Manufacturing: Overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP Integrated Business Planning
- SAP Digital Manufacturing
- SAP Analytics Cloud

IBP: Demand Planning

SAP S/4HANA LoB Apps

additional license

ext. Production Planning

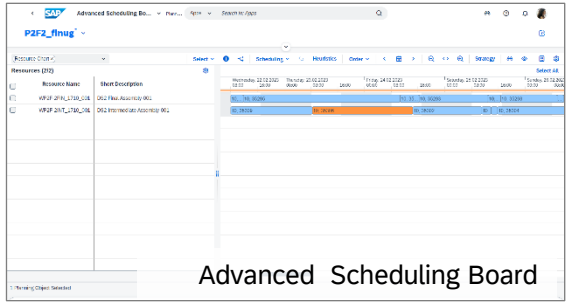
Plan and optimize production plans considering capacity constraints.
Schedule and dispatch production orders to work centers at the shopfloor

ext. Engineering & Ops (PEO)

Engineer and manage changes for Bill of Materials (BoM), Routings, and Work Centers.
Operate and provide detailed instructions for production operators and sign-off confirmations.

Env. Health & Safety (EHS)

Ensure safety and business continuity.
Mitigate health and safety risks by performing risk assessments.
Create safety instructions and manage incidents.



Advanced Scheduling Board

SAP S/4HANA Enterprise Management

Production Engineering

Design products and resources, managing the change throughout the life cycle. Manage master data such as materials, routings, BoMs, recipes, work centers, etc.

Production Planning

Plan products and components for internal and external procurement. Improve planning results through memory processing with MRP live, Predictive MRP and Demand Driven Replenishment

Production Operations

Control manufacturing operations for discrete, process, and repetitive industry variations and extensions, fully integrated with Supply Chain & Finance.

Manufacturing Options

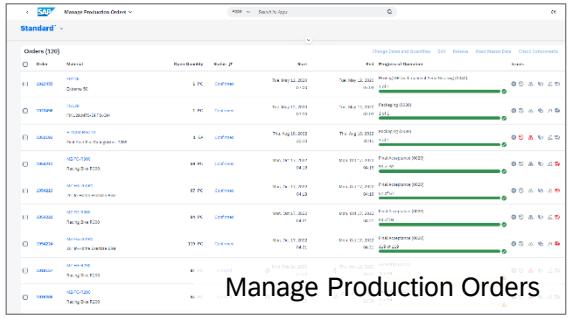
Specialize manufacturing models based on specific functional and industry requirements, including discrete, process, repetitive, project, outsourced, Kanban, and Just-in-Time manufacturing models.

Quality Management

Inspect production processes and goods receipts.
Manage inspection lots and apply usage decisions to improve manufacturing output.

Manufacturing Insights

Analyze manufacturing data for process improvements, decision support reporting and documentation purposes. Provide alerts for exception-based management.



Manage Production Orders

Manufacturing: Business Area Overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP Integrated Business Planning
- SAP Digital Manufacturing
- SAP Analytics Cloud

SAP S/4HANA LoB Apps

additional license

ext. Production Planning	Constraint based Planning and Scheduling				
ext. Engineering & Ops (PEO)	Extended Production Engineering	Extended Production Operations			
Env. Health & Safety (EHS)	Environment	Health and Safety	Incident	Maintenance Safety	Change

SAP S/4HANA Enterprise Management

Production Engineering	Product Definition	Product Structure	Production Processes	Product Infrastructure			
Production Planning	Materials Req. Plan.	Capacity Planning	Prod. Scheduling	Predictive MRP	Demand Driven MRP		
Production Operations	Production Control	Production Execution					
Manufacturing Options	Discrete	Process	Repetitive	Project	Outsourced	Just-in-Time	Kanban
Quality Management	Quality Planning	Quality Inspection	Quality Improvement				
Manufacturing Insights	Manufacturing Analytics						

Manufacturing: Production Engineering

Production Engineering

Product Definition

Production relevant material data:

Material Types:
[FERT] finished product
[HALB] semi finished products
[HIBE] operating supplies
[KMAT] configurable materials
[FHMI] prod. resources / tools

MRP Types:
[VB] consumption driven
[PD] plan / order driven
[VV] forecast driven

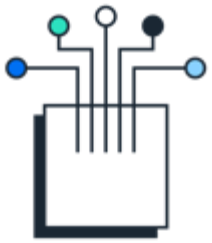
- Lot size procedures
- Scheduling parameters
- Units of measure
- Etc.

Product Structure

Structure products to manage components and assemblies.

Define separate BoMs for different areas (e.g., Engineering, Production, Sales, Service).

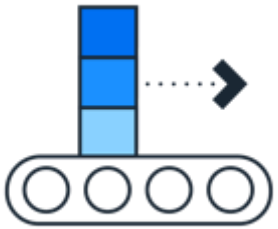
Engineering Change Management determines the valid BoM version for the respective date, production version, and purpose.



Production Processes

Routings plan the operations during manufacturing activities. Operations provide the basis for scheduling dates, capacity requirements for work centers, and material consumption.

Recipes define the product formulation process and the development of manufacturing products.



Production Infrastructure

Define work centers, production lines, factory layouts and production resources and tools (PRTs).

Assign production capacity based on factory calendar and resources availability.

Consider operations and maintenance plan (incl. shutdown plan).

Manufacturing: Production Planning

Production Planning	Materials Req. Plan. (MRP)	Capacity Planning	Production Scheduling	Predictive MRP	Demand Driven Replenishment

Plan raw materials and components based on BoM explosion of finished product requirements. Create proposals for internal and external procurement based on quantities and date requirements.

1. MRP Options:
   - MRP classic (ABAP) / MRP live (in memory)
   - batch or online / single or multi materials
2. Net requirements calculation:
   - qualified demand
   - qualified supply
   - relevant planning horizon
   - lot-sizing
3. Dependent requirements calculation (BoM explosion)
4. Source of supply assignment
5. Lead time scheduling

Balance production requirements with available capacity of respective work centers and shift calendars.

Plan, assign, and prioritize production schedule based on production demand and available production capacity.

Predict and simulate capacity constraints based of the current MRP result.

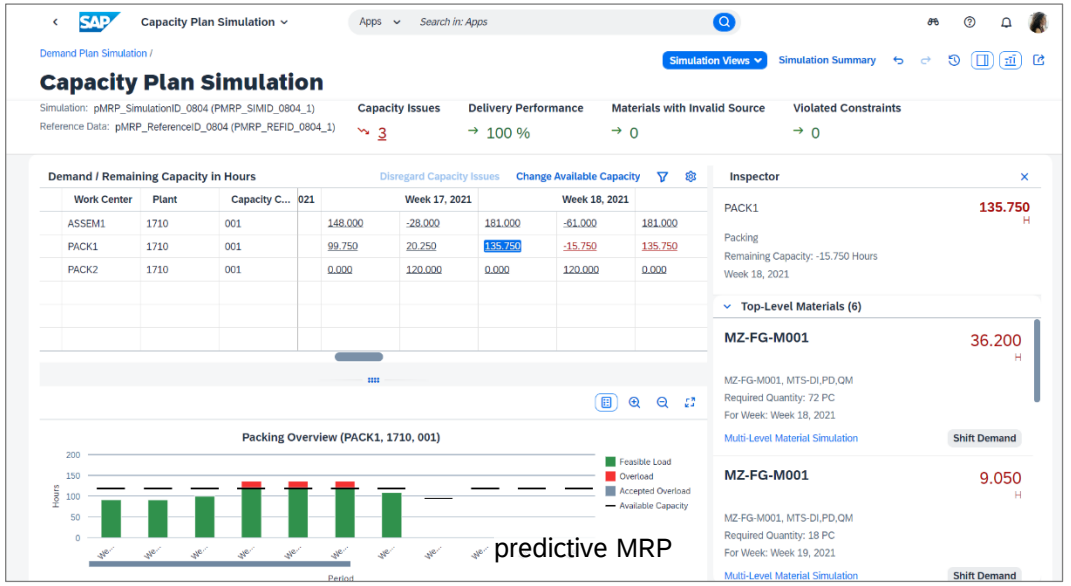
New mid-term planning solution to influence capacity planning through MRP prediction**.**

Includes options to **simulate** and resolve **capacity and material** gaps in a plant before they occur.

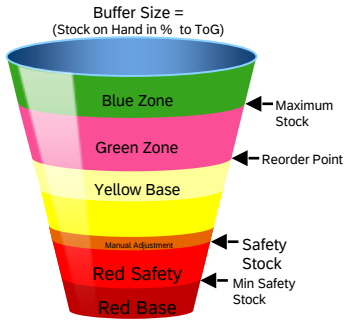
Buffer inventory based on target levels in strategic locations across the supply chain. Replenishment is triggered based on the average consumption over the lead time.

A specific MRP type controls the consumption-based planning through parameters for

- qualified demand
- qualified supply
- safety stock
- lot size and
- reorder point



predictive MRP

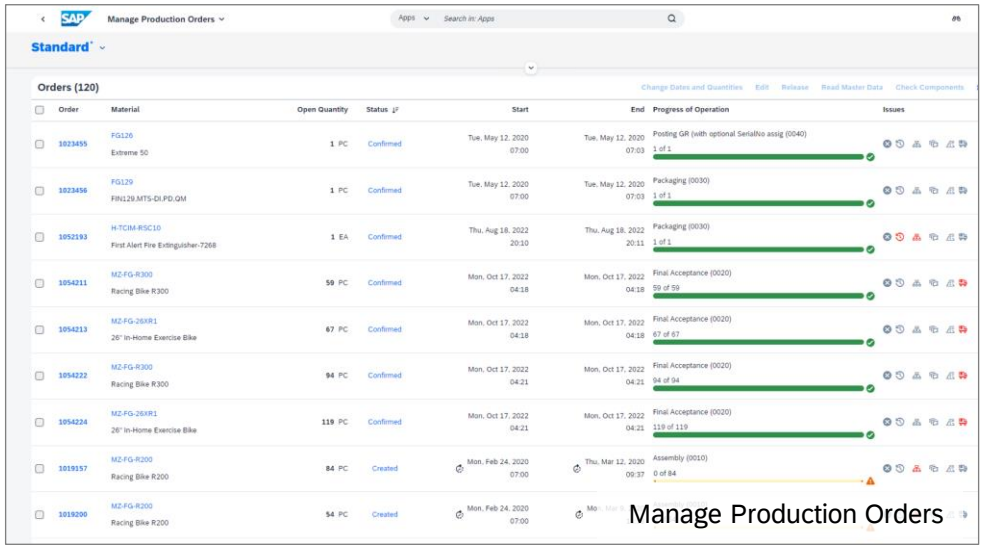


Manufacturing: Production Operations

Production Operations

Production Control

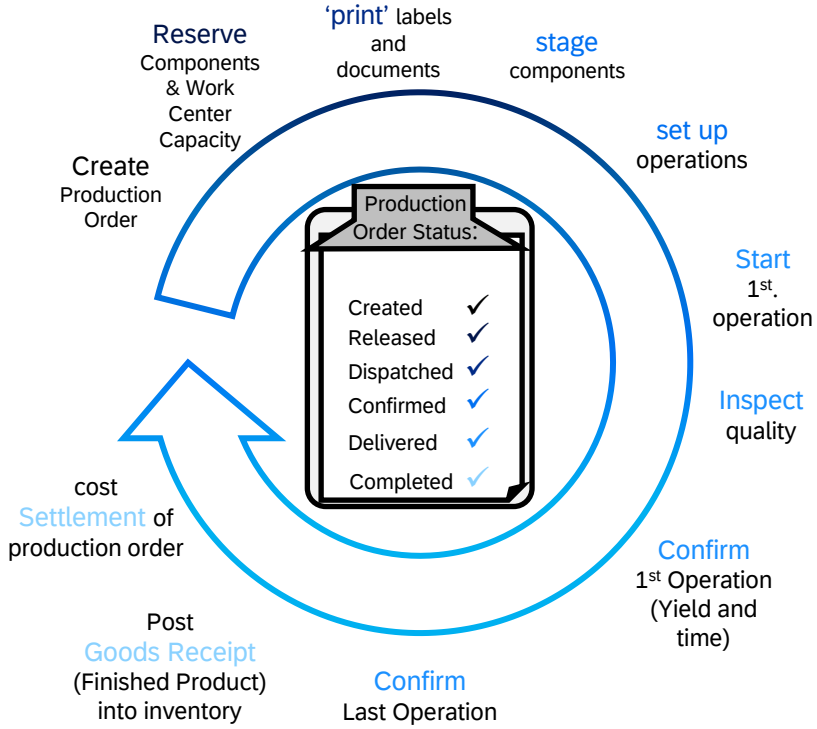
Control full shop floor production for handling materials, BoMs, recipes, routings, batches, parts, components, work centers, and resources, all the way up to the finished products using central cockpits to minimize bottlenecks and mitigate risk.



Manage Production Orders

Production Execution

Execute, control, monitor, and confirm manufacturing with real-time data from shop floor, contract manufacturers and suppliers. Transfer planned orders, release production orders, confirm operations, and track work in progress.



Manufacturing Options

Manufacturing Options	Discrete	Process	Repetitive	Project	Outsourced	Just-in-Time	Kanban
	Production order-based manufacturing with reference to routings for manufacturing processes and Bill of Materials for components and sub assemblies	Manage process manufacturing with a continuous flow of fluids and bulk materials. Use recipes to control the production process.	Simplified processing in repetitive scenarios with mass processing and streamlined financial controls in periodic actions.	Control production via projects and network orders. Keep inventory in project specific stock and collect costs via WBS elements.	Replenish with self-steering control circuits. An empty bin triggers the procurement process with parameters like • number of bins in the circle • bin status (full /empty) • Kanban card (source of supply, lot size)	Deliver components and sub-assemblies directly to the production line of the customer in order to avoid inventory buffers. With just-in-sequence the assembly is delivered in sequence according the requested specifications.	Replenish with self-steering control circuits. An empty bin triggers the procurement process with parameters like • number of bins in the circle. • bin status (full /empty) • Kanban card (source of supply, lot size)

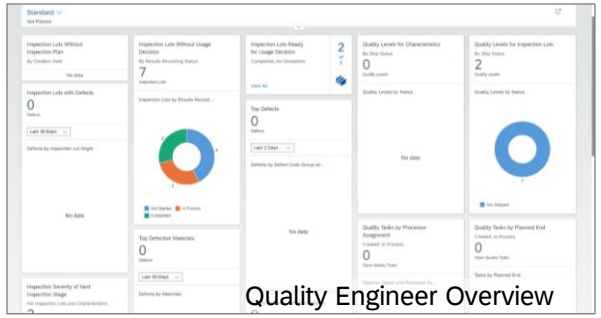
Manufacturing: Quality Management

Quality Management

Quality Planning

Quality Planning ensures the quality of products, processes, and services. During the early stages of product design and development, it is important to have the correct quality tools and to implement appropriate quality-planning strategies.

- **FMEA** (Failure Mode and Effects Analyses) prevents and avoid defects and ensure high levels of quality already in design phase.
- Use **control plans** to perform an integrated inspection planning for goods receipt inspections and during production.
- Use **inspection planning** to define inspection criteria for continuous inspection.



Quality Engineer Overview

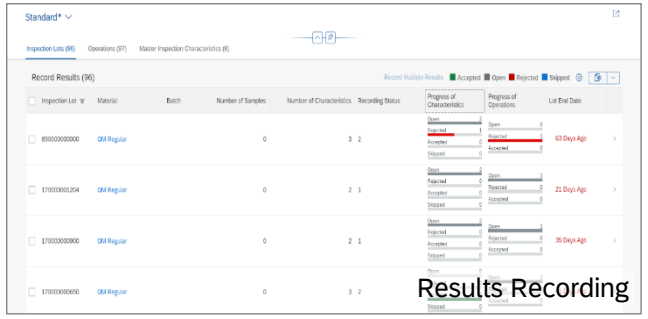
Quality Inspection

Quality Inspection is used to prepare, perform, and monitor quality inspections, for example, in purchasing, production, or sales scenarios.

Use **inspection lots** to perform a quality inspection. Once the inspection results have been recorded, the inspection lot is completed with the **usage decision.**

Define rules so that the system automatically determines the scope of the next inspection dependent on the latest inspection results. Use:

- **results recording** to enter inspection results
- **defects recording** to record individual defect items
- **sample management** for processing
- **calibration inspections** to plan and perform calibration inspections of test equipment
- **stability studies** to track and examine how different environmental conditions
- **quality certificates** for inbound and outbound

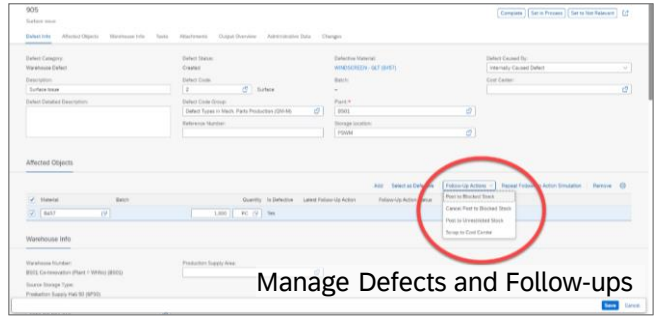


Results Recording

Quality Improvement

Quality improvement provides tools that are the basis for improving your processes and products. You can gain better insights into your quality-related data and thereby reach your corporate quality goals. Use:

- **quality notifications** to carry out the problem-solving process including root cause analysis
- **nonconformance management** to correct the defects, prevent them from recurring, and trigger process tasks
- use **new defect object for recording and tracking of warehouse or production related defects**
- Integration with new SAP Quality Issue Resolution (BTP app) for all types of problem solving processes (customer, supplier, internal)
- **quality analytics** and quality evaluations based on inspection results or based on issue data
- **use audit management** as systematic examination for determining, evaluating, and documenting



Manage Defects and Follow-ups

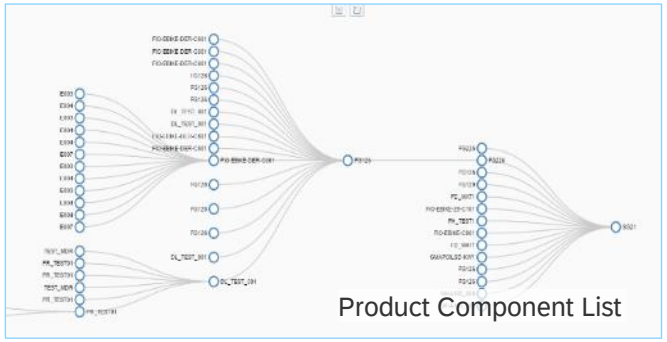
Manufacturing: Manufacturing Insights

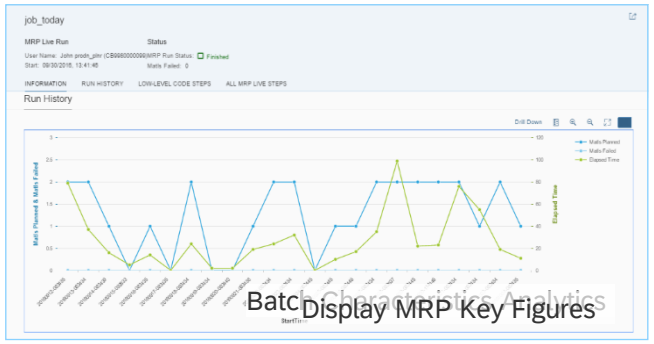
Manufacturing Insights | Manufacturing Analytics

Although analytics and reporting are typically embedded within the manufacturing business processes, see examples of specific manufacturing analytics below.

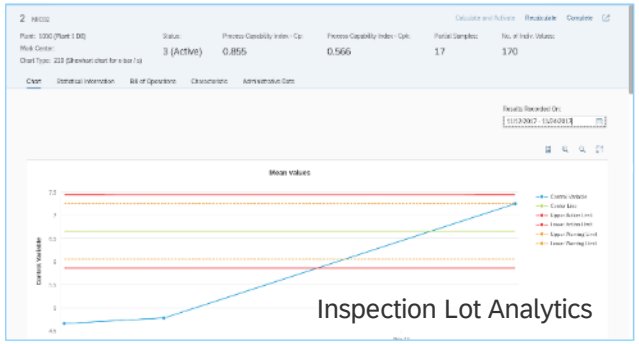
- Component List:
  all components that are used for a specific product (multi-level Bill of Material)
- Material where used list
  for which finished product a specific component is used
- Batch where used
  which component batches were used to produce a specific finished goods batch
- Missing Parts:
  missing components at time of production order release
- OEE
  Overall Equipment Effectiveness
- Planned vs. actuals
  e.g., for resource consumption, costs, time, etc.
- Capacity Utilization
  analyze Work Center Utilization
- Material Coverage
- Quality Analytics:
  - Non-Conformance Analytics
  - Inspection Lot Analytics

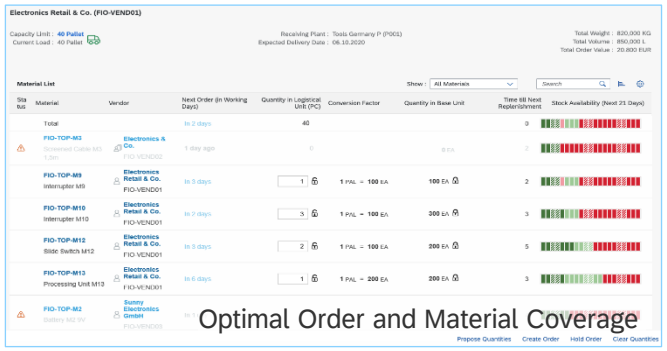
  etc.


Product Component List

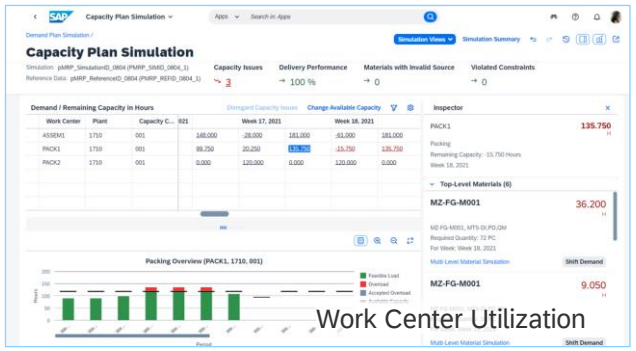


Batch Display MRP Key Figures


Inspection Lot Analytics



Optimal Order and Material Coverage



Work Center Utilization

Non-Conformance Analytics

additional analytics are available in the [Logistics Information System (LIS)]

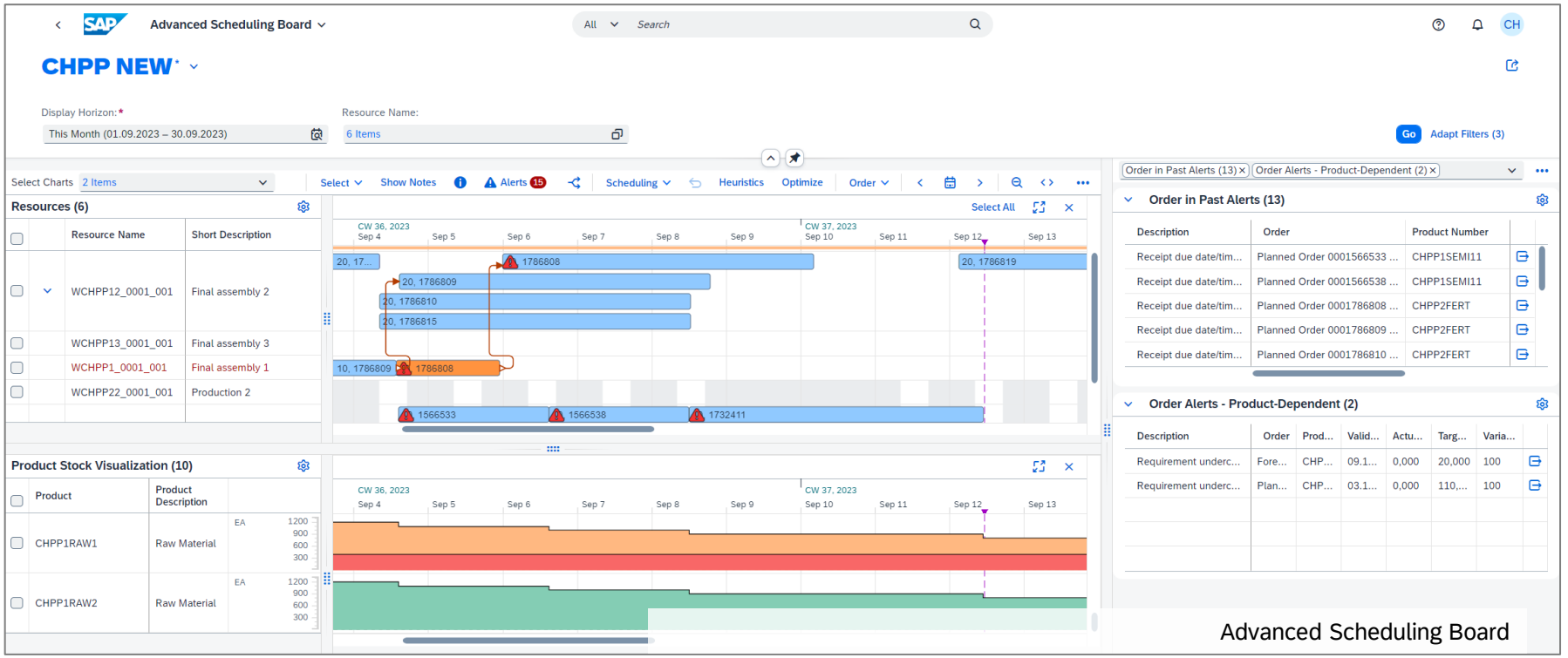
Manufacturing: Extended Production Planning

ext. Production Planning $ | Constraint based Planning

Constraint based production planning is co-deployed with SAP S/4HANA on the same system utilizing one HANA database for production or external procurement to cover product requirements.

Perform a **visualized production scheduling** to plan critical products, such as products with long replenishment lead times or products that are produced with bottleneck resources.

In addition, use the SAP Fiori app **Create Optimal Orders for Shipment** to order several materials in one purchase order and optimize the order quantities to best utilize the capacity of the means of transport.



Manufacturing: Ext. Production Engineering & Operations (PEO)

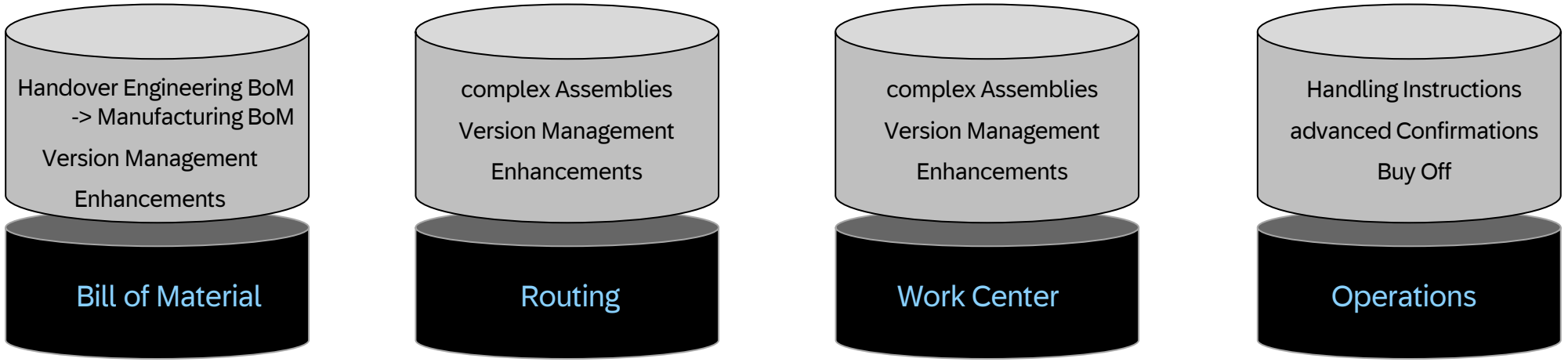
ext. Production Engineering & Ops

Extended Production Engineering

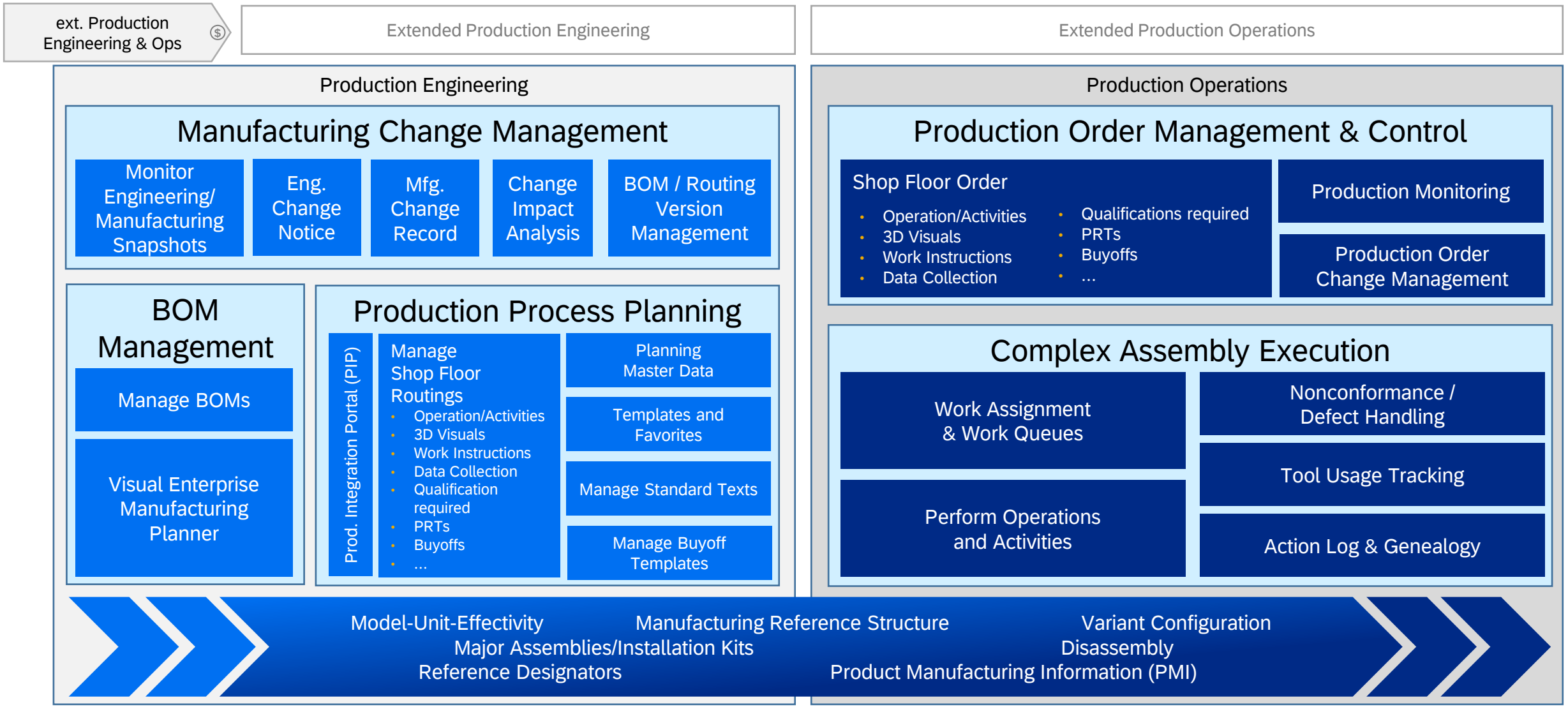
Extended Production Operations

SAP S/4HANA Ext. Production Engineering & Operations **(PEO)**

SAP S/4HANA Production Planning & Execution **(PP)**



Manufacturing: Ext. Production Engineering & Operations (PEO)



Manufacturing: Environment Health & Safety (EHS)

Env. Health & Safety (EHS)

Environment

Forecast emission data based on past emission data with the help of predictive learning algorithms and statistical methods.

Manage emissions of **greenhouse gas** as well as other air or water emissions to fulfill legal requirements while fostering **proactive data transparency & monitoring.**

Detect and communicate deviations, including investigations and tracking follow-up activities.

Reduce risk of environmental **non-compliance and penalties.**

Health and Safety

Manage your general and equipment related safety instructions centrally.

Prevent incidents and reduce EHS risks.

Standardized, cost-effective approach to managing operational risks

Minimize workplace exposures and related health impacts.

Manage industrial hygiene, monitoring by plan and perform workplace sample campaigns and related measurements.

Incident

Record EHS incidents, near misses, and observations.

Create transparency and standardization with **templates, task tracking, and analytical automated reporting.**

Decrease injury, illness, and incident rates, reduce EHS penalties and fines, and unplanned downtime.

Manage investigations, follow-up activities and improve employee engagement.

Role-based analytics provide insight into incident root causes.

Maintenance Safety

Control maintenance work through clear safety instructions and permits.

Link environment, health, and safety (EHS) information to technical equipment and plant maintenance tasks.

Support flexible levels of **permits natively integrated** with the work-order process in enterprise asset management.

Automate the permit process and **enforce fully auditable procedures** that promote consistent behavior.

Change

Streamline change requests, automating the involvement of the right people to mitigate risks caused by changes to equipment, substances, operating conditions, and procedures.

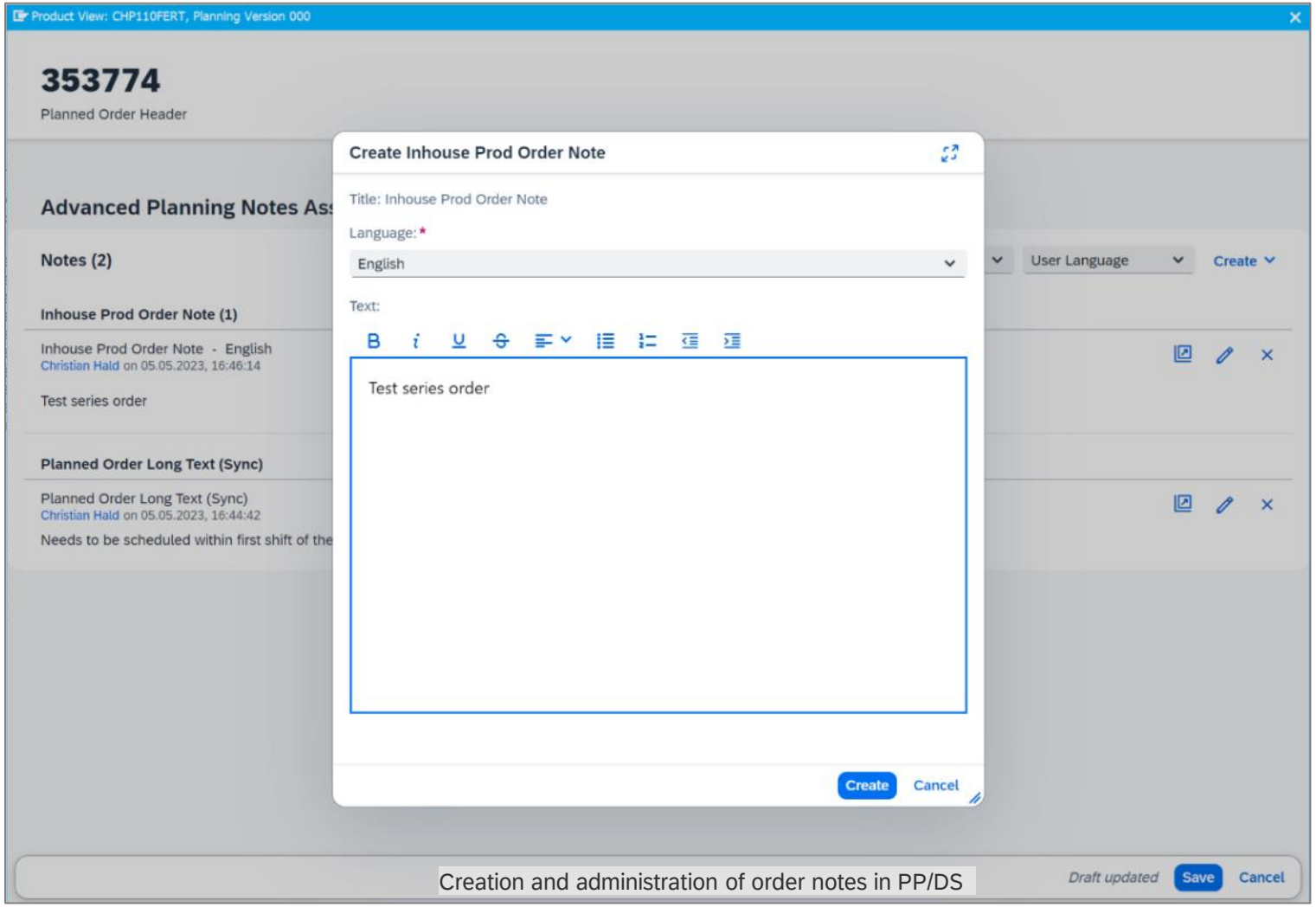
Manage operational changes with **thorough review**, risk mitigation, and documentation approval.

Manufacturing: Order Notes Management

2023
FPS0+1

Scope

- Hand-over of planning information to shop floor
- Capturing of object specific free text information in PP/DS
- Structuring of notes by usage of multiple note types
- Exchange of planning relevant information with shop floor by integration with PP long texts
- Improve information flow within and across planning departments
- Hand-over of planning information to shop floor
- Improve process flow

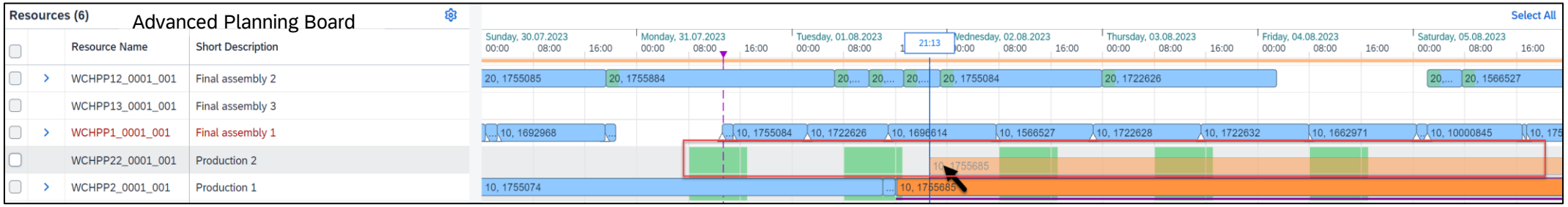


Creation and administration of order notes in PP/DS

Manufacturing: Interactive Scheduling Board

2023
FPS0+1

Advanced
Scheduling Board



After dragging an operation with left mouse button, calendar areas of alternative resources are highlighted in green color

Dragged operation can be dropped on one of the resources being highlighted in green color

Manufacturing: New monitoring, alerting and analytics for PP/DS

2023 FPS2

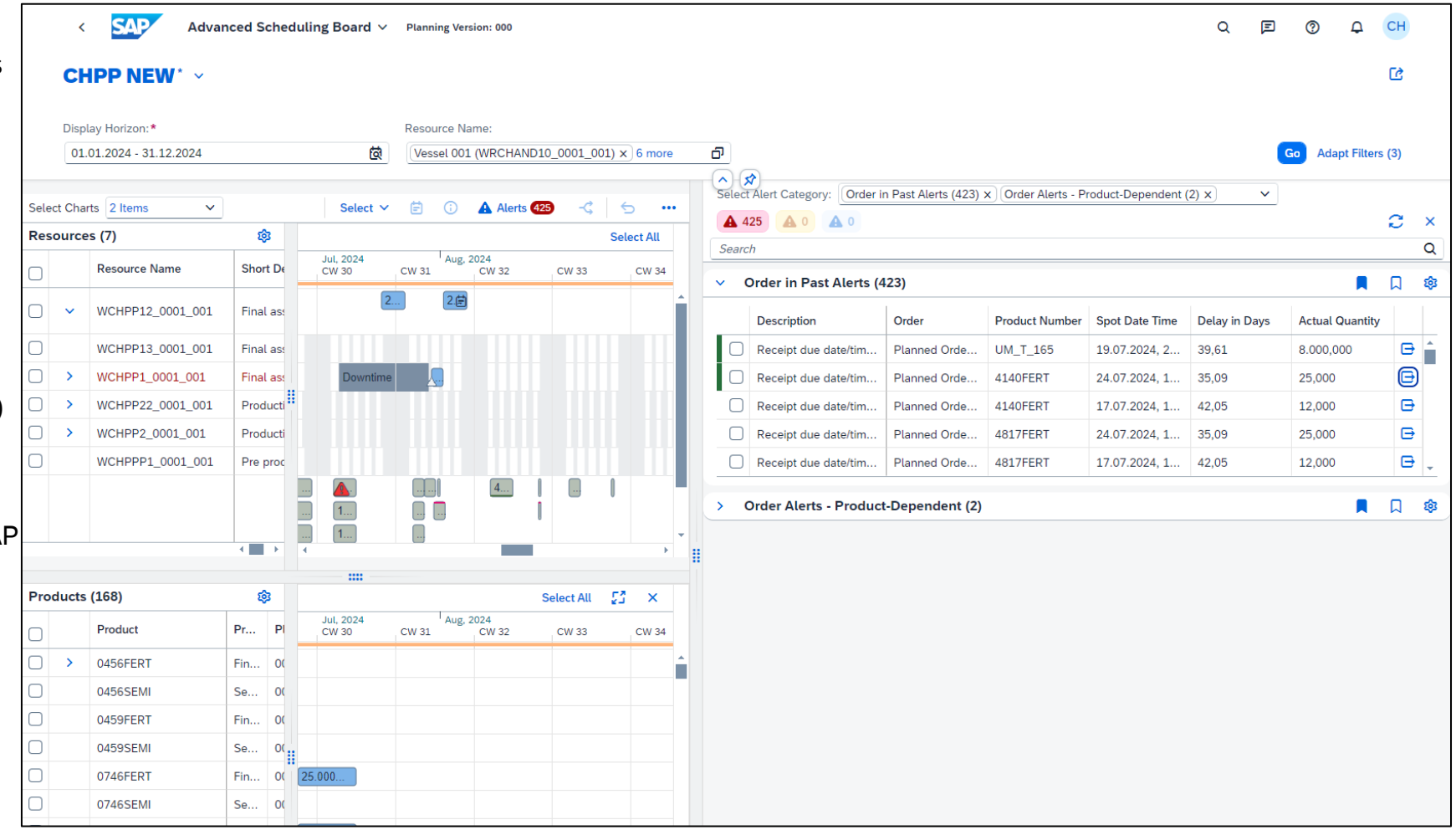
Advanced Analytics for prod. Plan. / detailed scheduling

Evaluation of production plans:

- Calculation and presentation of KPIs
- Graphical visualization of KPIs based on the modern UI technology
- Flexible combination of KPIs in a dashboards
- New data extraction based on Live Cache CDS view technology
- Provide standardizes interface for PP/DS data extraction (succession of PP/DS BW extractors)

SAP Analytics Cloud:

- Visualization content delivered in SAP Analytics Cloud
- Data extraction from S/4HANA via Live Connect and CDS views based on LiveCache
- Customer specific content in SAP Analytics Cloud can be defined



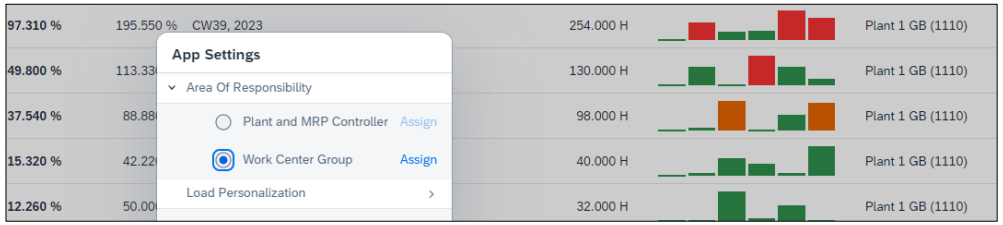
Manufacturing: Enhancements in Capacity Planning

2023
FPS0+1

Evaluate
Work Center Capacity

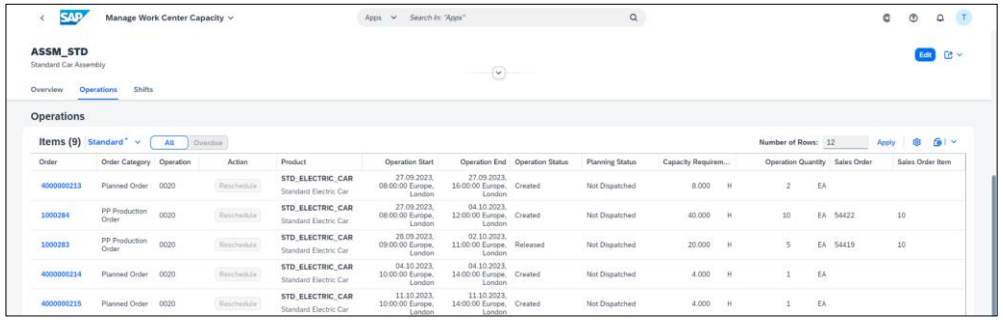
- Work Center Grouping:

  Manage Work Center Capacity and work lists via area of responsibilities

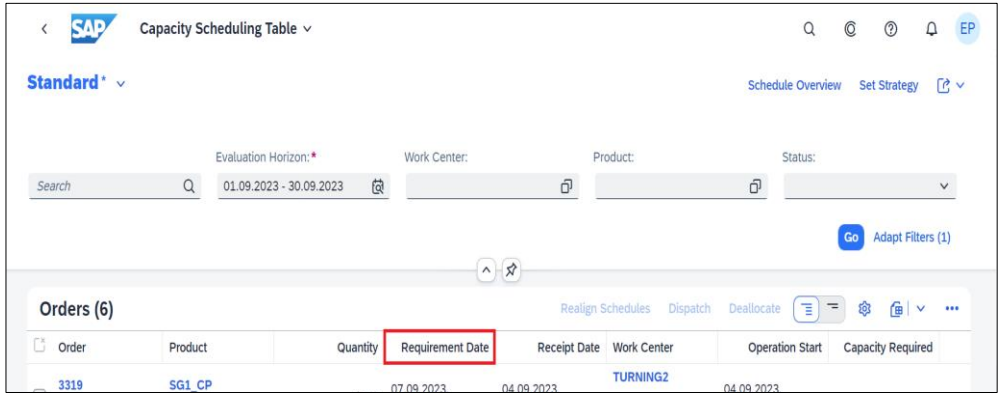


- Manage Work Center Capacity:

  Include Sales Order data for MTO in Operations Table



- Component availability date in Capacity Scheduling table



Manufacturing: Tank Planning
Filling, draining, cleaning tanks with on order

2023 FPS2

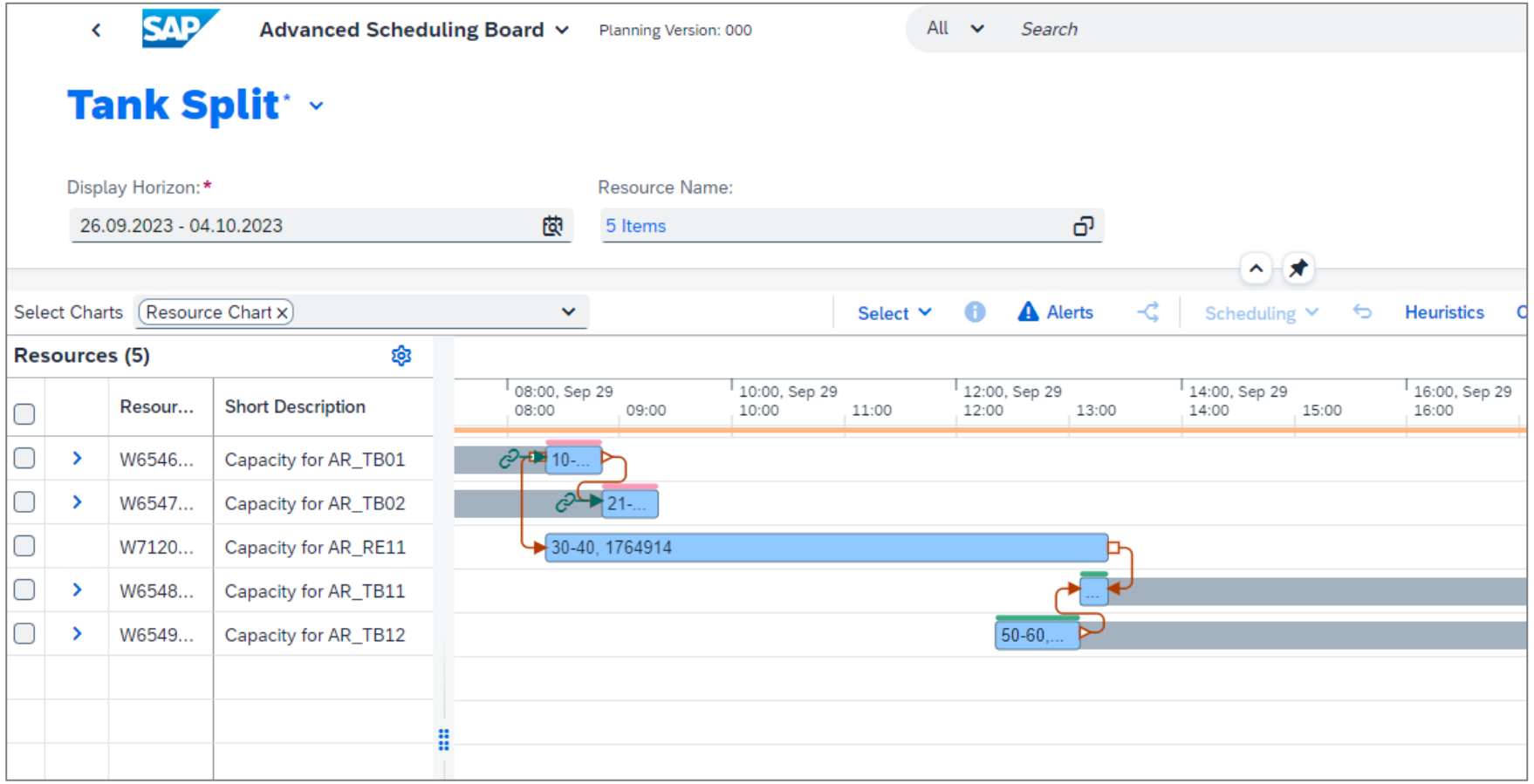
- Fill the output quantity of one order into multiple storage tanks
- Drain the input quantities of one raw material from multiple storage tanks
- Select the storage tanks
- Define the quantities per storage tank
- Define the sequence of storage tanks

Intuitive User-Interface provides information on:

- Tank sizes
- Fill levels
- Storage resource alerts
- Status
- etc.

Integration to execution processes

- Process confirmation
- Goods receipt postings
- Goods issue postings

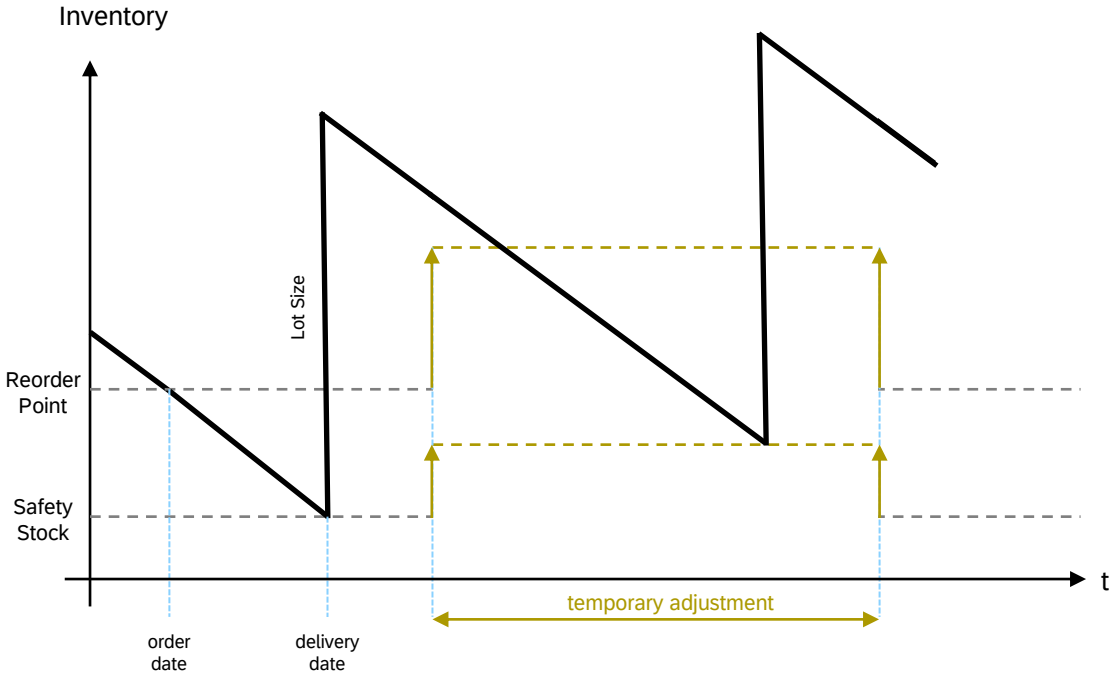


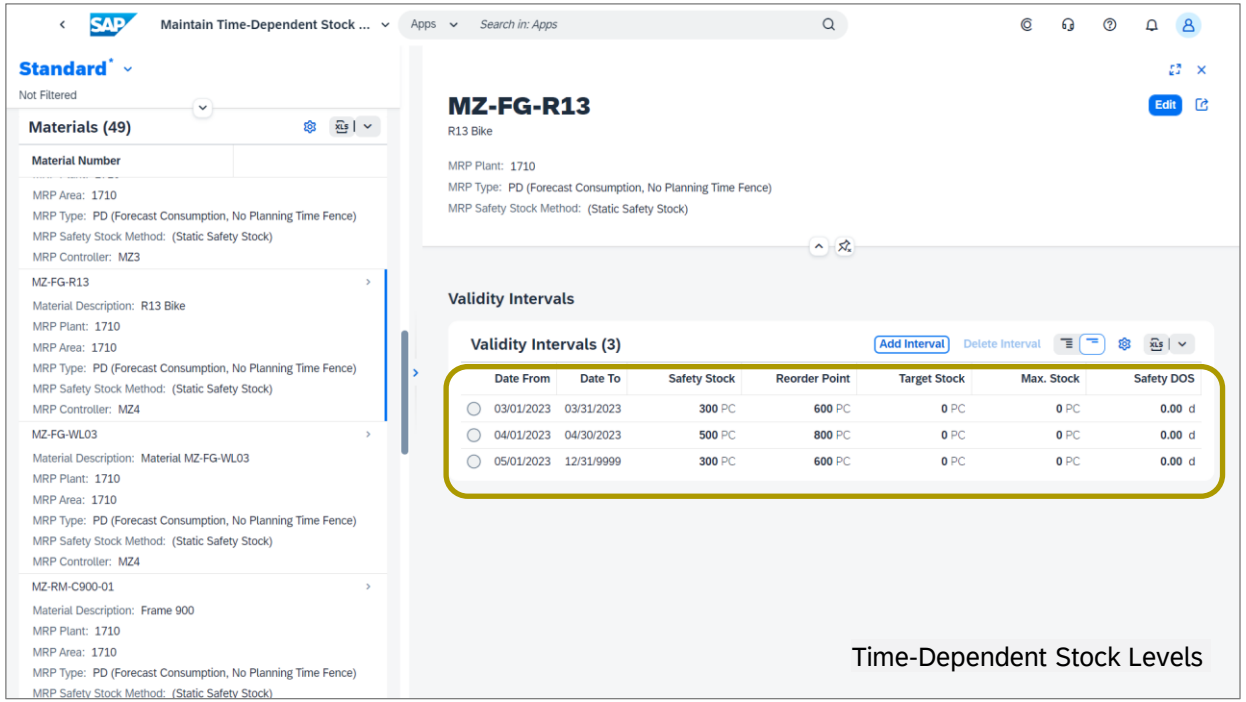
Manufacturing: Time dependent Safety Stock and Reorder Point

2023
FPS0+1

Executive Summary

1) Dynamic definition for Safety Stock and Reorder Point (Time series for previously static master data)
2) Define phases for temporary adjustment of inventory levels (e.g. for campaigns or seasonal trends)
3) No ongoing adjustment of master data required (less data maintenance required)

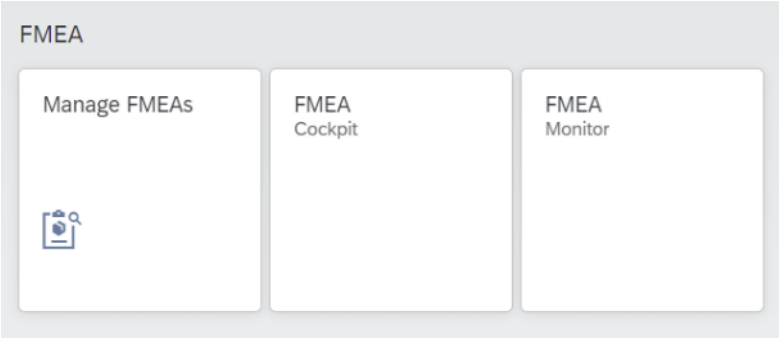




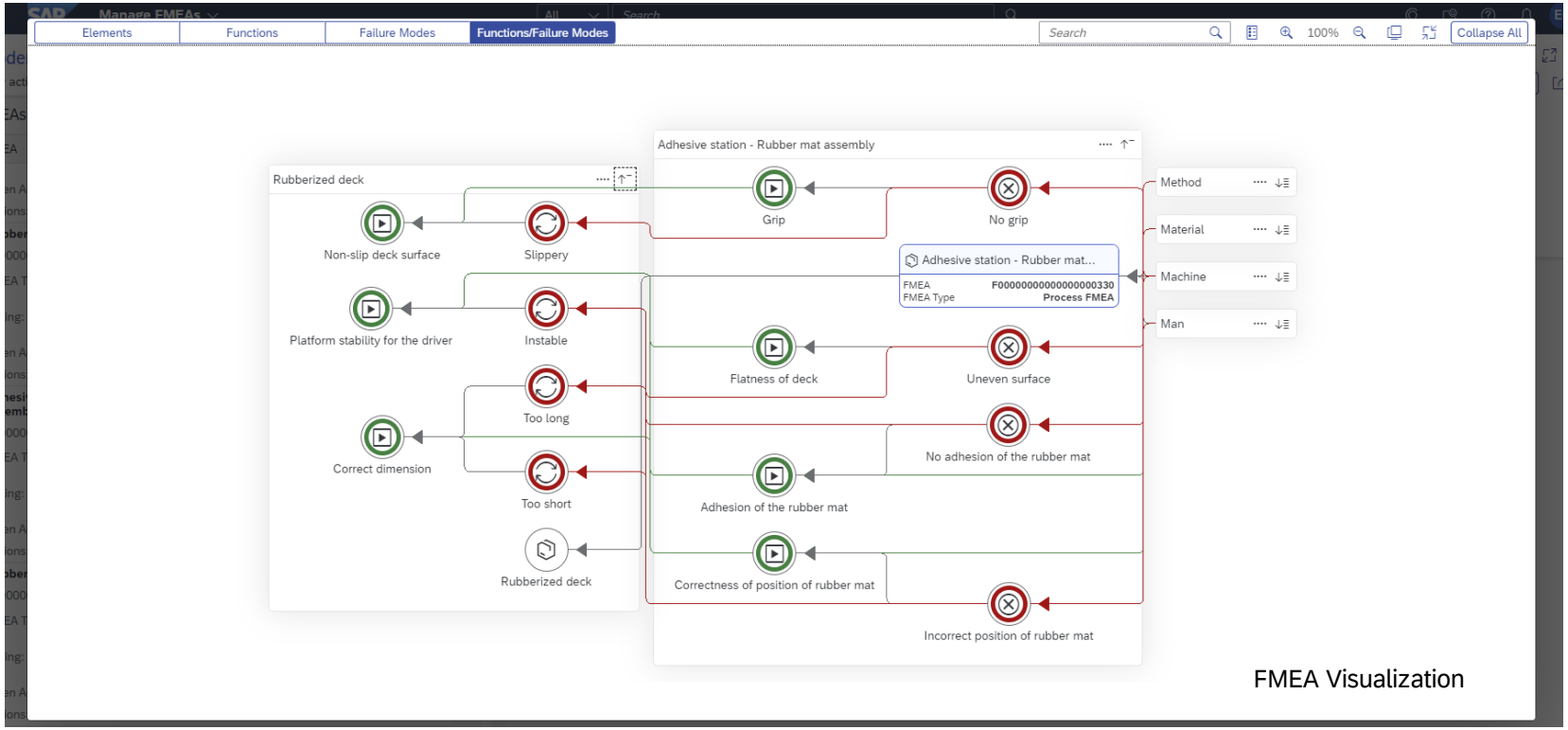
Quality Management: Failure Mode and Effects Analysis (FMEA)

2023
FPS0+1

1) Risk Analyses for Quality Management issues
2) Define probability, that a specific QM issues occurs
3) Narrow down the effects on costs, timeline, safety, trust, etc., of the respective quality issue
4) Visualize and mitigate



For Feature Comparison between Fiori App and existing transactions please check out:
[SAP Help for S/4HANA on-premise]



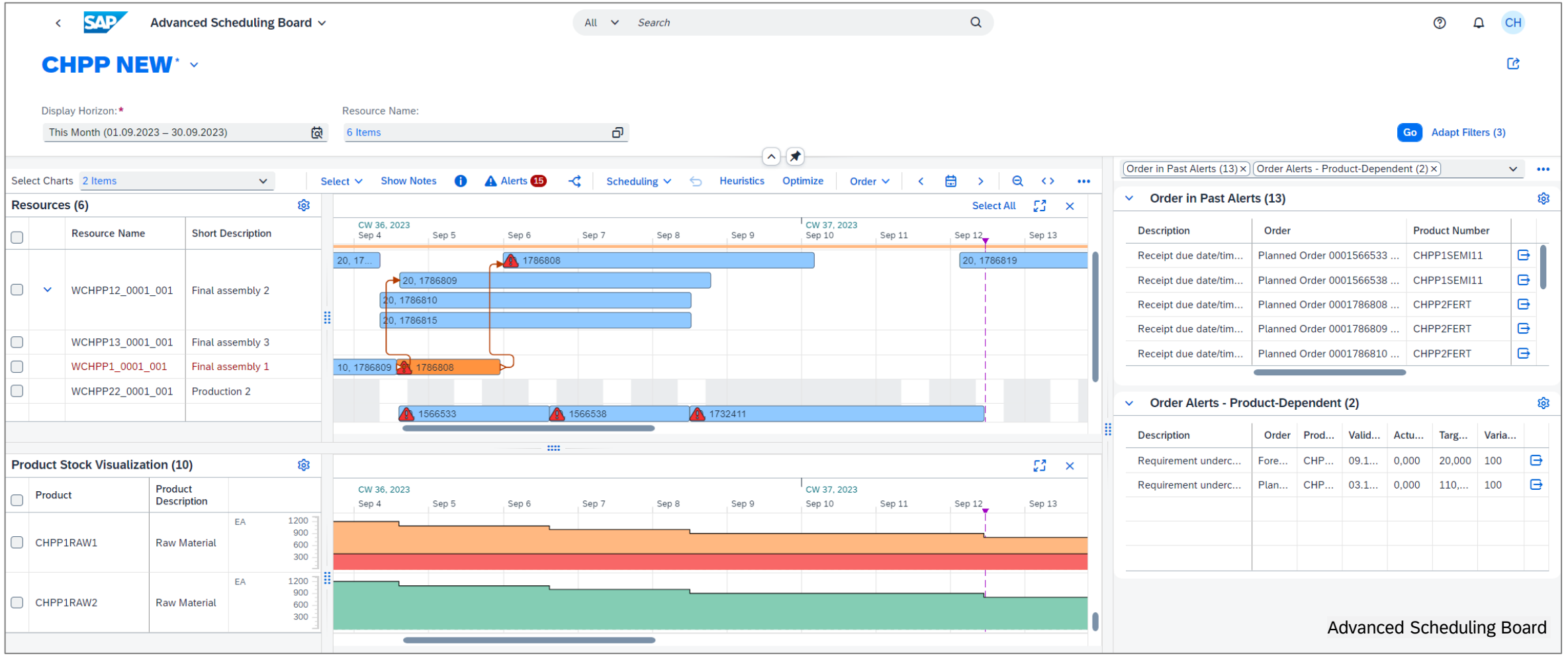
FMEA Visualization

Manufacturing: Advanced Scheduling Board (PPDS)

2023
FPS0+1

Executive Summary

1) New interactive Gantt chart with flexible evaluation of planning horizon
2) Reschedule and realign interactively
3) Area of responsibility extended by work center groups



Advanced Scheduling Board

Manufacturing: Sales Order specific BOM and Shopfloor Routing
(Engineer-to-Order Production Model)

2023 FPS2

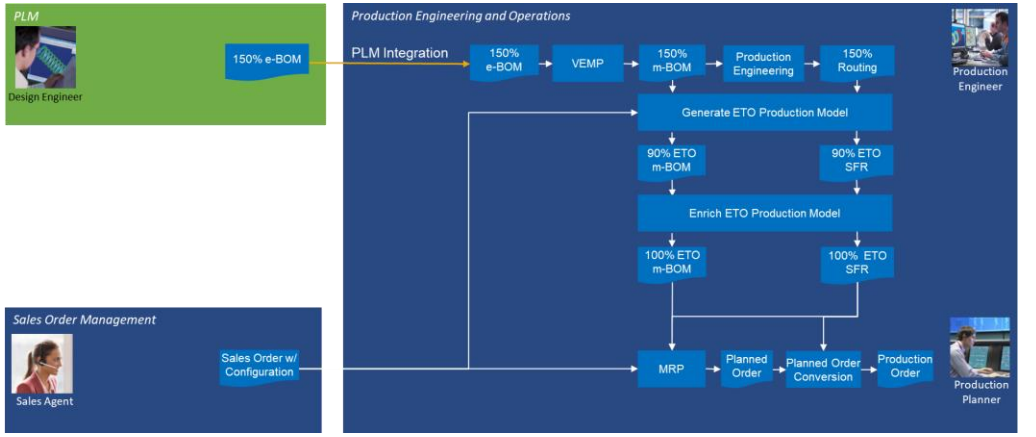
Sales Order specific BoM and Routing (PEO)

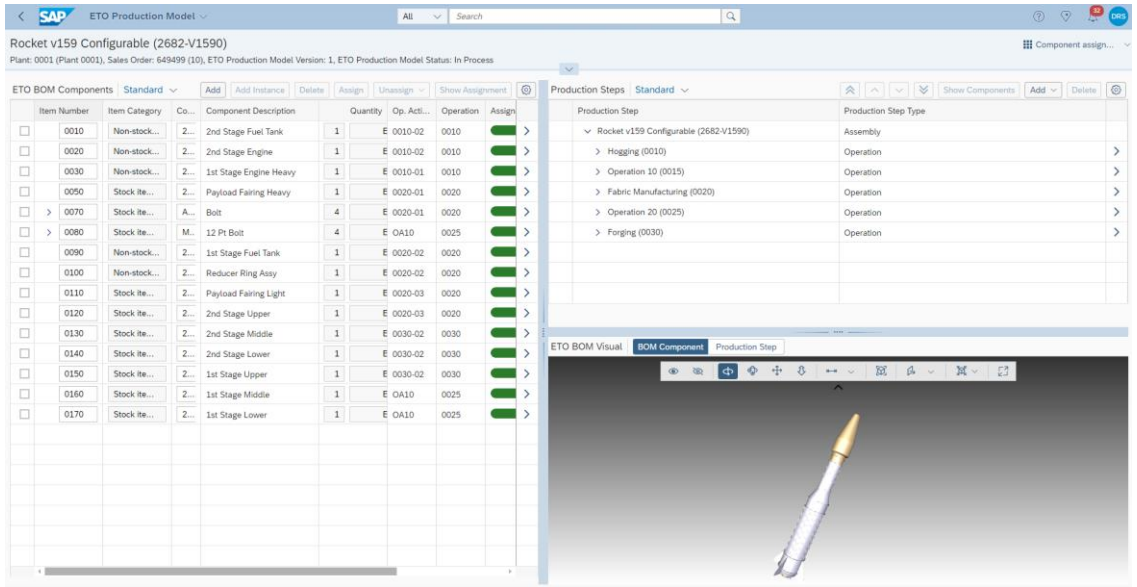
Feature

- Create sales order specific BOM and Shop floor routing (or ETO Production Model) based on the 150% CTO production model
- Use Manage Production Model App to enrich the ETO production model. i.e. add/remove/modify BOM components or production steps
- Create production order for sales order item which utilises the ETO production model instead of generic CTO production model

Business Benefit

- Flexibility to implement customer specific requirements in sales order specific production model without impacting the generic CTO production model





SAP S/4HANA Manufacturing: Supply Chain Integration

Modular Cloud LoB Solutions

additional license

additional installation

- SAP Logistics Business Network
- SAP Analytics Cloud
- Integrated Business Planning (IBP)
- Responsive manufacturing (ME, MII, QIM, VE)
- Production operations (MII, QIM)
- Extended Warehouse Management (Warehousing Hub)
- Extended Transportation Management (Transportation Hub)

Digital Manufacturing
Digital Supply Chain

SAP S/4HANA LoB Apps

additional license

- PPDS – constraint-based planning and scheduling optimization (short term bottlenecks)
- Extended Warehouse Management (warehousing optimization)
- Transportation Management (optimization of routes, driver, freight planning etc.)
- Advanced Available to Promise, delivery optimization
- Production Engineering & Operations to streamline, track, trace complex engineering handover from design to assembly to manufacturing

Manufacturing & Planning Optimization

SAP S/4HANA Enterprise Management

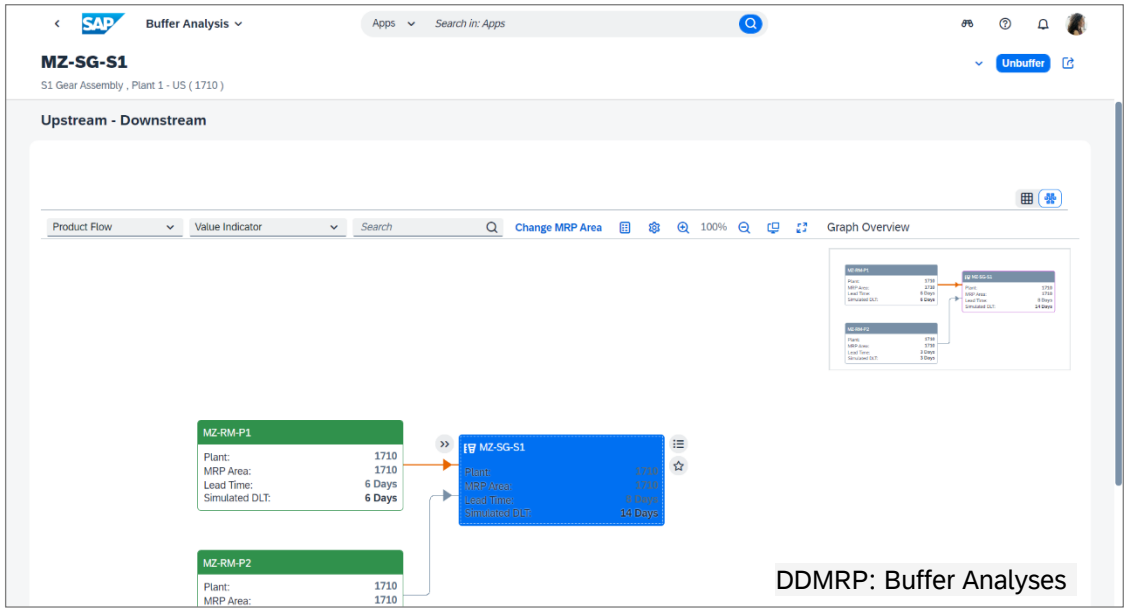
- MRP & Capacity
- Demand Driven MRP to reduce stock buffers & prioritize sales over forecast
- Manufacturing Operations
- Quality Management
- Inventory, Basic Warehouse & Basic Transportation
- Integration to
  - Sales incl. core ATP
  - Finance, valuation, costing & planning
  - Product Development, e.g., BoM, routing, design
  - Procurement
- Embedded analytics

Core Manufacturing, Integration, Transparency & control

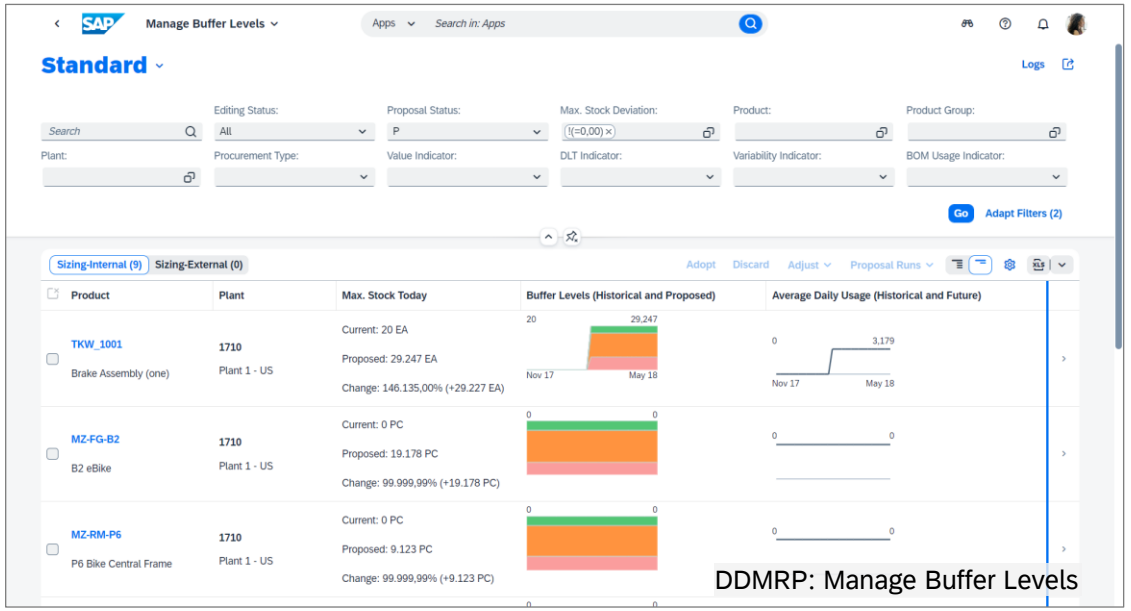
Manufacturing: Demand-driven MRP

Production Planning

Demand Driven Replenishment



DDMRP: Buffer Analyses



DDMRP: Manage Buffer Levels

1) Buffer Positioning

Set up **dynamic buffer profiles** and determine **threshold sizing** of each buffer according to **decoupled lead times** for variability.

2) Buffer Sizing

Use **buffer level management** worklists to review current planning situation based on the **net flow position.**

3) Replenishment Planning

Generate **replenishment orders** at decoupling points based on actual demand. Generate orders **between decoupling points** using classic MRP dependent demand logic.

4) Replenishment Execution

Review the current **performance situation** based on the **on-hand stock status, Stock Projections.**

5) Insight to Action

Easy to use cockpit providing capabilities to

- manage buffer levels augmented by system proposals
- centrally plan & carry out replenishment

Manufacturing: Predictive MRP

Production Planning

Predictive MRP

Scope

Define business scope and its **top level demand**

Calculate

Propagate the demand across the multi-level BoM

Result

Derived demands and (rough) capacity loads on all (sub) component levels, linked to the top demand

Evaluate

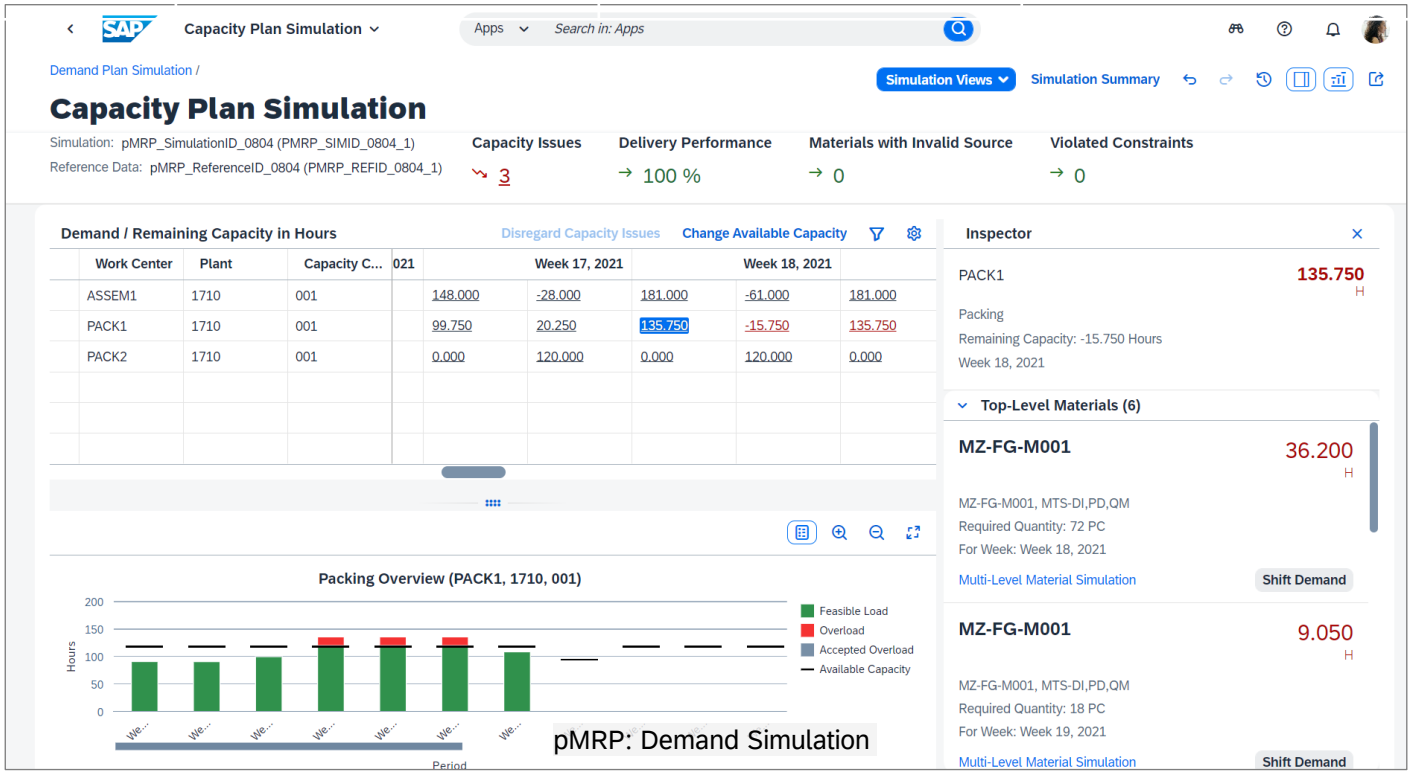
Which top level demands **drive overload?**
What are my **limits and constraints?**

Simulate

Make it fit: Change top level demands, change component or work center availability

Apply

Adjust the actual business objects based on capacity, preproduce, adjust demand or source of supply



pMRP: Demand Simulation

Manufacturing: Production Planning Optimizer

Extended Production Planning and Scheduling

Production Planning (to cover net demand by creating receipts)

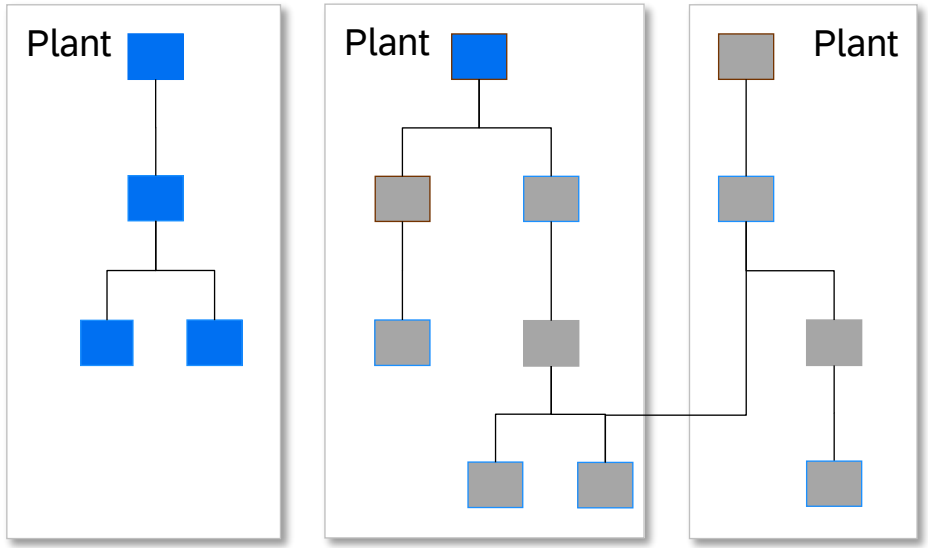
1) MRP for simple planning,
i.e., without the need to consider capacity constraints

MRP I
Heuristics

2) PPO for constrained based planning

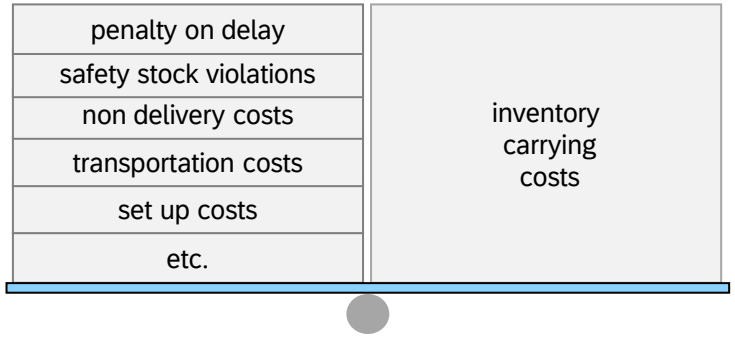
- cost-based optimization (linear programming)
- shared production resources
- common components
- stock transfer relations between plants
- bucket based planning
- improved delivery service

PP
Optimizer



Constraints:

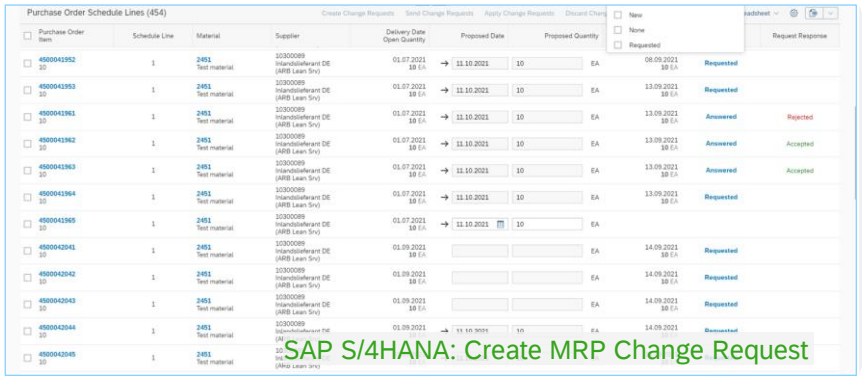
- resource capacity
- stock on hand
- firmed orders
- lead time
- safety stock



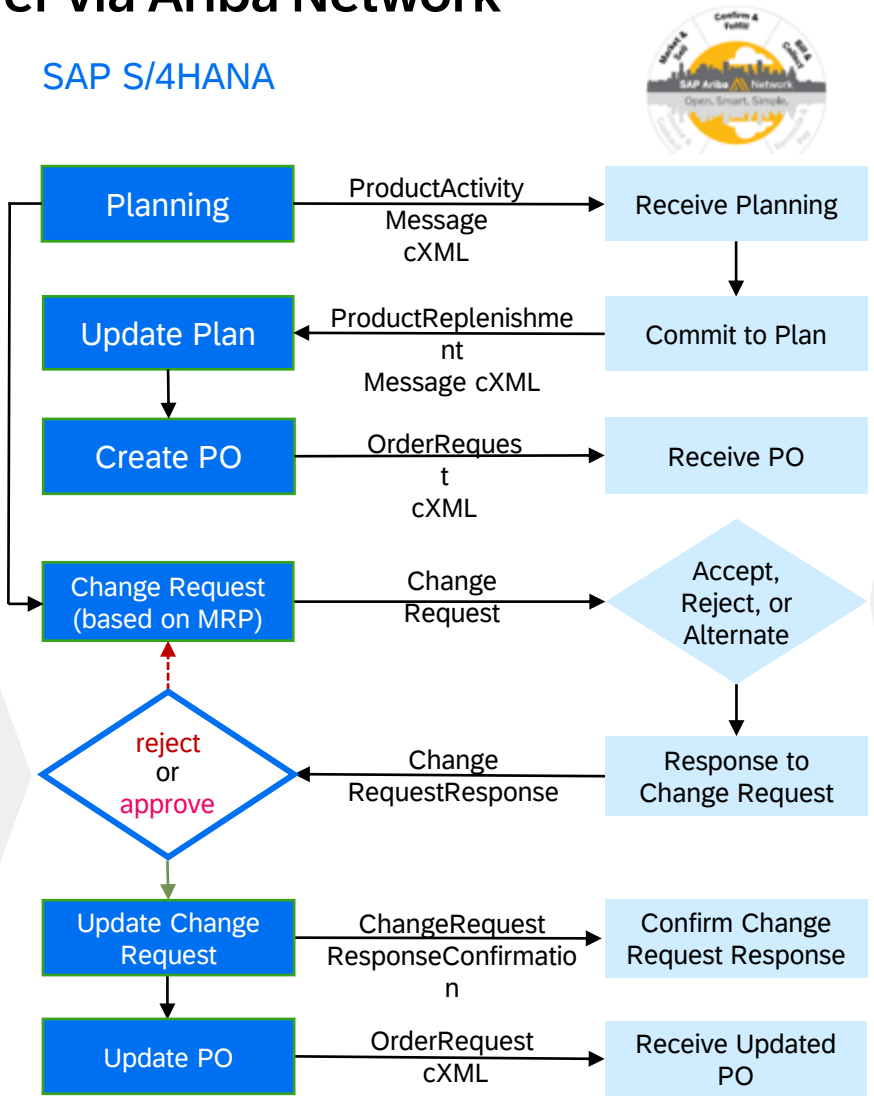
Manufacturing: Collaborative MRP

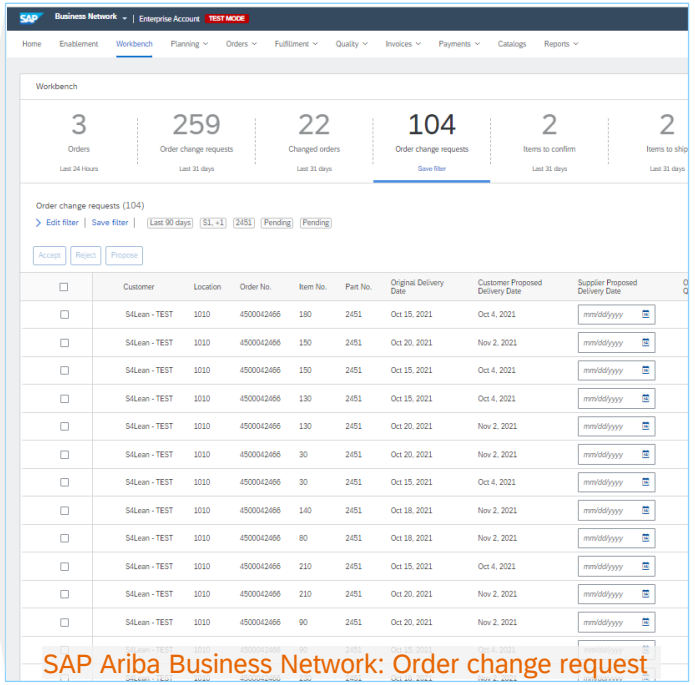
MRP change request with Supplier via Ariba Network

- Changing customer demand
- Material planner has to react on hundreds of needed changes for existing purchase orders daily
- Automation needed
- Requested by Ariba CEI:



SAP S/4HANA: Create MRP Change Request





SAP Ariba Business Network: Order change request

Quality Management: Integration to SAP Quality Issue Resolution

2023
FPS0+1

Supplier

Customer

D1 – Team
Define the Team: 8D Leader, Sponsor and 8D Team Members

D2 – Problem Description
Refine the defect description and distinguish between defect description from customer and supplier. Update your defect description depending on findings

D3 – Containment Actions
Define containment actions and assign them to a task processor

D4 – Root Causes
Define root causes manually or supported by a root cause analysis method. Identify root causes with 5 Whys

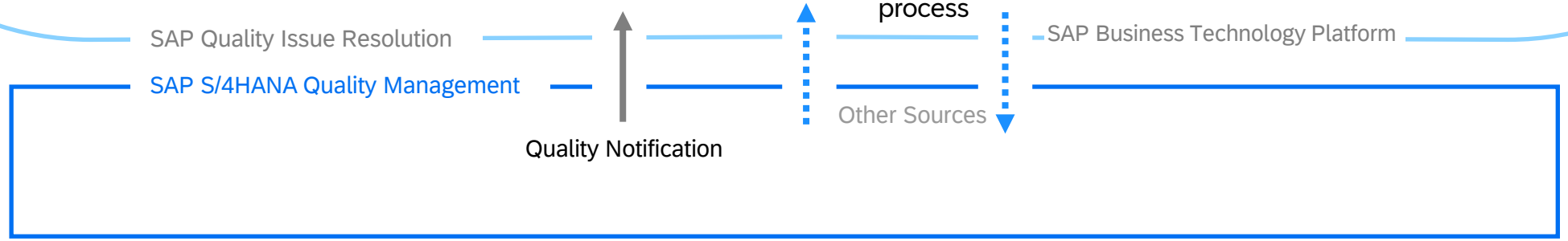
D5 – Defined Corrective Actions
Define the Team: 8D Leader, Sponsor and 8D Team Members

D6 – Implemented Corrective Actions

- Plan corrective actions in the context of an identified root cause
- Indicate the state of planning of a task by its status Implement the planned corrective actions
- Create additionally unplanned corrective actions

D7 – Preventive Actions
Define and implement preventive actions

D8 – Congratulate Your Team
Congratulate the involved team on the problem-solving process



Manufacturing: Delta Scope Summary 2023

2023 FPS2

Ext. Production Engineering

- **Production integration portal (PIP)**
  migrate legacy external routings to shop floor routing
- **Identification** of reference-only comp. in a BOM
- Production Integration Portal: create repair routing e for shop floor routing (FPS1)
- Compare As-Built with As-Planned (PEO):
  New app to create a comparison of a serialized product as it was actually built in execution with its as-planned MBOM.
- Order-Specific Shop Floor Routings
  Create and manage your order-specific shop floor routings. You can now use new features that are available for maintaining order-specific shop floor routings. (FPS2)
- Analyze Change Impact by engineering changes of EBOMs to MBOMs, shop floor routing, and production orders (FPS2)

Ext. Production Planning

Notes Management
- Collaboration and handover between planning and shop floor
- Integrated with PP/DS order and PP production order long text

Tank Planning for process industries: Manage Tank as storage resource
Filling and Draining multiple Storage Tanks with one Order (aka. 'Tank Split')

Constraint-based production planning: new advanced **graphical scheduling board**
SAP Fiori app to define and manage flexible constraints for PP/DS (FPS1)

Analytics in Production Planning and Detailed Scheduling (PP/DS):
new CDS (Core Data Services) views to monitor and analye KPIs in PP/DS.
This optimizes the planning of your resources, procurement, and production. (FPS2)

Production Engineering

- **Process Production Versions:**
  Network Graph View for Master Recipe. Navigate in the Process Production Versions app to a network graph that represents the sequence of operations and phase relationship for master recipe.
- **Work Center Groups:**
  New app features the column Work Center Group Type and also supports navigation to the Manage Work Center Groups
- **Work Center Responsibility**
  New app defines the area of responsibility by selecting the respective combinations of plant and work center person responsible.
  (incl. mass maintenance capabilities)

Production Planning

Manage Material Coverage::
New, modernized SAP Fiori app Coverage

Capacity evaluation
New SAP Fiori (Graphical Planning Board)

MRP live:
enablement of the simple distribution key

MRP: Time-dependent Stock levels:
- Validity intervals for multiple materials
- Visualization of relevant stock level values

Demand Driven MRP:
- Flexible definition of display horizons
- Advanced average-daily-use calculations

Production Operations / Options

- Serialization:
  Batch processing of multiple serial numbers from multiple production orders
- Internal Collaboration:
  Cross-domain collaboration between
  - production engineers
  - production supervisors
  - shop-floor workforce
- Production Supervisor Responsibility
  New app to define your area of responsibility by selecting the respective combinations of plant and production supervisor.

Quality Management

- **Quality Planning and Improvement**
  Failure Mode Effect Analysis (FMEA) for products and processes with graphical UI
- **Quality Inspection**
  Enablement of usage decisions for inspection lots with serialized materials
- **Quality Improvement**
  Defect recording with defect code determination based on business rules (BRFplus).
- SAP Quality Issue Resolution Supporting collaborative problem-solving processes (8D) with BTP App integrated with SAP S/4HANA QM (Q-notifications)

Sales

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Sales: Overview

Modular Cloud LoB Solutions

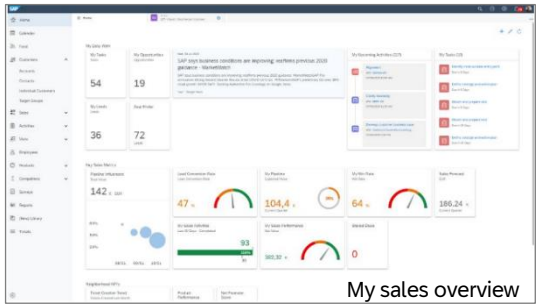
- E-Commerce
- Sales automation
- Customer data
- Marketing
- Customer service

additional license

additional installation

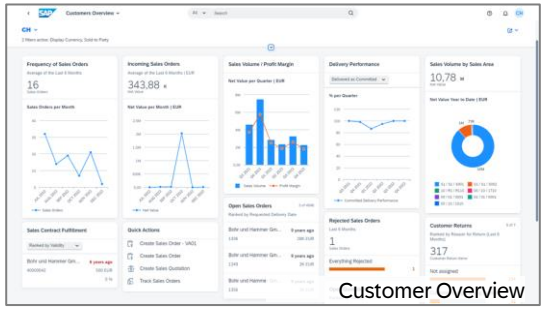
SAP S/4HANA Enterprise Management

Sales Force Support	***Manage*** customer engagement cycles with embedded presales capabilities for lead, opportunities, and relevant tasks.
Order and Contract Management	***Ensure*** consistent master data, including pricing across the organization. ***Process*** sales documents accurately and timely to maximize customer satisfaction. ***Access*** real-time sales performance KPIs for optimized decision making.
Solution Business Management	***Manage*** an end-to-end process that spans from creating a solution quotation to delivering products of different categories, such as physical goods, one-time services, long-running services, and subscriptions.



My sales overview

Monitor Condition contract



Customer Overview

Sales: Business area overview

Modular Cloud LoB Solutions

- E-Commerce
- Sales automation
- Customer data
- Marketing
- Customer service

additional license

additional installation

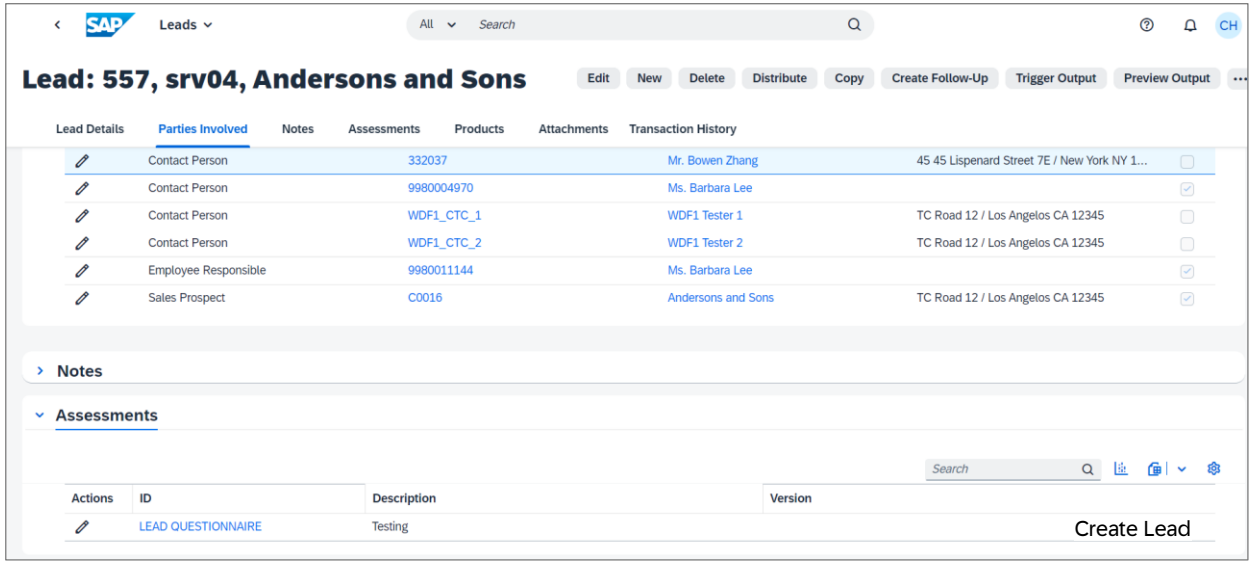
SAP S/4HANA Enterprise Management

Sales Force Support	Sales Lead Mgmt.	Opportunity Mgmt.
	Activity Management	Account and Contact Mgmt.
Order and Contract Management	Sales Master Data Management	Price Management
	Sales Contract Management	
	Sales Quotation Management	Sales Order Management and Processing
	Sales & Solution Billing	Sales Monitoring and Analytics
	Sales Rebates Mgmt. & Commissions Mgmt.	Claims, Returns and Refund Management
Solution Business Management	Solution Portfolio Management	Solution Quotation Management

Sales: Sales Force Support

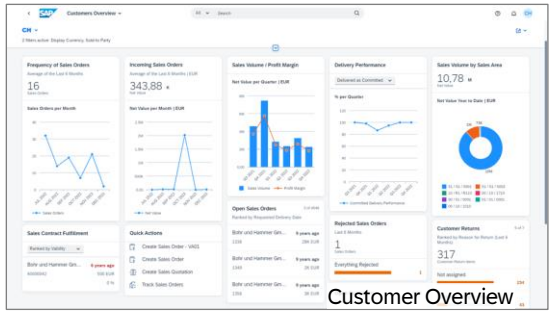
Sales Force Support	Sales Lead Management	Opportunity Management	Activity Management	Account and Contact Mgmt.
	Collects any potential sales information at the beginning phase of sales pipeline	Records recognized sales possibilities and tracks the progress across the sales cycle.	Plan, track and organize sales activities throughout the entire customer relationship life cycle.	Delivers sales force a holistic view of each customer with identified key contact and account data.

- Manage presales activities to maximize leads to order ratio:
  - Bring selected SAP CRM Sales capabilities into SAP S/4HANA
  - Use unified master data (Business Partner, Products, Price), transactional data objects (Sales Quotation, Sales Order) and harmonized UX
- Integrate with SAP S/4HANA sales processes
- Part of SAP S/4HANA, no add-on, no middleware required
- Included in SAP S/4HANA Enterprise Management license
- Best practices content (link)

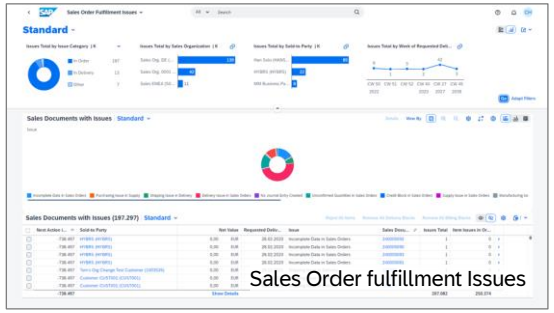


Sales: Order and Contract Management

Order and Contract Management



Customer Overview



Sales Order fulfillment Issues

Master Data Management & Price Management

Leverage simplified data models and central Business Partner approach.
Create, modify, or display sales master data in a harmonized user experience.
Control price master data definition and perform price calculation.

Sales Quotation Management

Accelerate sales cycles with integrated sales quotation management by delivering compelling sales quotations to customers and by focusing on prioritized quotations with embedded prediction capabilities for the quotation-to-order conversion rate.

Sales Contract

Manage contract types, such as, sales contract, condition contract for Settlement Mgmt., scheduling agreement, trading contract for Global Trade Management.
Use real-time and predictive analytics to effectively manage sales contracts.

Sales Order Management and Processing

Provides a 360-degree view of sales order execution. Maximize low-touch order rate, leveraging exception-based order management.
Prevent overall delivery delay with embedded predictive analysis.
Streamline sales processes with workflow.

Sales & Solution Billing

Cover manual and automated billing and invoicing scenarios.
Combine external billing data with sales documents into one single invoice.

Sales Rebates & Incentive and Commissions Management

Manage business volume-based sales rebate with condition contract settlement.

Sales Monitoring and Analytics

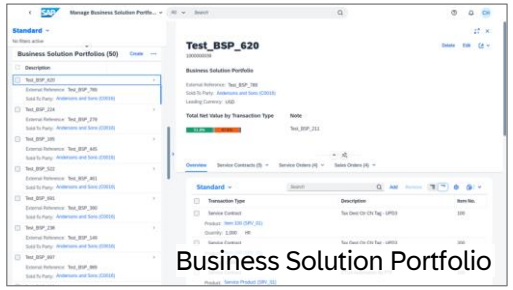
Monitor and analyze core sales business processes, from quotations and contracts, to sales orders, including their fulfillment up to invoices. Sales KPIs integrated in SAP Analytics Cloud.

Claims, Returns and Refund Management

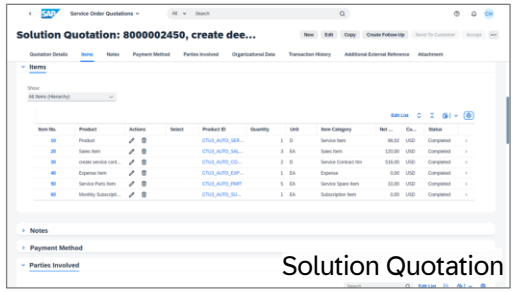
Reduce customer service & support cost by streamlining return processes and customer return analysis.

Sales: Solution Business Management

Solution Business Management



Business Solution Portfolio



Solution Quotation

Solution Portfolio Management

Business solution portfolios bundle service contract items, service order items, sales order items, and subscription contract items that are related to a solution and its customer.

- Create business solution portfolios automatically as a follow-up transaction for a solution quotation in addition to the contracts
- Create business solution portfolio manually using the app Manage Business Solution Portfolios

Solution Quotation Management

Offer solutions to your customers by creating quotations for combinations of different types of products (such as tangible products, services, and service contract items). These combinations of products can be modeled as product bundles in master data.

- Use product bundles to sell combined products as a single package
- Accept solution quotations to create follow-up transactions
- Use the pricing for one-time charges, periodic charges, and bundle prices

Sales: Master Data Management

Order and Contract Management | Master Data Management

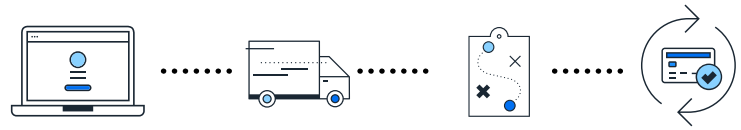
Business Partner Multiple Addresses Adoption in Order-to-Invoice Process

WHAT

- In SAP ECC, Customer and Vendor master data is maintained independently
- SAP S/4HANA Business Partner (BP) is the leading object and Customer & Vendor are the respective roles of the Business Partner
- Customers, who use Customer & Vendor in SAP S/4HANA applications shall benefit from the advantages of BP – compared to customer & vendor concept, e.g., multiple addresses

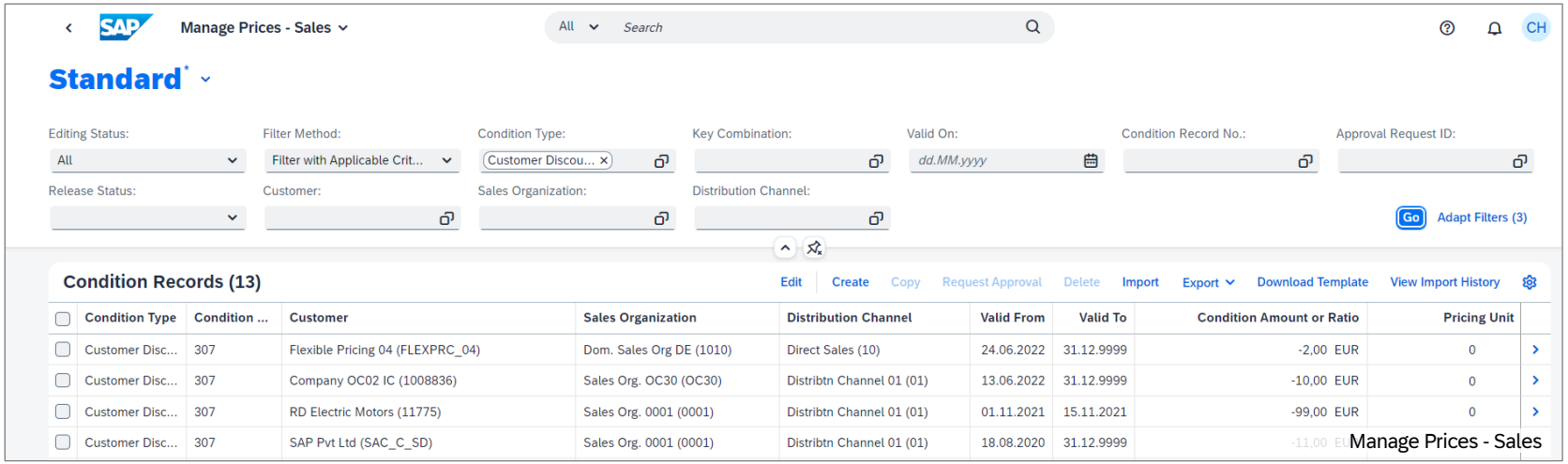
WHY

- Enablement of the Business Partner multiple addresses in order-to-invoice process with SAP S/4HANA 2021 release
- Business Functions:
  - BPCUSTOMER_MULTIPLE_ADDRESSES
  - Q2C_MULTIPLE_BP_ADDRESSES
- Master data migration planned for SAP S/4HANA 2021 FPS02
- SAP note: 3067314



Sales: Price Management 1/2

- Calculates net values in the sales process across the process
- Can be carried out automatically or edited manually
- Key elements include:
  - Pricing procedure
  - Condition type
  - Access sequence
  - Condition record
- Available APIs:
  - Asynchronous outbound service allows the replication of condition records for pricing which are used in Sales to external systems
  - Synchronous inbound service enables one to create, read, update, and delete condition records for pricing which are used in Sales
  - Inbound service enables external applications to read pricing procedure data which is used in Sales
- Price Elements – Flexible Analysis
- Manage Price Fiori App video



Sales Document

Sales document type and customer master data determine pricing procedure PP1

Product XYZ 120 PC

1

Pricing procedure PP1

	Condition Type	
1	List price	LP
2	Discount (%)	D2
Net value		

2

Condition Type LP

Access Sequence AS1

3

Access Sequence AS1

1	Customer/Material
2	Price list/currency/ Material
3	Material

4

Condition Record

1	>1	102 USD/PC
2	>100	101 USD/PC
3	>200	100 USD/PC

5

Sales Document

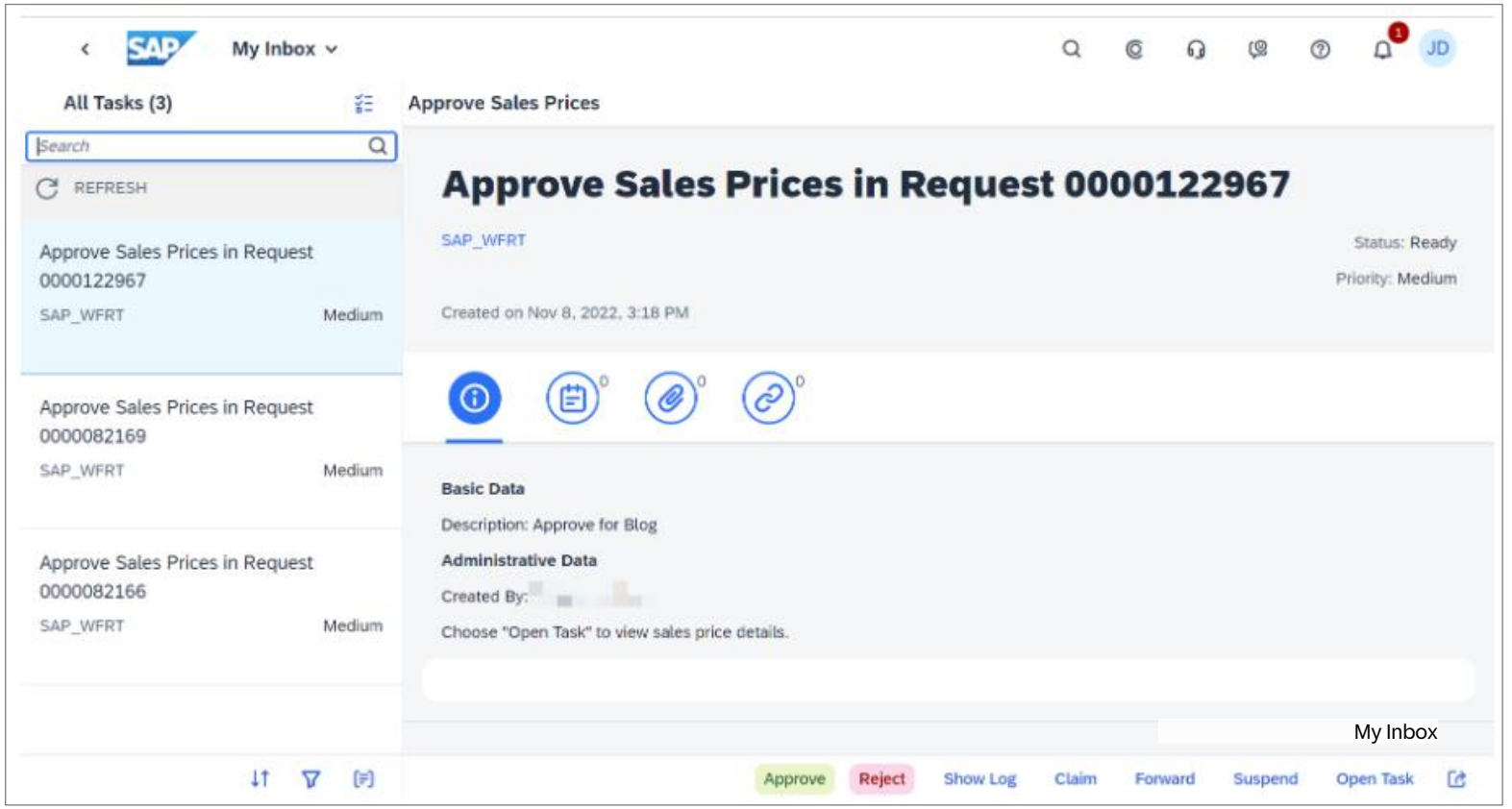
1	List price	101 X 120	12120 USD
2	Discount (%)	2%	-242.40 USD
Net value			**11635.20 USD**

Sales: Price Management 2/2

Approval Workflow

Configure workflows according to a company's internal guidelines on how to control and approve price changes in sales by different stakeholders:

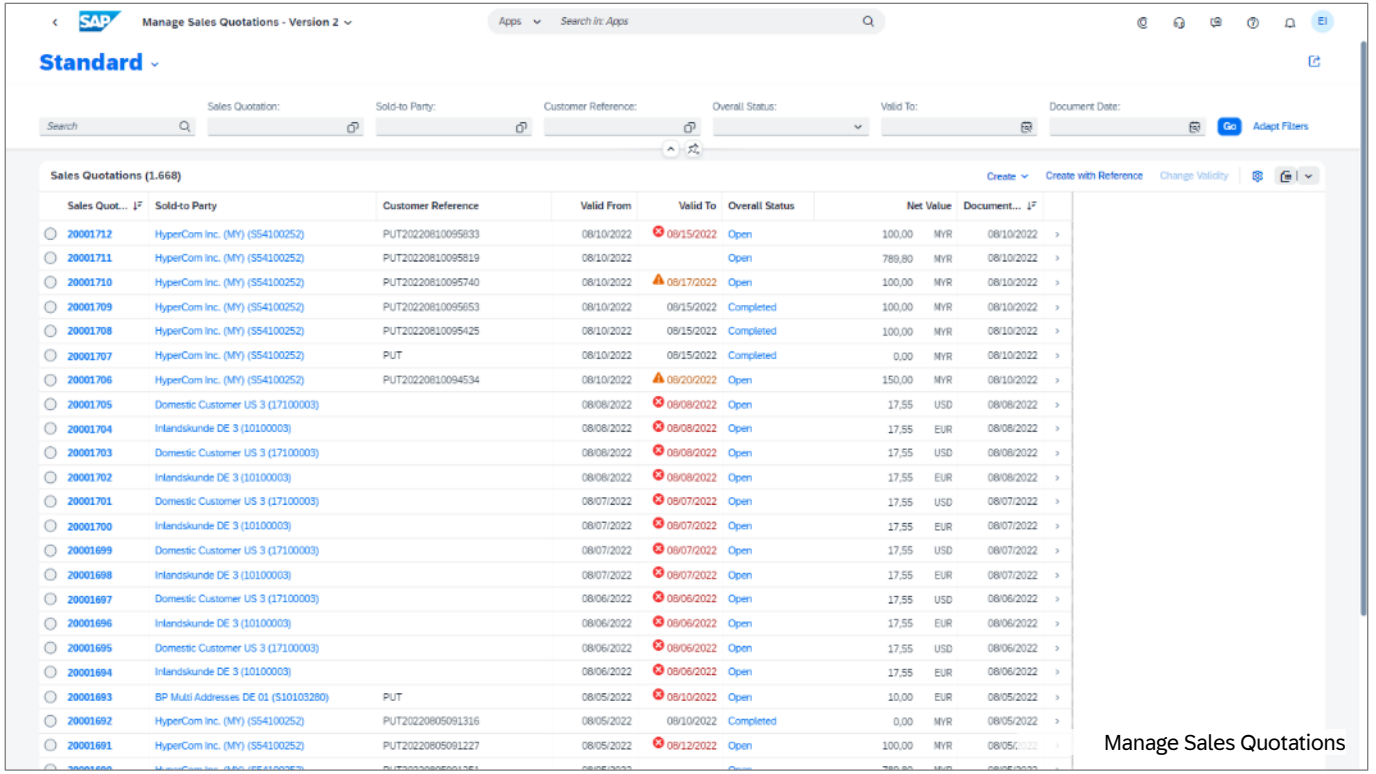
- Configure the process to trigger approval of sales-price changes
- Configure the workflow of approvals
- Define and assign responsible teams to the different approval workflows



My Inbox

Sales: Sales Quotation Management 1/2

- Create a quote in the system or presales system, while being accepted / rejected by customers
- Monitor incomplete quotation
- Use of approval workflow for granular control over which quote goes out to the customer
- Automatic notification of the responsible employee when a sales quotation is about to expire
- Analyze sales quotations based on flexible combinations of dimensions
- Manage duplicate quotations by comparing potential duplicate sales documents detected in the Manage Duplicate Sales Documents app



Manage Sales Quotations

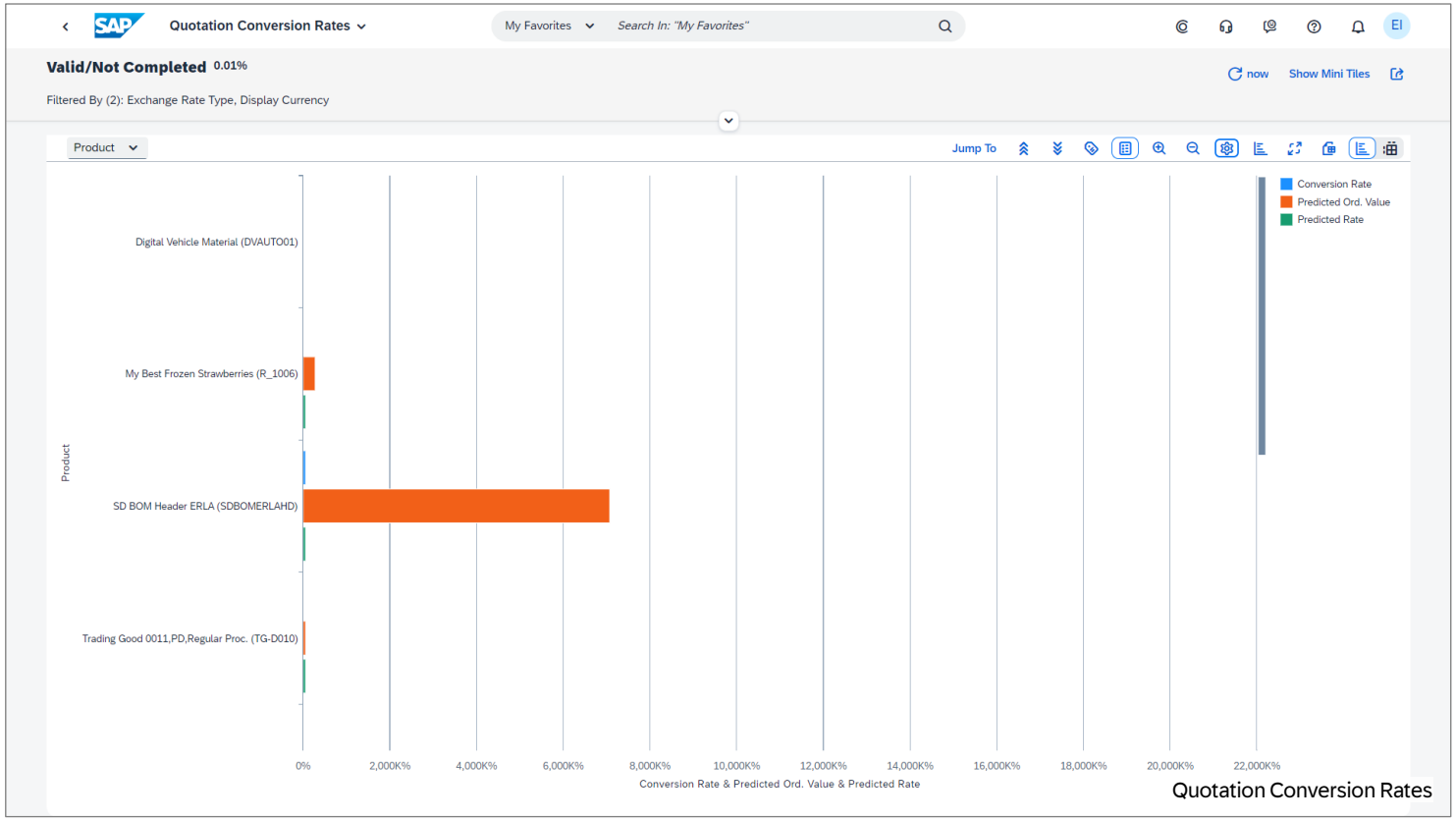
Sales: Sales Quotation Management 2/2

SAP Fiori App: Sales Quotation Conversion Rate

Allows Sales Manager & Internal Sales Representative to proactively:

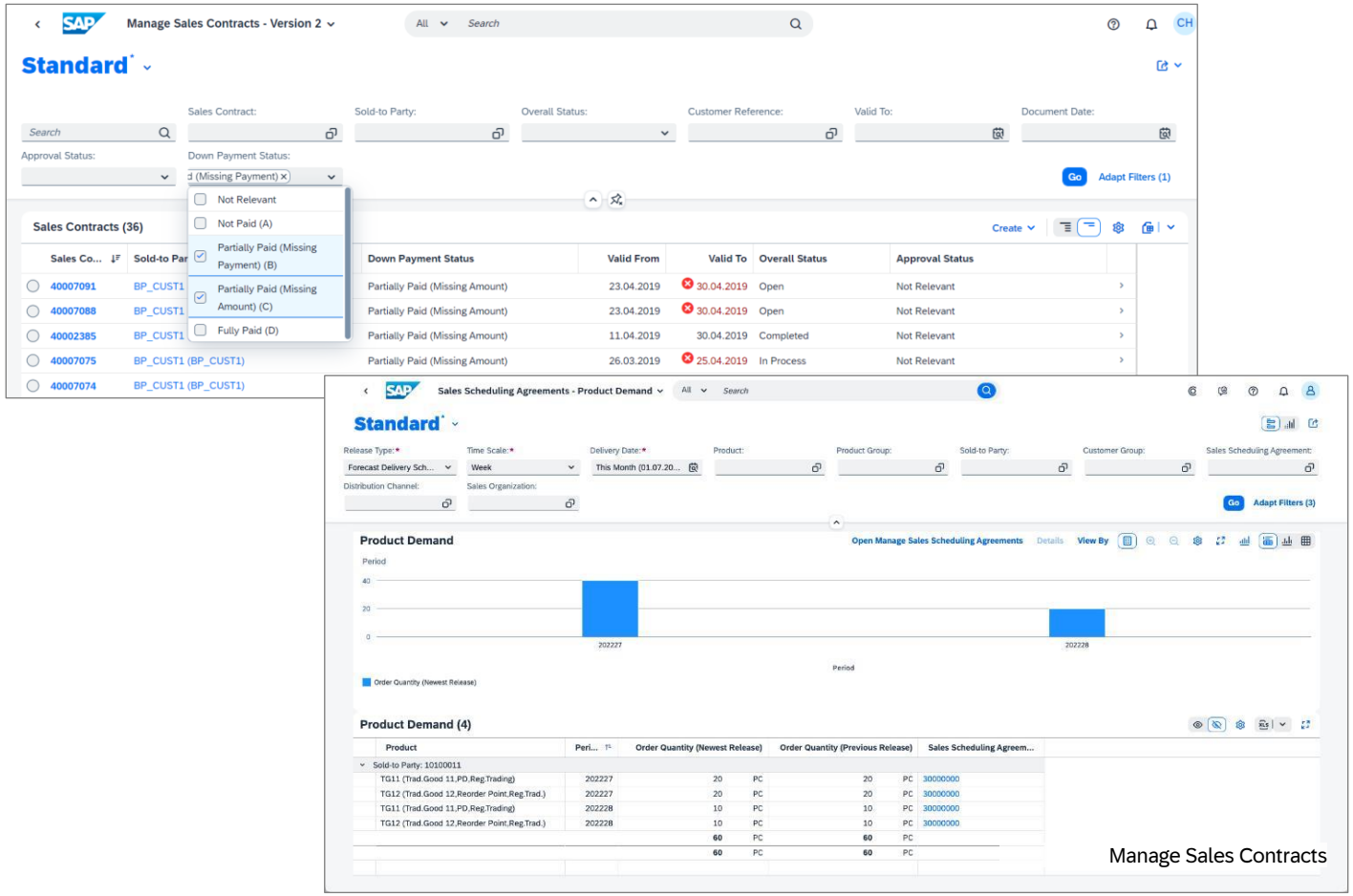
- monitor sales quotation to order conversion ratio
- work on high probability and high value quotations
- forecast sales with confidence

Accurate information about the conversion rate enables sales forces to focus on the most reliable quotations in order to increase sales.



Sales: Sales Contract Management 1/2

- Capture sales contracts effectively
- Contract types covered:
  - Sales quantity/value contract
  - Sales scheduling agreement
- Approval workflow for sales contracts
- Identify and monitor contracts that need to be renewed soon
- Proactively alerting for expiring sales contracts with abnormal fulfillment situation
- Analyze sales contract fulfillment rates to identify which contracts are not being fulfilled as expected

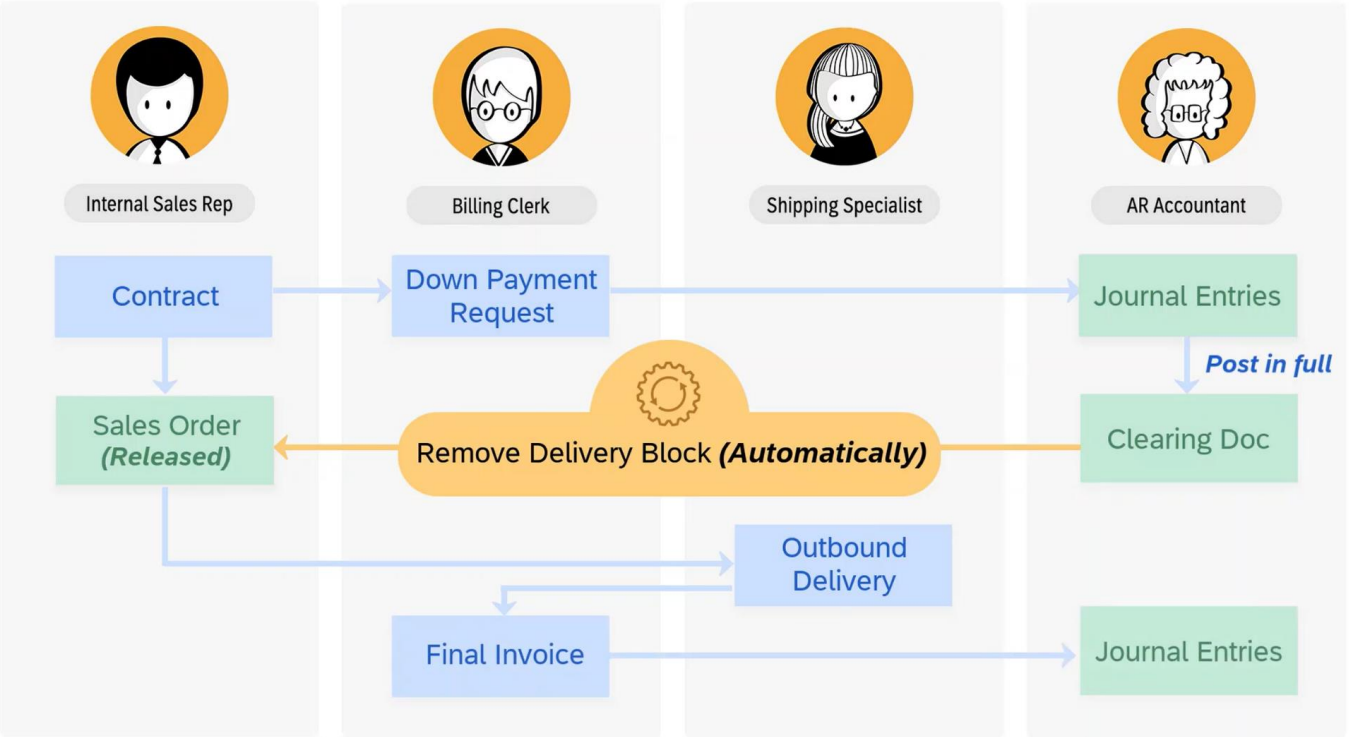


Manage Sales Contracts

Sales: Sales Contract Management 2/2

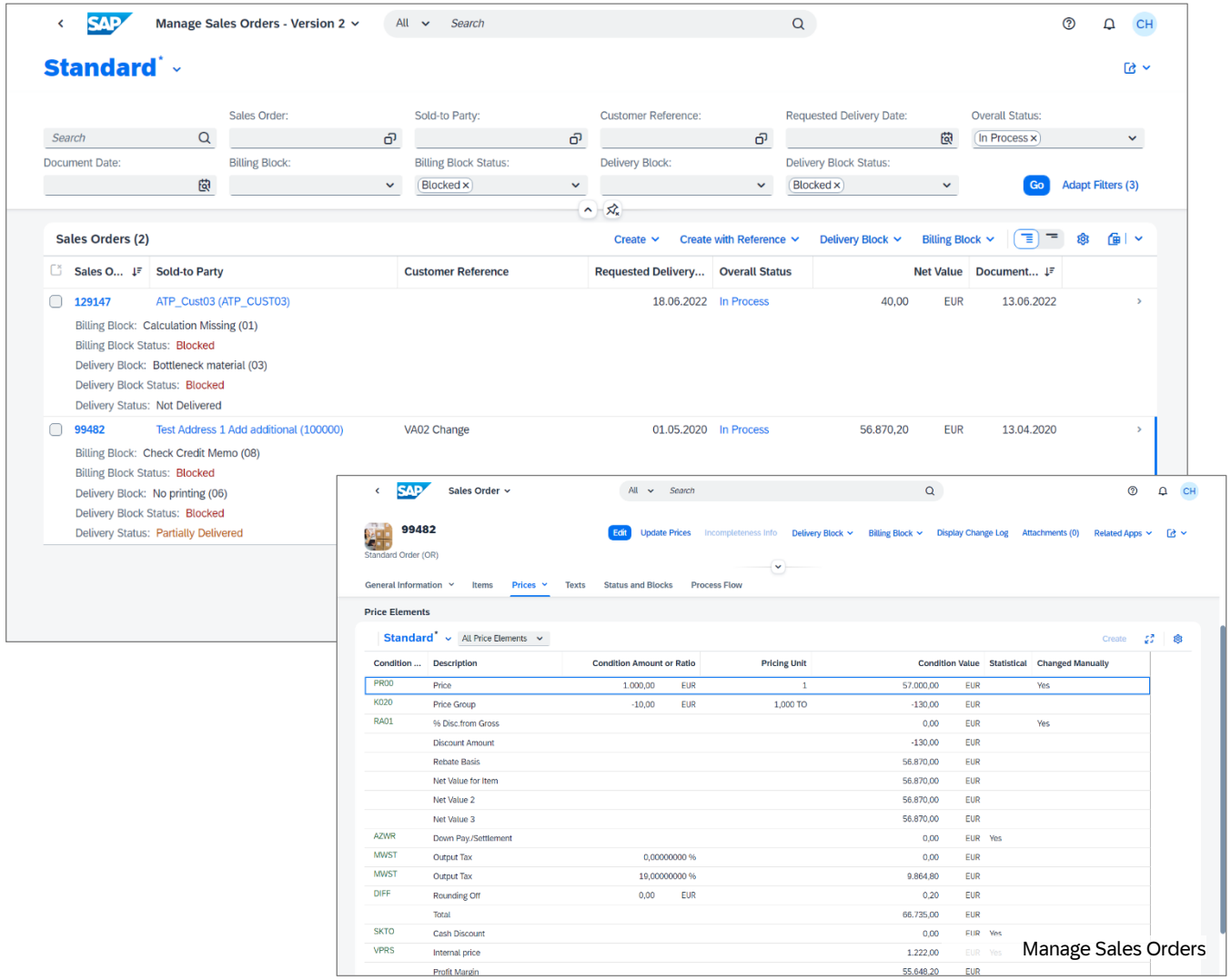
Enable down payment processing for sales quantity contracts using billing plans

- Create a sales quantity contract with down payment billing plan lines, and contract release orders with reference to the contract.
- The contract release orders are blocked for delivery before all agreed down payments are made.
- Once the customer has made the payment completely, the system removes the delivery block on schedule lines, allowing the continuation of delivery processing and invoicing.



Sales: Sales Order Management and Processing 1/8

- Execute business transactions based on sales documents, such as inquiry, quotation, and sales order, defined in the system.
- Create a sales document with or without reference to an existing document. When creating or changing sales documents, the system confirms dates and quantities.
- When processing a sales document, the system can automatically carry out basic functions, such as the following:
    - Pricing
    - Availability check (if this function is defined in the material master record)
    - Transferring requirements to materials planning (MRP)
    - Delivery scheduling
    - Shipping point and route determination (for the sales order)
    - Credit limit check
- Mass Change of Sales Documents.



Manage Sales Orders

Sales: Sales Order Management and Processing 2/8

Mass Order Creation

- Fiori App **Import Sales Orders**
- Creation of sales orders by importing pre-defined templates in Microsoft Excel spreadsheet formats

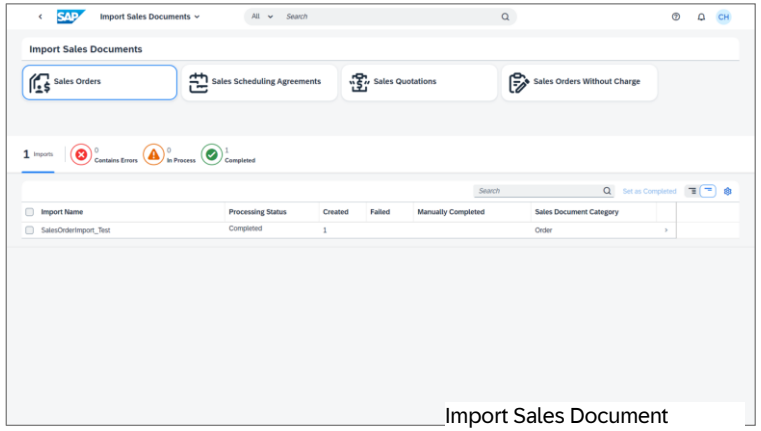
Configurable Template

- Over 160 **Fields** for Sales Order **Headers**, Sales Order **Items, Pricing** and **Text**
- Embedded how-to explanation
- Easy and flexible maintenance

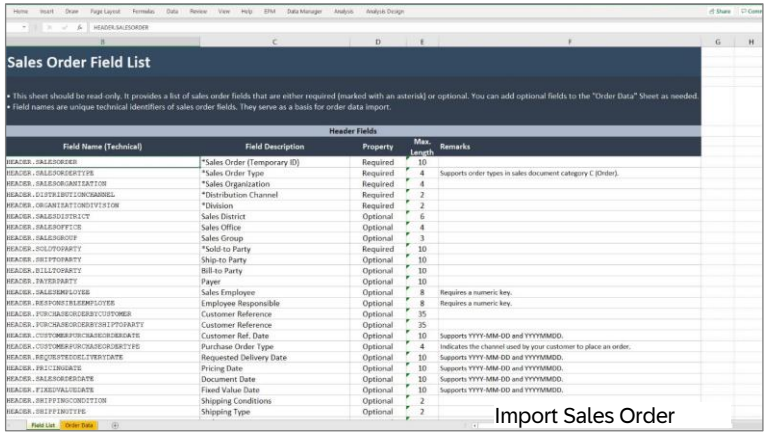
Sales Order Upload Template

Adaptation and Extensibility

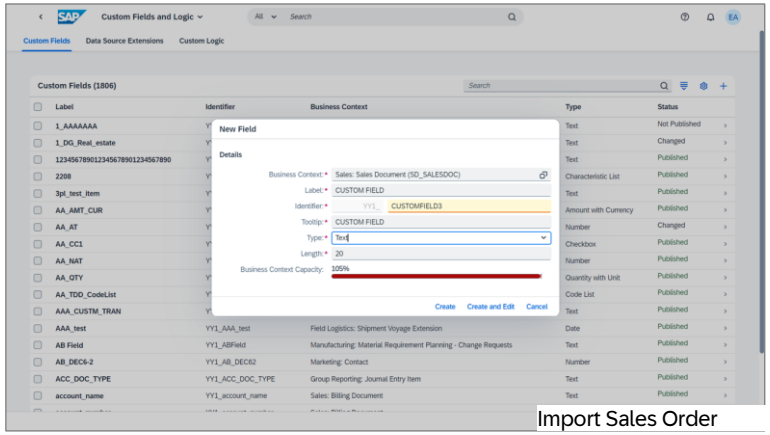
- **Field extension** via SAP S/4HANA In-App Extensibility
- Fiori App **Custom Fields**
- Enabled fields can be added to Sales Order upload template



Import Sales Document



Import Sales Order

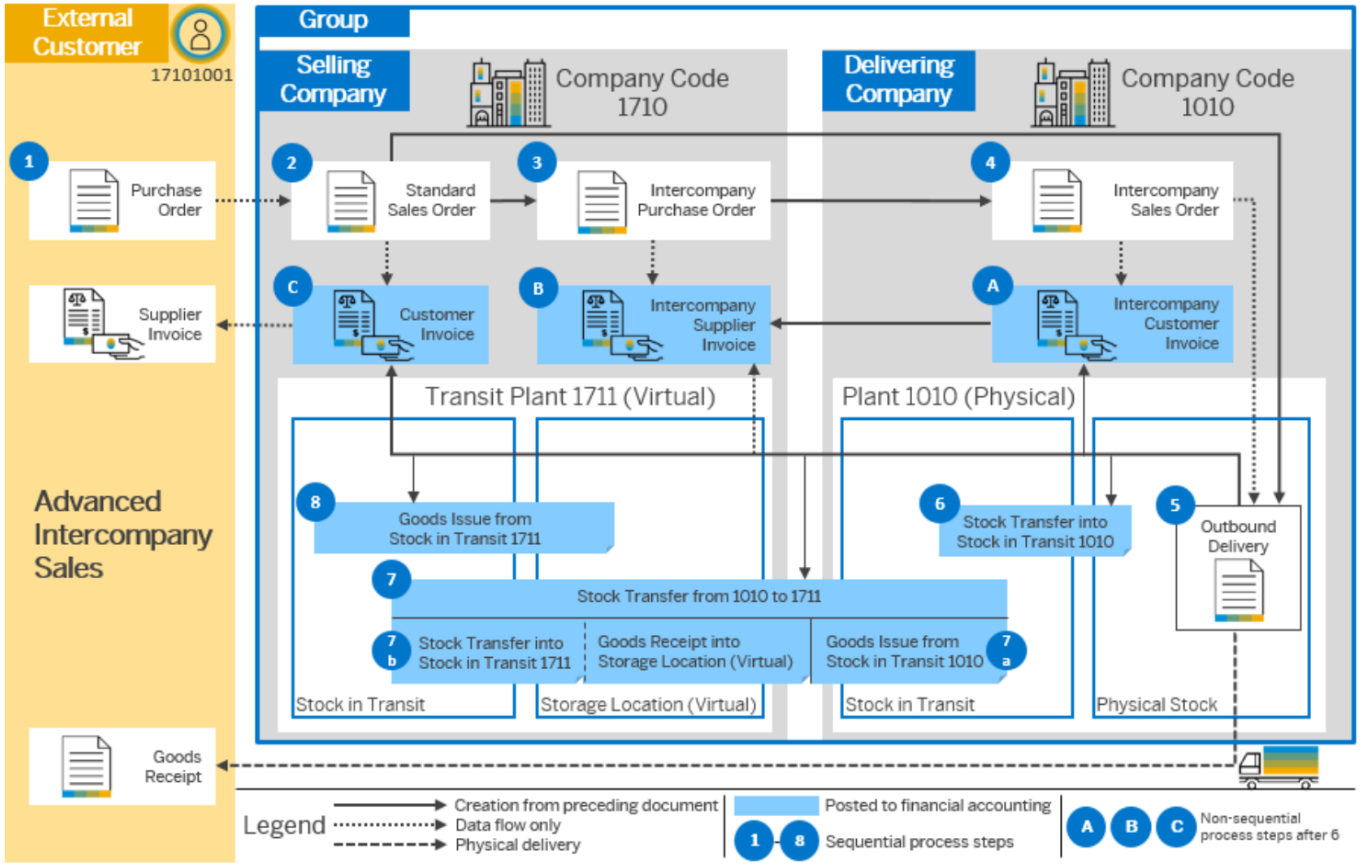


Import Sales Order

Sales: Sales Order Management and Processing 3/8

Advanced Intercompany Sales

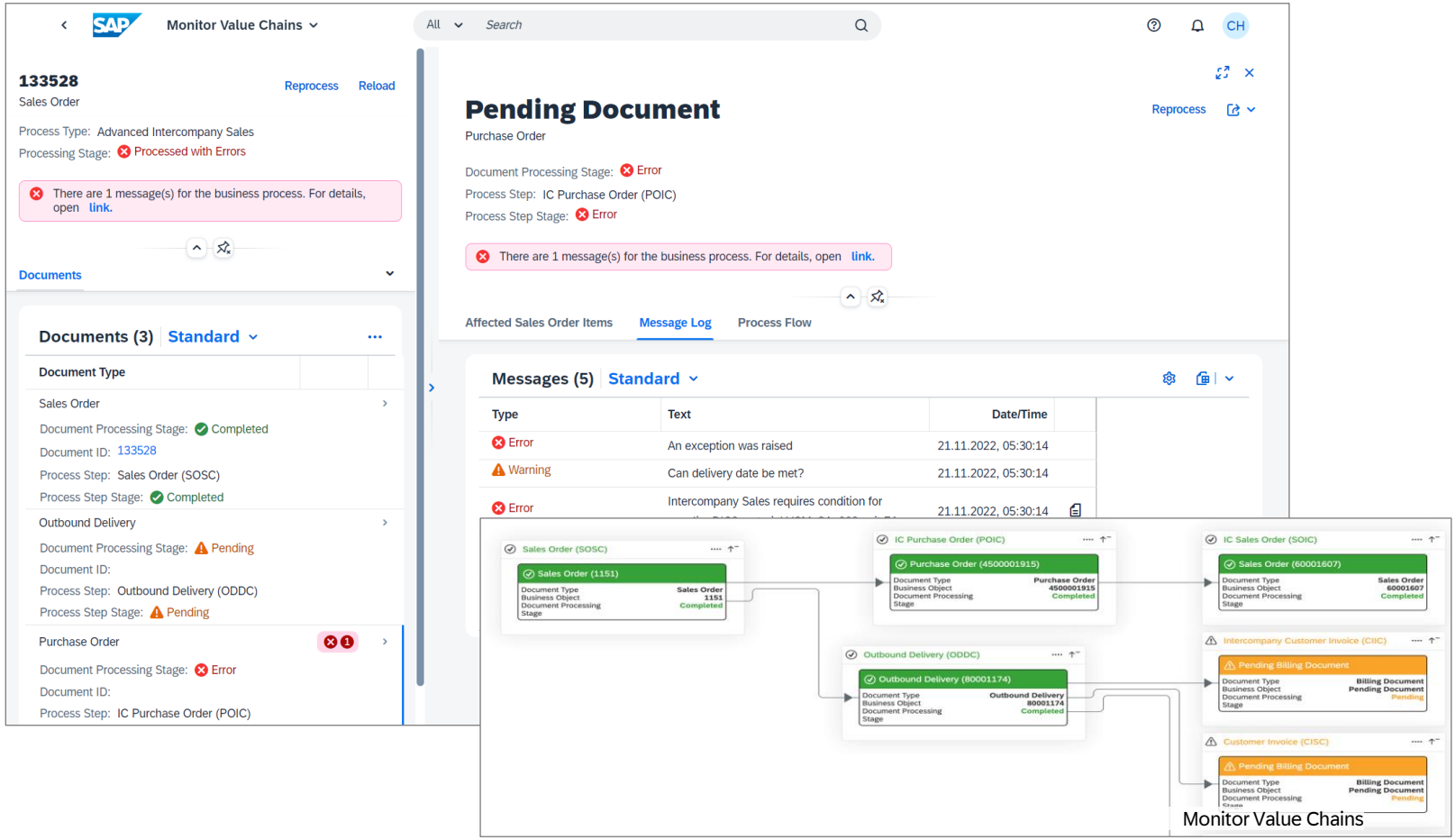
- Highly automated end to end process – fully integrated with:
  - Available-to-Promise check (ATP)
  - Material Requirements Planning (MRP)
  - Product Compliance
  - Trade Compliance
  - Transportation Management
  - Support of IFRS 15 compliance for handling revenue recognition and Cost Of Goods Sold (COGS)
  - Product Costing
  - Profitability reporting across legal entities
  - Group Reporting / Consolidation
- Change in the customer-facing sales order will automatically update all follow-up documents.
- Purchase Order in the Selling Company enables landed cost in product costing for the selling company



Sales: Sales Order Management and Processing 4/8

Advanced Intercompany Sales

- End to end value chain and process monitor
- Ensures process transparency with the ability to monitor document postings and to detect issues



Sales: Sales Order Management and Processing 5/8

Create sales order from PDF file automatically

Manual and error-prone sales order creation process

Business pain points:

- Sales offices receives customer's buying orders in PDF files as Email attachments.
- Sales representative monitors Email inbox regularly, "translates" order data into sales order data format and enters sales orders.
- **High manual repetitive effort, error-prone process.**

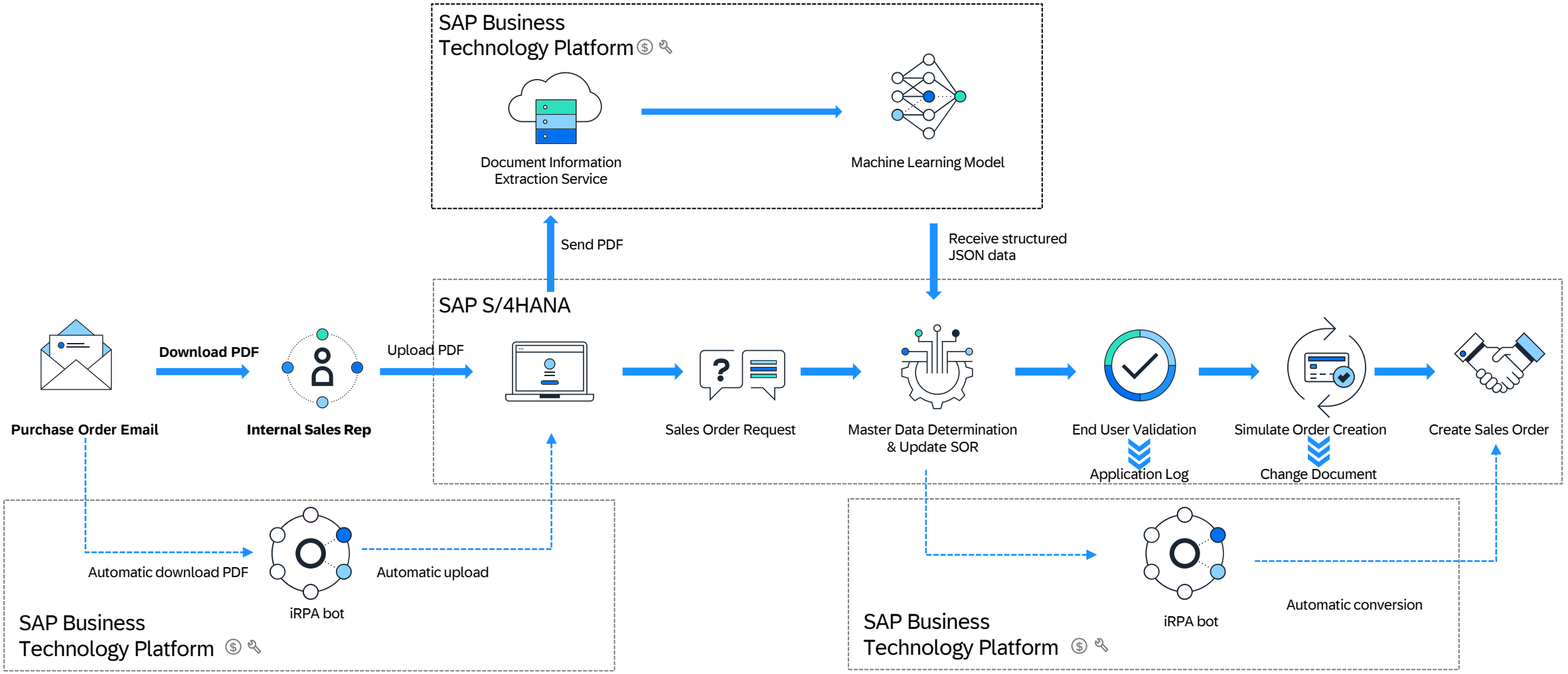
Automated sales order creation process

SAP S/4HANA Capabilities and Business Benefits:

- SAP RPA bot regularly checks the dedicated Email inbox and uploads unread PDF (customer order) automatically into SAP S/4HANA.
- SAP machine learning Document Information Extraction service extracts the sales order relevant data for SAP S/4HANA.
- Within SAP S/4HANA a sales order request is automatically created.
- In case of incompletion or incorrect data SAP S/4HANA provides guided procedure for correction. Side-by-side view of uploaded document.
- Sales rep. can verify order data, simulate order creation and confirm order creation.
- **Improved sales productivity with process automation.**

Sales: Sales Order Management and Processing 6/8

Create sales order from PDF file automatically – technical view



Sales: Sales Order Management and Processing 7/8

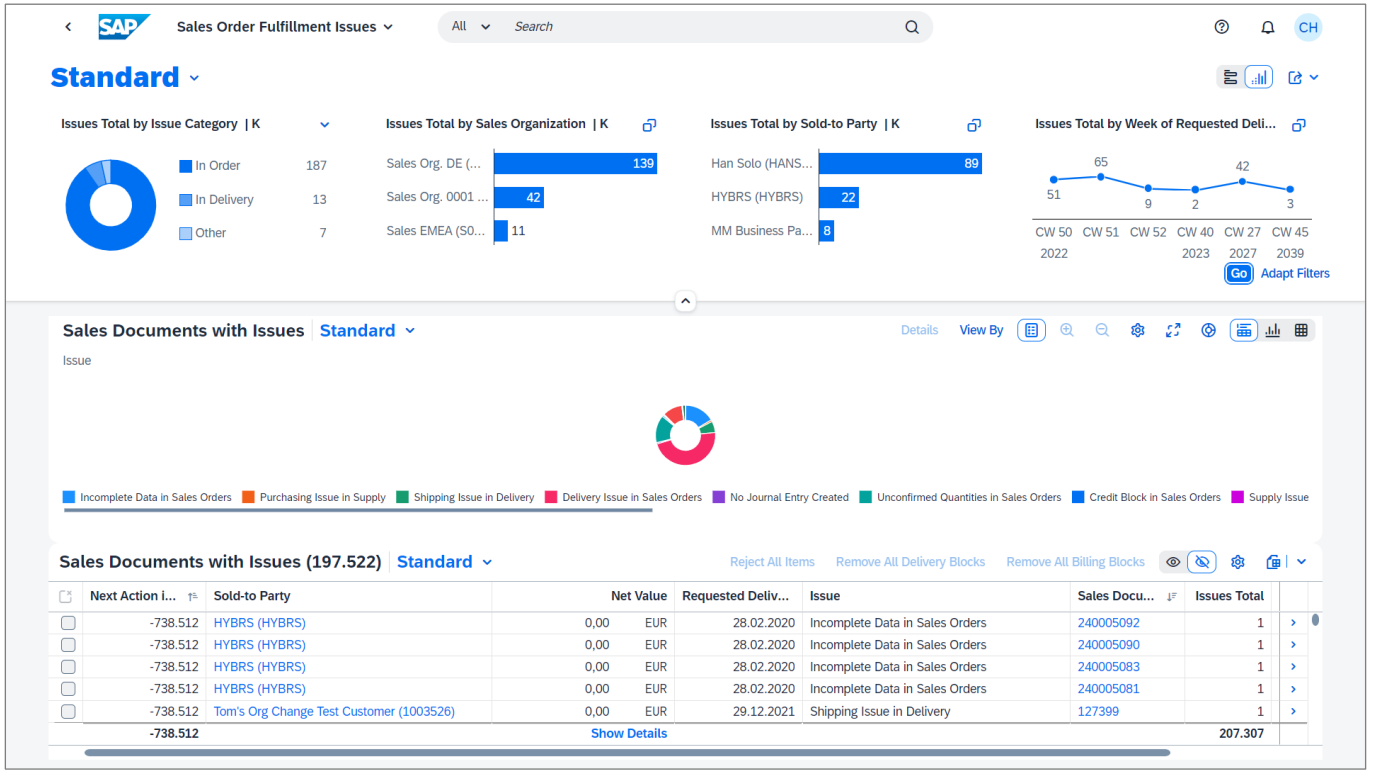
Exception-based Sales Order Handling – Sales Order fulfillment Cockpit

Optimizes order resolution with a central entry point for analyzing and resolving sales order fulfillment impediments

Connects to Track Sales Order Details App for a deep dive into the individual sales order

Issues included:

- Incomplete data (in sales orders, in delivery)
- Blocks (delivery block, credit block, shipping block, billing block)
- delivery issue in sales order
- Unconfirmed quantities in sales order
- Issues (shipping issue in delivery, invoice, supply issue, purchasing issue, manufacturing issue)
- Product compliance issue (product marketability status, dangerous goods status, safety data sheet status)
- Trade compliance issue
- Approval Status and Approval Request Reason included
- Navigation to Schedule Line for all Item Issues in Track Sales Order Details
- SAP Global Trade Services (SAP GTS) integration to SAP S/4HANA can now be used in the Sales Order fulfillment - Analyze and Resolve Issues and Track Sales Orders apps.

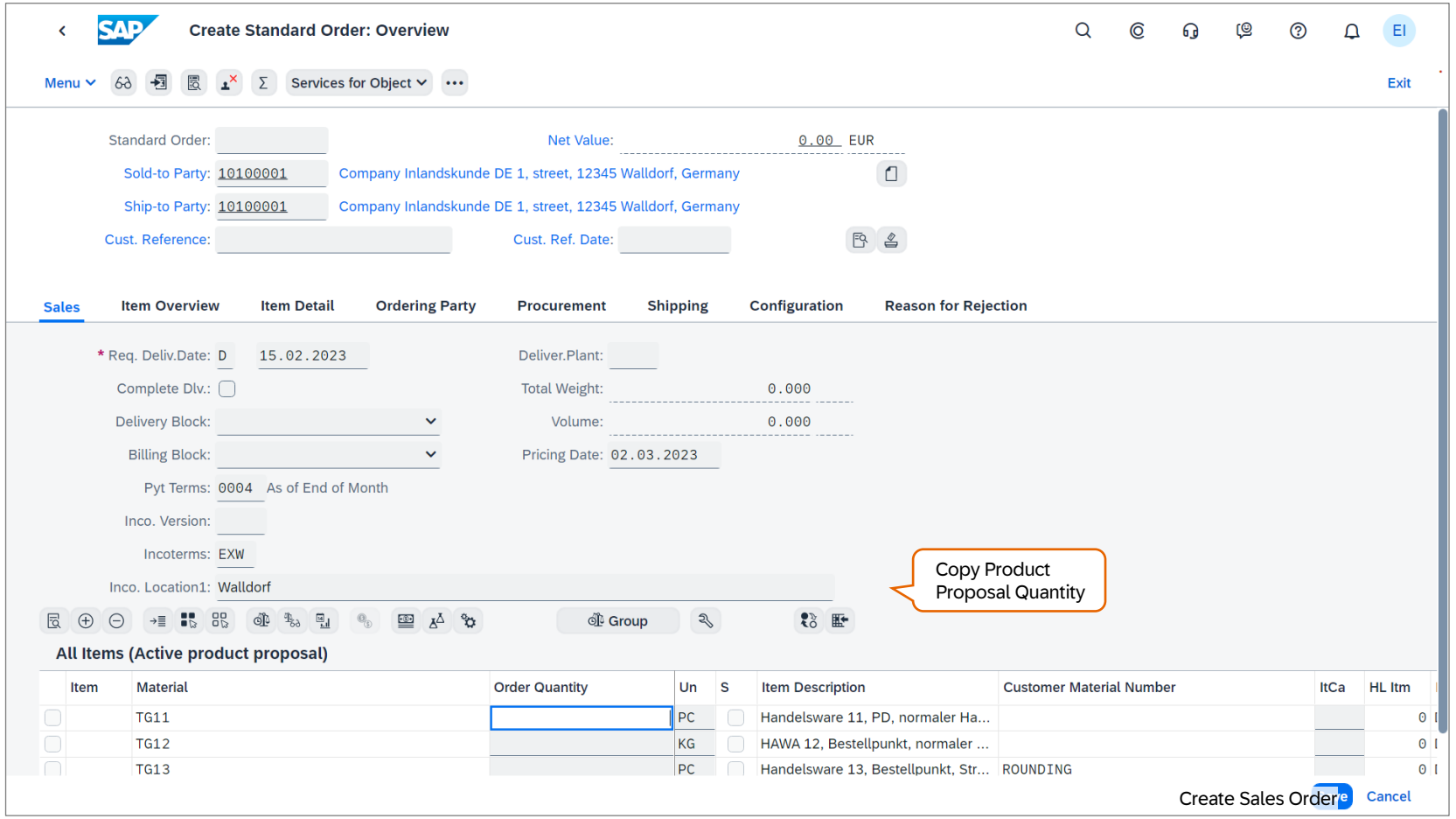


Sales Order Fulfillment Issues

Sales: Sales Order Management and Processing 8/8

Intelligent Product Proposal in Sales Order Creation

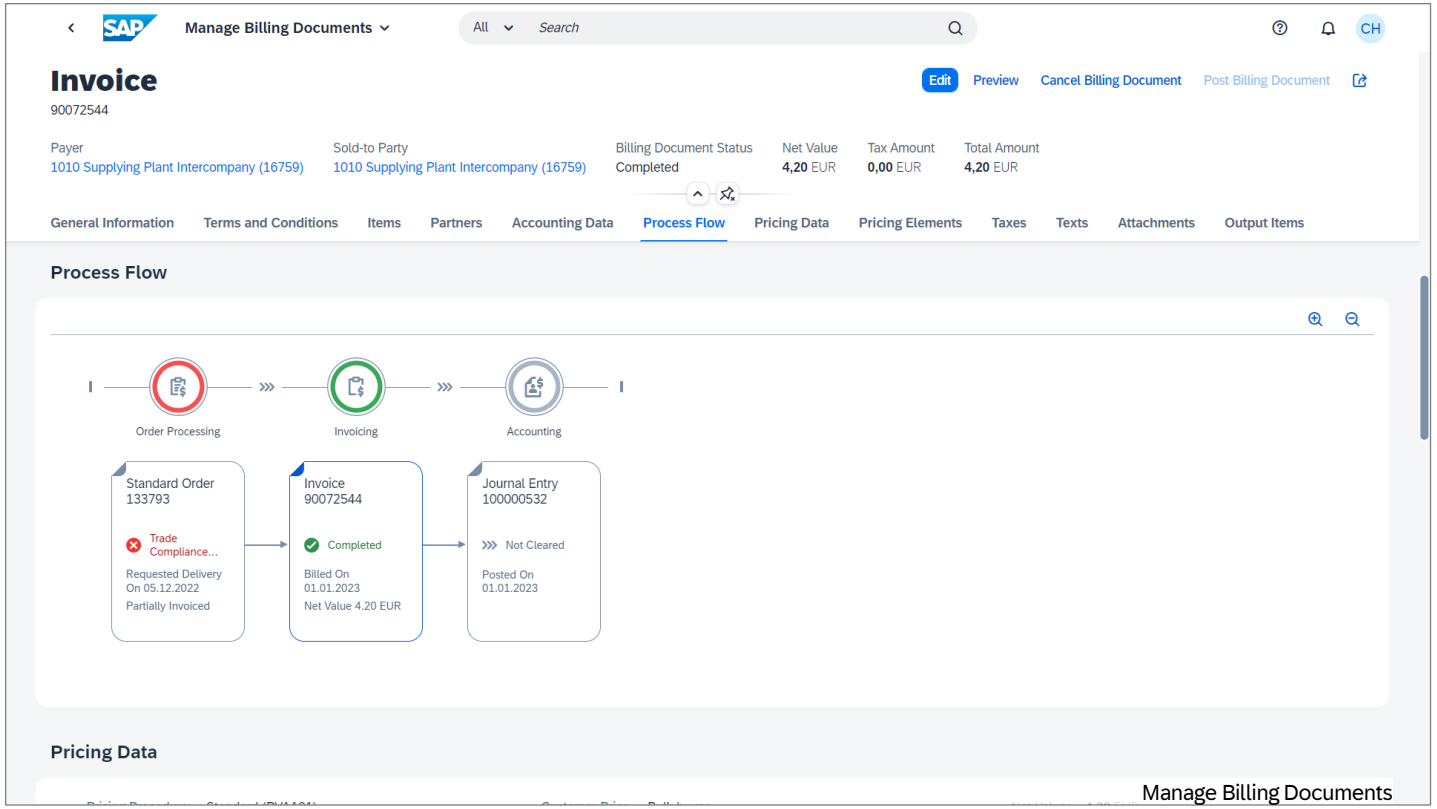
- The intelligent product proposal is an enhancement of the dynamic product proposal functionality
- The intelligent product proposal allows users to receive product and quantity proposals enabling faster order entry
- The quantity of products ordered can be predicted with the help of an algorithm parameter for double exponential smoothing



Sales: Sales and Solution Billing 1/3

Order and Contract Management | Sales and Solution Billing

- Create Preliminary Billing Documents for review, negotiation and rework purpose
- Create Billing Documents from internal and external data
- Communicate billing data via print, e-mail or EDI
- Converge data from different sources into a combined billing document

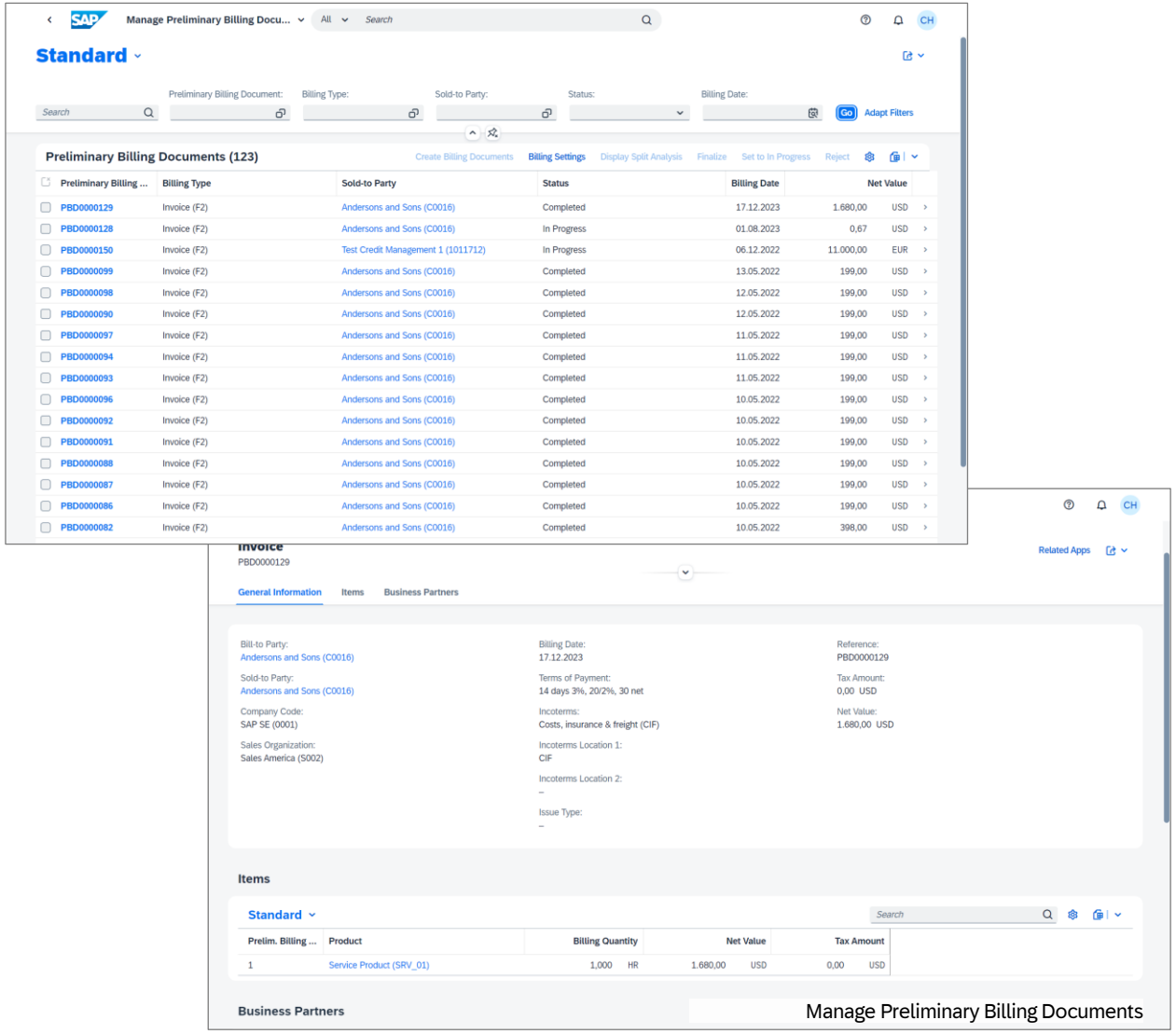


Manage Billing Documents

Sales: Sales and Solution Billing 2/3

Preliminary Billing Documents

- Copying of Output Items (Including Attachments) from Preliminary Billing Documents to Billing Documents
- Schedule Preliminary Billing Creation
- Create Preliminary Billing Documents based on billing due list items
- Get an overview of all preliminary billing documents in a worklist
- Reject preliminary billing documents
- Create billing documents based on preliminary billing documents
- Approval of Preliminary Billing Documents
- Change prices, texts, and more
- Generate print previews and send output
- Add billing items from documents in the billing due list



Sales: Sales and Solution Billing 3/3

Solution Billing

- Enablement of an omnichannel approach, creating one single invoice combining billable items from different channels (e.g. internal and external) and billing categories (e.g. one-time billing, recurring billing, and usage-based billing).

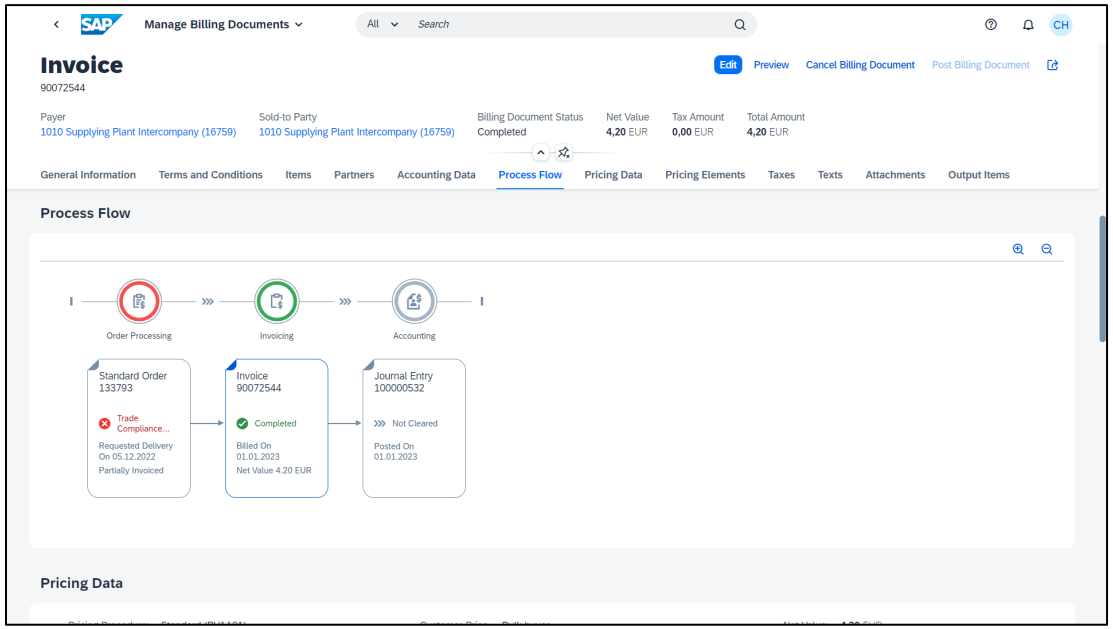
Delivery

Debit Memo Request

External Billing Request

Sales order

Billing Document



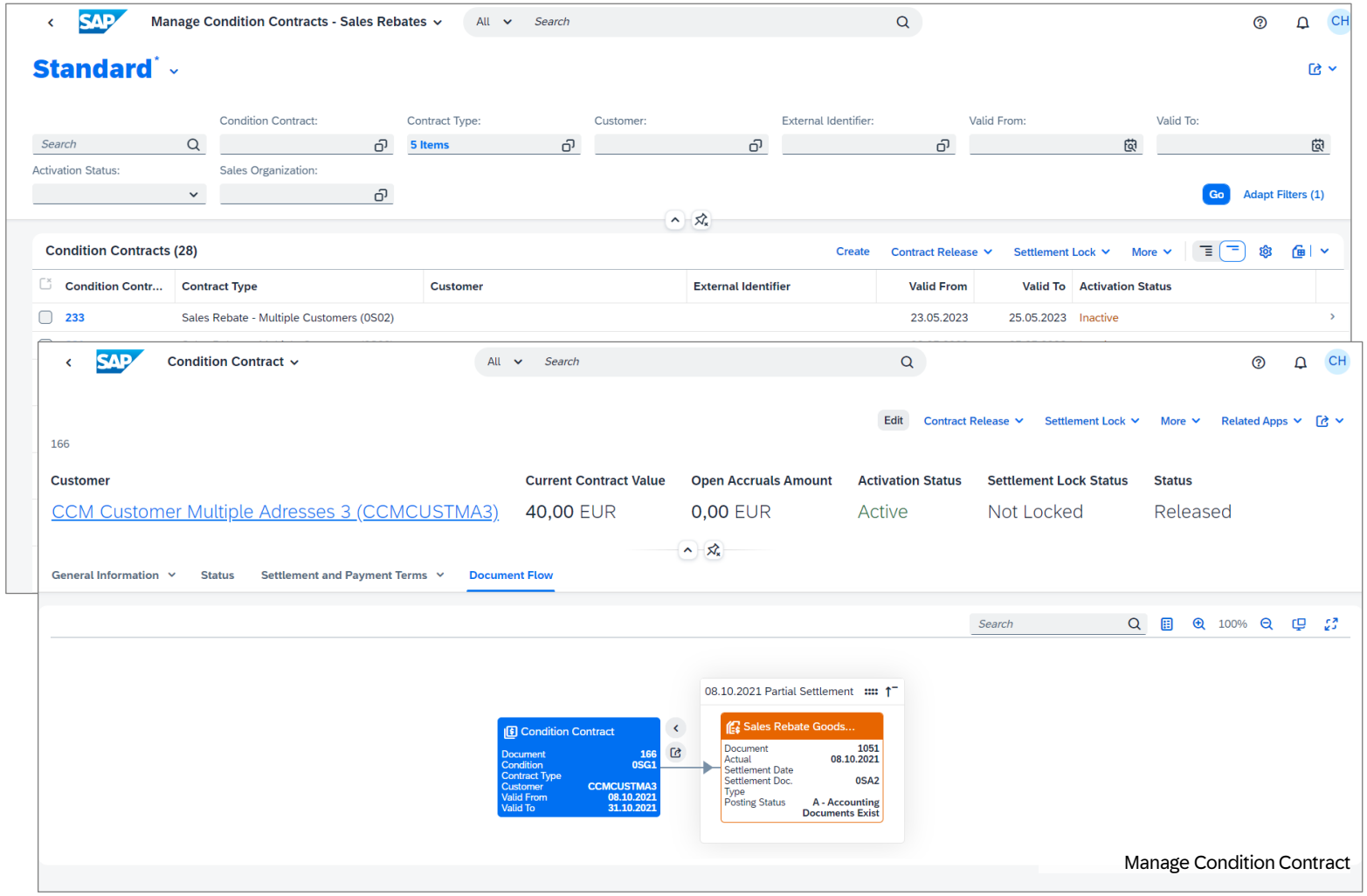
One single Invoice

SAP digital payment add-on

SAP Business Technology Platform

Sales:
Sales Rebates & Incentive and Commissions Management 1/2

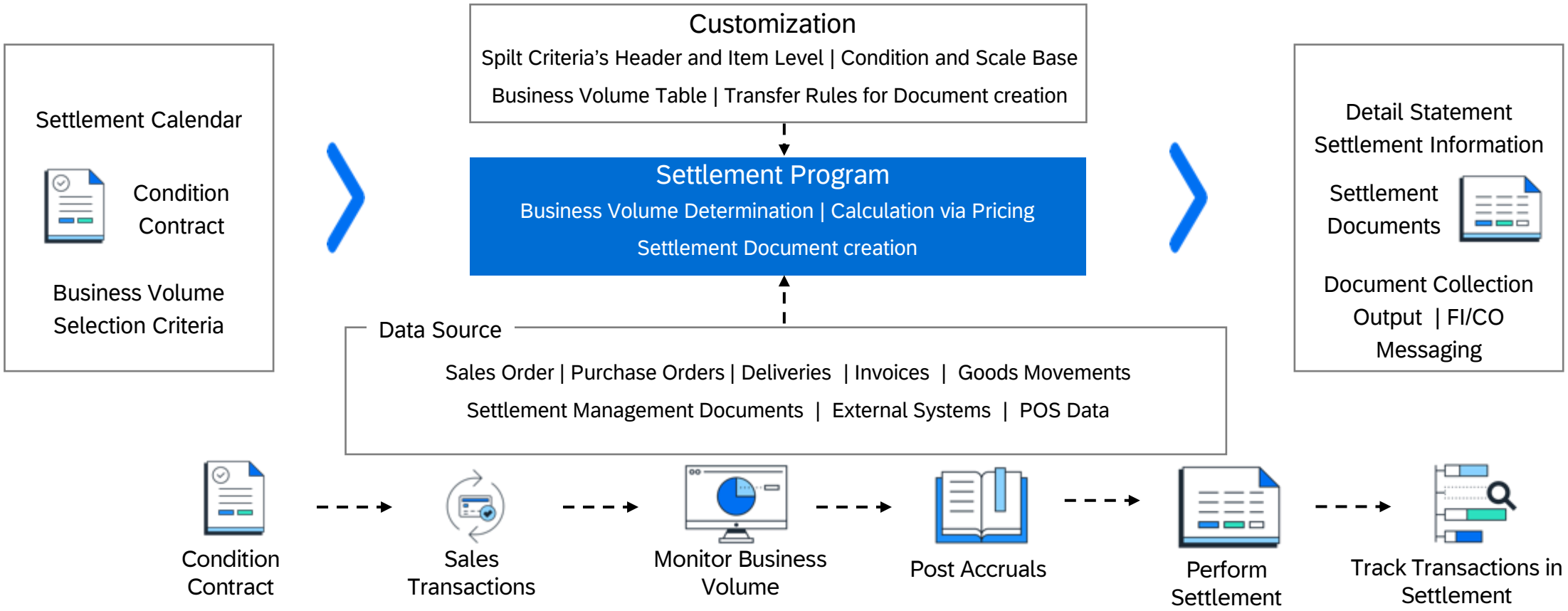
- Create condition contracts to enter rebate agreements with rebate conditions and other contractual data.
- Monitor the business volume related to condition contracts.
- Post accruals with transactional documents or for a delta accruals settlement in an aggregated way.
- Perform partial settlements and a final settlement automatically based on a settlement calendar and pay out rebates to customers in time to increase satisfaction.
- Track transactional documents processed in settlement runs to fulfill auditing requirements.
- Create and schedule jobs for updating the settlement calendar by generating new or deleting existing settlement dates from the condition contract settlement calendar.
- Situation templates to notify business users of problem messages related to errors in condition contract settlements.



Manage Condition Contract

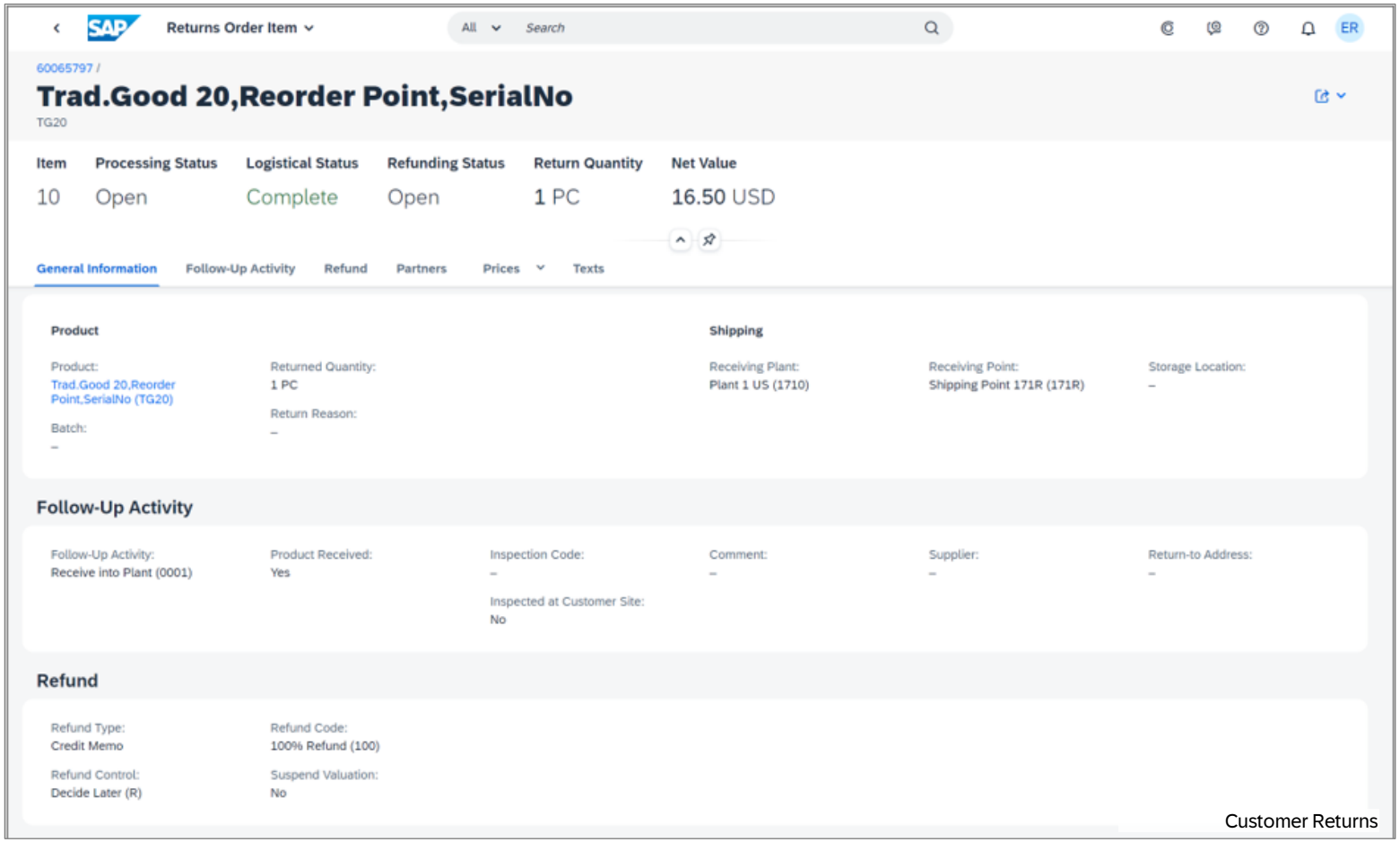
Sales:
Sales Rebates & Incentive and Commissions Management 2/2

Condition Contract Settlement by Settlement Management



Sales: Claims, Returns and Refund Management 1/2

- Manage and monitor the status of customer returns by using a customizable worklist
- Create, display, modify and delete customer returns
- Returns approval process with different roles involved
- Select pre-defined follow-up activities to speed-up the returns process, e.g.:
  - Move to free available stock
  - Move to scrap
  - Ship to supplier
  - Send back to customer
- Perform lean material inspection
- Determine the refund action, such as granting a credit or replacement of products
- Visual overview of returns process flow

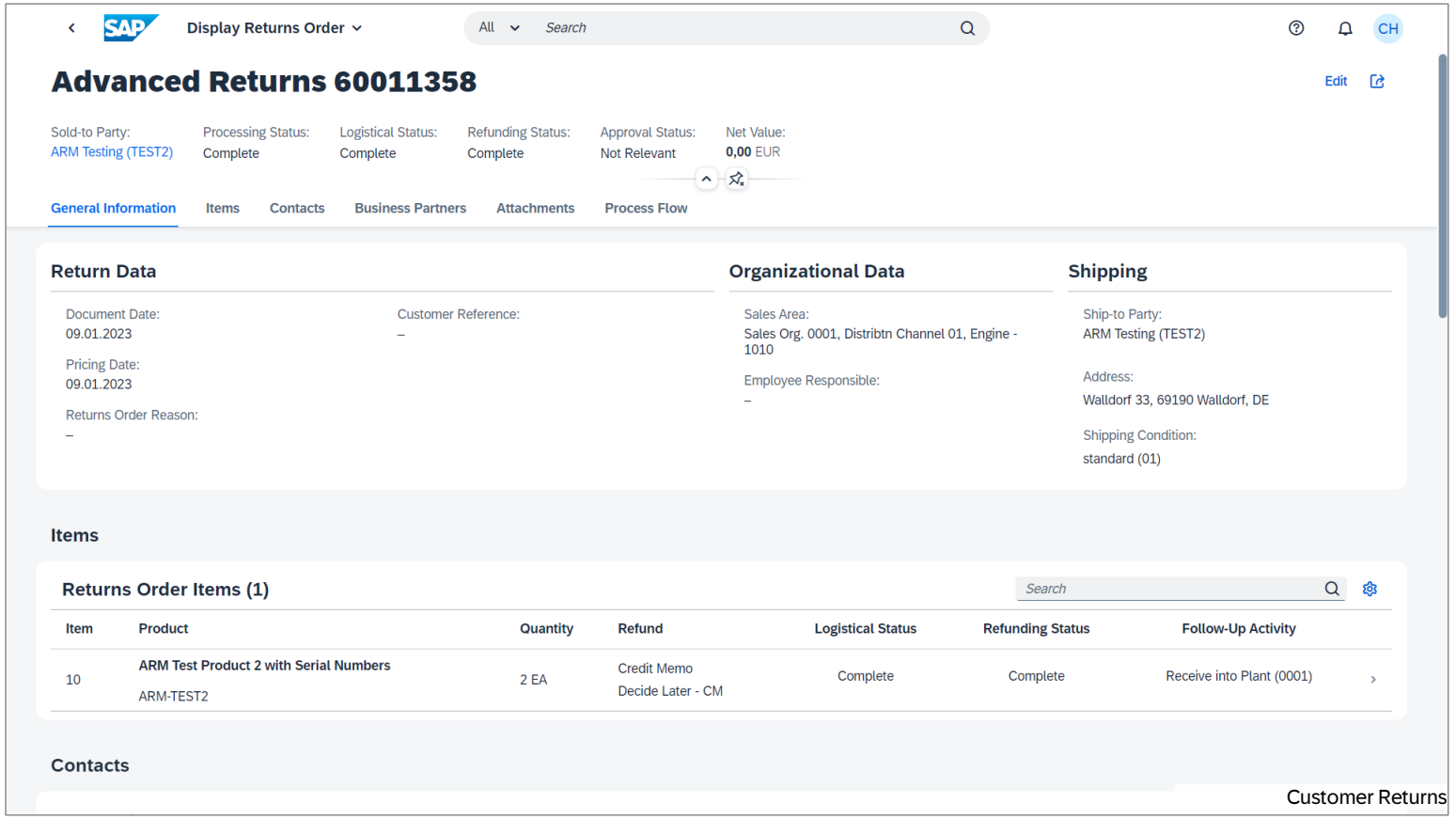


Customer Returns

Sales: Claims, Returns and Refund Management 2/2

Integration of customer returns and in-house repairs

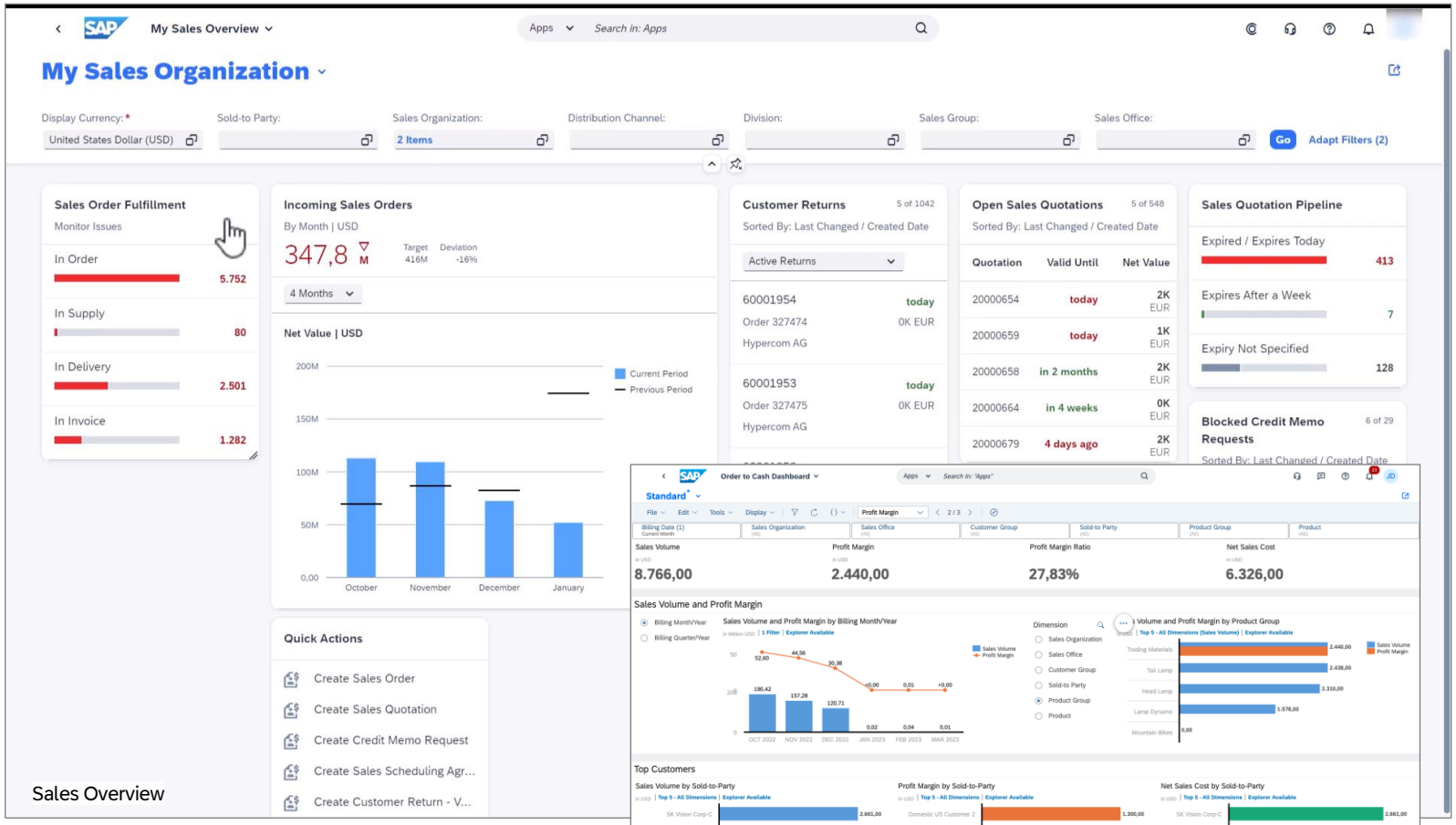
- Triggering of an in-house repair from a customer return order:
- Create an in-house repair as a follow-up document in the return order and in the material inspection
- After repair processing is complete, trigger the outbound delivery to send the repair object back to the customer
- Triggering of a customer return order from an in-house repair:
- Create customer return orders as follow-up documents from the in-house repair
- Allow creation and management of repair quotations while the customer return order is in process
- Continue with the in-house repair upon completion of the customer return order



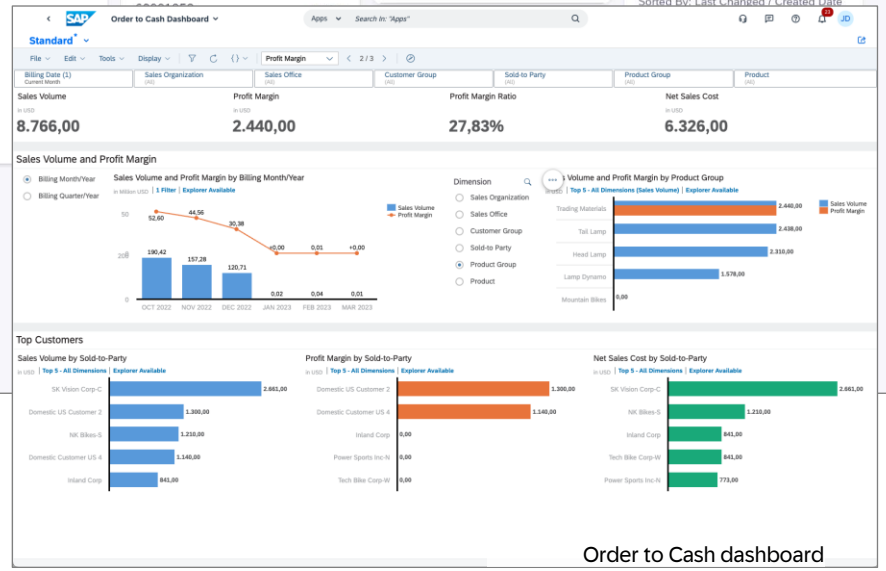
Customer Returns

Sales: Sales Monitoring and Analytics 1/4

- Gain insights into periodic sales and service volume, profit margin and delivery performance
- Perform root cause analysis on historical data
- Enable predictions such as delivery delays, product proposals
- Generate reports on sales, delivery, on pricing element attributes chosen independently based on customer requirements
- Consume analytical content real time within SAP S/4HANA box or in SAP Analytical Cloud



Sales Overview



Order to Cash dashboard

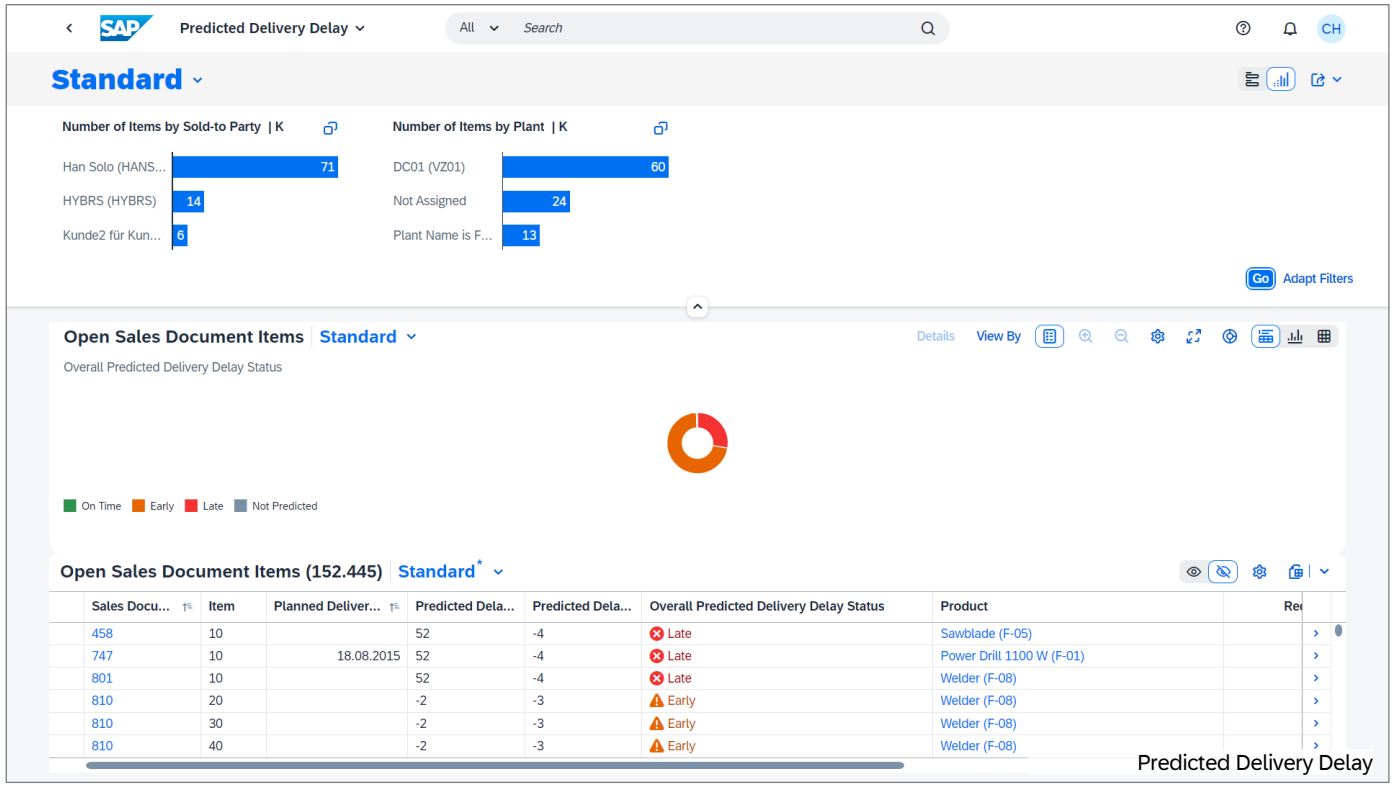
Sales: Sales Monitoring and Analytics 2/4

SAP Fiori App: Predicted Delivery Delay

Leverages embedded SAP S/4HANA predictive capabilities, analyzing historical data, and forecasting business results

Allows Sales Managers & Internal Sales Representatives to proactively monitor how likely a sales order item is to be delayed with two KPIs and take appropriate actions to ensure delivery as promised:

- predicted delay for creation of outbound delivery
- predicted delay for creation of goods issue

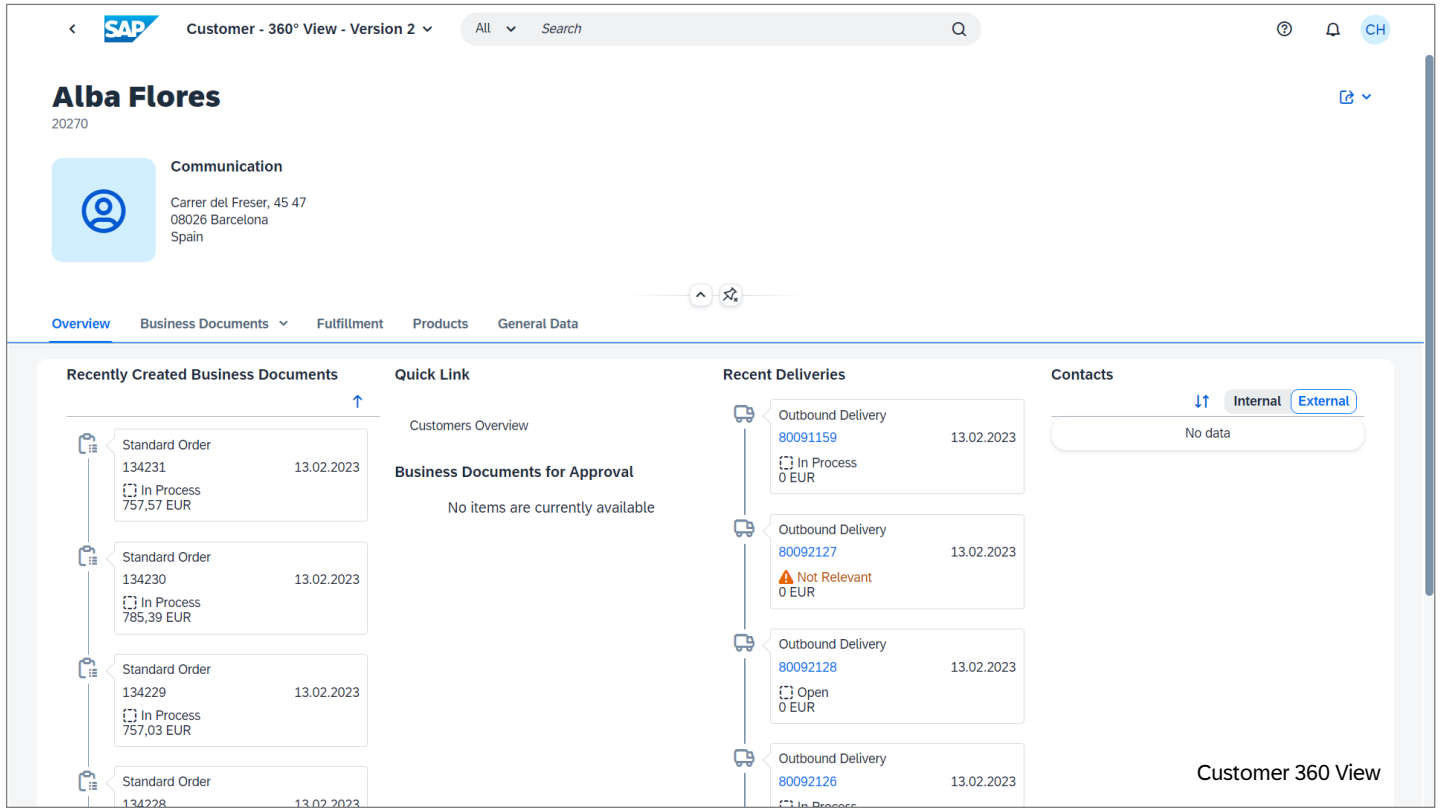


Predicted Delivery Delay

Sales: Sales Monitoring and Analytics 3/4

Customer 360° – Version 2

- Gain a comprehensive overview of the business documents associated with specific customers.
- For example, check the details of business documents that were recently created for a specific customer.
- The app displays aggregated data for sales documents, billing documents, and service documents for a certain period of time.
- Additional functionalities:
  - When navigating to the Customers Overview app from a specific sold-to party, the system automatically copies this sold-to party to the search criteria.
  - When choosing one of the sales areas for a specific sold-to party, the system lists all the addresses, including addresses of multiple partners assigned to this sold-to party.

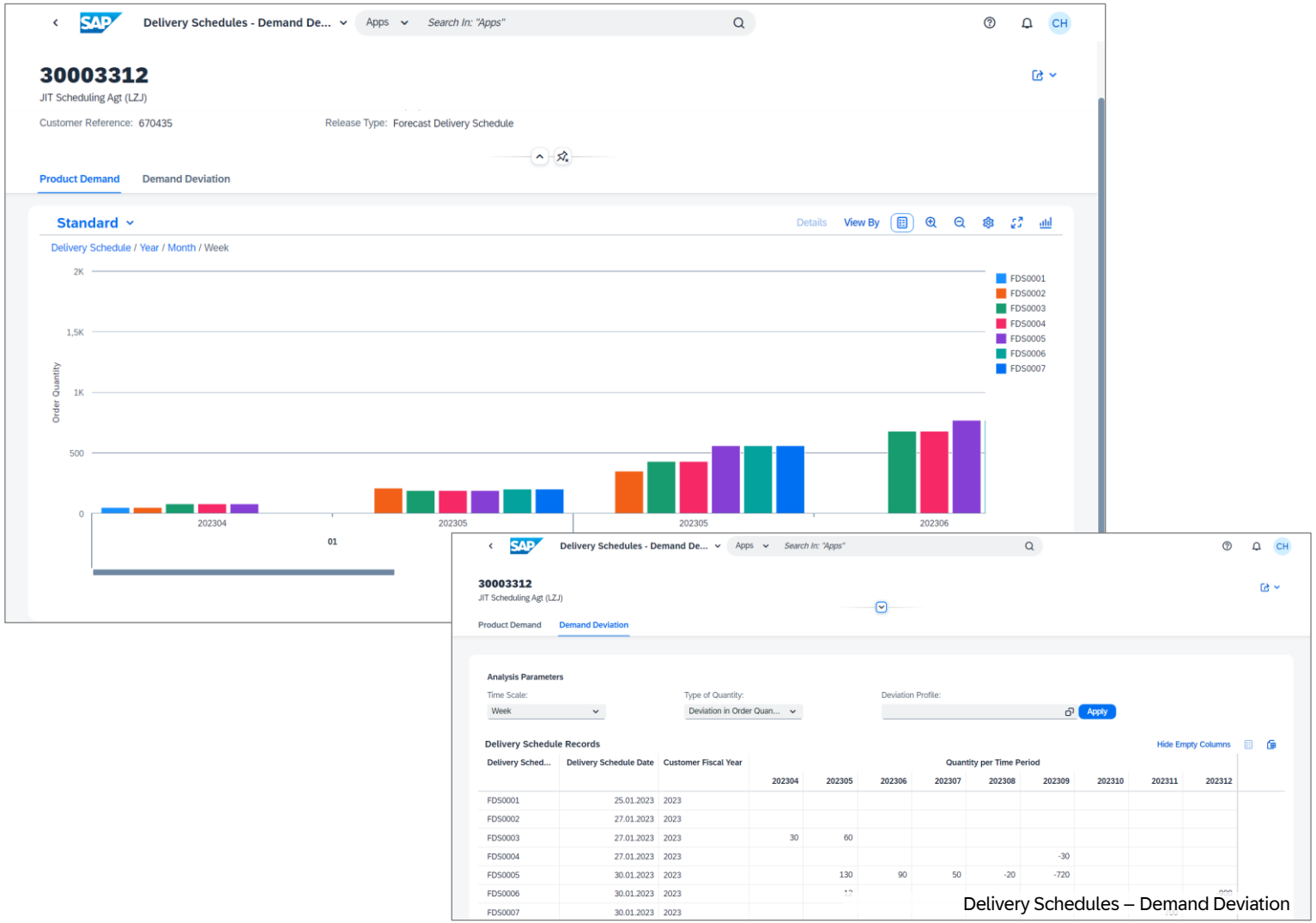


Customer 360 View

Sales: Sales Monitoring and Analytics 4/4

Monitoring of sales scheduling agreement delivery schedules

- Monitor and compare forecast or just-in-time delivery schedules of sales scheduling agreements
- Monitor the linear sequential changes of delivery schedules over time
- Get quick insights into the call-off behavior of your customer in order to verify contract fulfillment and help ensure stable requirements planning
- Detect fluctuations in call-offs in time to take necessary actions

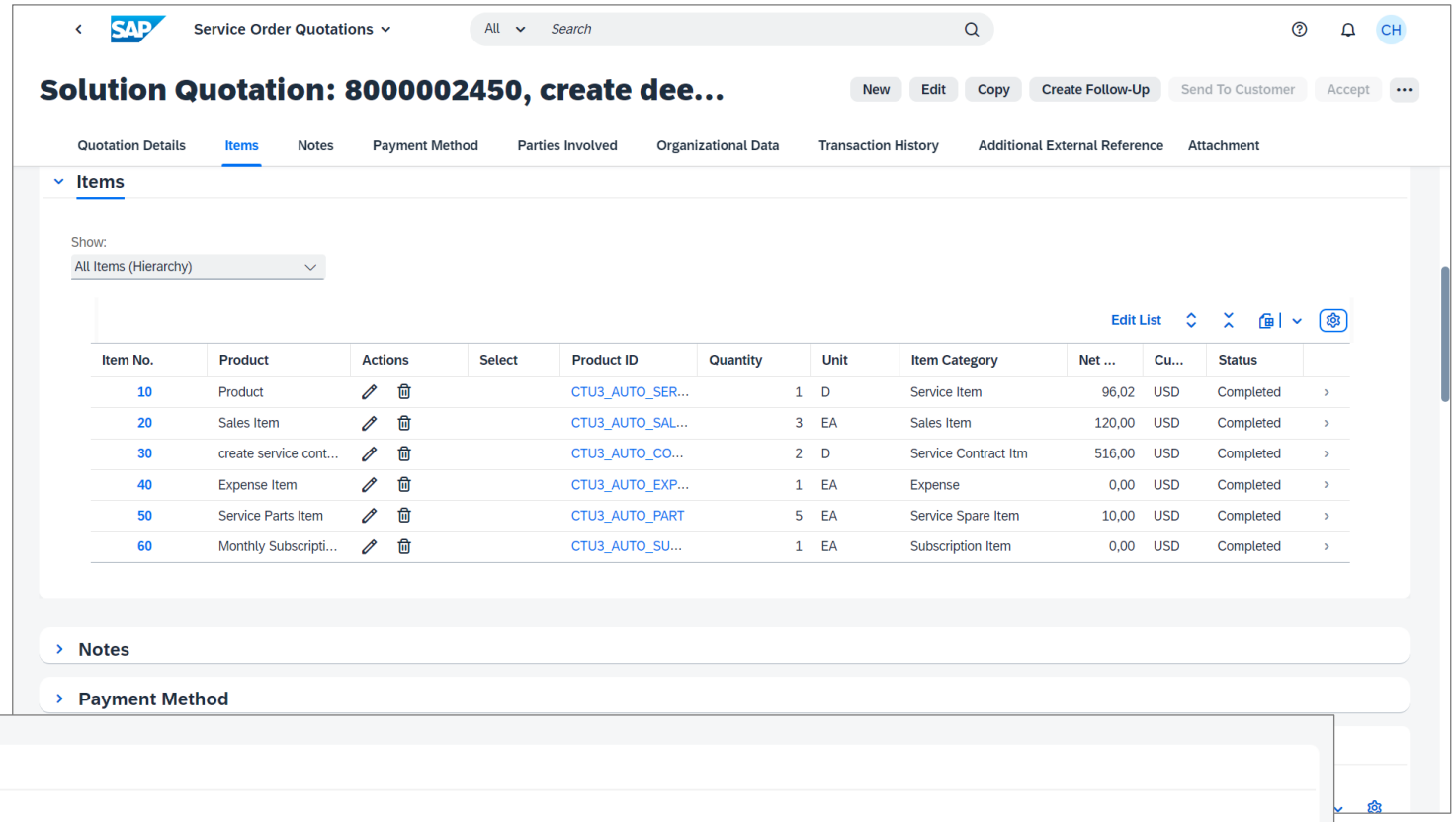


Delivery Schedules – Demand Deviation

Sales: Solution Quotation Management 1/2

- Create solution quotation with sales item, service order item, service contract item, subscription items and product bundles containing a combination of these items

- Automatically create respective follow-on documents to complete the end-to-end process



Service Order Quotation

Sales: Solution Quotation Management 2/2

Solution Quotation

Web UI

OData API (CRUD)

Solution Quotation

Notebook ULTRA Bundle
- Ultrabook 13“
- Windows OS
- Office for Windows (opt.)
- Notebook Installation
- Software Installation (opt.)
- Max Attention Support
- Cloud storage with activation

Order Management.

Sales order
- **Ultrabook 13”**
- **MS Windows OS**
- **Office for Windows**

Service order
- **Notebook Installation**
- **Software installation**

Service contract
- **Max Attention Support**

Subscription contract ($)
- **Cloud storage with activation**

Service / Sales fulfillment

Sales

Delivery HW/SW

Service

Service Execution

Service

Service Contract Execution

Subscription Order Management (SOM)

Subscription process ($)

Invoicing & Accounting

Invoice

Ultrabook 13’	799 €
Windows OS	199 €
Office for windows	349 €
TOTAL	1347 €

Invoice

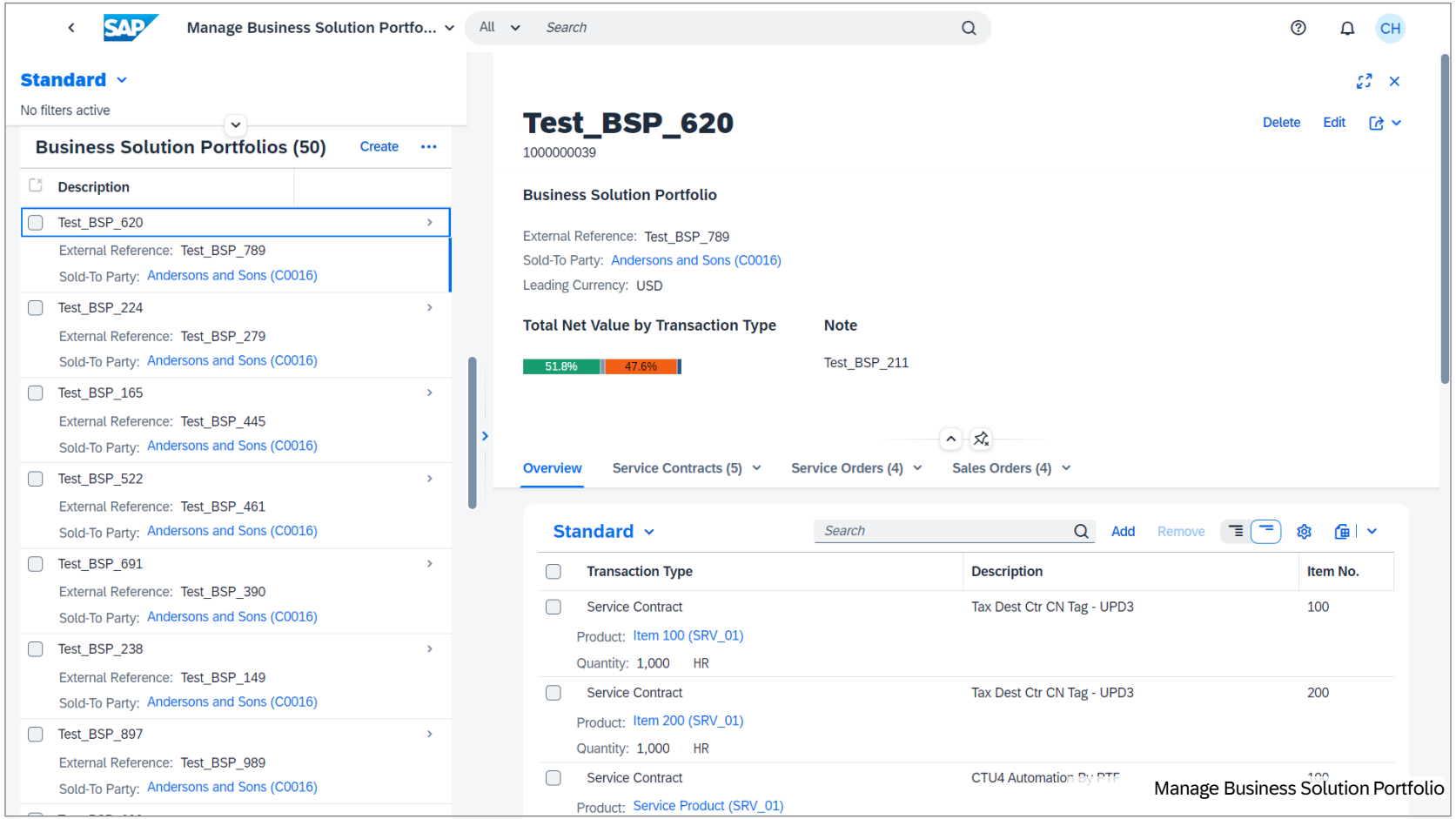
Notebook Installation	110 €
Software installation	35 €
TOTAL	145 €

Invoice

Max Attention support	60 €
TOTAL	60 €

Sales: Solution Portfolio Management

- Manage Solution Portfolio app offers a combined view to manage multiple businesses sold to a customer (services, physical goods, subscriptions, etc.), representing multi-element deals.



Manage Business Solution Portfolio

Sales:
Configure role-based access to price and cost details in sales and billing documents

Control and restrict the access that business users have to price elements of an SD document on header or item level:

- Supported documents: Sales order, Credit memo request, Debit memo request, Customer return and Billing process documents

Based on configuration, the system automatically controls whether the business user has the appropriate role and authorization to access the information in the price element area of the respective documents.

Configuration

Access Levels for Price Elements

Access Level	Description
1000	Level 1 - Low Sensitivity
8000	Level 8 - High Sensitivity

Pricing Procedure

Description	Cond. Type	Access Level
Price	ZPR0	1000
Discount	ZD01	1000
Freight	ZF01	1000
Net Value		1000
Sales Tax	ZTX1	1000
Total Value		1000
Internal Cost	ZPIP	8000
Margin		8000
. . .		

Different Access to Price Elements of a Sales Order

Michael
Logistics Expert

Valid Access Rules:
- ✓ Display discounts
- ✓ No access to internal costs and profit margin

Read Access 1000 | No Write Access

Sales Order Item		
Price	ZPR0	101.50 EUR
Discount	ZD01	-5.00 EUR
Freight	ZF01	+3.50 EUR
Net Value		**100.00 EUR**
Sales Tax	ZTX1	19 %
Total Value		**119.00 EUR**
. . .		

Clara
Internal Sales Representative

Valid Access Rules:
- ✓ Display discounts
- ✓ Display internal costs and profit margin

Read Access 1000-8000 | No Write Access

Sales Order Item		
Price	ZPR0	101.50 EUR
Discount	ZD01	-5.00 EUR
Freight	ZF01	+3.50 EUR
Net Value		**100.00 EUR**
Sales Tax	ZTX1	19 %
Total Value		**119.00 EUR**
Internal Cost	ZPIP	73.87 EUR
Margin		**26.13 EUR**
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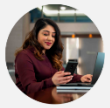


Nasreen
Sales Manager

Valid Access Rules:
- ✓ Change discounts
- ✓ Display internal costs and profit margin

Read Access 1000-8000 | Write Access 1000

Sales Order Item		
Price	ZPR0	101.50 EUR
Discount	ZD01	-6.00 EUR
Freight	ZF01	+4.50 EUR
Net Value		**100.00 EUR**
Sales Tax	ZTX1	19 %
Total Value		**119.00 EUR**
Internal Cost	ZPIP	73.87 EUR
Margin		**26.13 EUR**
. . .		

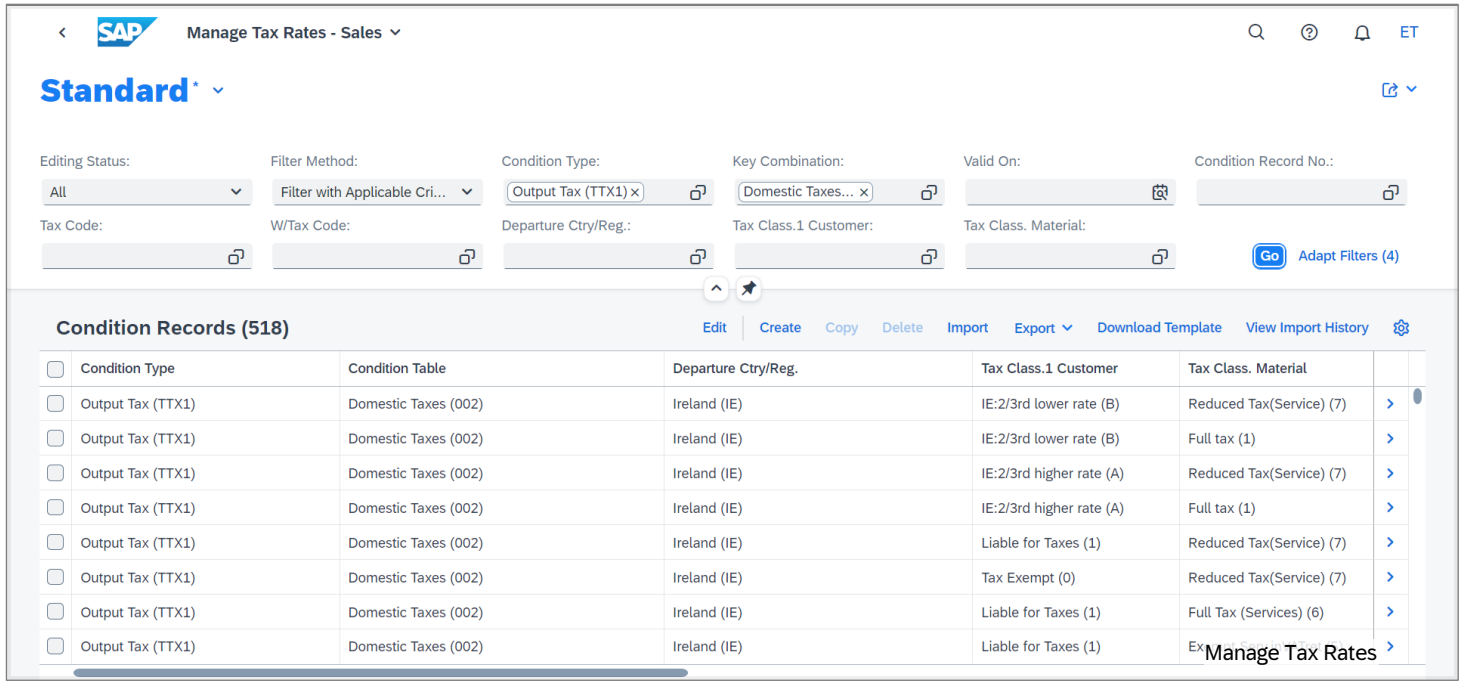
Example: Role based access to price elements

Sales:
Maintaining tax records in sales or uploading them from template-based spreadsheets

- New Fiori app to create tax rates in the form of condition records as the pricing master data in sales.
- When a tax is calculated in a business document, the system looks for the corresponding condition records in the master data to determine the final tax rate.
- Support of mass operation to efficiently manage multiple tax rates at one time

The following tasks are performed in this SAP Fiori app:

- Maintain tax records and its details
- Select a specific template for the combination of tax-relevant attributes
- Download the template to a spreadsheet
- Specify values in the spreadsheet for the tax record and for the tax-relevant fields and the validity dates
- Create or change tax condition records by uploading the spreadsheet

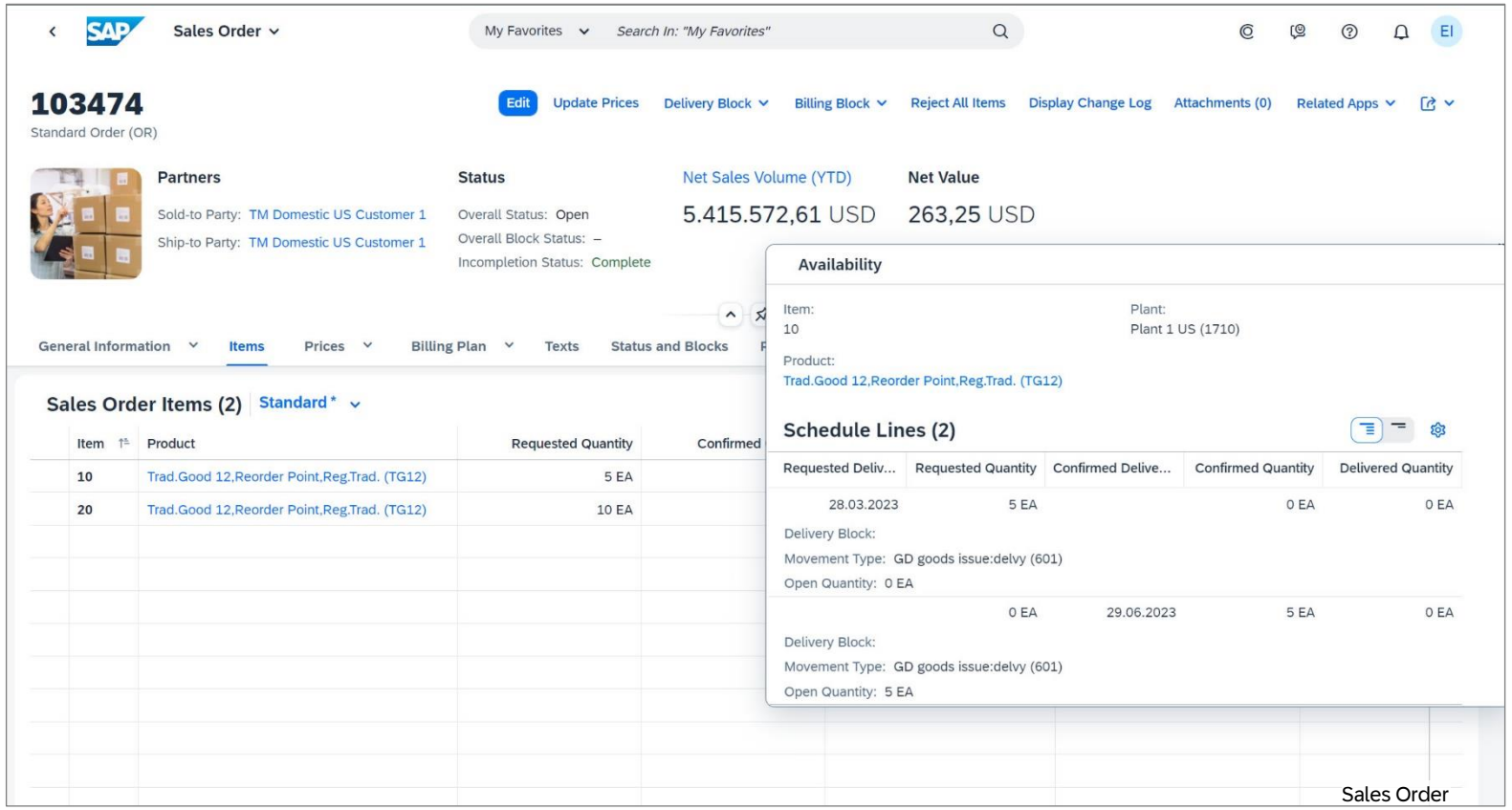


Manage Tax Rates

Sales: Available-to-promise (ATP) result screen in Manage Sales Orders

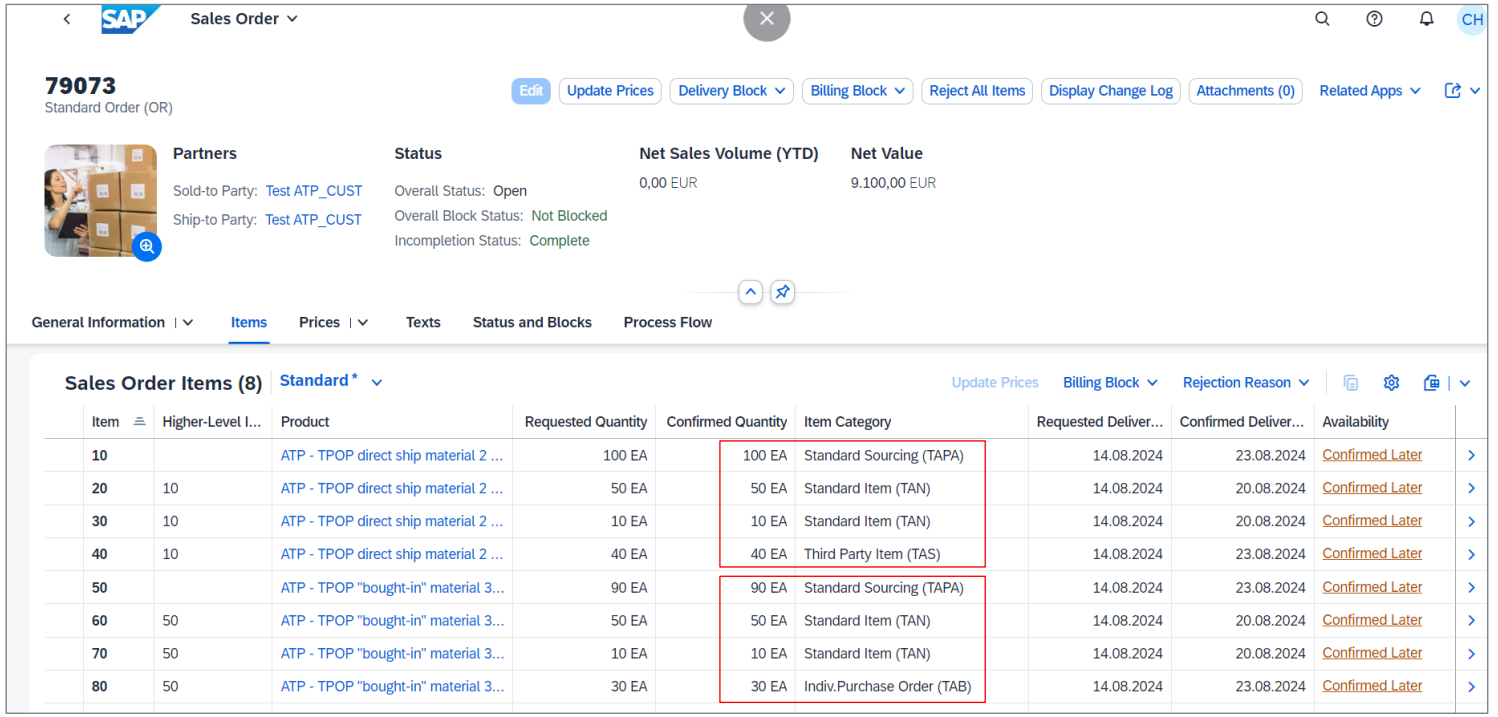
- Enable analysis and adoption of confirmed delivery dates and quantities on the ATP results screen for sales-order items in the SAP Fiori app "Manage Sales Orders - Version 2"

- Improve efficiency in managing planned product deliveries in sales orders



Sales: Available-to-promise (ATP) provides hybrid sourcing results

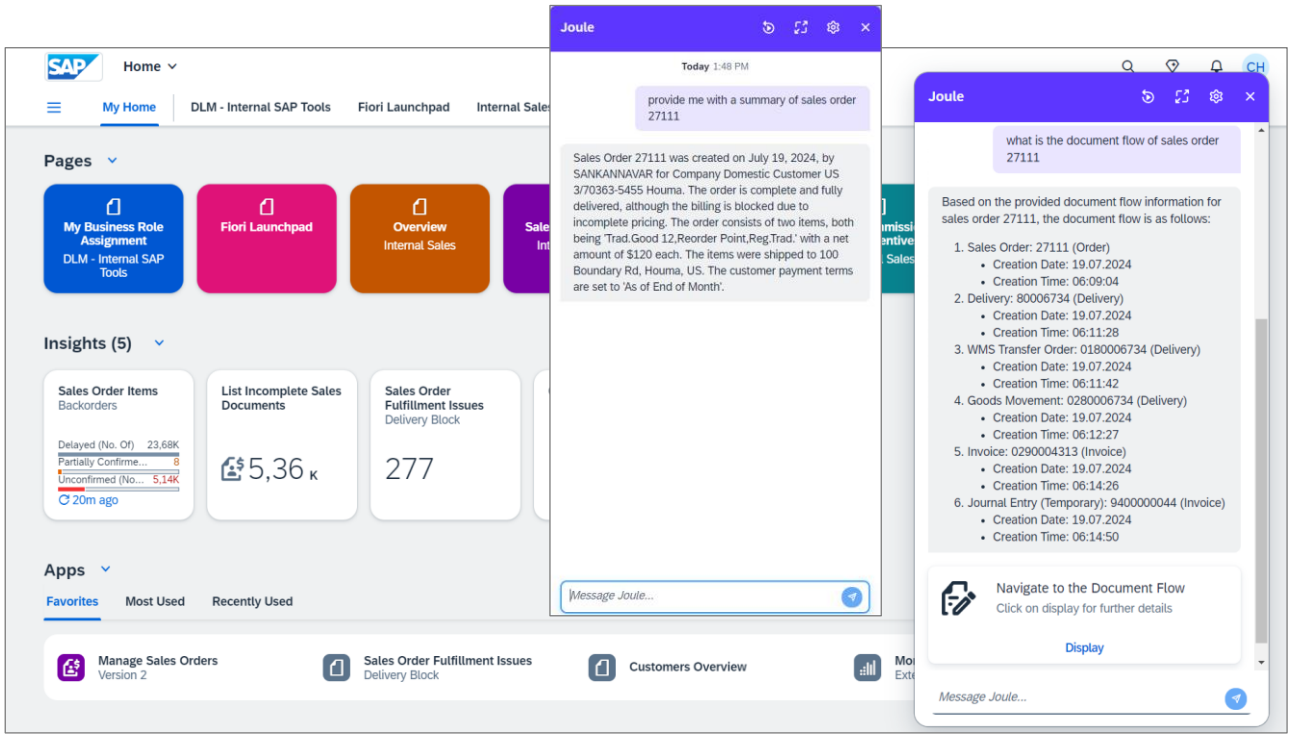
- Advanced available-to-promise returns a hybrid sourcing result on sales order item and subitems:
  - Source from internal (plants) and from external (supplier) locations, allowing for the optimal balance to be fulfilled for the customer in time and in full
  - Generate subitems for the third-party order processing, in which the third-party supplier ship to your plants or subsidiaries.
  - Combine items for standard order processing and third-party order processing to fulfill specific requirements.
- Enable a direct shipment from the supplier to the customer to bridge missing availability of parts that are not included in the customers' own stock



Item	Higher-Level I...	Product	Requested Quantity	Confirmed Quantity	Item Category	Requested Deliver...	Confirmed Deliver...	Availability
10		ATP - TPOP direct ship material 2 ...	100 EA	100 EA	Standard Sourcing (TAPA)	14.08.2024	23.08.2024	Confirmed Later
20	10	ATP - TPOP direct ship material 2 ...	50 EA	50 EA	Standard Item (TAN)	14.08.2024	20.08.2024	Confirmed Later
30	10	ATP - TPOP direct ship material 2 ...	10 EA	10 EA	Standard Item (TAN)	14.08.2024	20.08.2024	Confirmed Later
40	10	ATP - TPOP direct ship material 2 ...	40 EA	40 EA	Third Party Item (TAS)	14.08.2024	23.08.2024	Confirmed Later
50		ATP - TPOP "bought-in" material 3...	90 EA	90 EA	Standard Sourcing (TAPA)	14.08.2024	23.08.2024	Confirmed Later
60	50	ATP - TPOP "bought-in" material 3...	50 EA	50 EA	Standard Item (TAN)	14.08.2024	20.08.2024	Confirmed Later
70	50	ATP - TPOP "bought-in" material 3...	10 EA	10 EA	Standard Item (TAN)	14.08.2024	20.08.2024	Confirmed Later
80	50	ATP - TPOP "bought-in" material 3...	30 EA	30 EA	Indiv.Purchase Order (TAB)	14.08.2024	23.08.2024	Confirmed Later

Sales:
Sales order monitoring based on textual natural language processing using Joule

- Display Sales Order Details:
  - Joule fetches sales order details at both the header and item level. At the header level, Joule fetches details such as the order number, customer information, order status, delivery date and payment terms At the item level, Joule fetches details such as the requested quantity, delivery status, net amount, and billing status.
- Display Sales Order Fulfillment Issues:
  - Joule fetches issues in the sales order fulfillment process. These include incomplete data, billing blocks, delivery issues, credit blocks, and trade compliance issues in sales orders.
- Display Sales Order Document Flow:
  - Joule fetches information regarding the document flow related to a specific sales order, which includes information about the various documents and processes involved in the order fulfillment, such as document sequence, types, status, details, and dependencies.

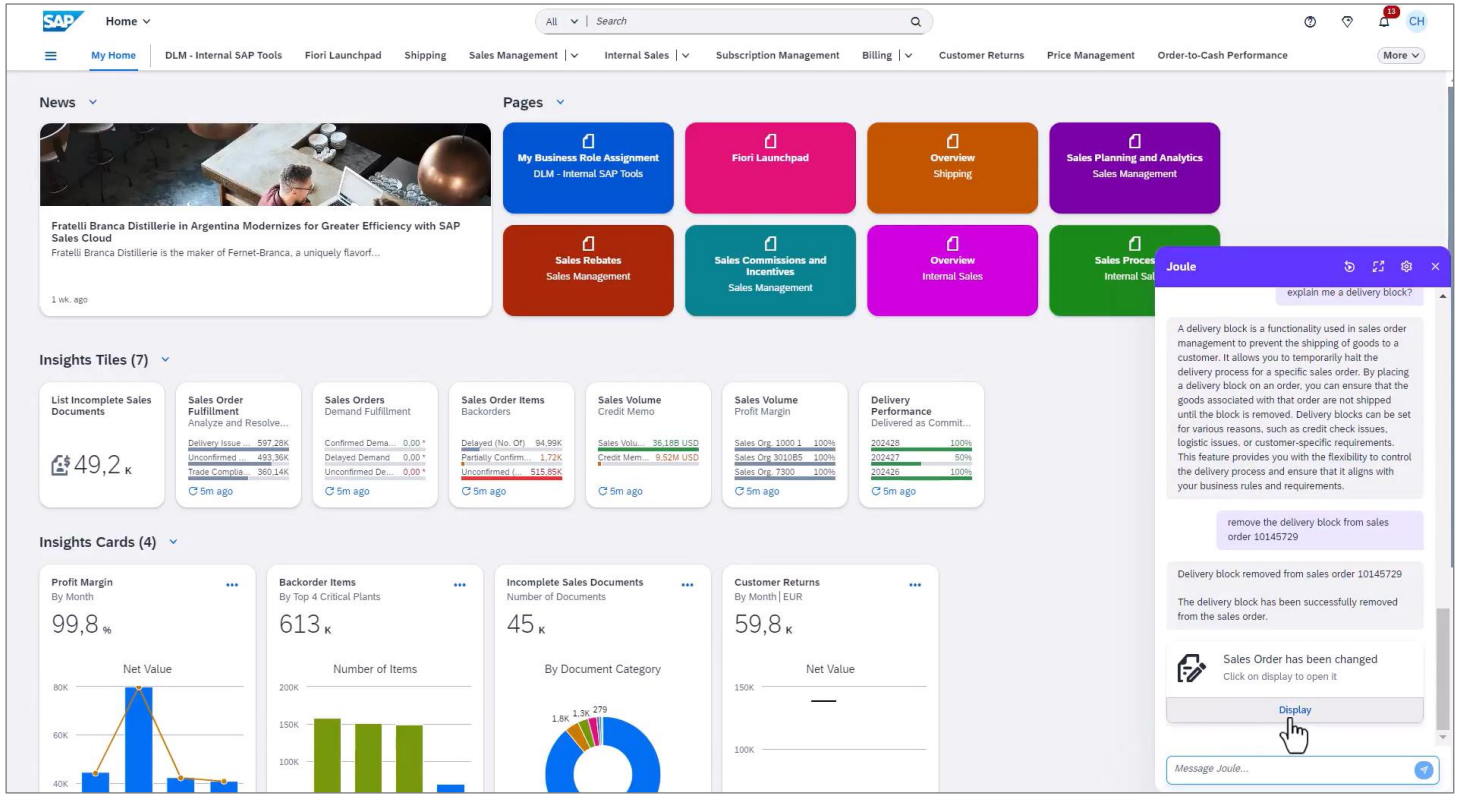


Sales:
Monitor and resolve sales order fulfillment issues with Joule and Business AI*

Order and Contract Management | Sales Order Management and Processing | 2023 FPS2

AI-assisted monitoring of sales order fulfillment issues

- Using latest large language models, Joule provides advanced responses for an intelligent order fulfillment process
- Not only fetch and monitor fulfillment issues, but also solve and change data on sales order header and item, e.g. removal of delivery, billing or credit blocks with the support of Joule and Business AI

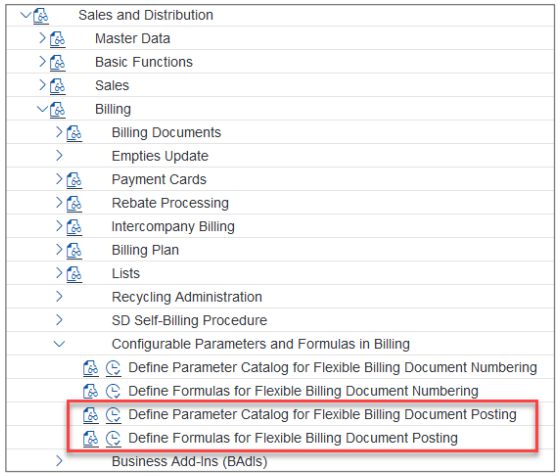


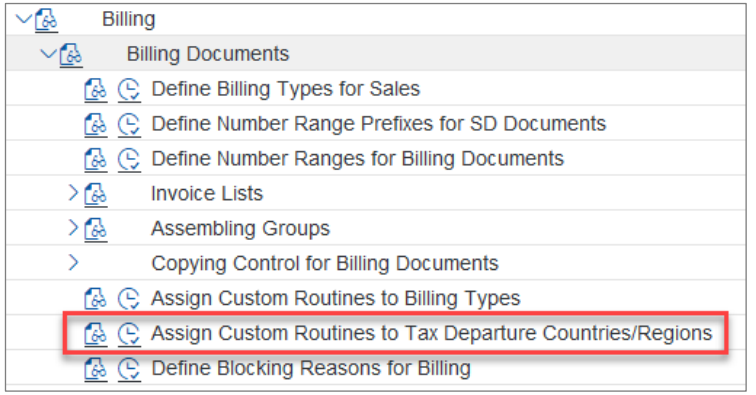
*Availability planned in December 2024 with the new Joule infrastructure

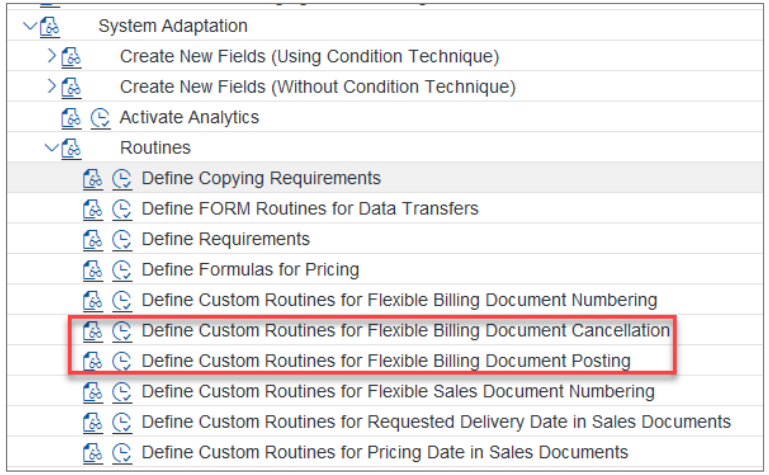
Sales:
Flexible billing document posting – suppressing automatic posting

Enhancement of flexible billing document functionality to enable the dynamic suppression of the automatic posting of specific billing documents to financial accounting:

- Specify criteria that the system uses to decide whether or not to block the automatic posting of specific billing documents to financial accounting
- Trigger dedicated decision logic depending on the billing document's tax departure country or region
- Base each decision on an evaluation of specific header fields of the billing document to be posted
- Evaluate the following header fields: billing type, sales organization, company code, SD document category, preceding billing type, and destination country or region
- Add custom fields to the billing document header through extensibility to further customize your criteria for posting suppression





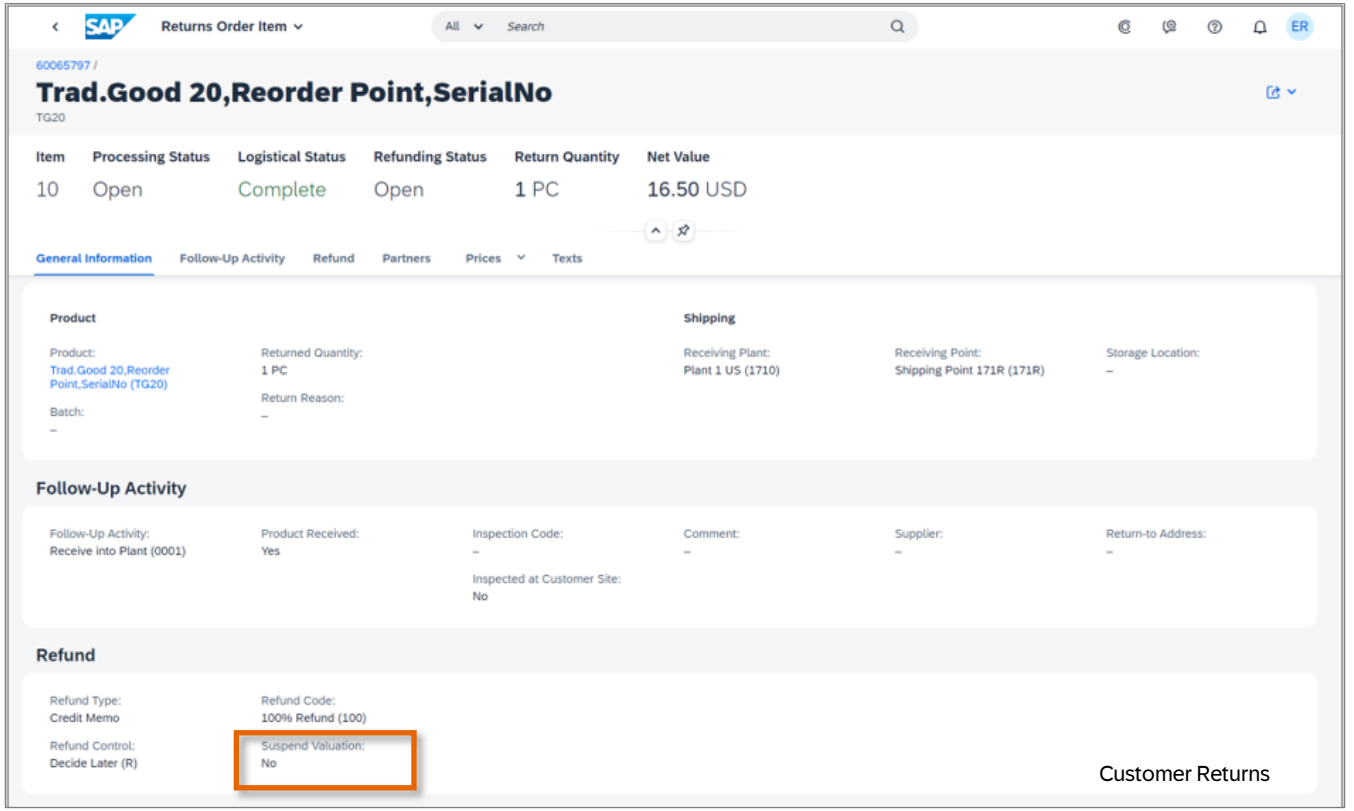


Sales: Suspending product valuation initiated by a refund in the customer returns process

- By default, if you decide to refund the customer (either with a replacement or a credit memo), the product ownership is transferred from the customer to you and the system performs the valuation posting, for example, posting the goods receipt to valuated stock.

- However, there may be cases where you want to refund the customer but do not want the refund to be interpreted as a transfer of product ownership before the inspection. To achieve this, you can now indicate in the returns order item that you want the system to delay the product valuation for any refund decisions made until the final logistical follow-up activity is confirmed in the inspection.

- As a result, only the final logistical follow-up activity determines whether the product valuation should take place or not.

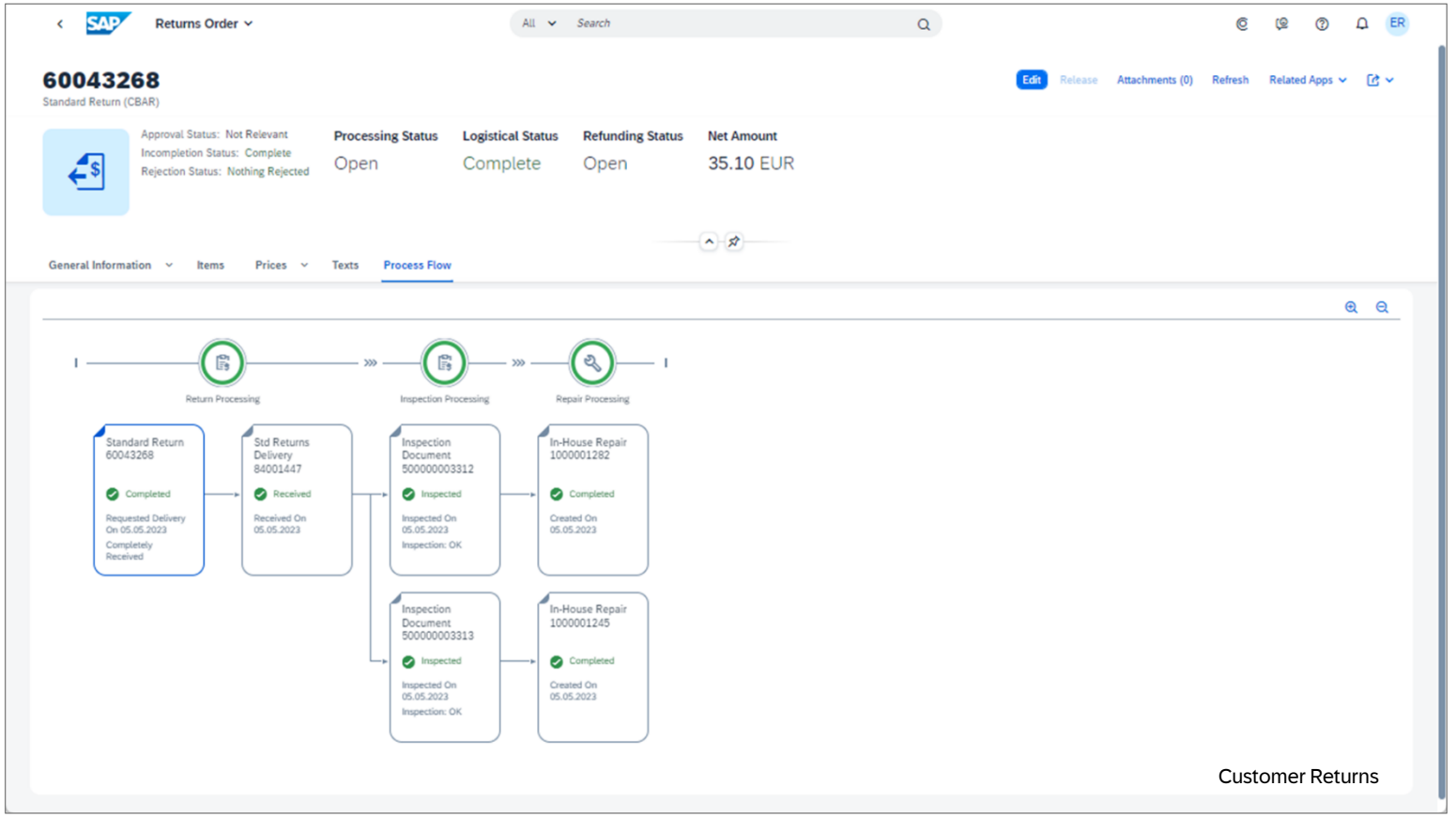


Sales:
Enhancements to the SAP Fiori app “Manage Customer Returns (Version 2)”

More functionalities in the SAP Fiori app “Manage Customer Returns (Version 2)” providing support for:

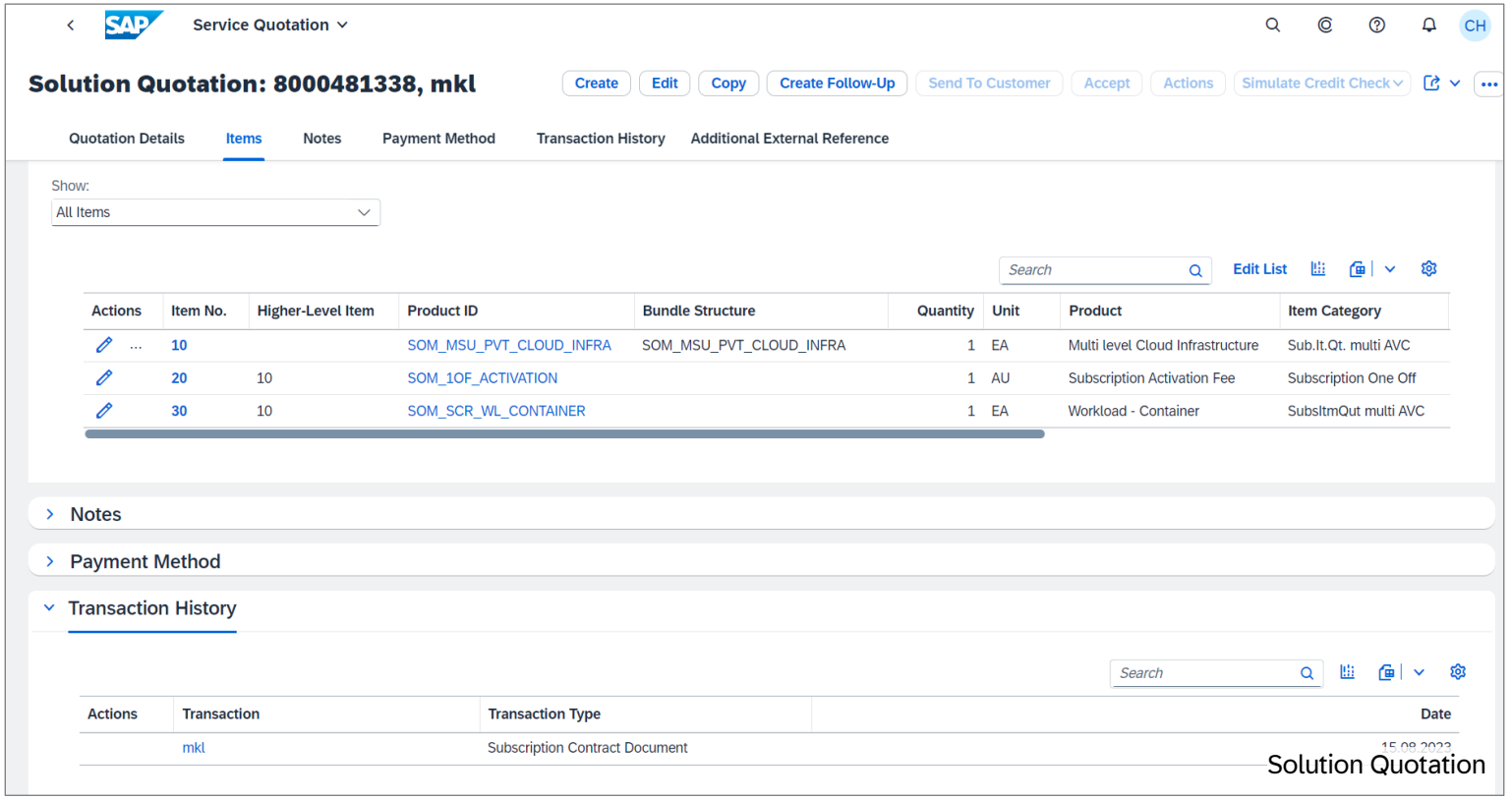
- Text entities on the header and item levels
- Attachments and process flows
- One-time-customer and document-specific addresses
- Multiple addresses
- Extensibility

- Empower the returns and refund clerk with more functionalities in return order processing



Sales:
Support of multilevel configuration

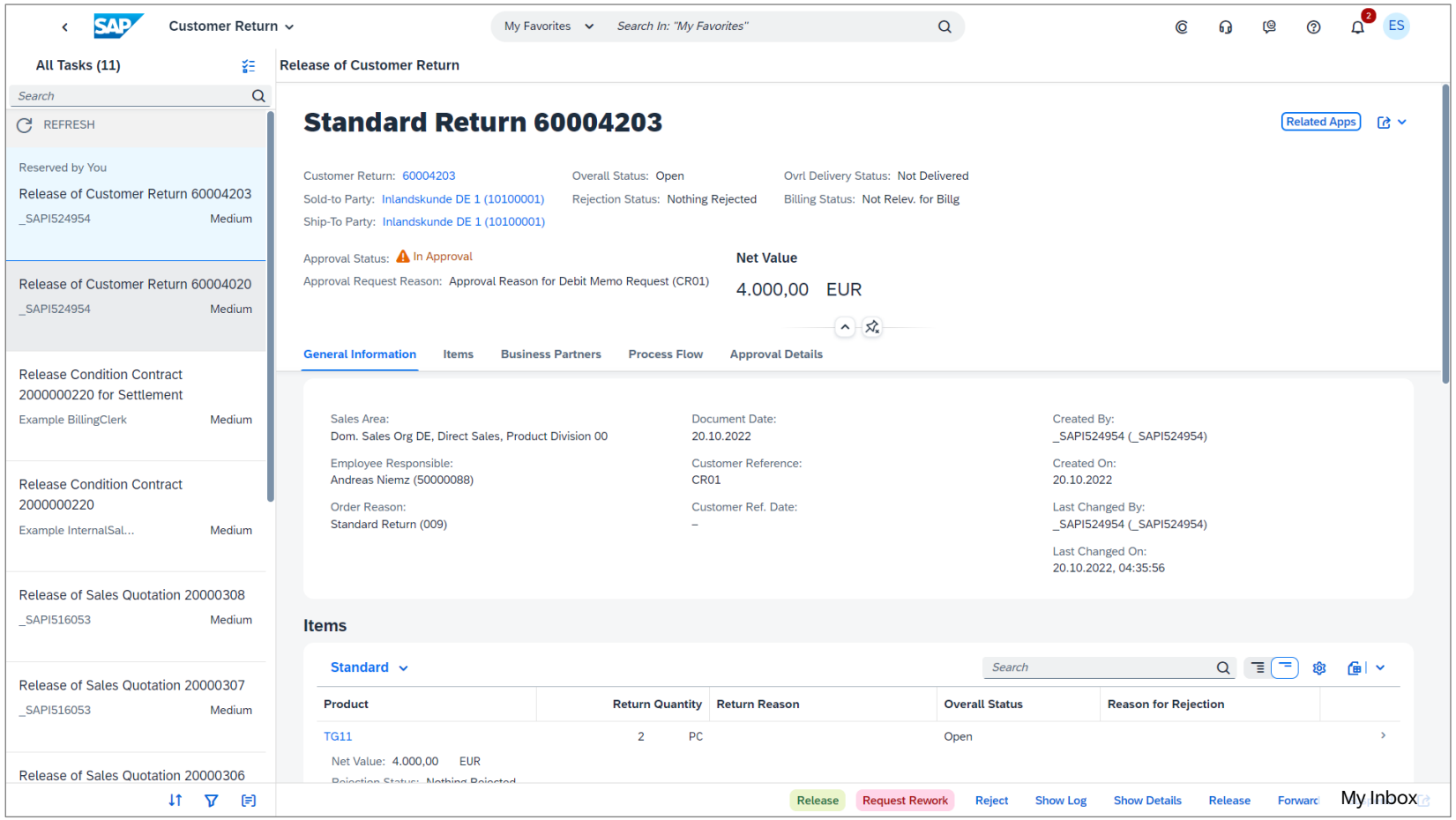
- Solution quotations can be created for subscription products with multi-level advanced variant configuration (AVC) which has subscription products as its subitems.
- Configuration of the main item and its corresponding subitems is stored as Bill of Materials (BOM).
- Ability to configure multilevel advanced variant configuration (AVC) products using the UI

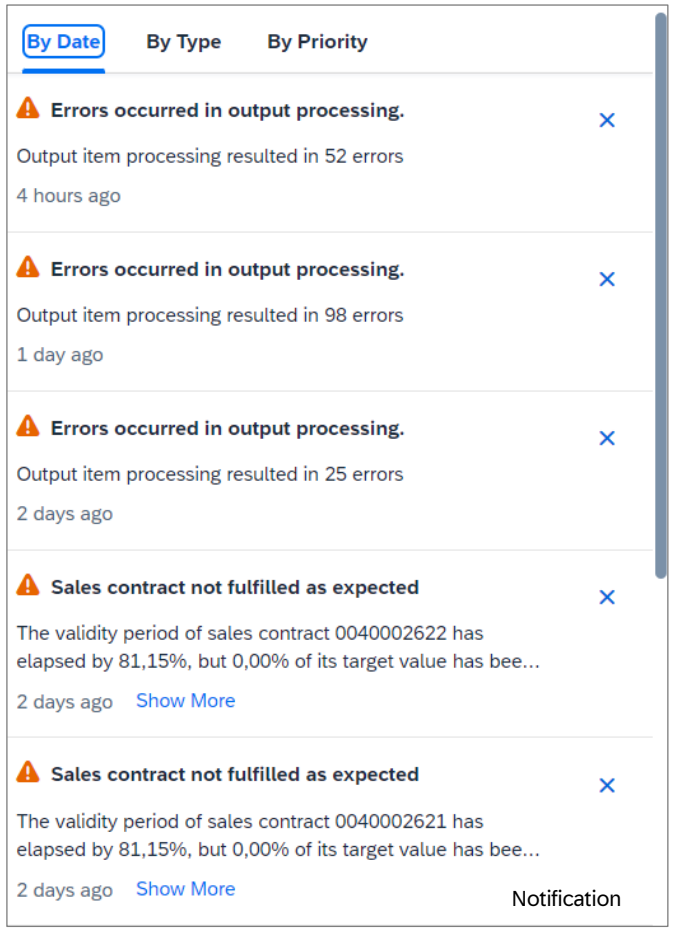


Solution Quotation

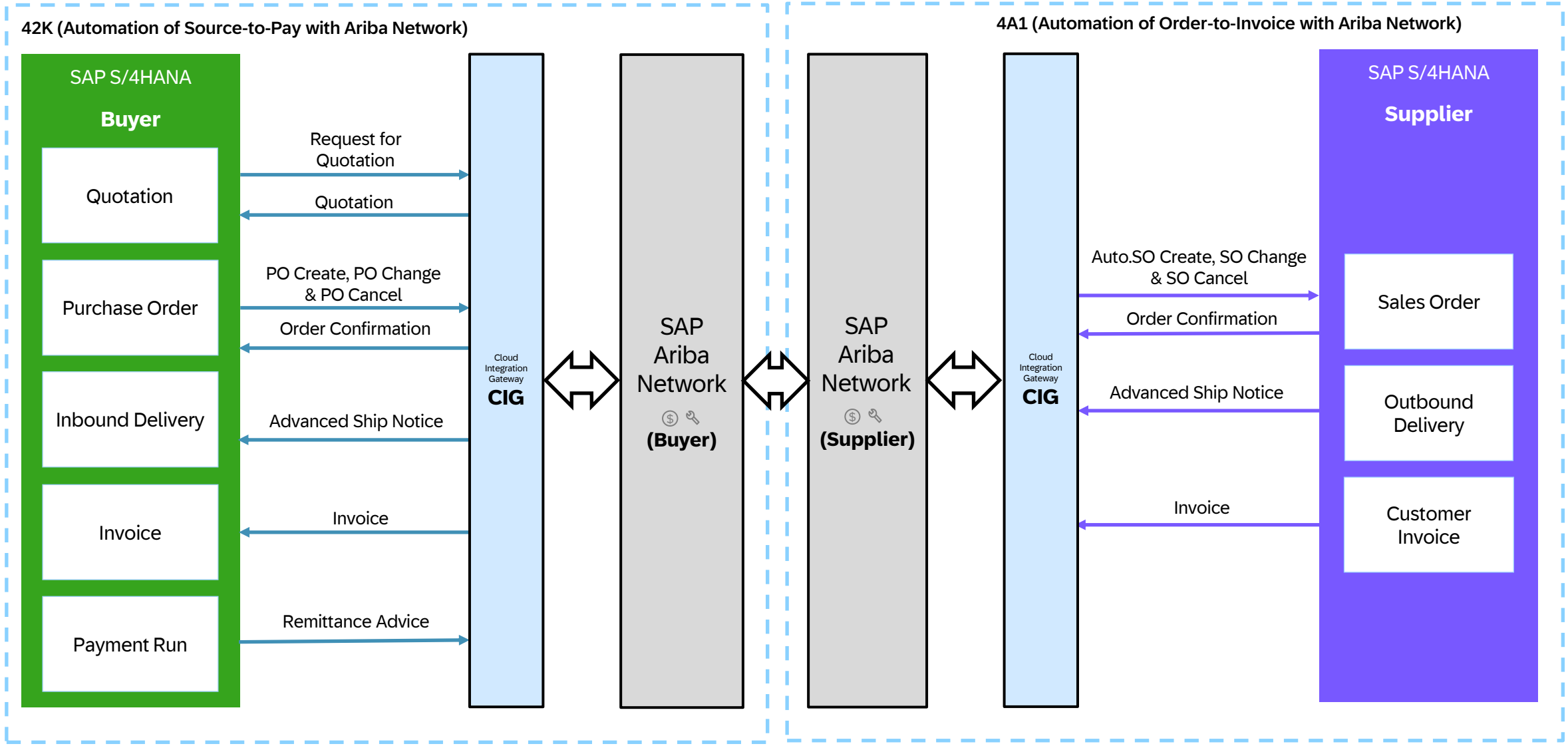
Sales: Responsibility management and workflow

Streamline sales processes with predefined responsibility management and workflow for sales documents.





Sales: Integration with Ariba Network



Sales: Integration with SAP Omnichannel Promotion Pricing

SAP S/4HANA

NEW Business Function

NEW IMG activity: Omnichannel sales promotions

NEW condition type: sales promotion

Sales Order

Call/trigger promotion calculation

Receive promotion result

NEW sales promotion status

Sales order with promotion confirmation

Outbound Delivery

Billing/Invoicing

SAP Omnichannel Promotion Pricing

On SAP Business Technology Platform

Sales promotion rules with generic attributes

Promotion calculation

IF

- "SALES ORG" "DISTRIBUTION CHANNEL"
- "CUSTOMER/GROUP/HIERARCHY"
- "PRODUCT/GROUP/HIERARCHY"
- "QUANTITY/AMOUNT/WEIGHT/VALUE"
- "VALIDITY" .....

- "AND"
- "OR"
- "INCLUDES"
- "EXCLUDES"

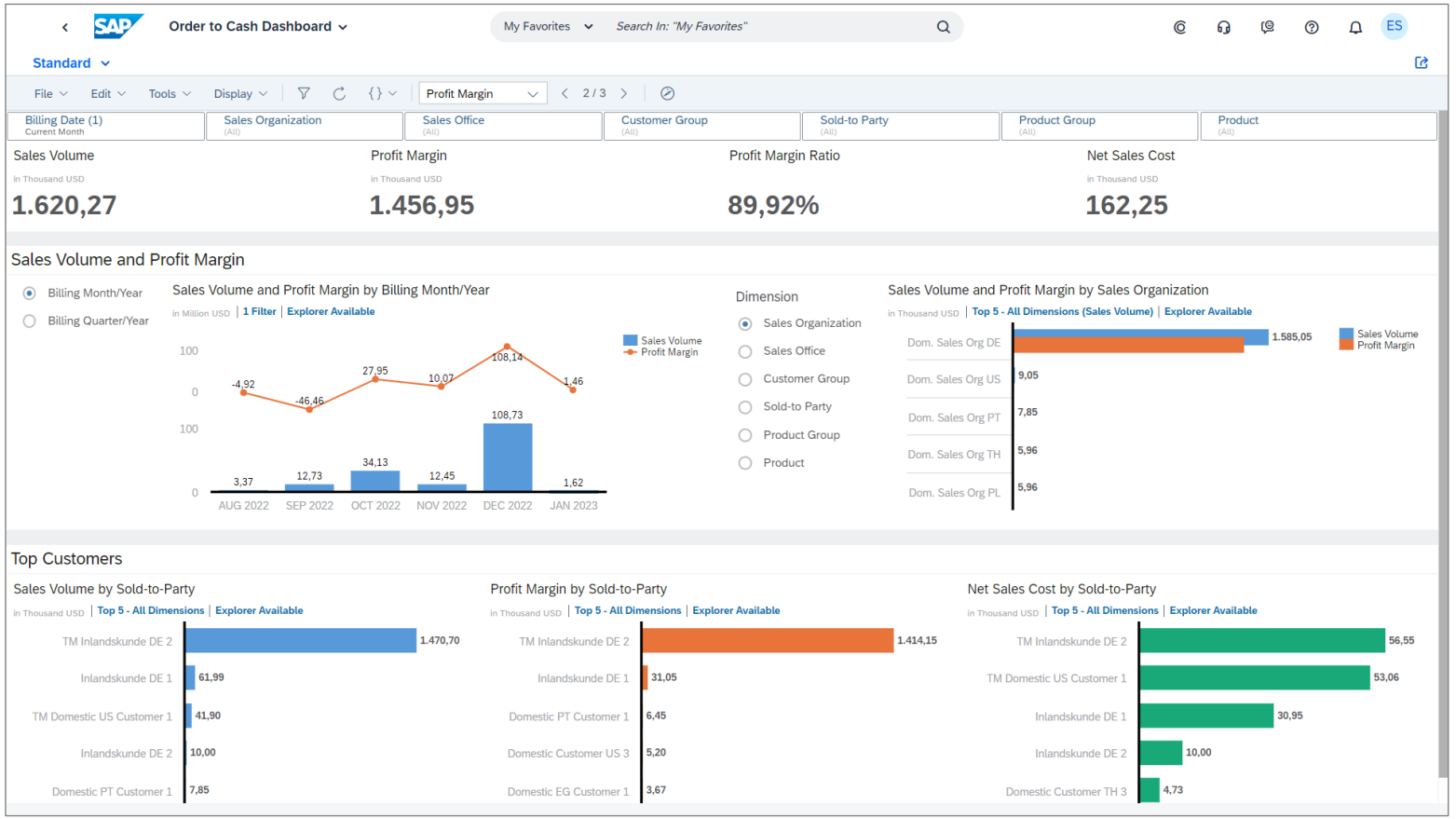
THEN

- "FREE GOODS"
- "DISCOUNT"
- "DISCOUNT WITH A CAP"
- "FIXED AMOUNT"

Sales: Order-to-Cash Dashboard

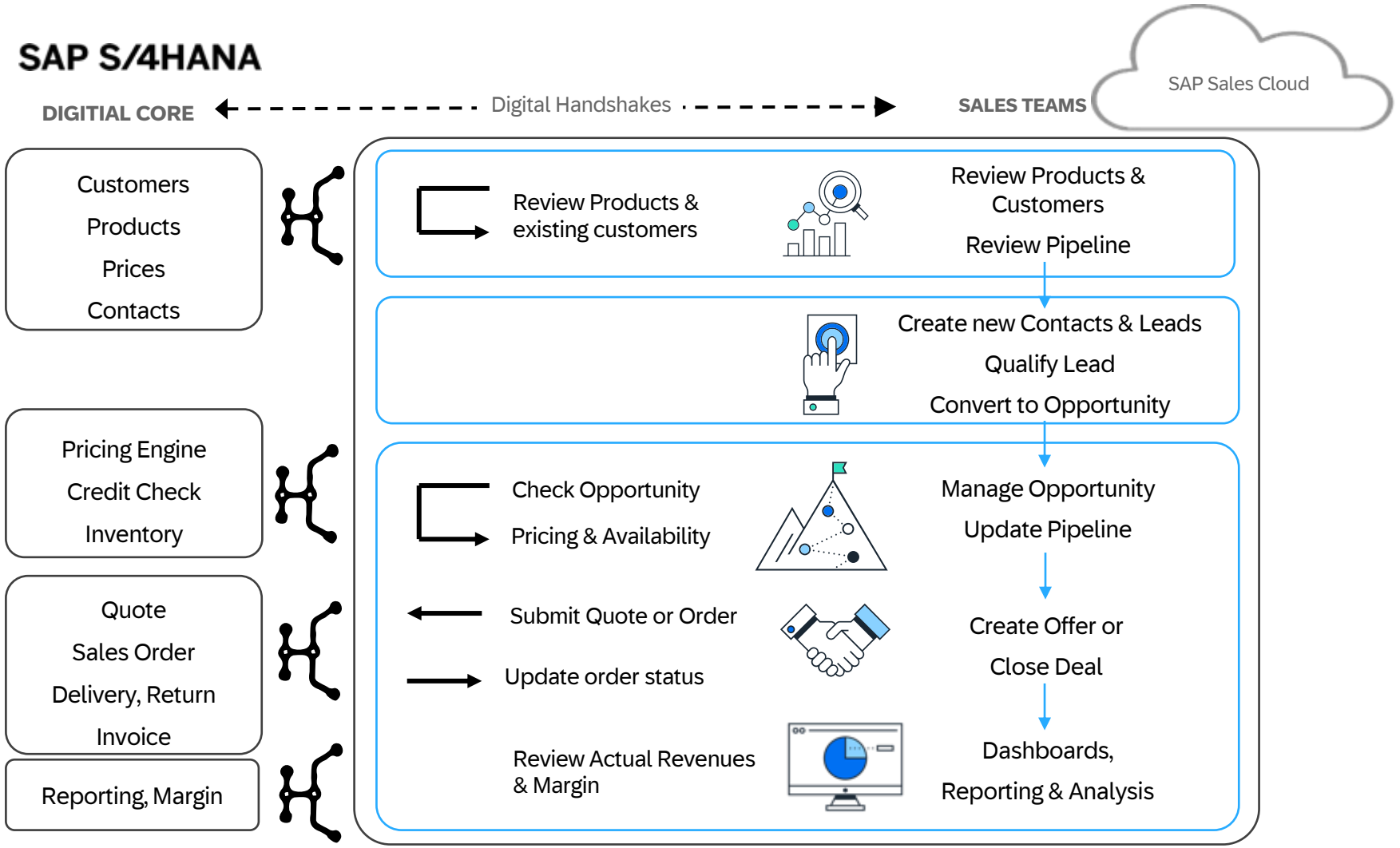
SAP Analytics Cloud

- Ready-to-use, preconfigured Order-to-Cash Dashboard visualizes real-time insights into sales processes for executives and senior management
- The dashboard also provides insights into the after-sales process with additional service key figures.
  This gives sales managers a comprehensive picture of the order to cash process, and helps improve customer satisfaction as well as customer-oriented selling
- The dashboard offers significant key performance indicators such as sales volume, open sales orders, open deliveries, incoming sales orders and sales cost, as well as comprehensive key figures from service, such as incoming service orders and open service orders
- The template of the story is stored in SAP Analytics Cloud



Sales: Sales Automation with SAP Sales Cloud

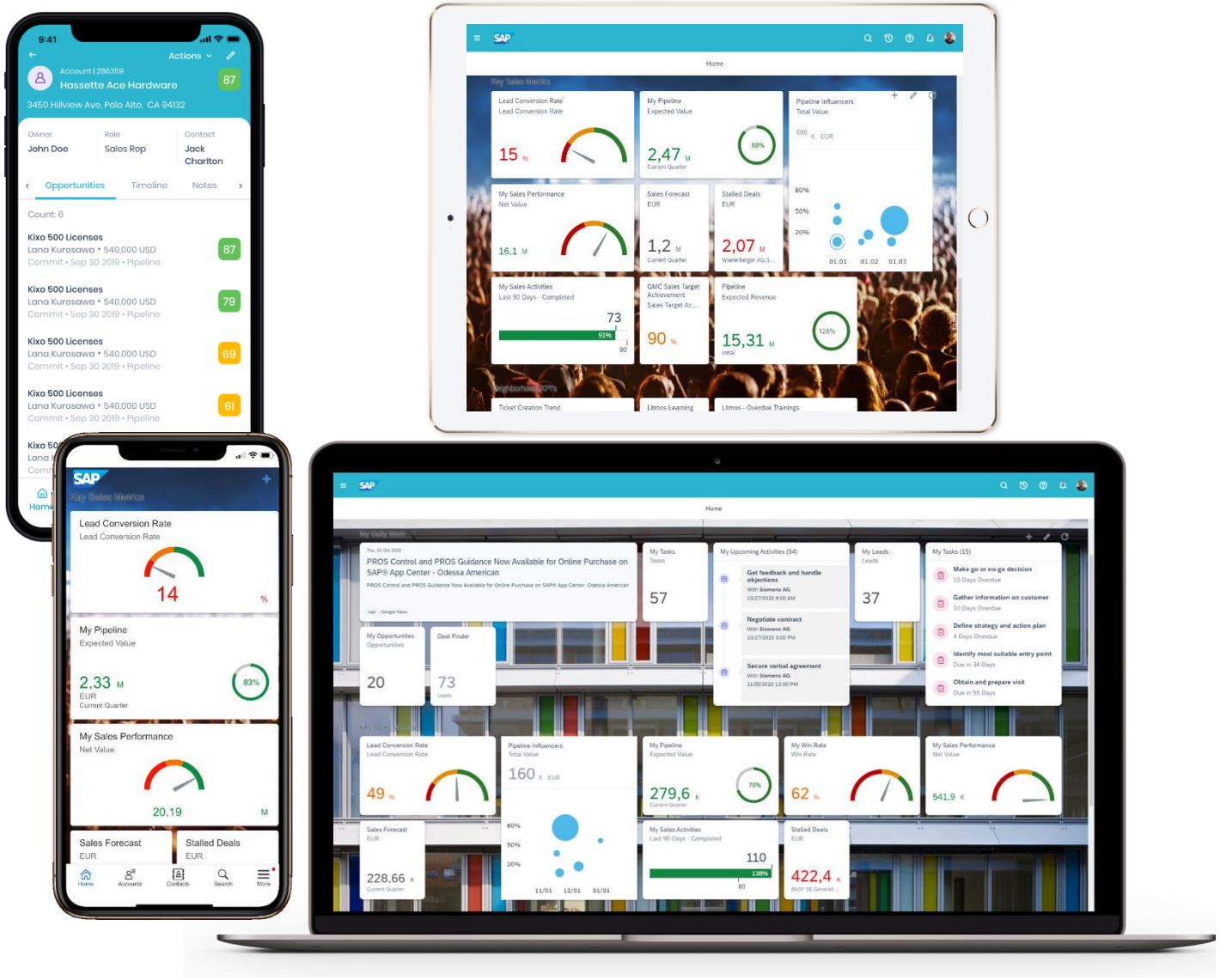
- Native integration between SAP Cloud for Customer and SAP S/4HANA
- Provides a flexible option for customers needing true hybrid scenarios and incremental updates
- Empower sales with a mobile SFA cloud solution to manage sales process together with SAP Cloud for Customer
- Provide sales with the transparency of order-to-cash management process (including pricing, credit, and inventory data) with SAP S/4HANA
- Best practices integration package is available



Complement SAP S/4HANA with SAP Sales Cloud

SAP Sales Cloud

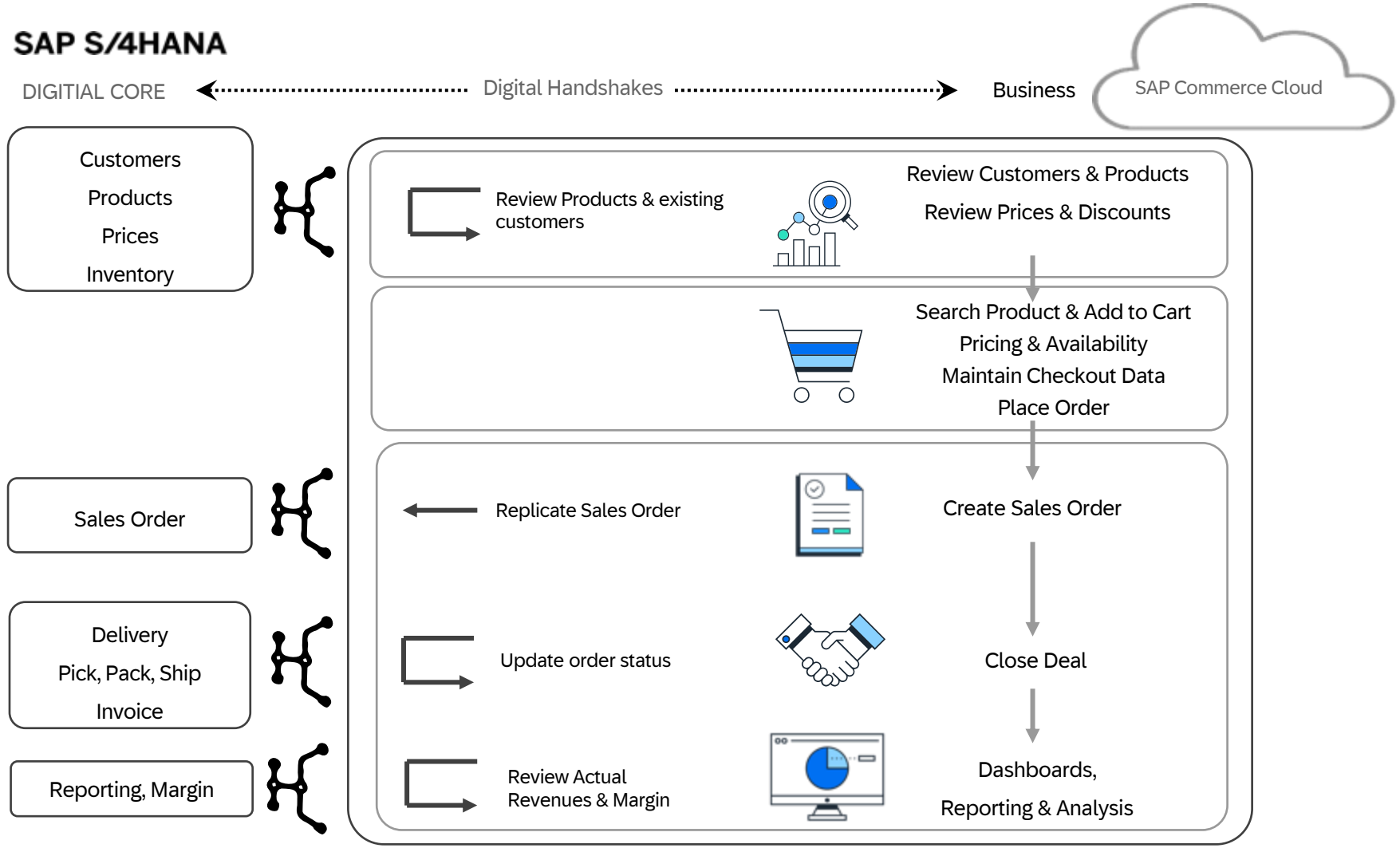
- Next generation UX
- E2E process and data integration
- Available on all devices
- Online/Offline capability
- Groupware integration
- Industry specific capabilities for Consumer product industry
- Data driven user assistance (Machine Learning)
- Better TCO than with external CRM system



Sales: Integration with SAP Commerce Cloud

SAP Commerce Cloud

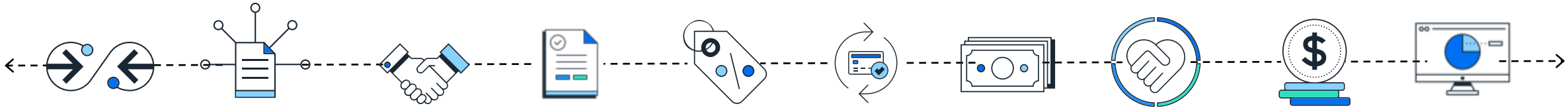
- Native integration for SAP Commerce Cloud and SAP S/4HANA, leveraging powerful core sales office functionality with sales front end office
- Take full advantage of the well-established order fulfillment process on SAP S/4HANA and extend sales channels with SAP Commerce Cloud
- Flexible integration options for order management -- Order management for B2B and B2C business scenarios
- Best practices integration packages available



Sales embedded in Quote-to-Cash

End-to-end management of quote-to-cash process for any business model

Model + Price | Quote + Sell | Order + Provision | Rate + Invoice | Collect + Settle | Recognize + Report | Learn + Grow



Offer Modeling

- Master data definition
- Product and bundle definition
- SKU management
- Monetization modeling
- Entitlement modeling

Quote Management

- Configure, price, and quote complex quotes*
- Guided selling

Order Management

- Subscription, product, service, project, and bundle order management
- Process orchestration (distribution, fulfillment, order tracking, etc.)
- Rights and entitlement management
- Subscription lifecycle (renewals, add-ons, removals, and changes)

Contract Management

Usage Collection, Pricing + Charging

- One-time, recurring, and usage, and event charging
- Billing data collection, enrichment, and validation
- Allowance, balance, and entitlement management
- Unified customer bill and billing stream
- Partner rev-share tracking

Converged Billing + Settlement

Rev-Share + Payment

- Accounts receivables management with subledger accounting
- Payment clearing automation
- Payment deferrals and installment plans
- Credit, collections, and dispute management
- Partner rev-share settlement
- Identify revenue-loss situations using AI

Customer Care, Credit + Collections

Controlling + Revenue Accounting

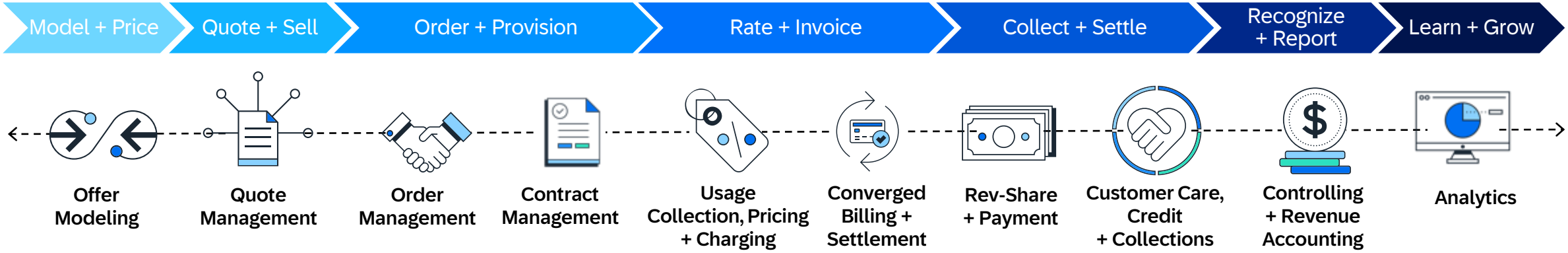
- Revenue recognition (IFRS 15 and local standards)
- Management accounting
- Tax compliance

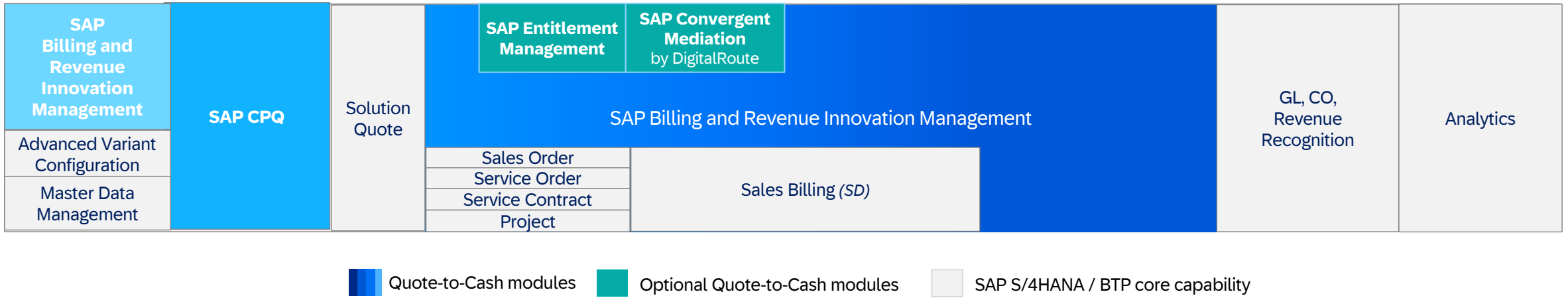
Analytics

- Customer and revenue insights
- Personalized offers and promotions
- Revenue planning

Sales embedded in Quote-to-Cash

End-to-end management of quote-to-cash process for any business model





NOTE: Actual product modules will vary based on customer-specific requirements and use cases.

Sales: Delta Scope Summary

2023 FPS2

Joule and Business AI *

Sales Order Management

- Monitor and resolve sales order fulfillment issues with Joule and Business AI* (FPS02)
- Sales order monitoring based on textual natural language processing using Joule (FPS02)

Solution Business Management

Solution Quotation Management

- Support of multilevel configuration in solution quotation management

Order and Contract Management

Price Management

- Configure role-based access to price and cost details in sales documents and in billing process documents
- Maintaining tax records in sales or uploading them from template-based spreadsheets (FPS01)

Sales Order Management and Processing

- Managing sales orders app, version two – support of an available-to-promise (ATP) result screen
- Utilize a hybrid sourcing result from aATP to source from internal (plants) and external (supplier) locations (FPS02)

Sales Billing & Solution Billing

- Flexible billing document posting – suppressing automatic posting

Claims, Returns, and Refund Management

- Suspending product valuation initiated by a refund in the customer returns process
- Enhancements to the SAP Fiori app “Manage Customer Returns (Version 2)”: supporting attachments, process flows, and additional fields

*Availability planned in December 2024 with the new Joule infrastructure

Service Management

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

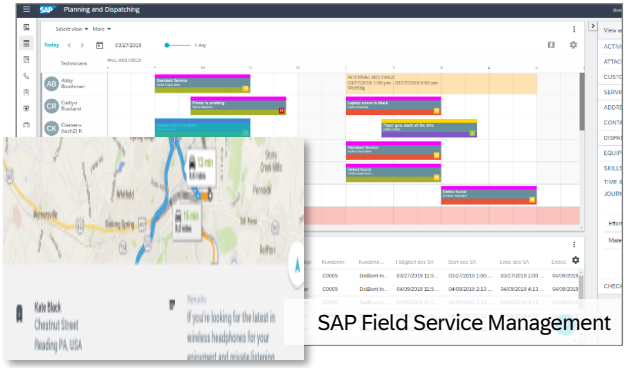
Service: Overview

Modular Cloud LoB Solutions

additional license

additional installation

- Asset Network and Collaboration with SAP Asset Intelligence Network (AIN)
- Mobile Field Service Execution with SAP Field Service Management (FSM)
- SAP Service Cloud



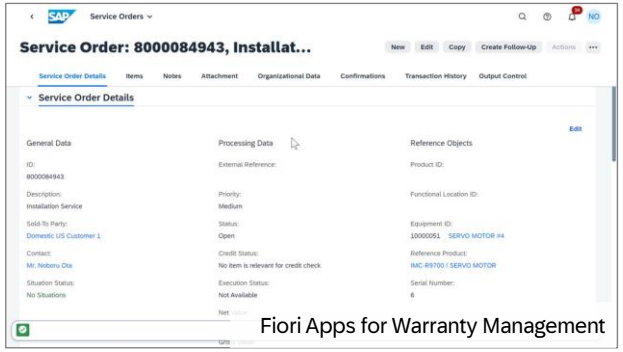
SAP Field Service Management

SAP S/4HANA LoB Apps

additional license

Subscription Order Management

Extend commercial service offerings with enhanced subscription management.



Fiori Apps for Warranty Management

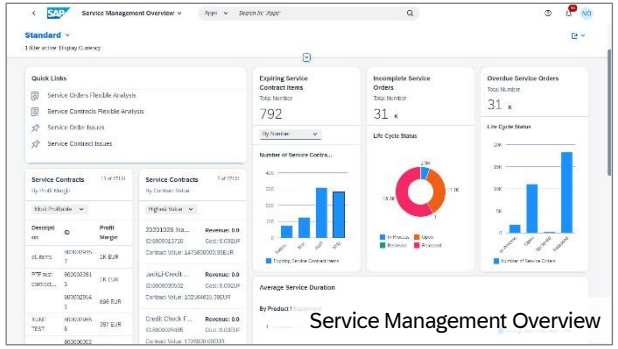
SAP S/4HANA Enterprise Management

Service Master Data and Agreement Management

Manage customer asset records, service history, and commercial agreements.
Process warranty claims to supplier/manufacturer or claims coming from your customers.
Plan preventive maintenance services based on relevant information readily available.
Monitor operations and business outcome of services business by holistically looking at the entire service processes.

Service Operations and Processes

Engage with customers on multiple platforms for their requests, complaints, and any other interactions.
Combine services and products as a packaged solution.
Perform services efficiently and effectively, with all the required material and human resources. Bill customers in a timely manner in accordance with contractual agreements.



Service Management Overview

Service Parts Management

Improve efficiency in parts fulfillment, planning, procurement, and warehousing with integration of core materials management and finance functions.

Service: Business area overview

Modular Cloud LoB Solutions

additional license

additional installation

- Asset Network and Collaboration with SAP Asset Intelligence Network (AIN)
- Mobile Field Service Execution with SAP Field Service Management (FSM)
- SAP Service Cloud

SAP S/4HANA LoB Apps

additional license

SAP S/4HANA Enterprise Management

Subscription Order Management	**Subscription Management**	
Service Master Data and Agreement Management	**Service Monitoring & Analytics**	**Service Contract Management**
	Technical Assets, Structures, and History	**Warranty Management**
	Service and Maintenance Plan	
Service Operations and Processes	**Customer Engagement**	**In-House Repair**
	Service Request & Order Mgmt.	**Service Execution**
Service Parts Management	**Service Parts fulfillment**	**Service Parts Warehousing**

Service: Service Master Data, Agreement, and Spare Parts Mgmt.

Service Master Data and Agreement Management

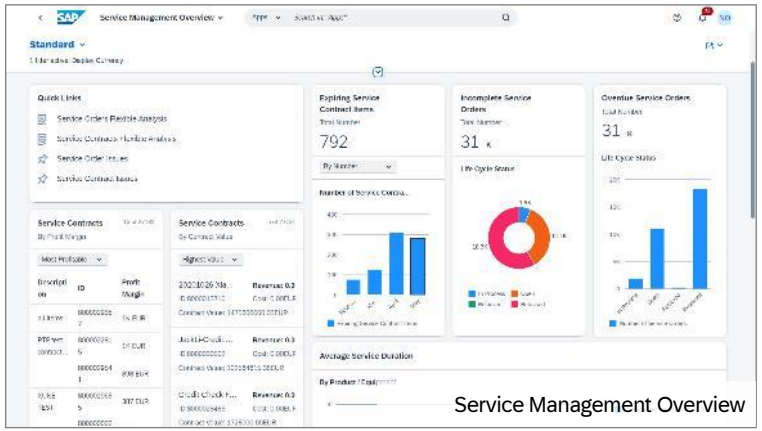
Technical Assets, Structure, and History	Service Maintenance Plan	Service Contract Mgmt. & Warranty Mgmt.	Service Monitoring and Analytics
Provide precise information on **customer location and installed equipment** to call center, field service, depot repair, and sales staff. Plan and perform maintenance services with **complete records of a piece of equipment or a system** via equipment master data, maintenance plan, measuring point, task list, bill of materials, etc.	**Schedule** service commitments and major maintenance events (e.g., shutdowns and turnarounds) **to enable preventive and predictive service** activities, based on time, counter, condition, or risk	Manage **service agreements, price arrangements, and customer entitlements** in a single repository, trigger **automatic periodic billing.** Manage correspondence of **warranty claims**, whether your organization is the warrantee or warrantor.	**Monitor** operations and business outcome of services business by holistically capturing and measuring service performance and profitability using operational reporting and dashboards.

Service Parts Management

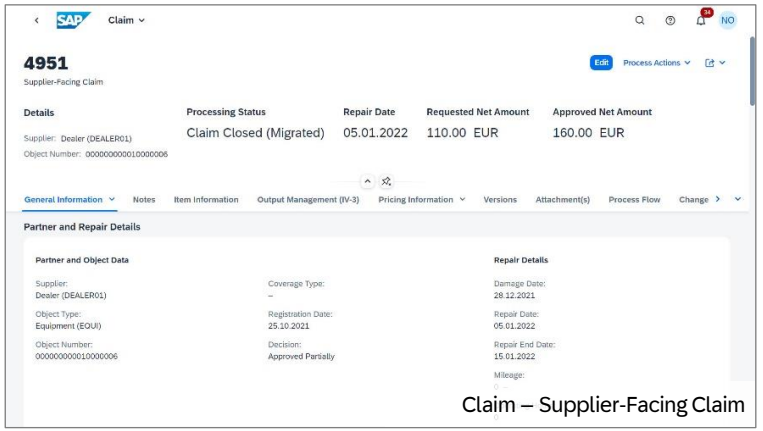
Service Parts fulfillment

Facilitate the optimization of spare part stock processing according to usage and availability

Improve efficiency in parts fulfillment, planning, procurement, and warehousing with integration of core materials management and finance functions, as well as support for language and localization requirements.



Service Management Overview

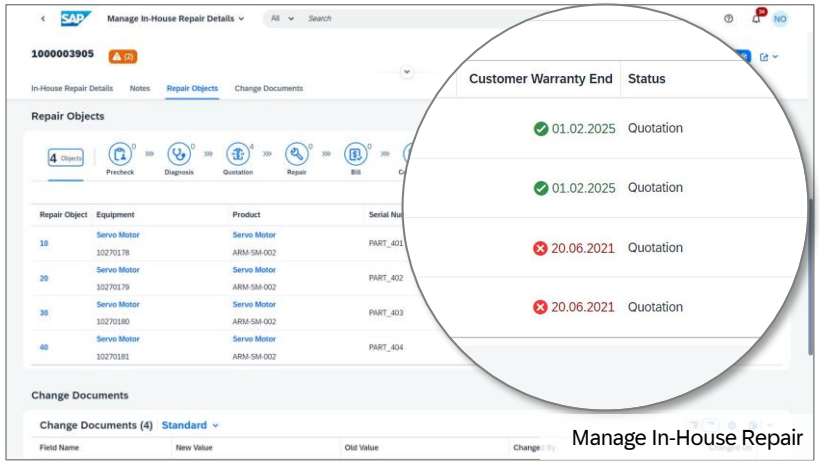


Claim – Supplier-Facing Claim

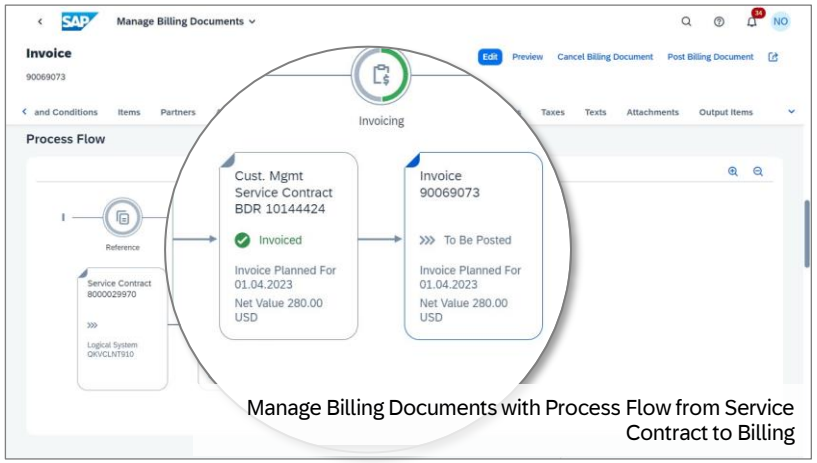
Service: Service Operations and Processes

Service Operations & Processes

Service Request Management	Service Order Management	In-House Repair	Service Billing fulfillment	Customer Engagement
Create, track, and manage service requests with **full visibility of current and historical service agreements and activities.** Improve customer satisfaction by providing the front-line service agent with a **full view of customers, installed equipment, and service history.**	Provide front-line field service teams with access to **up-to-date information on service history and equipment configuration** to expertly perform maintenance service work.	Plan and perform **in-house repairs more effectively by integrating the repair process across various lines of business** for greater transparency.	Deliver services in the most efficient manner from simple to most complex services, through **planning, scheduling, parts provisioning, service work**, and billing. Reduce cost **with a complete logistical and financial insight.**	Support efficient issue resolution through multichannel **customer engagement and smart interactions.**



Manage In-House Repair



Manage Billing Documents with Process Flow from Service Contract to Billing

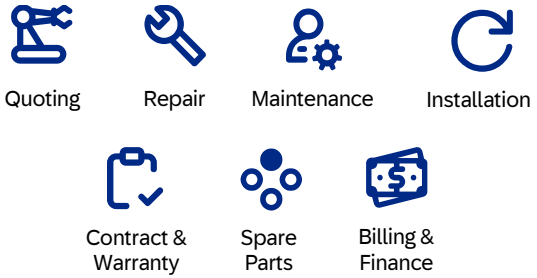
Service Management Solutions from SAP

Delivering a unified service resolution

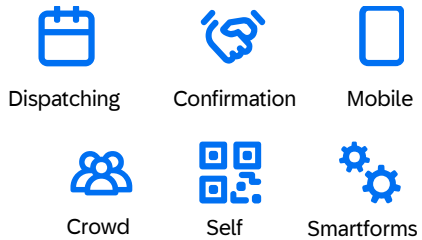
SAP Service Cloud | SAP S/4HANA | SAP Field Service Management

Customer Service

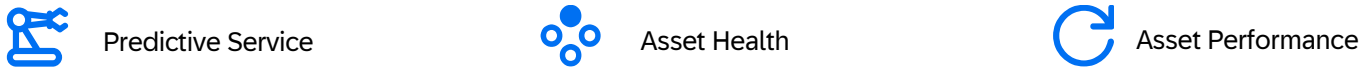
Service Operations



Field Service

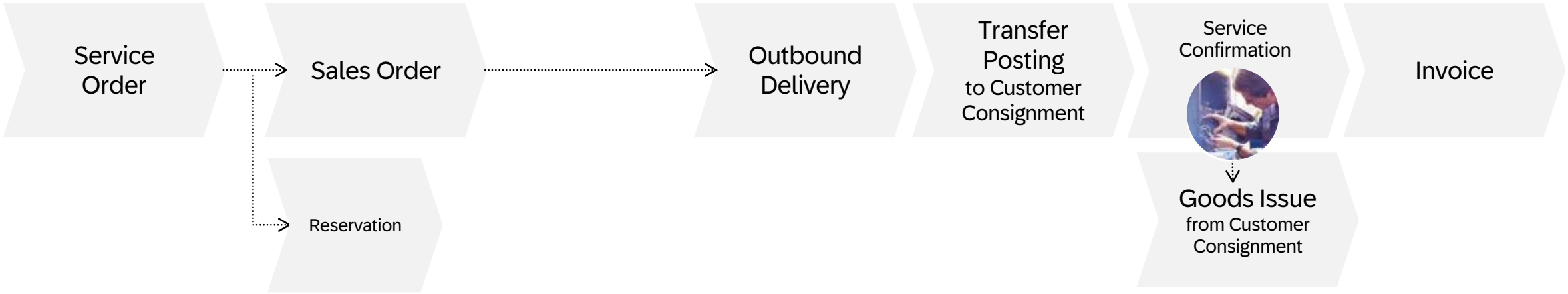


SAP Asset Performance Management

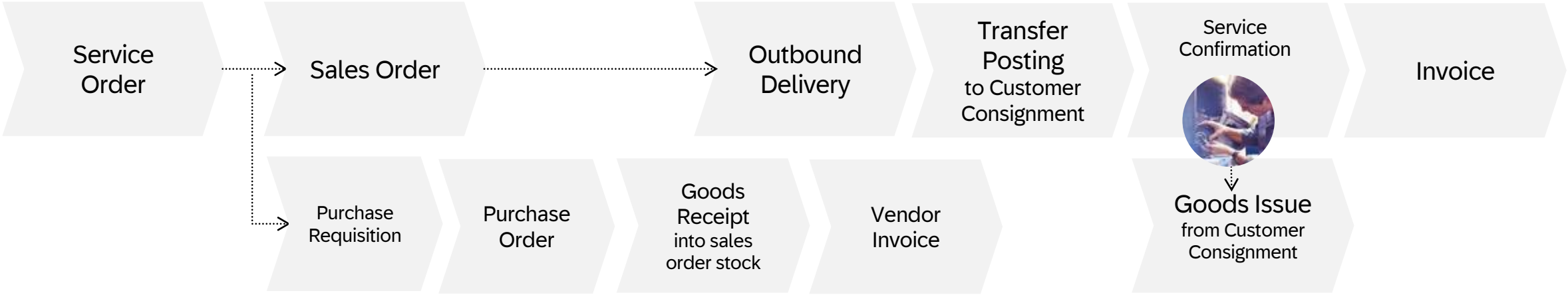


Service: Advance shipment

Parts in stock

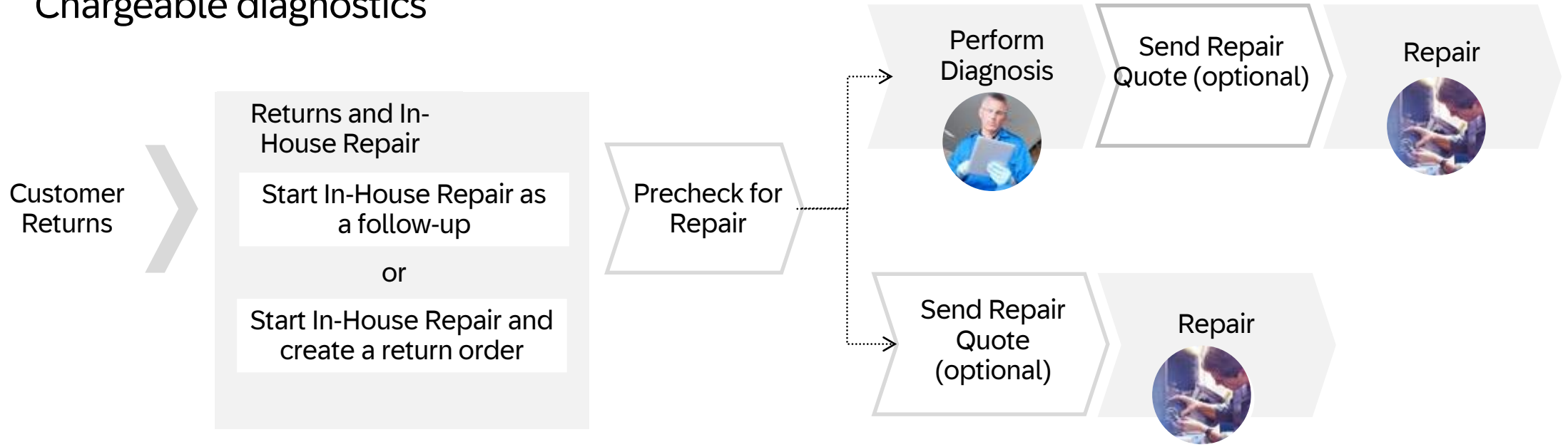


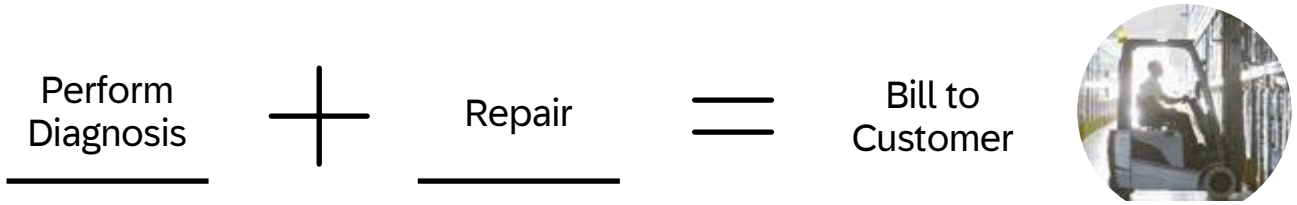
Parts not in stock



Service: Chargeable diagnostics in in-house service

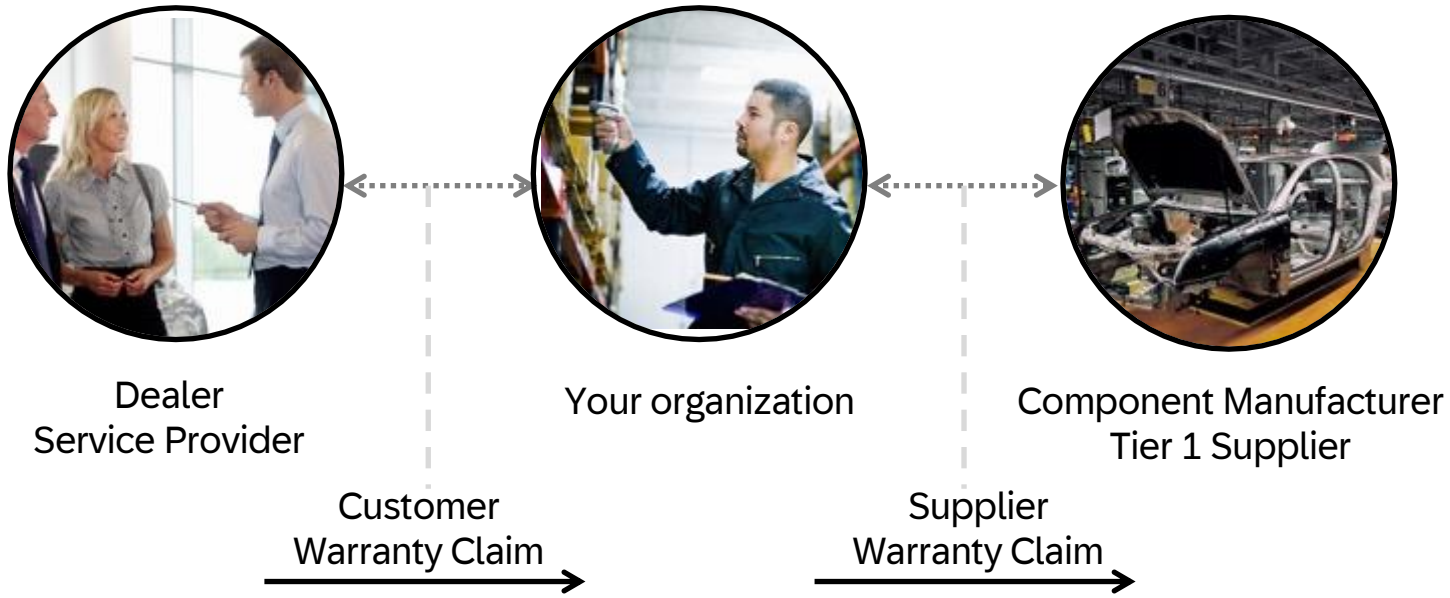
- Seamless process handover with customer returns
- Chargeable diagnostics



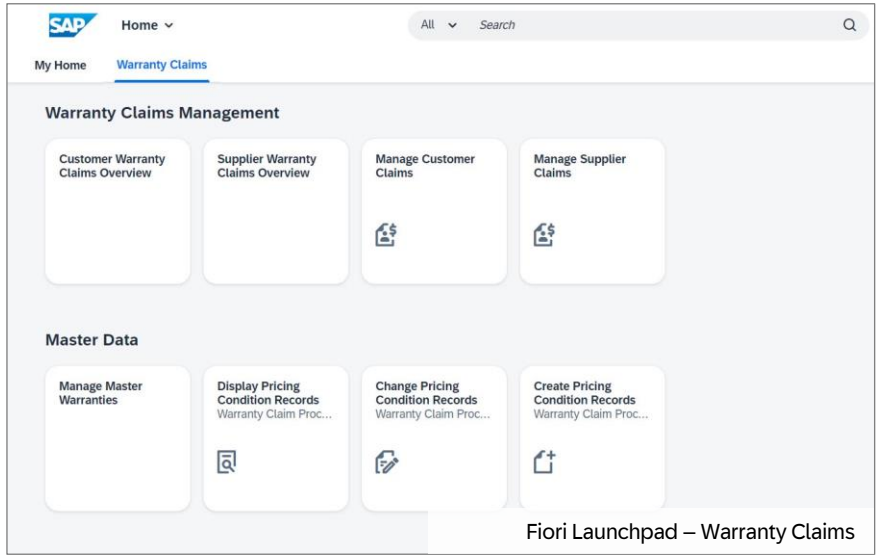


* It's possible to charge only the diagnosis when customer decides not to proceed with repair

Service: Warranty claim processing



The warranty claim processing capabilities of SAP S/4HANA let your business manage correspondence of warranty claims, whether your organization is the warrantee or warrantor.

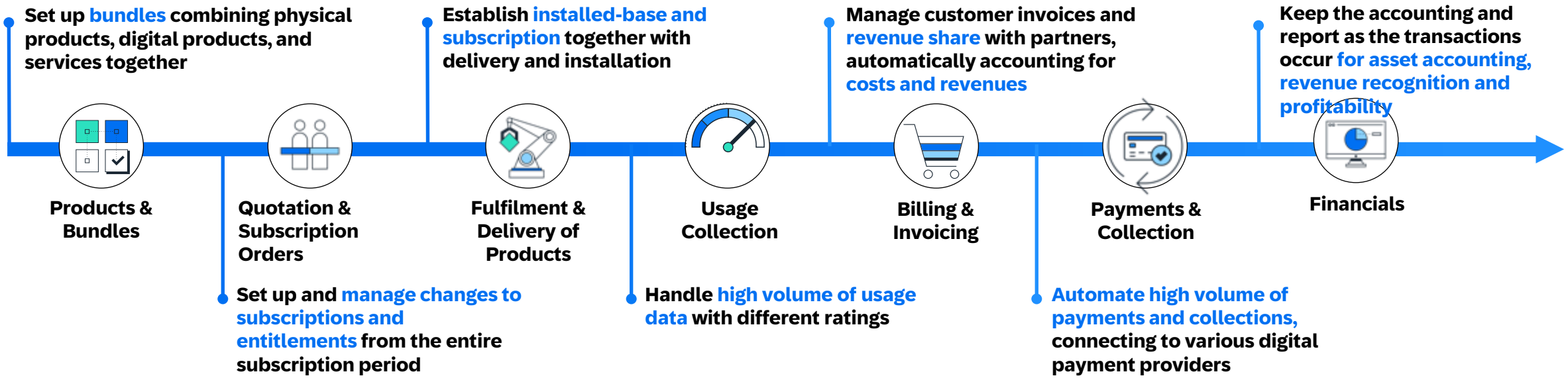


Fiori Launchpad – Warranty Claims

Service: Example of aftermarket solution business with SAP

Subscription and pay-per-use

Subscription Order Management | Subscription Management



Example: Subscription for Robotic Painting System

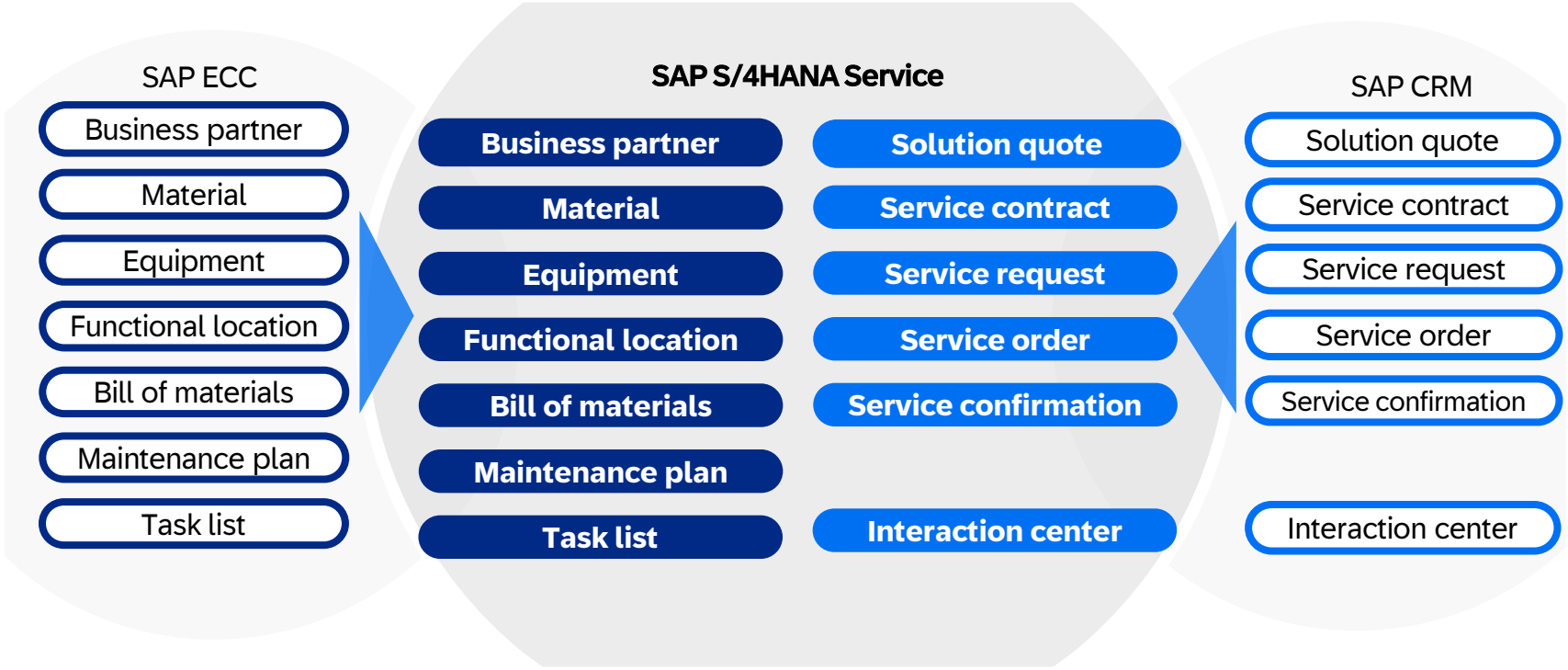
	Subscription for Outcome or Usage
Product	Lease robots (asset owned by you)
One-Off Service	Installation & Training
Service Contracts	Maintenance, repair, parts, consumables
Subscription	Outcome-based subscription • KPI 1: Number of cars painted • KPI 2 :Paint line throughput (cars / hour)

SAP Community Call recording with system demonstration

Service: Data harmonization and elimination of functional redundancies

Data harmonization and elimination of functional redundancies

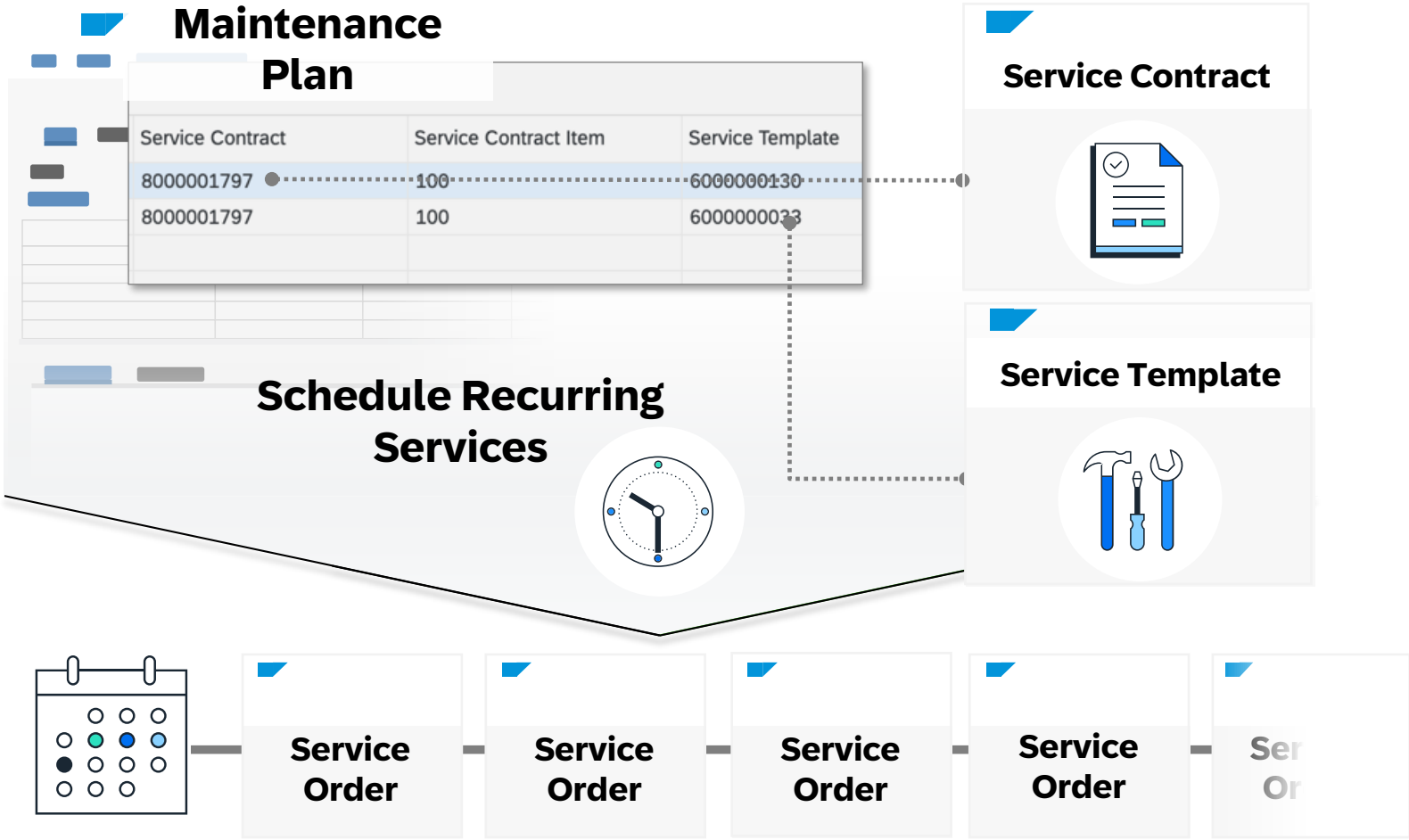
- SAP S/4HANA Service combines the data model of SAP ECC and SAP CRM into one, eliminating the need for data synchronization.
- Harmonization simplifies the ways end users interact with the system for their day-to-day work.
- Elimination of synchronization and redundancies contributes to reduction of IT costs for operation costs and systems.



Service: Recurring service planning and scheduling

Plan and schedule recurring services using maintenance plan and service templates, linked with service contracts.

- Link recurring services with service contracts.
- Leverage the familiar maintenance plan master data record.
- Automatically generate service orders with pre-defined service templates.



Service: Recurring service planning and scheduling

Service Master Data and Agreement Mgmt. | Service and Maintenance Plan

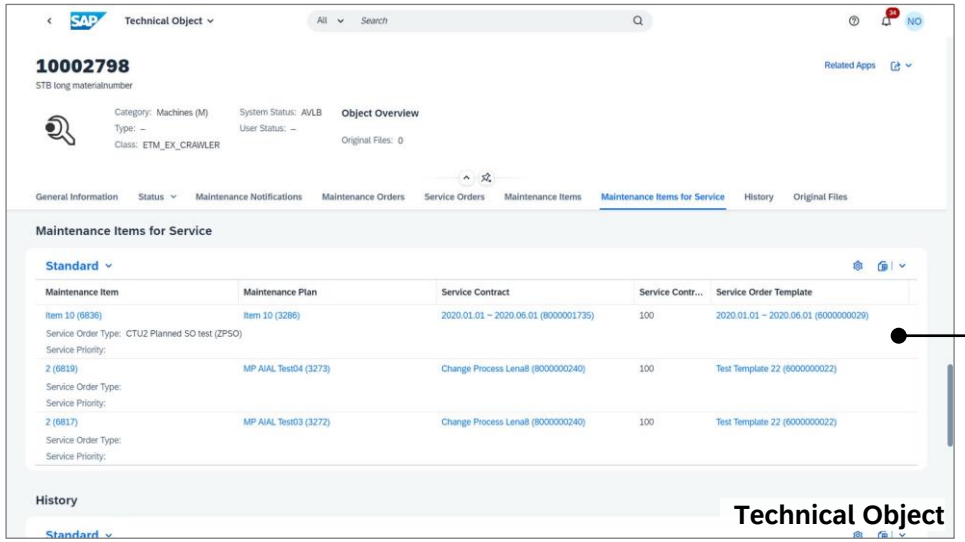
Plan and schedule recurring services using maintenance plan and service templates, linked with service contracts.

Service Maintenance Plan

- Display of service planning history

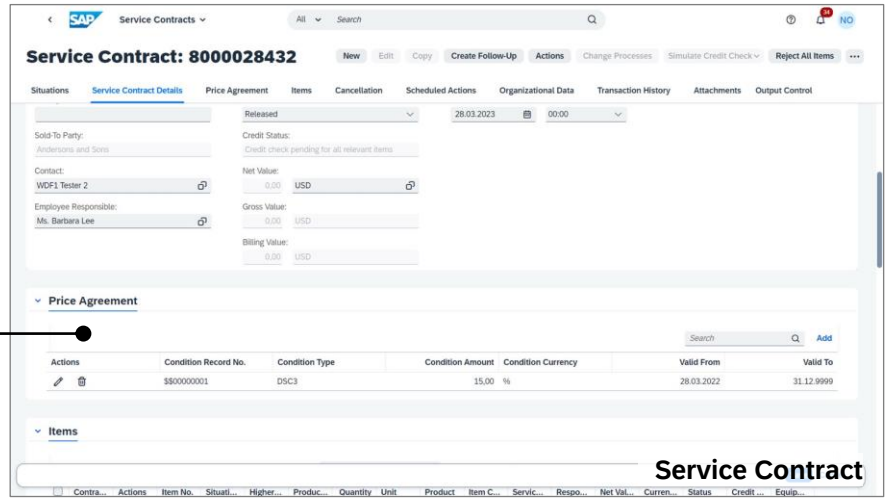
Service Contracts Management

- Ad-hoc billing for service contracts
- Auto renewal of price adaptation items
- Header price agreements in service contract



Service Plan History

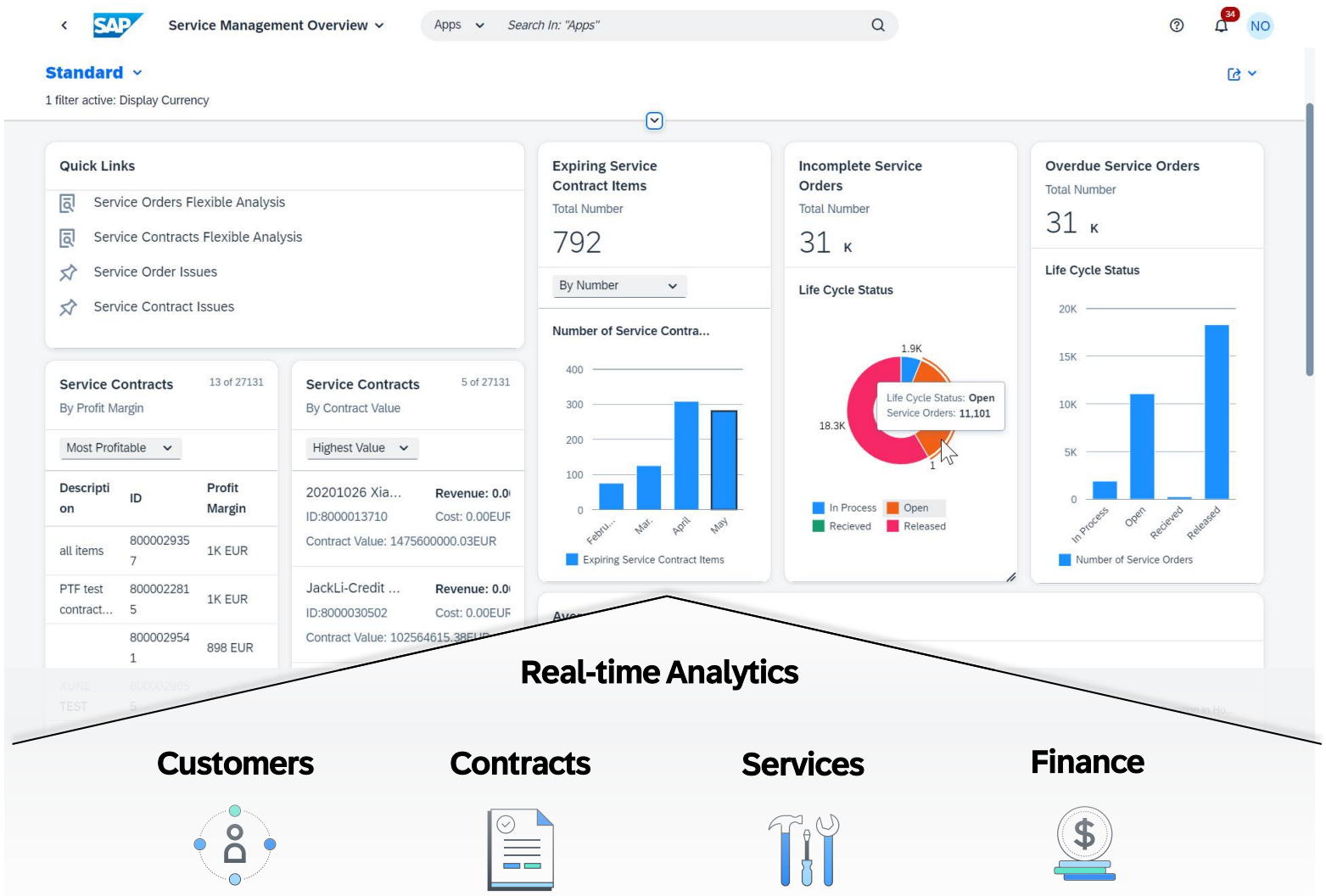
Header Price Agreement



Service: Embedded analytics

Monitor operations and business outcome of services business in real-time via analytics, looking directly at the transactional data.

- Visualization / dashboard in real-time directly from SAP S/4HANA
- Both operational (e.g. overdue service orders) and business management (e.g. profit margin)
- Personalized for individual user roles



SAP Field Service Management

Extending the capabilities of SAP S/4HANA Cloud

AI Enabled Integrated Field Service

Extended Field Service Capabilities

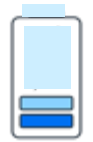
Customer Engagement

Asset Health

Asset Strategy

Asset Collaboration

Asset Visualization


Additional Mobile Personas

SAP Field Service Management

- Schedule/Dispatch
- Service Map
- Mobility
- Crowd Workforce
- Skills Management
- Time & Material Journal
- AI Scheduling & Optimization
- Customer Self-service
- Smartforms
- Business Rules/Configuration
- Extensions
- Reporting & Analytics

SAP S/4HANA Cloud

Service

Asset Management

Human Resources

Finance & Accounting

Sourcing & Procurement

Supply Chain

Inventory Management

Invoicing

Time & Payroll

Projects

Health & Safety

Sales

Service: In-House Repair 1/2

Unified service process combining field service and in-house

Service Operations and Processes

2023 FPS2

Combined in-house repair and field service in one service order

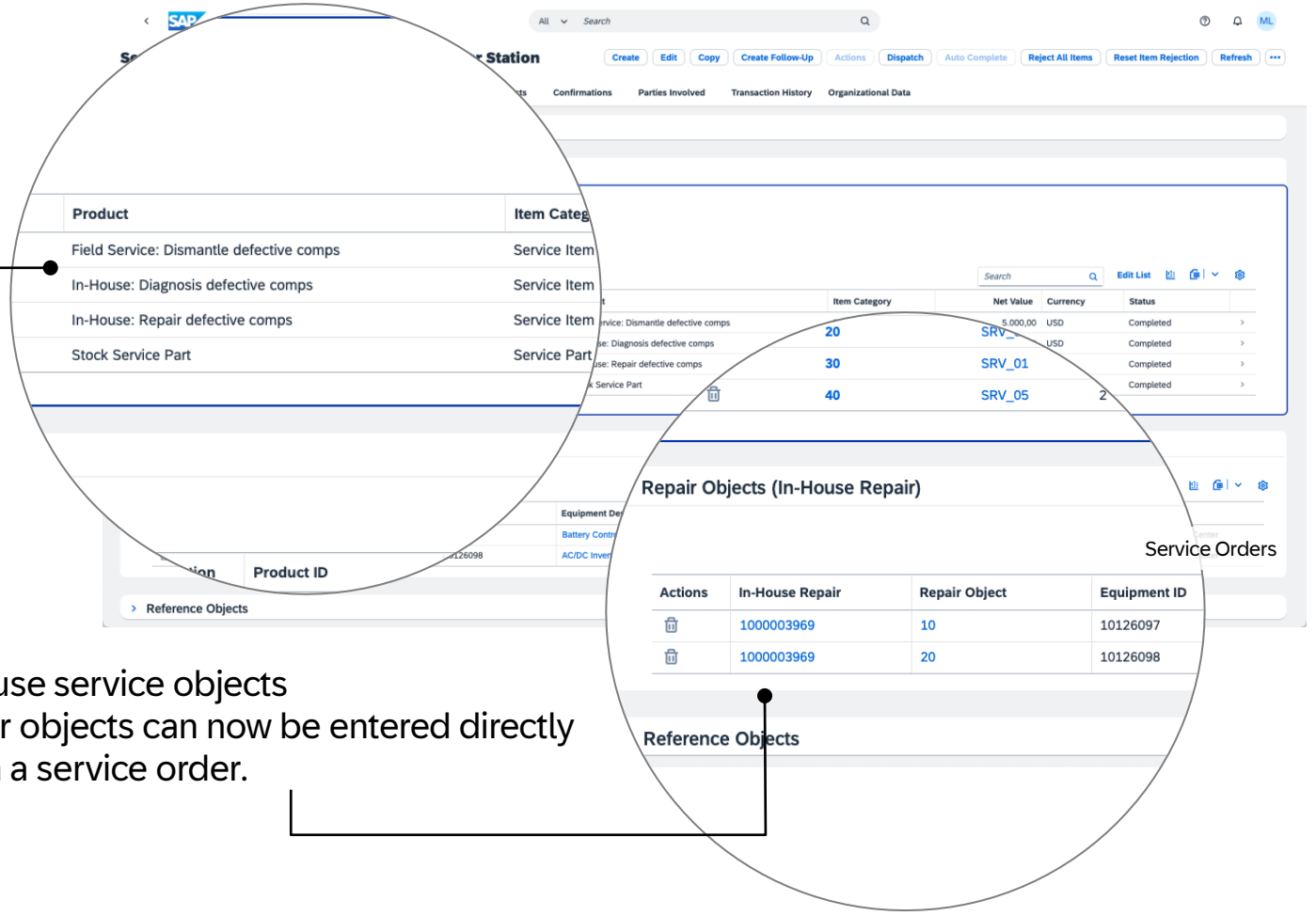
Unified service process
Field services and in-house services can now be included in a single service order document to better reflect the reality of the complex service business.

Reflects the reality of complex service management process

Customer use case example in screenshot:

Service quote for a field service to dismantle defective components and billable diagnosis in a service center service.

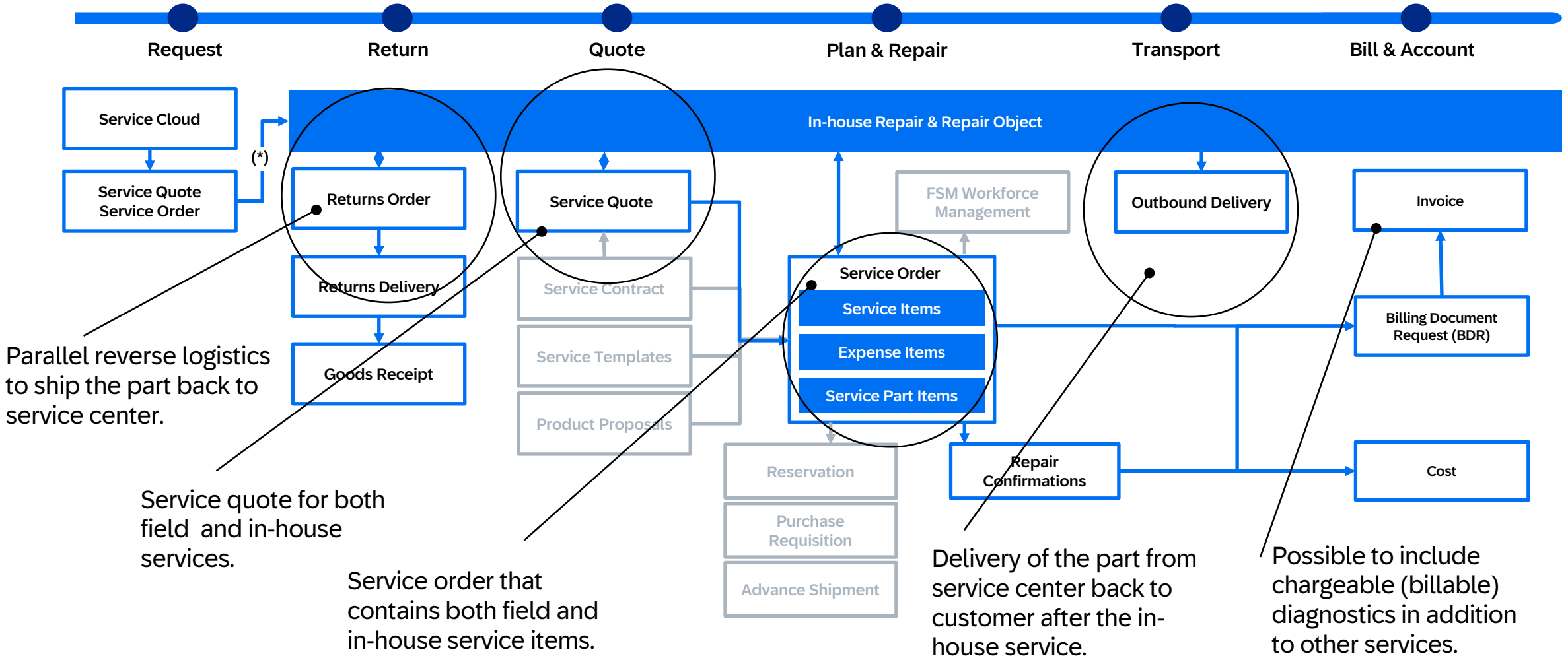
A single service order also reflects the financial and commercial aspects better: profitability in a single service order.



In-house service objects
Repair objects can now be entered directly within a service order.

Service: In-House Repair 2/2

Unified service process combining field service and in-house



Service: Non-serialized products in in-house repair

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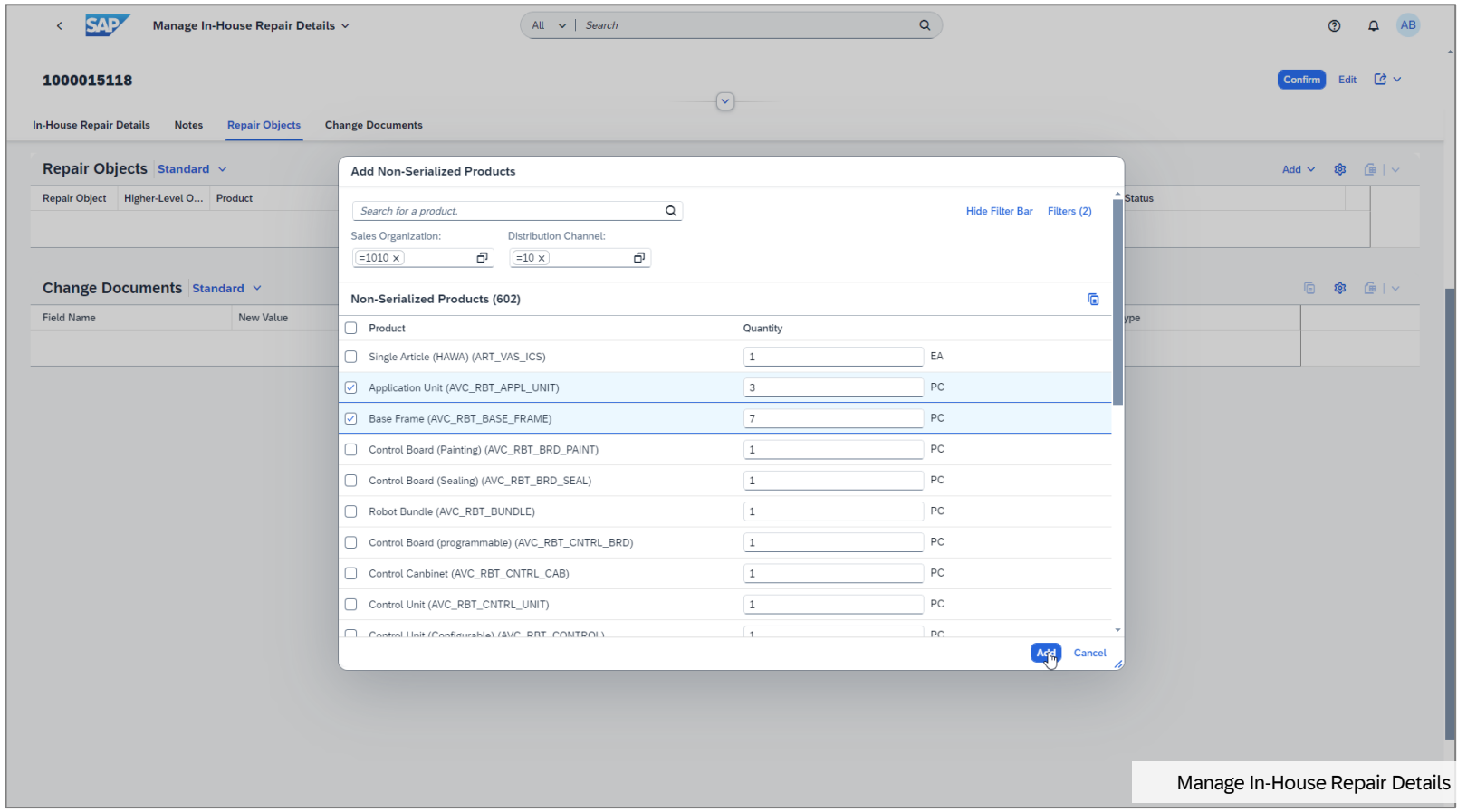
Non-serialized products in in-house repair

You can now process serialized products and non-serialized products as repair objects that have been added to an in-house repair.

Serialized products are products that have a serial number assigned and aren't related to a piece of equipment. They're identified as unique products and are recorded with the quantity 1 only. Within the in-house repair process, serialized products are handled like equipment.

Non-serialized products are products that aren't identified by a serial number and therefore can be recorded with a quantity greater than 1. You can process non-serialized products in customer returns and in in-house repair.



Manage In-House Repair Details

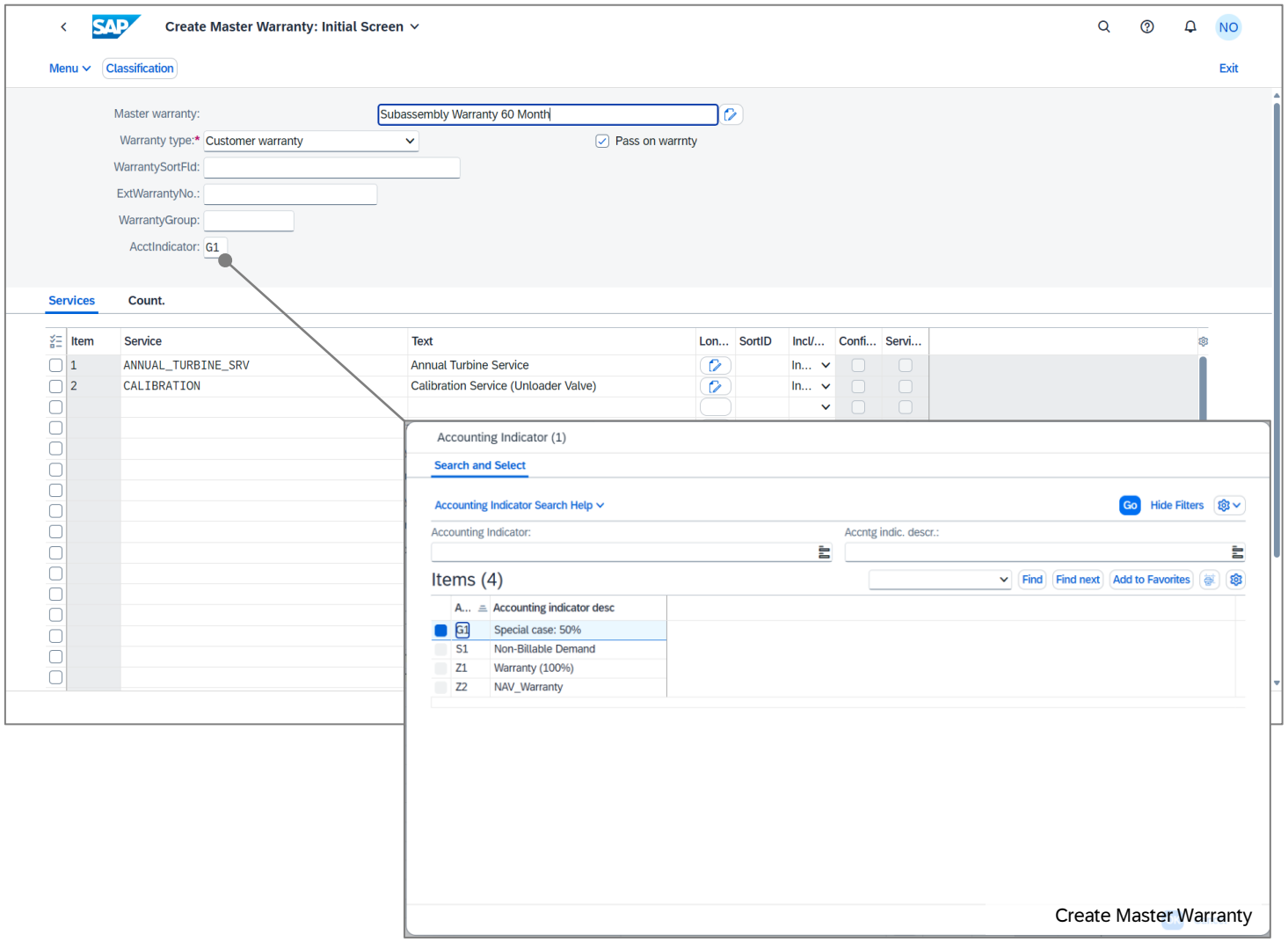
Service: Warranty management

- Enhancement of Warranty Determination for Service Items

  Service items are recorded in the Master Warranty individually as either included in warranty or excluded from warranty. This information is then used for warranty determination of the service items during a service transaction. An equipment can have a large number of individual service items. The warranty determination has been enhanced to include warranty for all the service items by maintaining a blank entry.

- Accounting Indicator in Master Warranties

  With this feature, you can set an accounting indicator in the warranty objects assigned to a technical object. When the equipment is reused in a service order, the accounting indicator with the warranty information will be copied over.



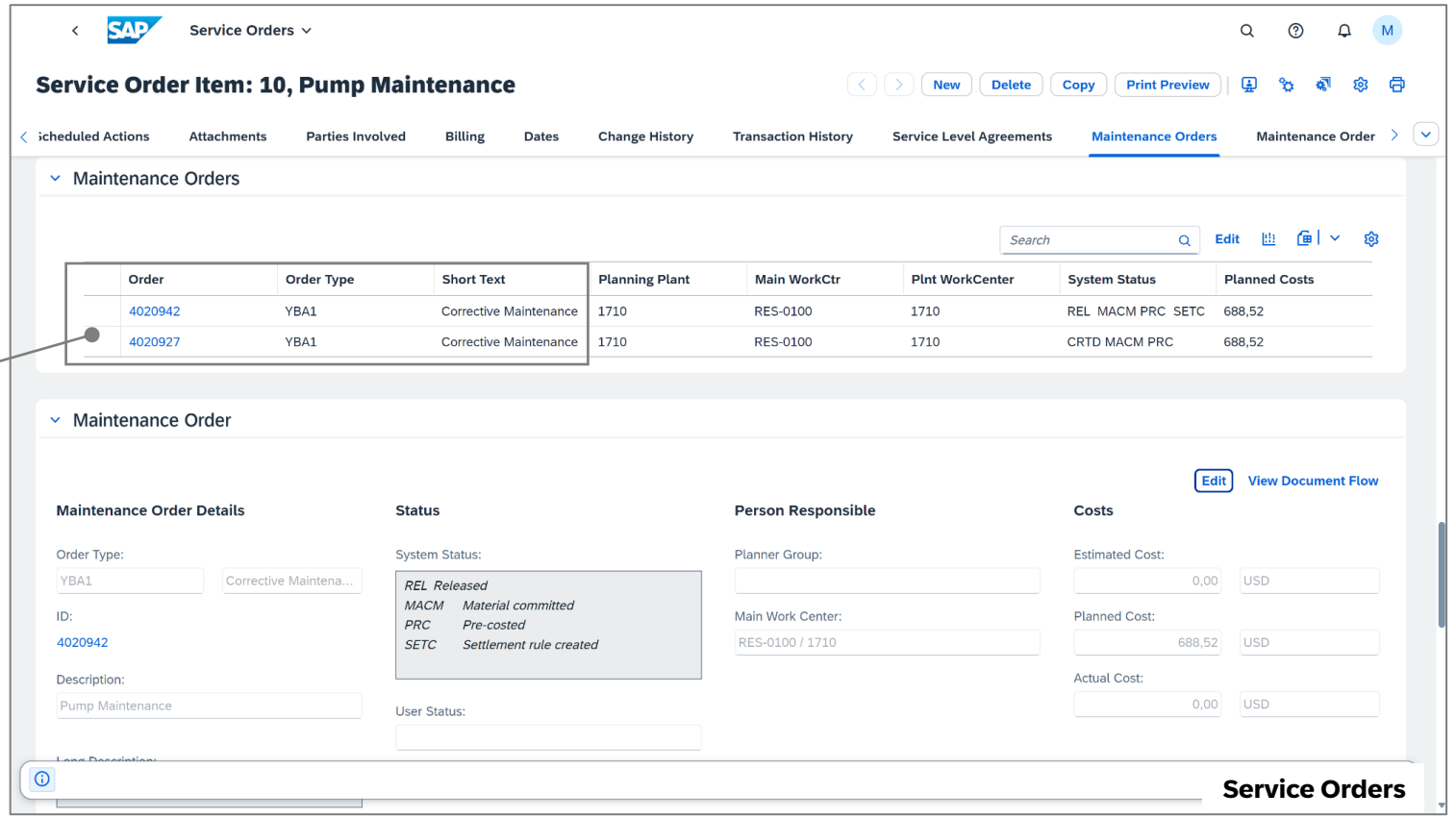
Service: Multiple billable maintenance orders

In a single service order item

Service Operations & Processes | Service Order Management | 2023 FPS2

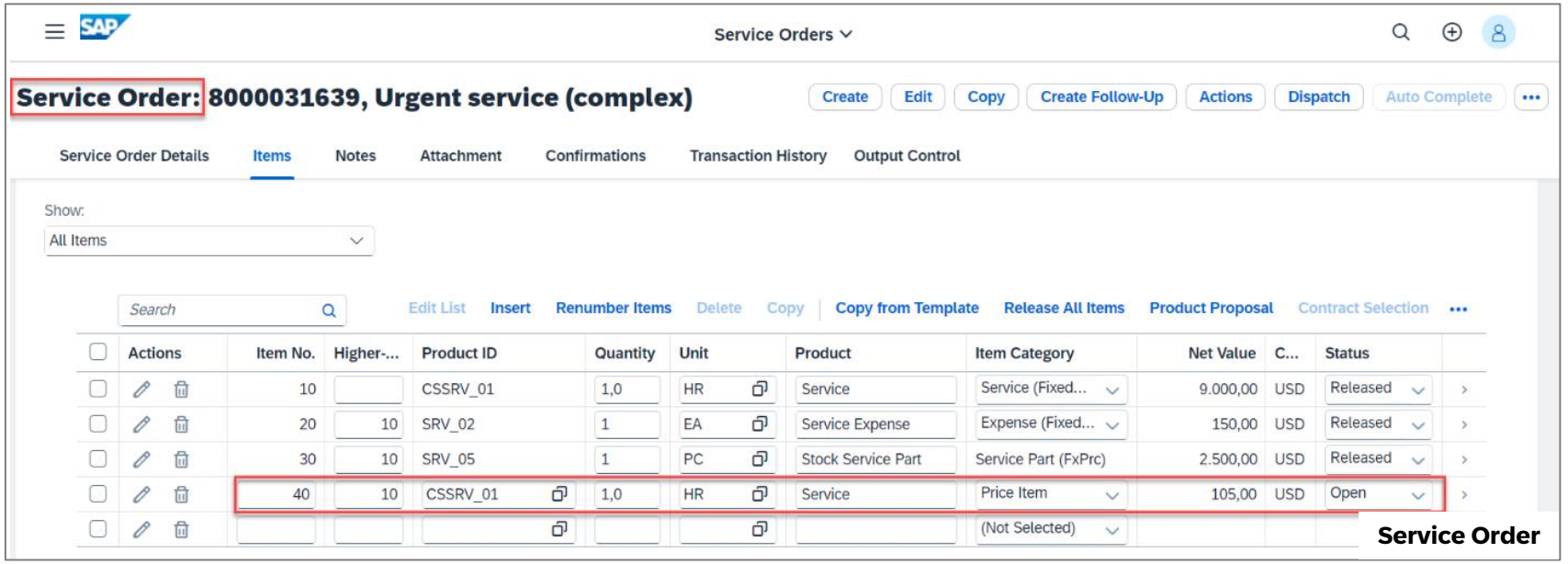
Distributed execution in Service with Advanced Execution

You can now create multiple billable maintenance orders corresponding to a single execution order item. This allows you to distribute the planning and execution of one execution order item to several billable maintenance orders.



Service: Price items

Service orders and service quotations



Service Order

Price items can only be the subitems of service items or execution order items that have been added to service orders or service order quotations. When you use a price item, it inherits the account assignment object in service orders and the service contract from its higher-level item. The price item also inherits the external reference from its higher-level item, but you can change the external reference of the price item manually.

You can now use a price item in service orders and service order quotations to reflect the surcharge for additional service provided.

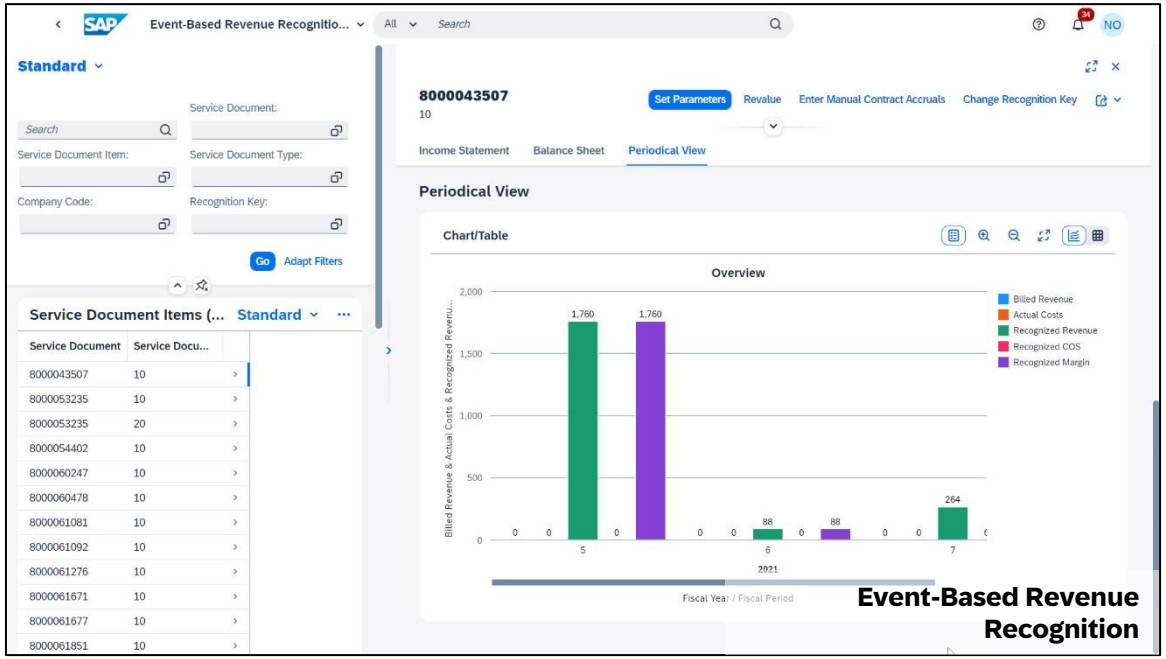
Price items are particularly useful if you discover that the fixed price agreed upon cannot cover all service costs and you need to charge your customers more.

Item-based accounting is a prerequisite for price items.

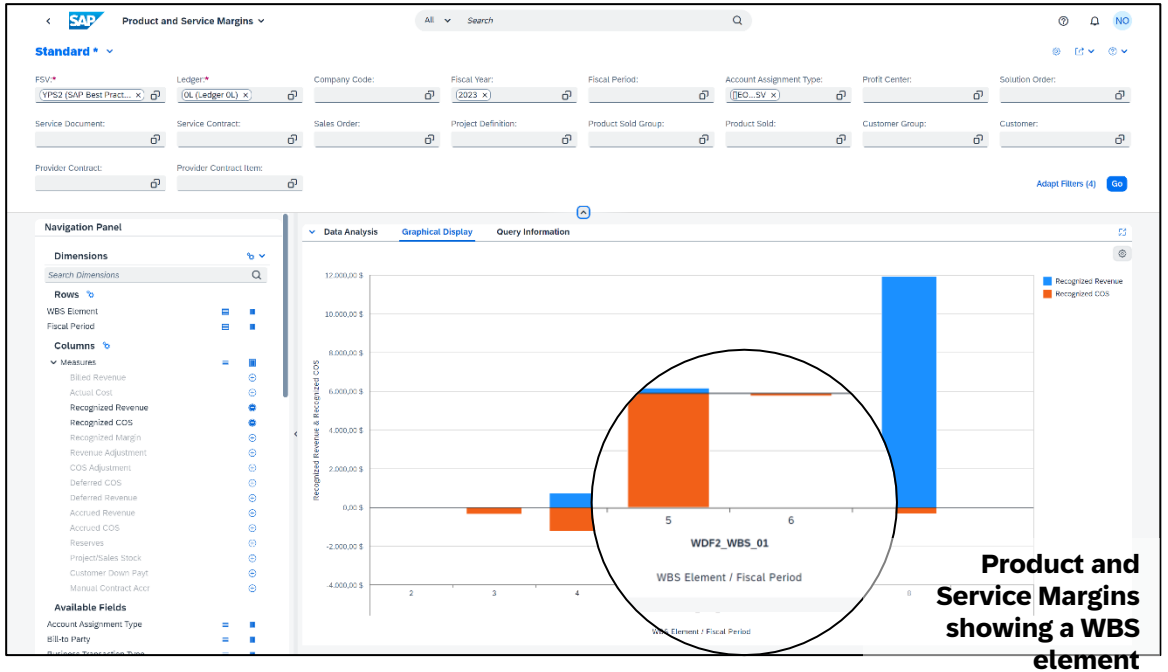
Service: Item-Based Accounting

2023
FPS0+1

Item-Based
Accounting in Service



Event-Based Revenue Recognition



Product and Service Margins showing a WBS element

You can now use item-based accounting to record cost and revenue that have been incurred by service transaction items.

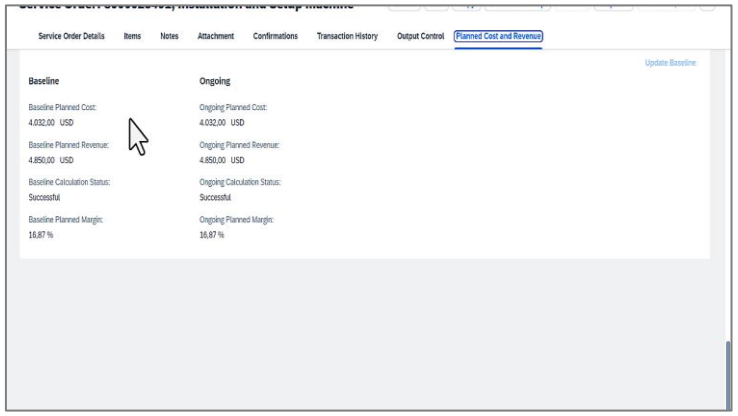
For service order items, service contract items, and for Service with Advanced Execution, controlling objects are used for event-based revenue recognition.

You can now assign work breakdown structure elements (WBS elements) as attributes to service transactions such as service contracts, service orders, or repair orders when you have enabled item-based accounting.

Service: Key capabilities in item-based accounting

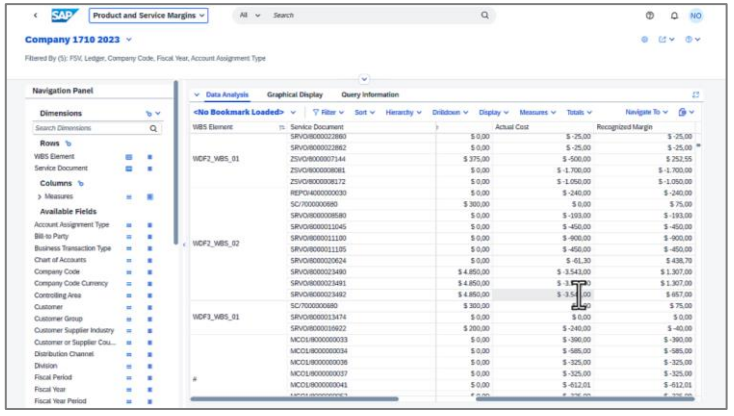
Planned cost and revenue calculation

Tracking baseline and ongoing cost and revenue per service order.



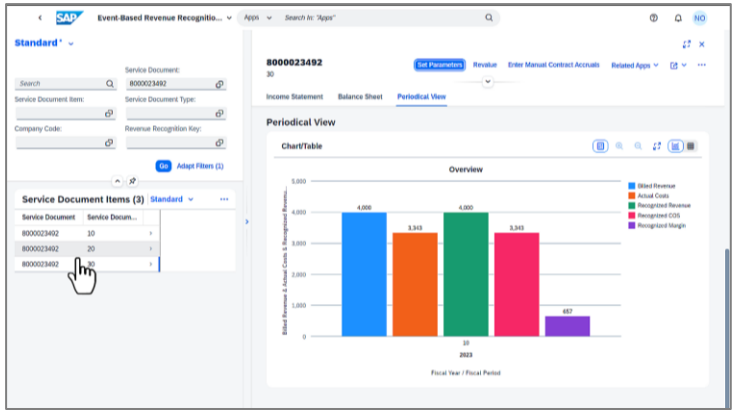
Financial reporting and margin analysis

Real-time profit and loss for your service business without waiting for month end.

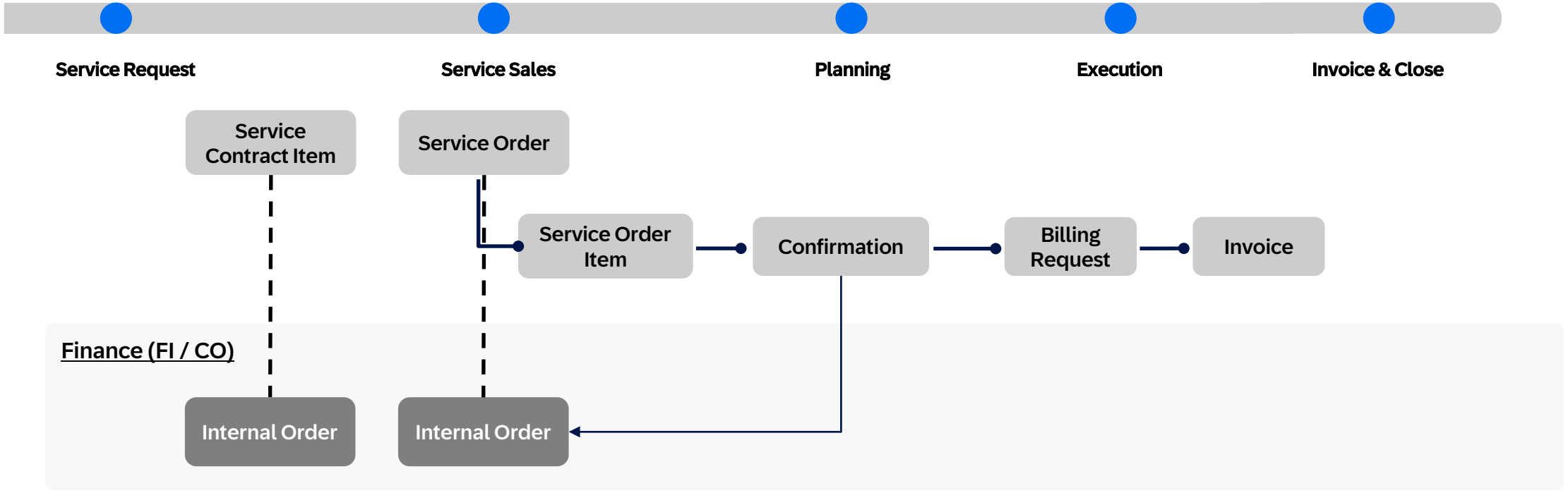


Event-based revenue recognition (EBRR)

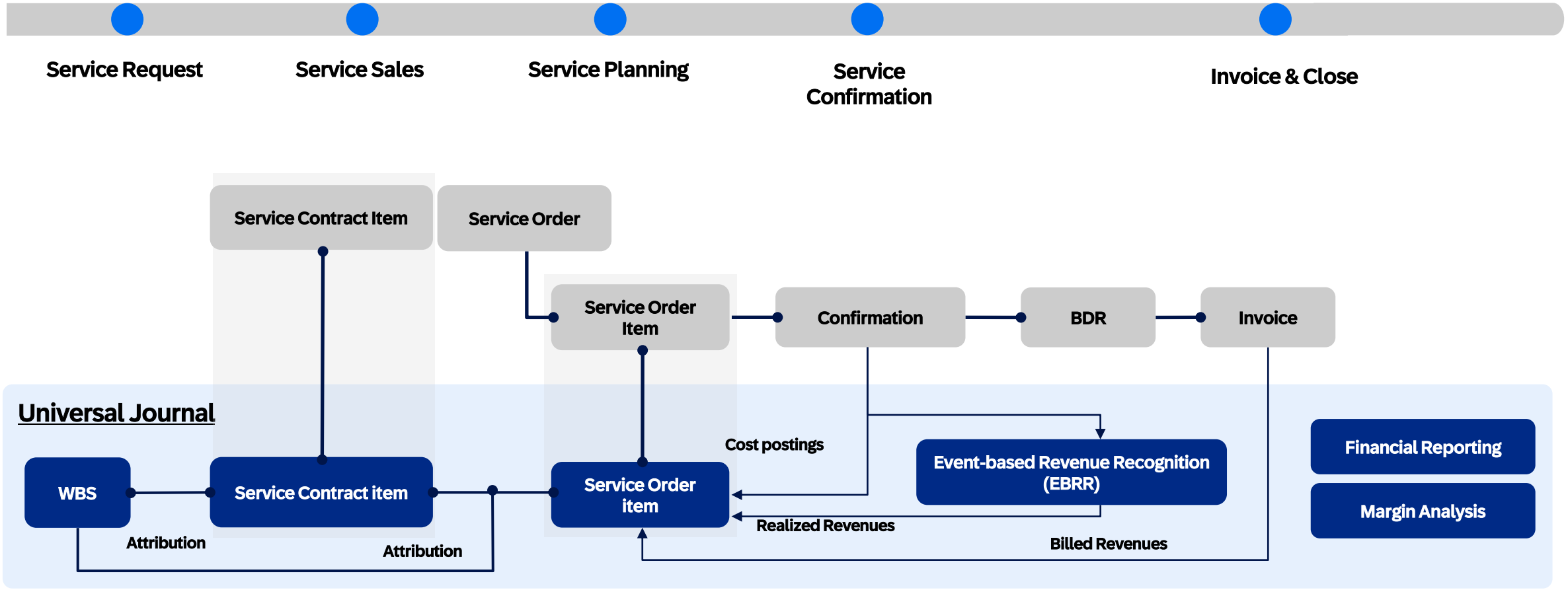
Accurate revenue recognition for various methods as each relevant transaction occurs.



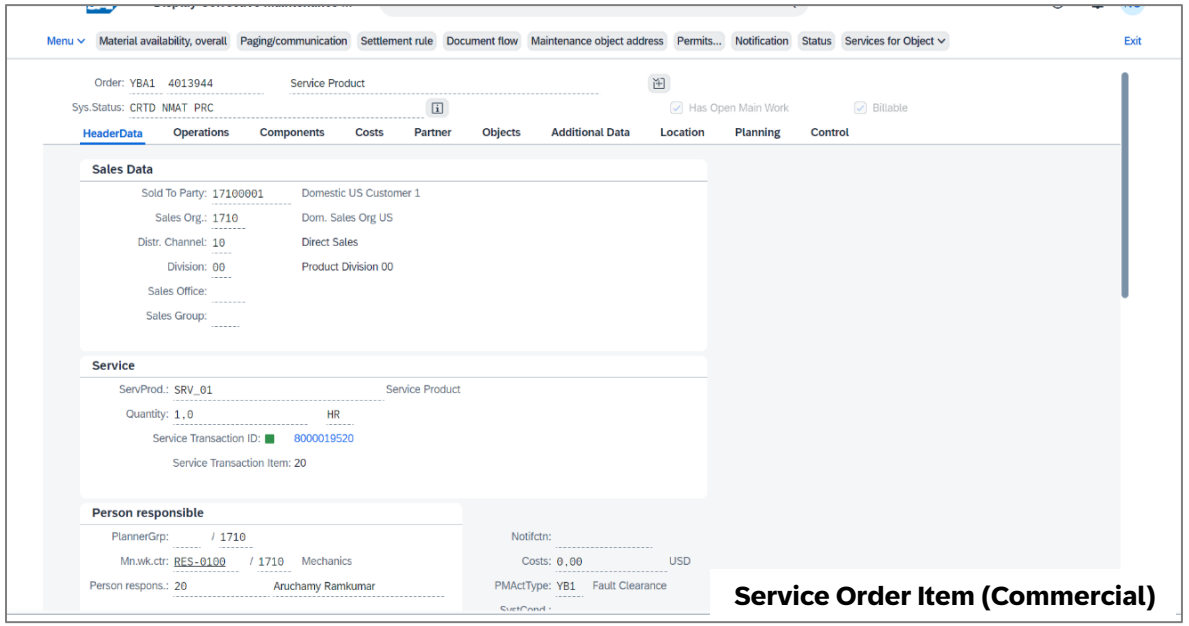
Service: Illustration of classic financial integration



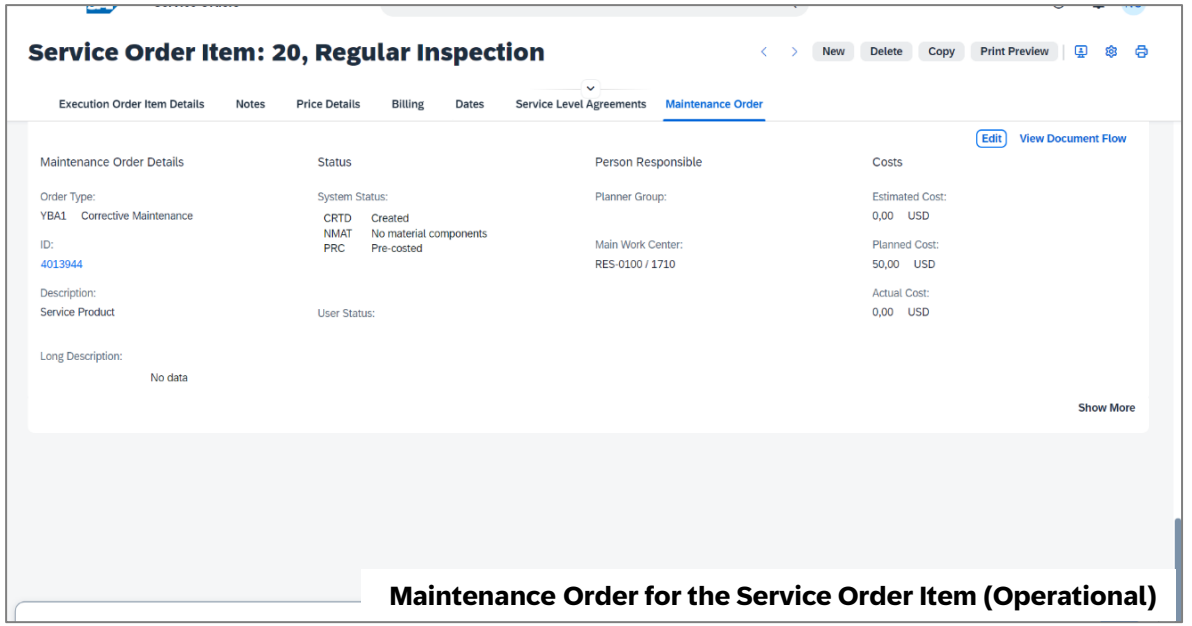
Service: Item-based accounting in service process



Service: Service with Advanced Execution



Service Order Item (Commercial)



Maintenance Order for the Service Order Item (Operational)

- You can now use the **Mass Schedule Maintenance Plans** - Service app to schedule a large number of maintenance plans for Service with Advanced Execution.
- You can now use **In-House Repair with Advanced Execution**

The new **Service with Advanced Execution** is a service process that is geared towards services that have **longer service cycles and complex technical objects** that require extensive planning and execution. The core characteristic of this process is **the integration of the commercial aspects of Service with the planning and execution capabilities of Maintenance Management**.

Service: Key capabilities in Service with Advanced Execution

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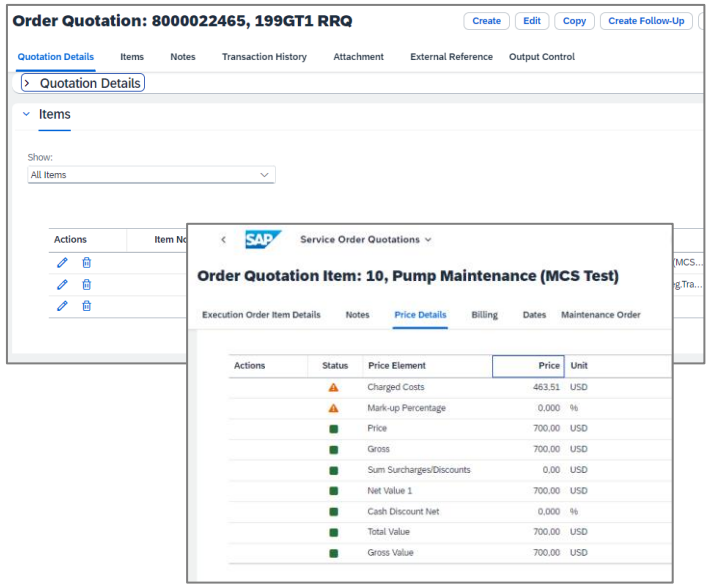
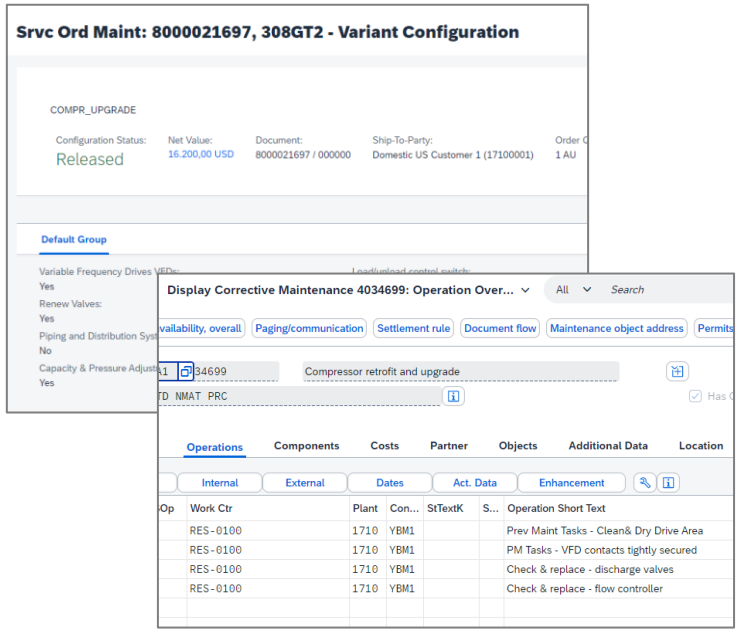
Resource-related Quote

Simulate actual service work to calculate costs for a service quote.



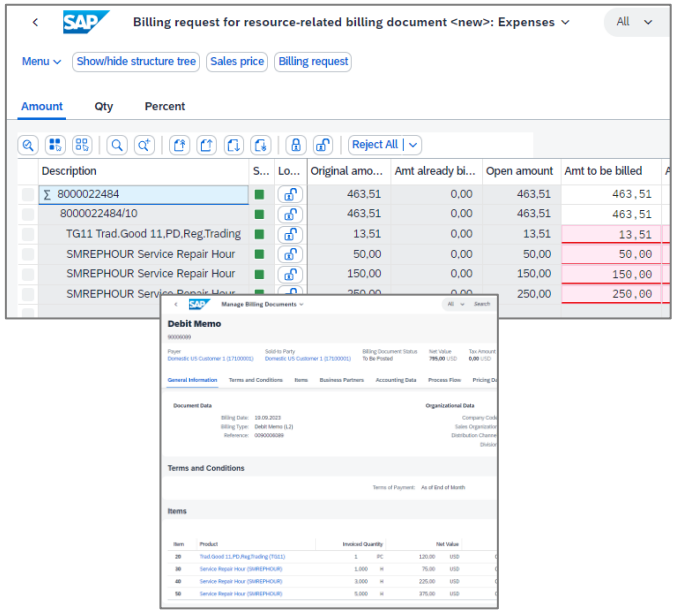
Configurable Task Lists

Configurable service items in service quote and service order

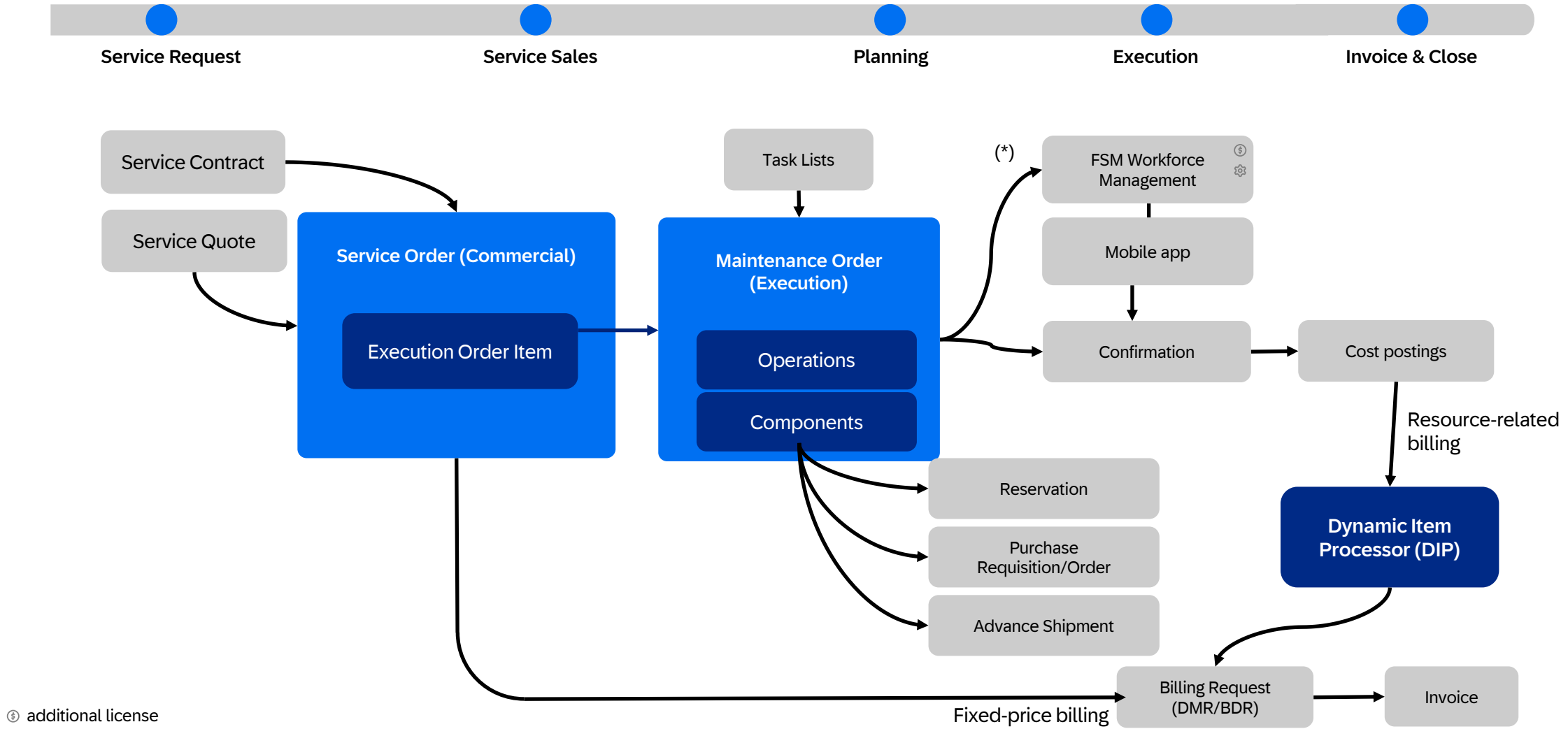


Fixed Price & Resource-related Billing

Various method for billing: fixed price and “cost plus” (resource-related billing). Bill upon completion, billing plan, itemized billing, and summarized billing



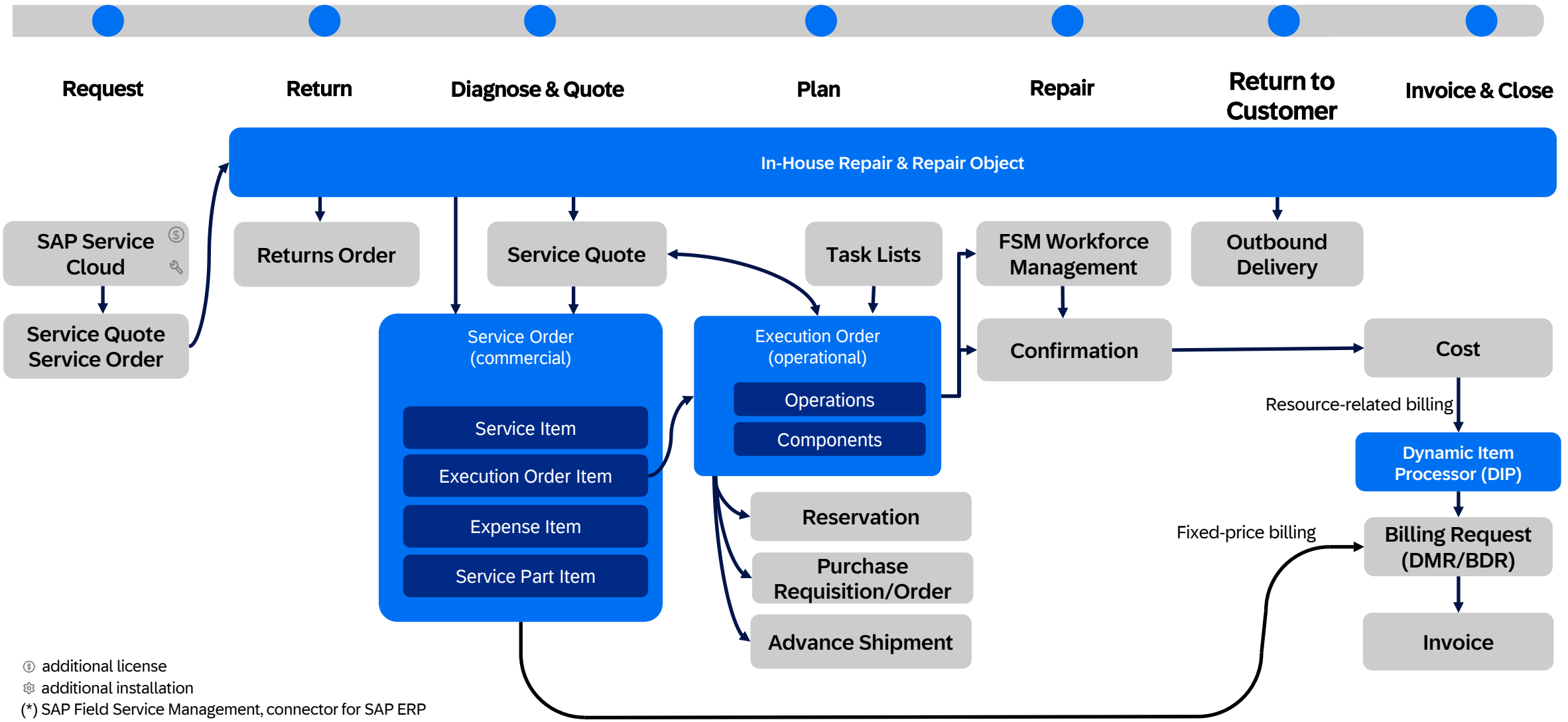
Service: Service with Advanced Execution



additional license
additional installation
(*) SAP Field Service Management, connector for SAP ERP

Service: In-House Repair with Advanced Execution

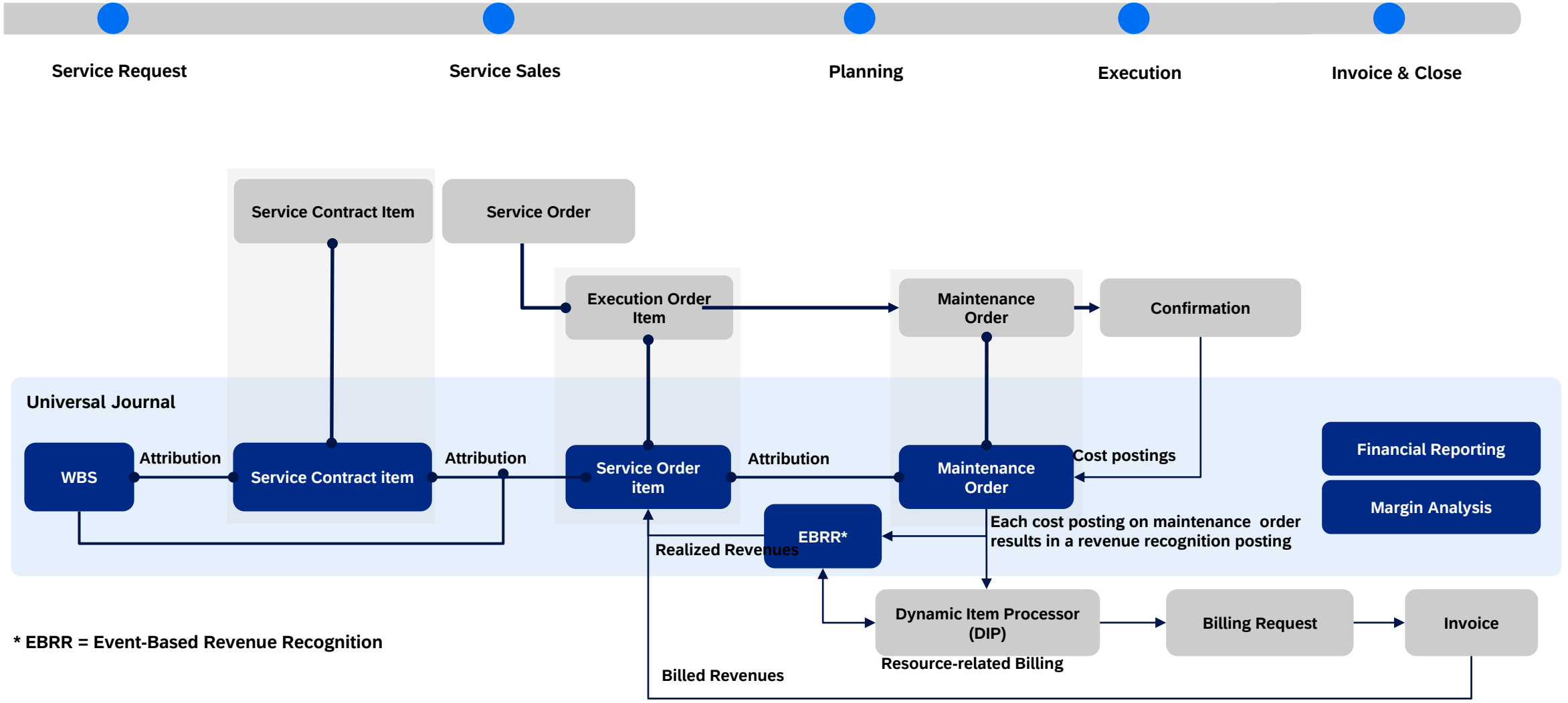
Service Operations & Processes | In-House Repair | 2023 FPS0+1



additional license
additional installation
(*) SAP Field Service Management, connector for SAP ERP

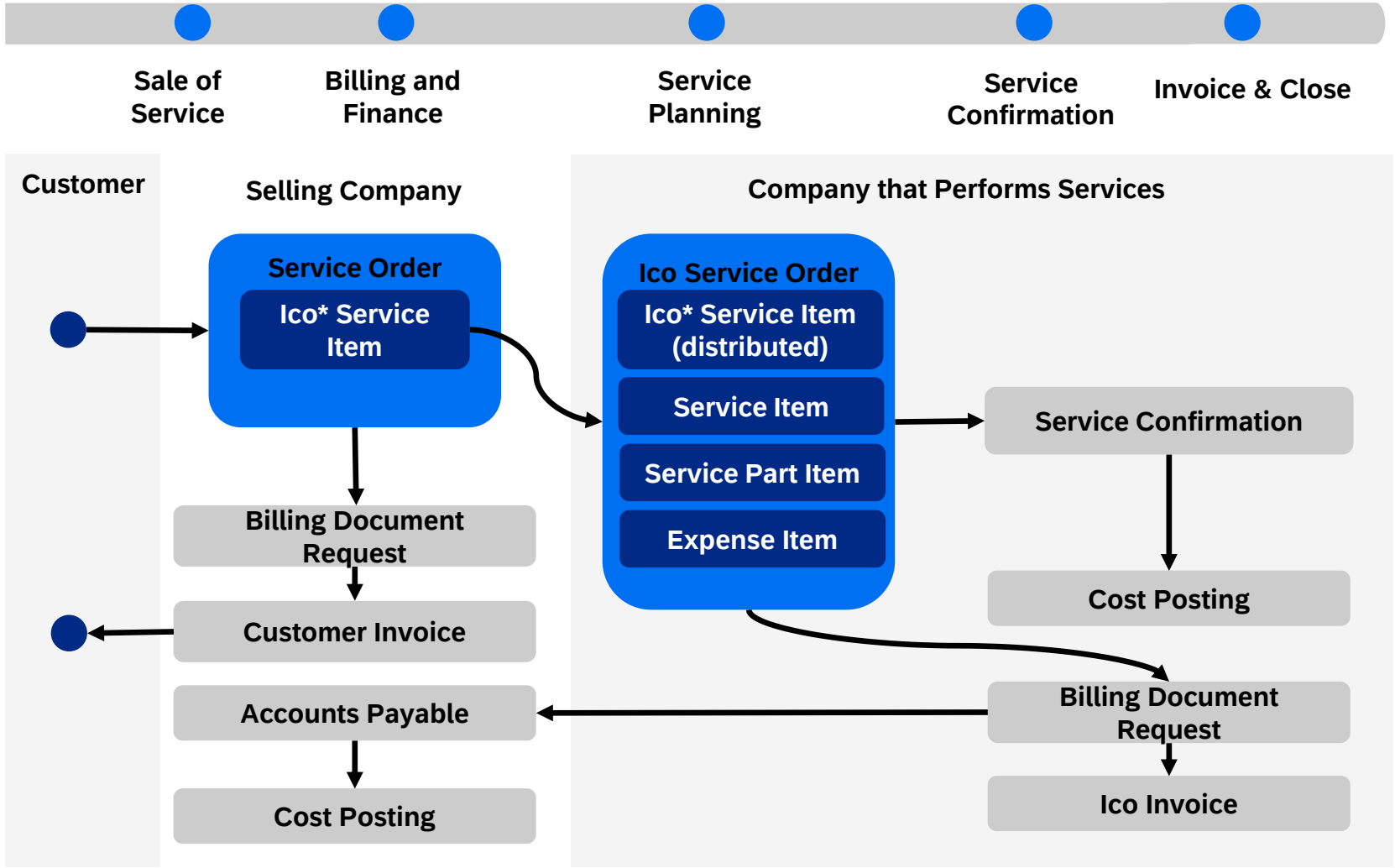
Service: Finance for Service with Advanced Execution

Service Operations & Processes | Service Order Management | 2023 FPS0+1



Service: Intercompany service orders

You can distribute a service to another company using an intercompany service order. The intercompany processing enables you to sell a service to a customer and distribute it to another organization for execution.
You can only use a fixed price service item for an intercompany service order.
Cascade Intercompany Items
When you receive an intercompany item from a company that sells a service, you can forward this intercompany item to another company so another company can execute the service.



* Ico = Intercompany

Service: Delta scope summary

2023 FPS2

Service Master Data and Agreement Management

Service Contract Management

- Streamline **revenue recognition** by aggregating all revenue from service orders and maintenance tasks at the service contract level. **Cost-based percentage of completion method** is now supported for a service contract as a root in financial hierarchy.
- Efficiently deal with changing contract prices in the future for renewal by defining prices in advance for service contract items that are planned to be extended through automatic renewal in the future. Get the **new situation for automatic contract renewal** to notify service managers to check the prices for a service contract item.
- Keep track of the relationship of service contract items with their related transactions using **external references** in service contract items.

Warranty Management

- Enhancement of Warranty Determination for Service Items
- Accounting Indicator in Master Warranties (Asset Management)

Service Operations & Processes

In-House Repair

- Combined Process of In-House Repair and Field Service
- Initiate In-House Repair Process from Service Orders and Service Quotations
- Multiple Service Quotations and Orders for One Repair Object
- Requotes in In-House Repair
- Manage Repair Objects App (Deprecation of Apps in In-House Repair)
- Create Service Order for Multiple Repair Objects
- Process Serialized Products and Non-Serialized Products
- Updated Availability of Scrapped Repair Objects

Service Order Management

- Mass Creation of Resource-Related Billing Requests App
- **Resource-Related Cost Item** in Service with **Advanced Execution**
- BDRs in Transaction History of Service Order and Service Confirmation
- Manual Goods Issue for Service Parts
- Material Valuation for Split Valuation
- New Item Categories for Service Order Management
- Integration with **SAP Global Trade Services**
- Situation Template: Trade Compliance Check Blocked/Pending

Other

- Manage Substitution/Validation Rules - Service Documents
- Automatic Determination of Enterprise Service Organization

This summary is not exhaustive. Refer to What's New Viewer for a complete list.

Service: Delta scope summary

2023
FPS0+1

Service Operations & Processes

General

- **Intercompany Service Orders**
- **Service Quotation as Maintenance Call Object**
- Requotes in Service Order Quotations
- **Using Multiple Serial Numbers in Confirmation Items (mass entries)**
- **Batch Entry Enabled for Confirmations**
- Serialized Product as Reference Object in Service Transactions
- Unplanned Items in Service Orders and Repair Orders
- Configurable Products and Product Variants in Service Order Quotations and Service Order Templates
- **Stock Transfer to Storage Location of Executing Service Employee**

Service with Advanced Execution

- You can now create multiple billable maintenance orders for a single execution order item (FPS1)

Item-Based Accounting in Service

- Price Items in Service Orders and Service Order Quotations (FPS1)

In-House Repair

- Availability Check and Reservation of Stock Service Parts
- External Workforce Procurement in In-House Repair
- Triggering Actions for Multiple Repair Objects
- Customizing Activity to Display Actions in In-House Repair Apps
- Integration with SAP Field Service Management
- **You can now use In-House Repair with Advanced Execution**

Pricing

- Pricing Analysis in Service
- Additional Subtotal Fields for Service Order Items
- Modular Pricing Procedures for Automatic Inclusion of Price Conditions in Service

Profitability Analysis

- Service Plan/Actuals to Report on actual and plan data for Service Business
- Controlling for Account Assignment Objects in Service Transactions (WBS or Internal Order when item-based accounting is off)

Event-Based Revenue Recognition

- New Supported Revenue Recognition Methods for Event-Based Revenue Recognition with Advanced Execution including Method 3: recognize revenue on cost-based percentage of completion (POC)

This summary is not exhaustive. Refer to What's New Viewer for a complete list.

Finance

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Finance: Overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP S/4HANA Central Finance
- SAP S/4HANA Cloud for Advanced Financial Closing
- SAP S/4HANA Group Reporting
- SAP S/4HANA Receivables Management
- SAP S/4HANA Cloud for Customer payments
- SAP S/4HANA Cloud for credit integration
- SAP Central Finance Transaction Replication by Magnitude
- SAP Account Substantiation and Automation by BlackLine
- SAP Digital Payments Add-on
- SAP Cash Application
- SAP Analytics Cloud
- SAP Profitability and Performance Management
- SAP governance, risk, and compliance solutions (SAP GRC)
- SAP S/4HANA Cash Management
- SAP S/4HANA Advanced Payment Management
- SAP S/4HANA Treasury and Risk Management
- SAP Multi-Bank Connectivity
- SAP Trading Platform Integration
- SAP Market Rates Management
- SAP Global Trade Services

SAP S/4HANA LoB Apps

additional license

Adv. Accounting & Financial Close	***Drive*** a faster, compliant financial close with less cost and effort and a high degree of automation.
Adv. Financial Operations	***Balance*** the need to decrease days sales outstanding (DSO) and bad debt write-offs, while maintaining superior customer service and **reducing cost** with automated exception handling, validation, and routing of invoices.
Treasury Management	***Improve*** the management of every activity associated with cash, payments, liquidity, risk, and compliance by simplifying working capital, risk management and compliance.
Commodity Management	***Identify and qualify*** financial risks associated with commodity price volatility in Sales and Procurement and mitigate by hedging them with commodity derivatives.
Subscription Billing and Revenue Management	***Leverage*** flexible models to include subscription and usage-based billing, partner revenue share, receivables mgmt. and payment handling as well as credit and collection mgmt.
Real Estate Management	***Perform*** activities from portfolio analysis and investment tracking to lead qualification, lease posting, rent escalation, and maintenance and repair service orders.

SAP S/4HANA Enterprise Management

Accounting and Financial Close	***Simplify*** corporate accounting and financial close, close books, create financial statements, and manage according to IFRS as well as local legal regulations.
Financial Operations	***Process*** outgoing and incoming invoices and respond rapidly to fluctuating market dynamics.
Cost Management & Profitability Analysis	***Collect,*** assign, and analyze costs by project, order, cost center, or business process; to accurately evaluate the profitability of markets, channels, products, and segments.
Enterprise Risk and Compliance	***Manage*** risks, controls and regulatory requirements in business operations, especially import and export compliance, as well as free trade agreements.

Finance: Business area overview

Modular Cloud LoB Solutions

additional license

additional installation

- SAP S/4HANA Central Finance
- SAP S/4HANA Cloud for Advanced Financial Closing
- SAP S/4HANA Group Reporting
- SAP S/4HANA Receivables Management
- SAP S/4HANA Cloud for Customer payments
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- SAP S/4HANA Advanced Payment Management
- SAP S/4HANA Treasury and Risk Management
- SAP Multi-Bank Connectivity
- SAP Trading Platform Integration
- SAP Market Rates Management
- SAP Global Trade Services

SAP S/4HANA LoB Apps

additional license

Adv. Accounting & Financial Close	Document & Reporting Compliance	Corporate Close	Joint Venture Accounting	Contract and Lease Management					
Adv. Financial Operations	Collections Mgmt.	Contract Accounting	Credit Evaluation Mgmt.	Dispute Resolution	E-Invoicing	Financial Shared Service Mgmt.	Financial Supply Chain	Indirect Tax	Invoice Management
Treasury Management	Cash and Liquidity Management	Debt and Investment Management	Payments and Bank Communications	Financial Risk Management					
Commodity Management	Commodity Procurement	Commodity Risk Management	Commodity Sales						
Subscription Billing and Revenue Management	Subscript. Order Management	Convergent Invoicing	Credit & Collection Management	Fin. Customer Care and Dispute Management	Receivables Management & Payment Handling				
Real Estate Management	Contract & Lease Mgmt.	Energy and Safety	Investment and Construction	Maintenance and Repair	Portfolio & Location Mgmt.	Workspace Mgmt.			

SAP S/4HANA Enterprise Management

Accounting and Financial Close	Revenue and Cost Accounting	Financial Accounting	Entity Close	Financial Reporting					
Financial Operations	Accounts Payable	Accounts Receivable	Cash Management	Electronic Bill Presentment & Payment	Settlement Management				
Cost Management & Profitability Analysis	Overhead Cost Management	Product Costing	Profitability Analysis						
Enterprise Risk and Compliance	International Trade Mgmt.								

Finance: Delta Highlight

2023
FPS0+1

Predictive
Liquidity Forecast

SAP Analytics Cloud (Planning)

- Improved integration scenarios with SAP S/4HANA including content for fast time-to-value & applied prediction and AI, including
  - Predictive liquidity forecast and intelligent cash collections
  - Financial planning content integration with sales planning
  - Planning consolidation

SAP Cloud for Advanced Financial Closing

- Automated balance validations for improved closing quality
- Advanced orchestration of SAP Intelligent RPA bots for closing for further automation scenarios

Advanced Accounting & Financial Close

- **Group reporting** innovations include:
  - Group Financial Statement Review Booklet **(FPS01)**
- **Central Finance** innovations include:
  - Improved error resolution in all pending journal entries

Billing and Revenue Innovation Management

Convergent Invoicing
- Subscription contract lifecycle management

Subscription Order Management
- Extensibility driving transparency and flexibility for services and subscription

Advanced Treasury and Working Capital

- Improved In-house bank functionality
- Advanced bank statement handling for intra and end day statement
- Improved smart trading for hedge request
- Advanced memo record processing
- Intelligent Collections – predictive capabilities to help cash collections teams reduce late payments
- Promise-to-Pay Documents as Payment Advice
- Advanced Reprocessing rule definition for Open Item Clearing

Accounting and Financial Close

- Organizational flexibility in financial accounting: profit center reorganization is available with new analytics and improved usability and is considered in key scenarios, such as for network and network activities, for maintenance orders, in predictive accounting, and in accruals management.
- New user experience for journal entry management
- Simplified definition and automated execution of account balance validations to ensure data quality

Cost Mgmt., Profitability & Margin Analysis

- Handle multiple accounting principles using ledgers in Management Accounting (Universal Parallel Accounting*)
- Group ledger to provide a management view of intercompany transactions
- Review Booklet for Margin Analysis for Sales Accountants

International Trade & Tax

- Automated checks to ensure consistency of electronic documents with authorities' portals
- Automated error notifications for e-docs failures
- Enhanced preview of statutory reports to enable simpler review of errors and faster corrections
- Suppression of sales doc output in integration scenario with SAP GTS compliance service**(FPS01)**
- Suppression of invoice creation in integration scenario with SAP GTS compliance service**(FPS01)**

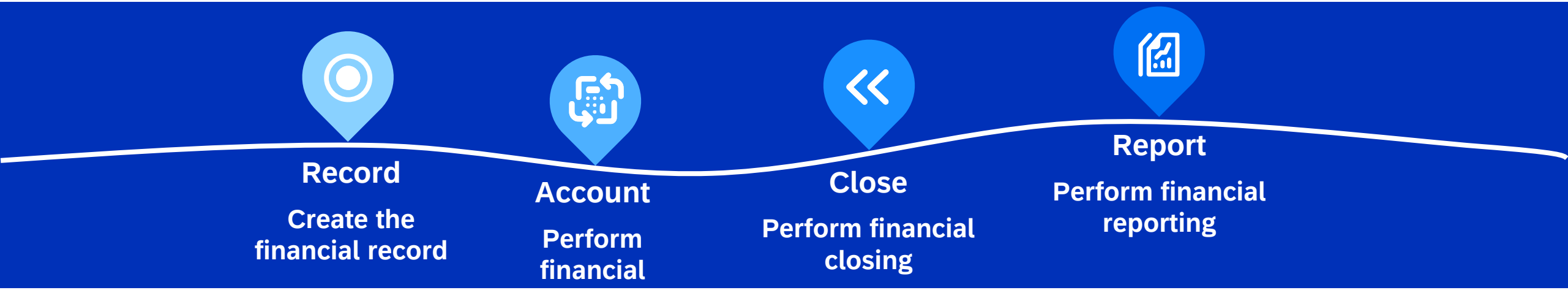
**Restricted release for approved greenfield SAP S/4HANA customers*

Finance: Unlock new efficiency with intelligent automation along the Record-to-Report process

2023
FPS0+1

- GR/IR reconciliation
- Intercompany Matching + Reconciliation process
- Accrual Collector
- Depreciation Run
- General Ledger

- Contract and Lease Management
- Revenue Recognition IFRS 15
- Disclosure Management



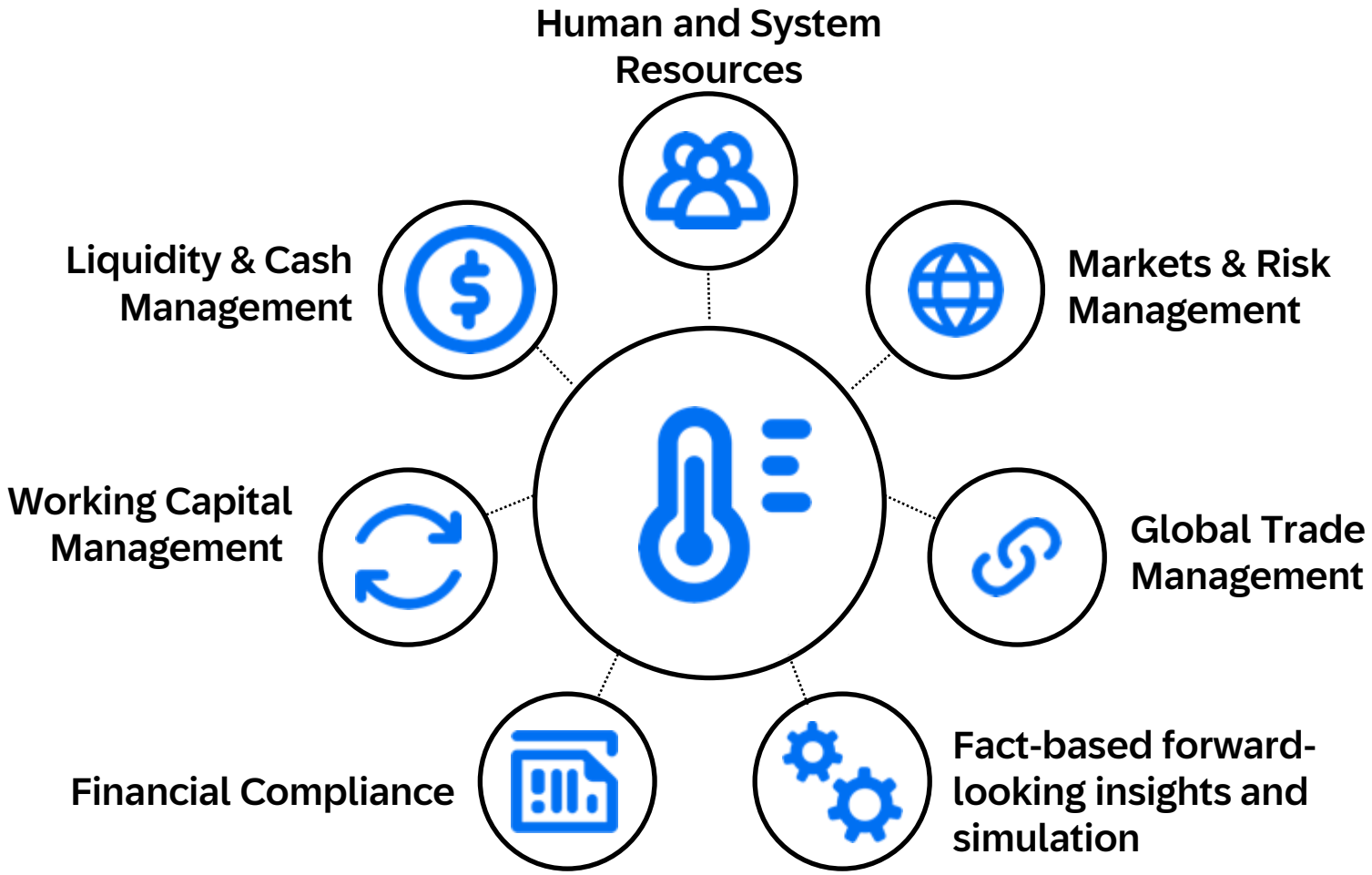
- General Ledger Upload
- Lock/ Unlock Profit Center
- Group Reporting Data Collection
- Central Finance

- Financial Close Summary
- Closing Monitoring and Orchestration
- Account Substantiation and Automation
- Corporate Close

- Automatic Rules / Workflow
- Machine Learning
- RPA

Finance: Business Challenges for CFOs

Delivering key insights in time to steer the business



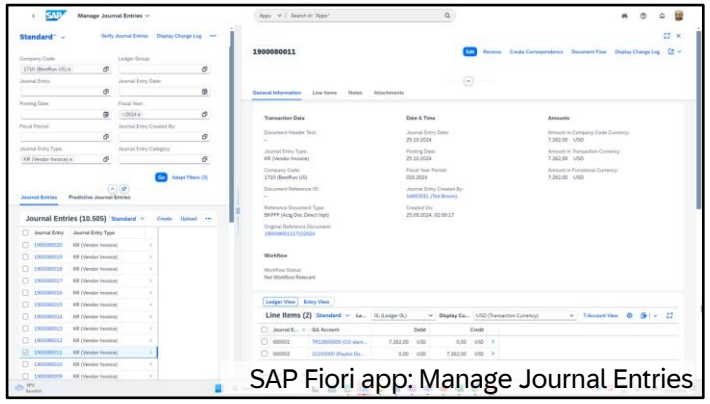
Key Risks

- Revenue & operational stability
- Liquidity & credit risk
- Remote staff & secure systems
- Trade disruption & new suppliers

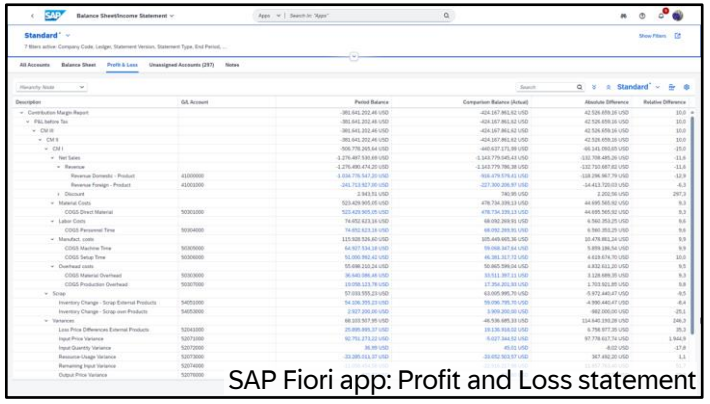
Finance: Accounting and Financial Close

Accounting and Financial Close

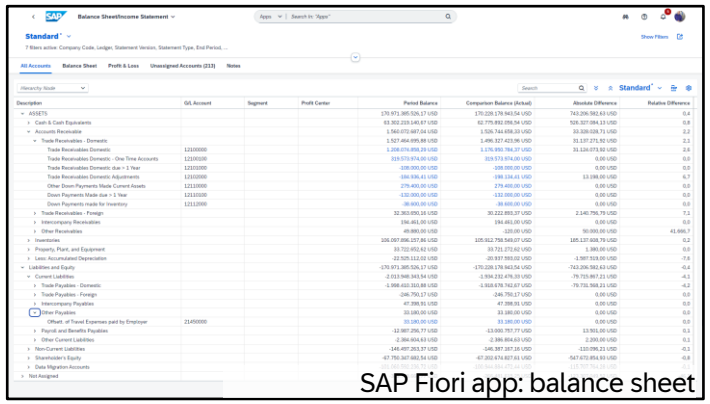
Revenue and Cost Accounting	Financial Accounting	Entity Close	Financial Reporting
Automate financial and managerial accounting processes like revenue recognition and production costs to help companies ensure continuous compliance	Record and summarize business transactions and create periodic reports on the financial results and financial position of a company	Close the period by performing key accounting tasks: manual adjustments, accruals, etc. Run technical financial jobs	Produce statements that disclose an organization's financial status to management, investors, and the government



SAP Fiori app: Manage Journal Entries



SAP Fiori app: Profit and Loss statement



SAP Fiori app: balance sheet

Finance: Financial Accounting

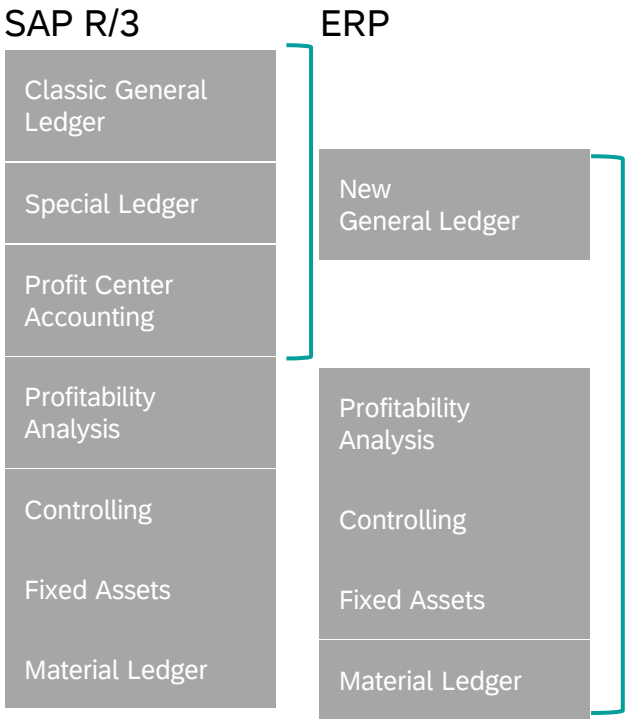
Universal Journal – the single source of truth

Accounting and Financial Close

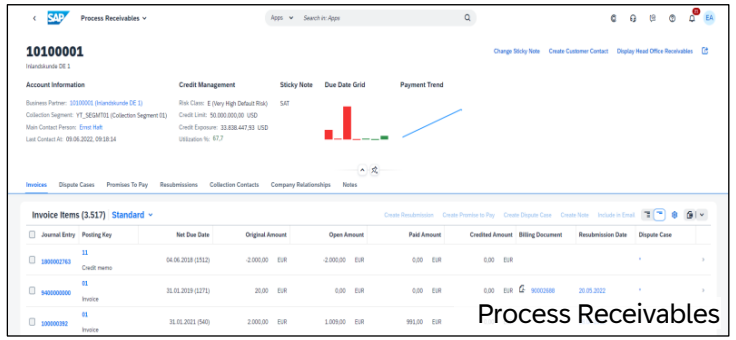
Universal journal – data reconciliation by design

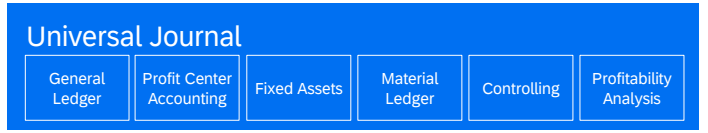
- Concept: take the best of all worlds (e.g. ledger, market segment, coding block, etc.)
- One line item table with full detail for all applications - for instant insight & easy extensibility (entry extension or ACDOCA derived)
- Data stored only once: no more reconciliation needed Reduction of memory footprint through elimination of redundancy
- Fast multi-dimensional reporting without replicating data to BW
- If BW is in place anyway, only one single extractor needed
- Secondary cost elements are now G/L accounts
- Multi-dimensional GL
- Extension ledger to reduce duplication of data for management reporting
- Custom defined fields
- Up to 999,999 line items per document
- Unified, extensible currencies
- Consistent parallel valuation (transfer prices)
- Up to 10 currencies per ledger
- Basic & Advanced Compliance Reporting
- Leverage Semantic Tagging for reporting on flexible hierarchies
- Integrated Planning (ACDOCP)
- Integrated Group Reporting (ACDOCU)
- Predictive Accounting

Link to documentation



Finance in SAP S/4HANA Cloud





Universal Journal - single source of truth

Finance: Financial Accounting

Extension Ledger – supporting the management view use case

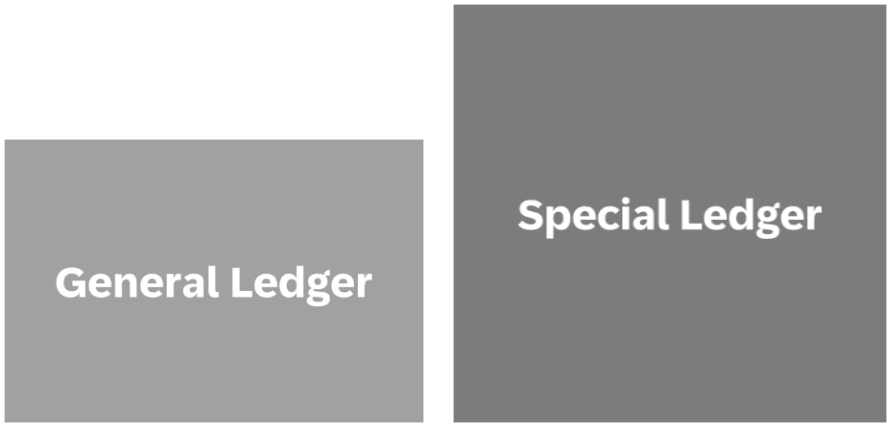
Accounting and Financial Close

SAP ERP

Legal Ledger

Management Ledger

- Same legal data (95 %)
- Few adjustments (5%)
- High data redundancy



SAP S/4HANA

Standard & Extension Ledger on top

- Separation of management data from legal data
- No data redundancy

[Link to documentation]

Finance: Financial Accounting
Improving the user experience

2023
FPS0+1

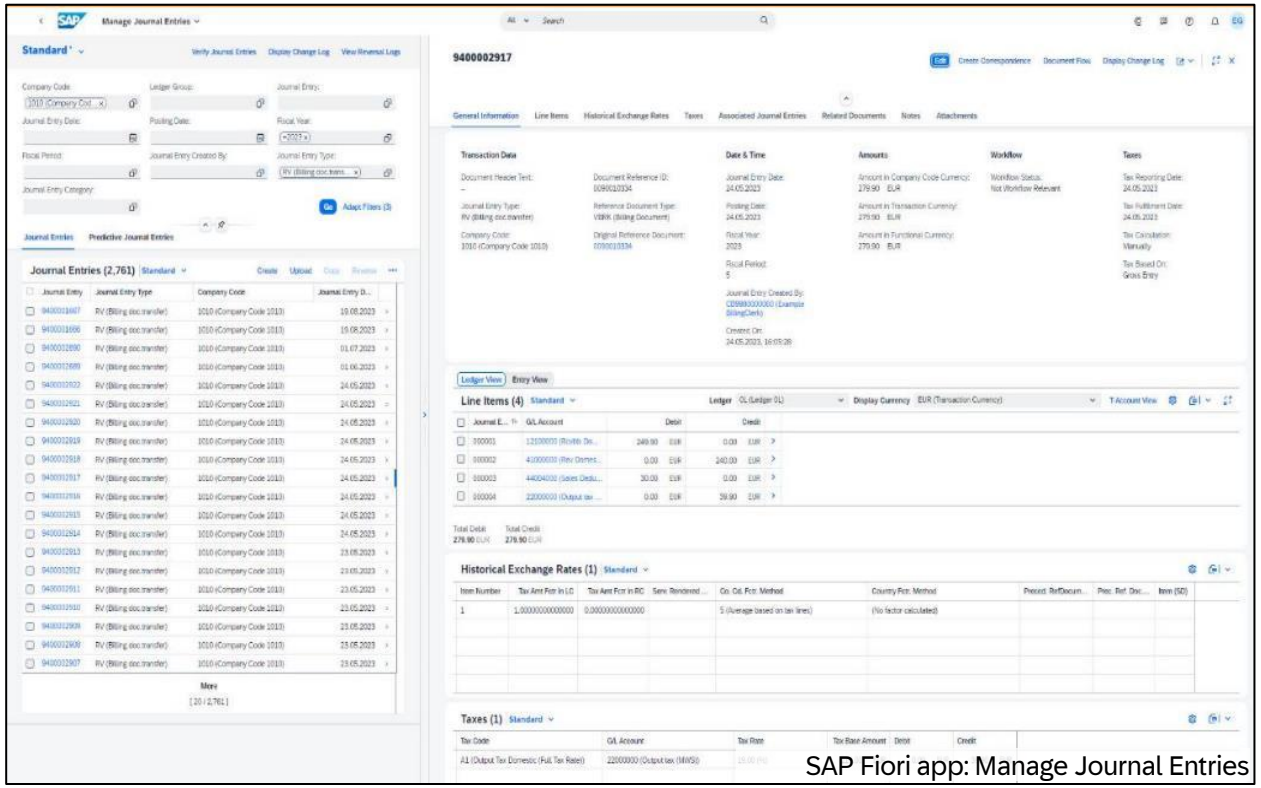
SAP Fiori app: Manage Journal Entries

New version of the SAP Fiori app **Manage Journal Entries** app (F0717A), which you can use to do the following:

- Display general journal entries and their line items
- Create new general journal entries or copy and edit general journal entries
- Upload general journal entries using templates
- Reverse general journal entries individually or through mass reversals. Reversals
  of more than 200 items are conducted as background jobs.
- View reversal logs and change logs
- See related documents, such as purchase orders or incoming invoices
- See an overview of the customer and supplier accounting document data, such as the customer, amount, or posting date
- Display amounts in different currencies
- Display intercompany journal entries
- Post notes and add attachments to general journal entries

Benefit

- Better usability and more fields to filter for and display
- Greater detail in the list of journal entries
- Clearer navigation between journal entries and line items and related apps
- The ability to display parked documents, workflow status, and related documents. You can also display predictive journal entries if you use predictive accounting.



SAP Fiori app: Manage Journal Entries

Finance: Major Revenue Accounting and Reporting innovations

Revenue Accounting

- **Central Finance Integration**

  Mapping of data from local systems to Revenue Accounting as a part of Central Finance in order to process revenue accounting data from local systems centrally and provide a consolidated reporting view

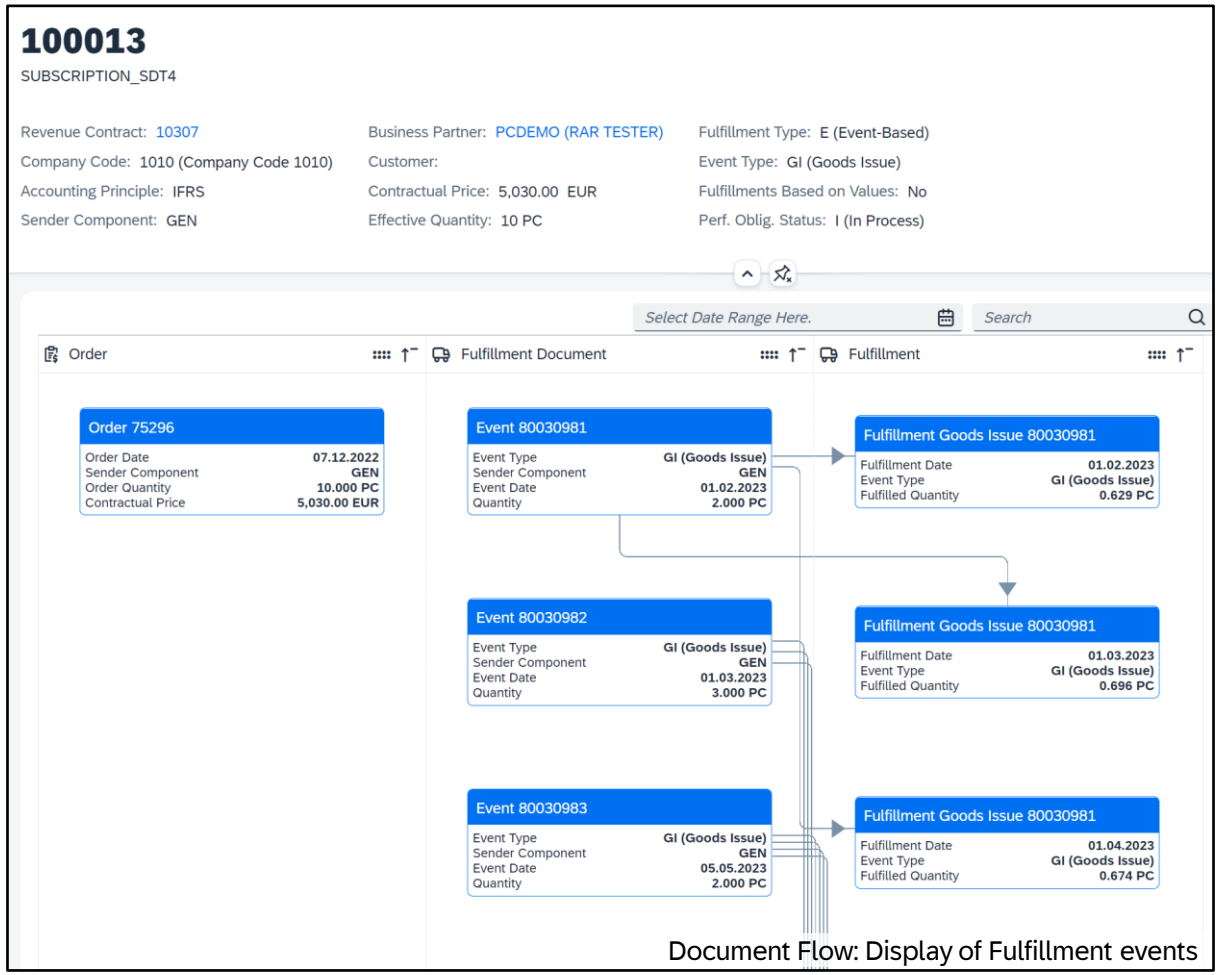
- **Start Date Type: 'Defined by Fulfillment Event Date'**

  New start date type to support over-time revenue recognition with event-driven start dates. Fulfillments are triggered by fulfillment events and are spread based on the fulfillment event date, duration, and deferral method, similar to time-based fulfillments

- **Operational Load with Migration Date**

  Perform the operational load from SAP Sales and Distribution (SAP SD) with a migration date:

  - to have more flexibility in migration and operational load process
  - to have the option to clean up revenue contracts and reload them to generate production postings



Document Flow: Display of Fulfillment events

Finance: Ensure availability of all revenue accounting items and contracts

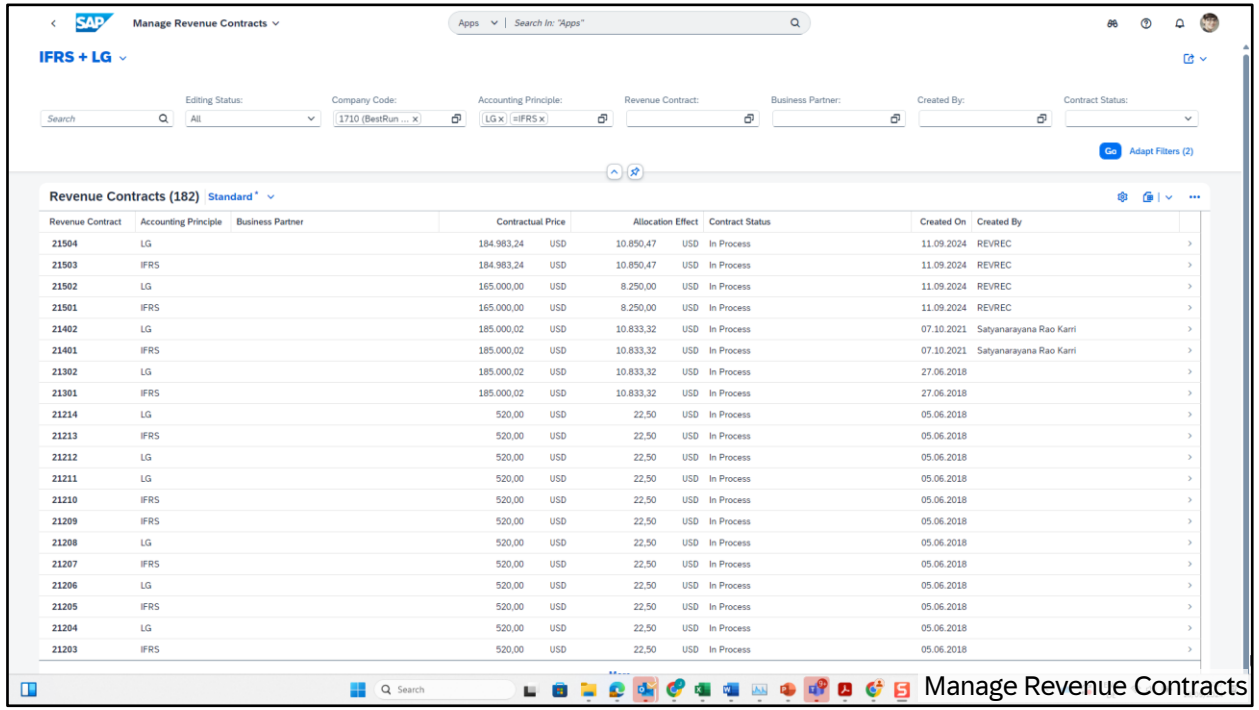
Revenue Accounting

Migration to optimized revenue accounting in a distributed scenario

In a distributed system scenario, it is beneficial to complete the operational load from all involved operational systems before starting the creation of revenue accounting contracts. This ensures that all revenue accounting items, created in different operational systems, are available and will be considered when combining them into the contracts. In the SAP Sales and Distribution operational load transactions* you now have the option to postpone contract creation in Revenue Accounting and Reporting.

If you choose to use this option, the operational load will be performed, but the revenue accounting items (RAIs) will not be processed immediately. Instead, they will be postponed with the postponement reason Initial Load.

When the operational load for all involved operational systems has been completed, you can start the initial load transaction** to create RAR contracts. This program picks up all revenue accounting items with the postponement reason ‘Initial Load’ and processes them

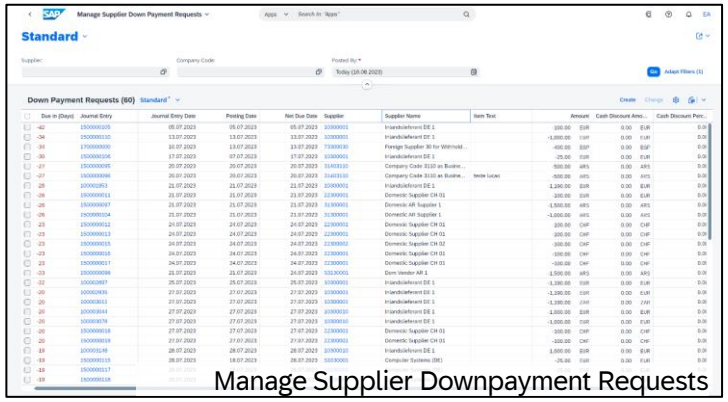


Manage Revenue Contracts

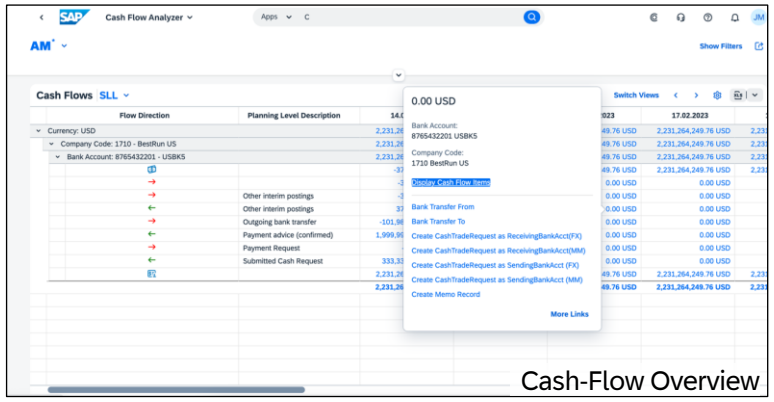
*FARRIC_OL and FARRIC_OL_EXPERT and in the operational load application programming interface (API) for third-party systems: FARR_INBOUND_EXT_MIGRATION_API ; **FARR_INB_INIT_LOAD

Finance: Financial Operations

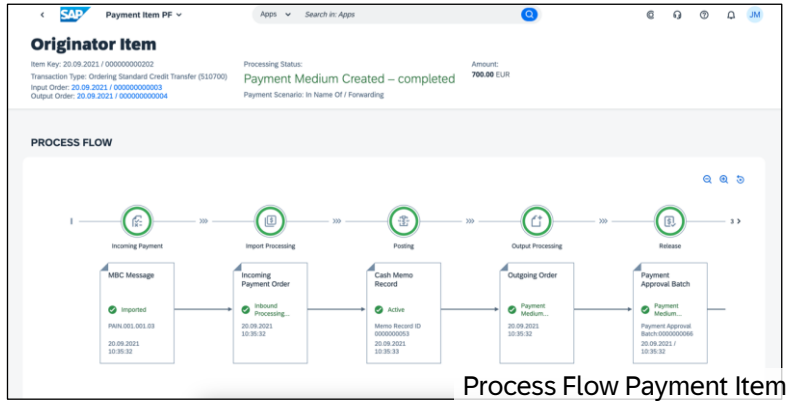
Financial Operations	Accounts Payable	Accounts Receivable	Cash Management	Electronic Bill Presentment and Payment	Settlement Management
	Simplify the way you record and manage accounts payable. Automate and streamline open Items management as well as payment processes. Use Analysis tools to always stay in control to optimize operations and working capital	Manage customer accounts receivable efficiently. Manage and streamline Credit Checks, Collections and Disputes to take control of receivables and improve customer processes and relations.	Monitor basic cash flows in real-time to manage and maintain sufficient liquidity. Cash management involves managing cash and liquidity centrally directly embedded in financial operations. To detect cash deficits and surpluses in real time	Improve service by empowering customers with a payment portal and e-billing. Electronic bill presentment and payment involves presenting bills on the web and offering customers the option of paying their bills online.	Integrate core business functions in the order-to-cash cycle to simplify financial settlement services. Settlement management involves complex, high-volume financial payment processes that companies offer to business partners.



Manage Supplier Downpayment Requests



Cash-Flow Overview



Process Flow Payment Item

Finance: Accounts Receivable

Improving the user experience for mass processing

2023
FPS0+1

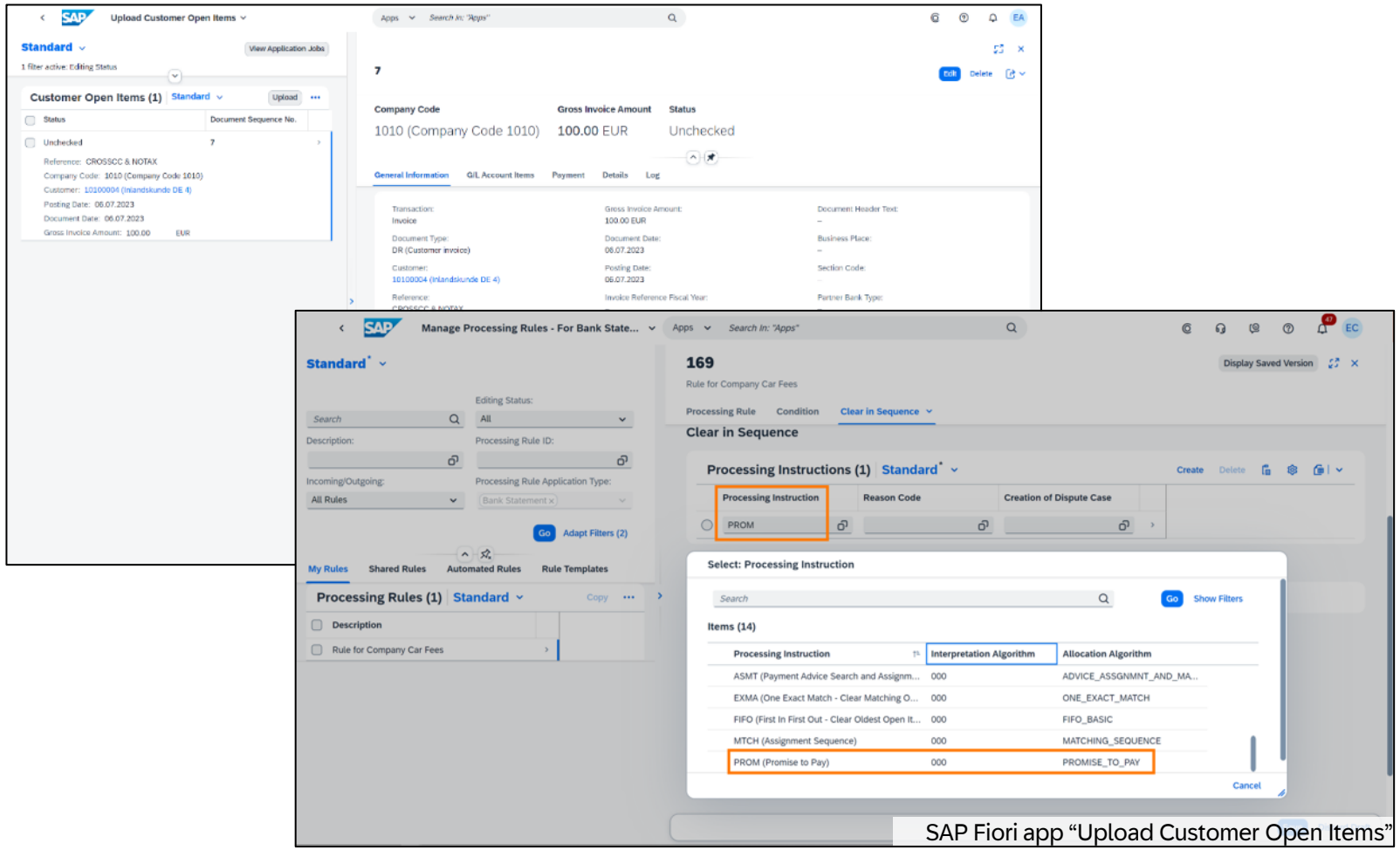
Support for mass uploading of customer open items

New SAP Fiori app “Upload Customer Open Items” enabling upload of multiple customer open items into the system all at once:

- Upload customer open items such as customer invoices and credit memos
- Check and edit the uploaded customer open items
- Check for errors in the customer open items before posting
- Post the uploaded customer open items in batch

Benefit

- Increase operational efficiency with the ability to upload a batch of customer invoices
- Improve usability and flexibility by enabling users to check and modify items after uploading



SAP Fiori app “Upload Customer Open Items”

Finance: Cost Management & Profitability Analysis

Cost Management & Profitability Analysis

Overhead Cost Management

Increase transparency in the drivers of (overhead) cost and the causes of underperformance by achieving a holistic view

Get complete, accurate, real-time information to help managers increase overall profitability and operational efficiency by area of responsibility

Product Costing

Improve decision making based on detailed information provided instantly about costs of products manufactured or sold, when in production. Use production related cost information automatically focusing on actuals and allow for isolated production cost change simulations

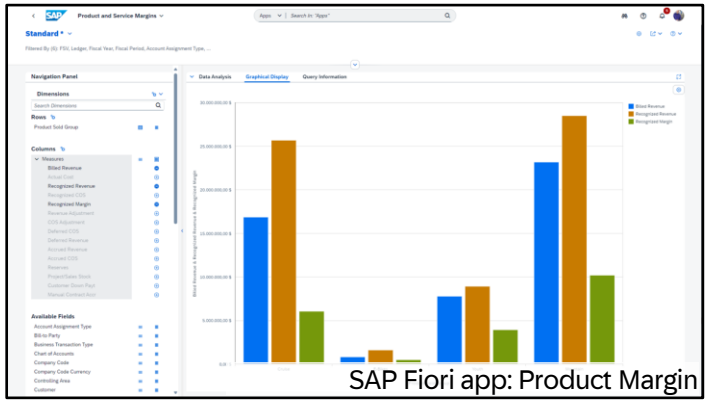
Support period-close activities using costs calculated for work in progress, variances and scrap, and product settlement

Assess costs accurately with product cost management that's aligned with the type of manufacturing process. Including service cost management or project cost management, depending on the business model.

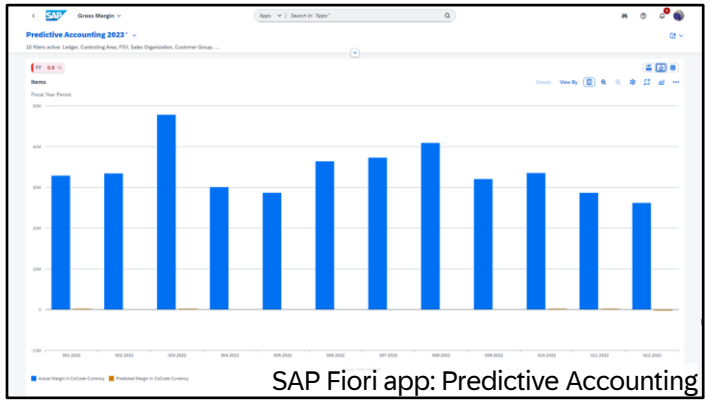
Profitability Analysis

Reach or exceed performance goals and deliver superior service at lower cost by increasing insights in profitability through real-time financial reporting and multidimensional data analysis

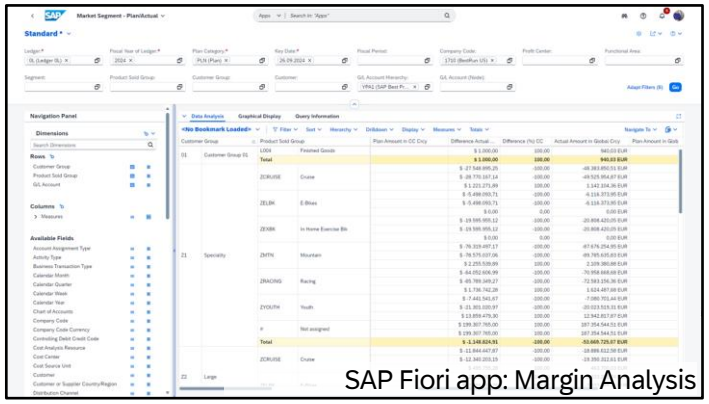
Help business users improve decision making with immediate, role-based insight into current statuses and flexibility for ad hoc reporting and analysis embedded in the system of record



SAP Fiori app: Product Margin



SAP Fiori app: Predictive Accounting



SAP Fiori app: Margin Analysis

Finance: Cost Management & Profitability Analysis

Cost Management & Profitability Analysis

Universal Parallel Accounting* establishes a parallel value flow across end-to-end processes

Statement of direction

- Provide an accounting solution, able to valuate business processes in parallel and in real time, per required accounting principle and for (group) consolidation purpose
- Support of up to 10 currencies throughout different accounting processes thereby eliminating restrictions that used to apply to asset accounting and inventory valuation

Value proposition

- Full audit trails through consistent, parallel information across all ledgers
- High degree of automation and accuracy for parallel legal valuations
- Benefit from the flexibility of the parallel ledgers not only in general ledger accounting but also in various subledgers
- Simplified configuration settings and less manual effort
- Basis for future innovations in the area of parallel valuations

Capabilities

- Define material prices by ledger
- Capitalization of self-manufactured assets by ledger
- Actual cost rate, overheads, settlement and universal allocation are calculated and posted by ledger
- Parallel valuation postings and analysis in production accounting for event-based production orders
- Perform valuation runs and other closing tasks by ledger, resulting in individually calculated values for financial and management accounting
- Display accurate data based on the selected ledger in many Finance apps

Introduction to Universal Parallel Accounting

**Restricted release for approved greenfield SAP S/4HANA customers*

Finance: Overhead Cost Management

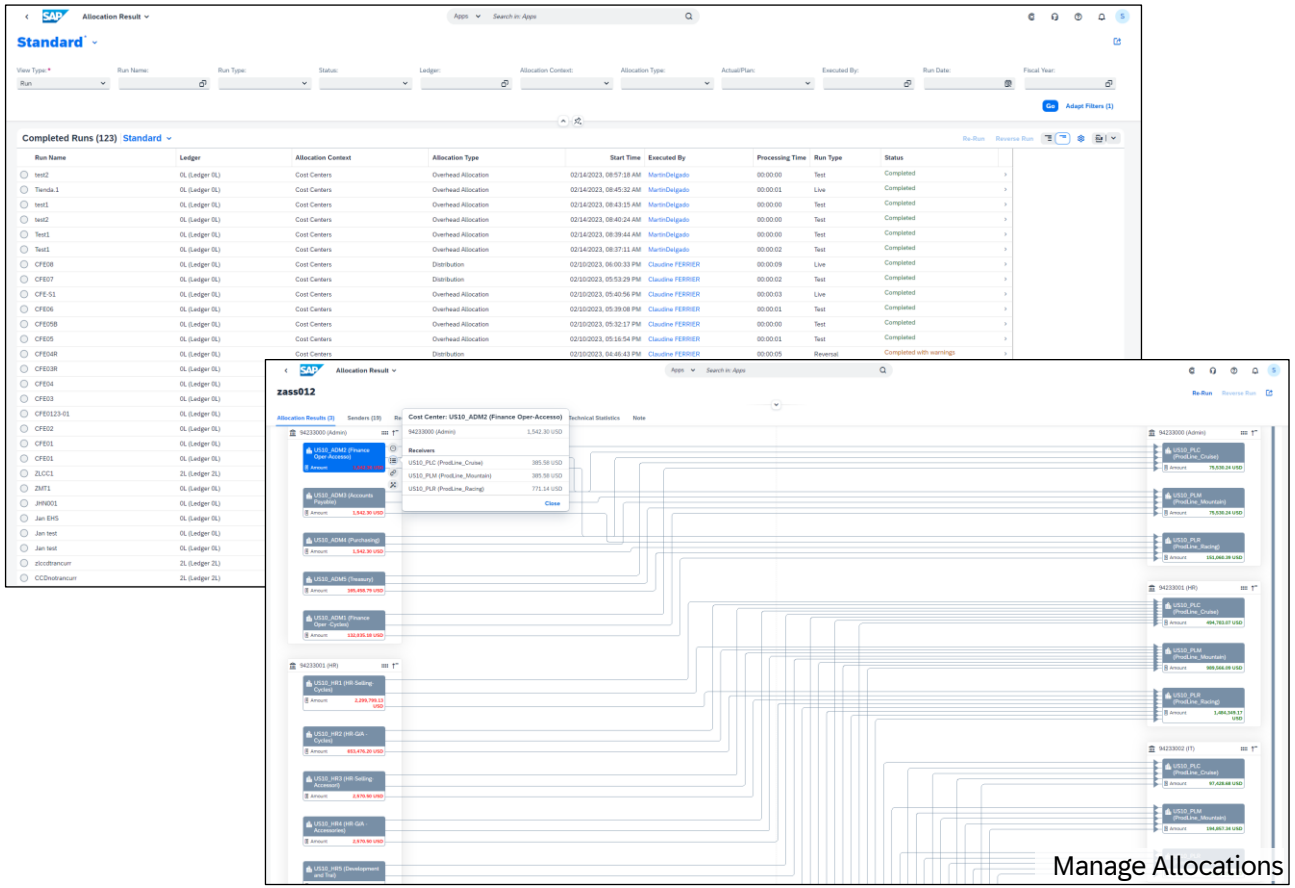
Universal Allocation

Handle multiple accounting principles using ledgers in Controlling*

- Controlling functions supported in the leading ledger and other ledgers
- Ledger-specific handling of activity allocation, cost distribution and allocation, and settlement*
- Allocation tags to improve searches for allocation cycles

Business Value

- High traceability, transparency and insights on the overhead allocation process
- Proven allocation functionality with improved standardization and the speed of the universal journal

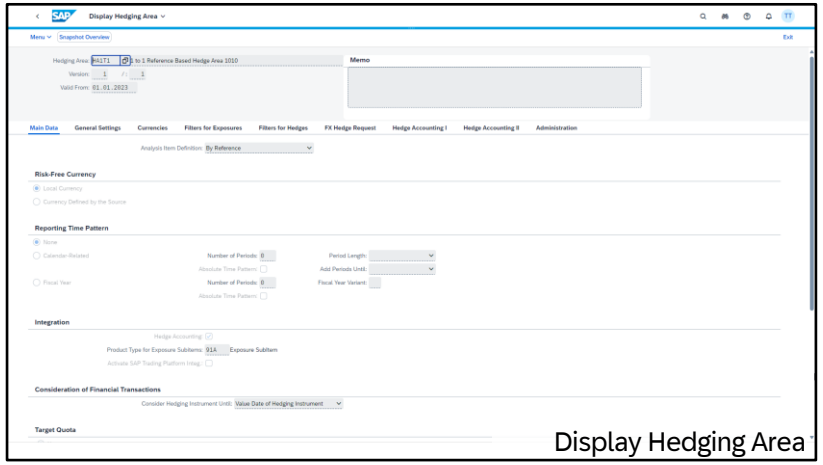


Restricted release for approved greenfield SAP S/4HANA customers

Finance: Treasury Management

Treasury Management | Cash and Liquidity Management | Payments and Bank Communications | Debt and Investment Management | Financial Risk Management

Gain real-time insight into global cash and liquidity management. Capture cashflows from across the enterprise in a central view. Obtain up-to-date cash position and cash flow forecasts in real-time.
Develop a long-term liquidity forecast using embedded planning tools. Control the lifecycle of bank accounts through bank account management.
Manage bank fees through a bank fee analyzer



Display Hedging Area

Increase compliance and automation with integrated payments and bank communications. Secure proper approvals and documentation with rule-based workflows. Monitor outgoing payment and incoming account statements from end to end.
Enable bank connectivity for payments, status, and account statements. Centralize payment management with a Payment Factory approach. Connect bank and SWIFT through the cloud-based SAP Multi-Bank Connectivity solution.

Manage debt and investments to optimize borrowing rates, investment costs, and capital structure with real-time insights. Monitor and control counterparty risk. Automatically include cash flows in the cash forecast. Receive market data automatically and use it for treasury functions. Benefit from seamless integration to Trading Platform providers and use dashboards for overview and drill down of maturity profile of financial instruments.
Generation of single accumulated interest flow for risk-free rates

Protect your assets and cash flow with real-time financial risk management. Capture, analyze, and quantify financial exposures from across the enterprise. Manage the complete hedging process using a centralized cockpit. Integrate hedging seamlessly with trading portals. Simulate risks with what-if scenarios. Create effective hedging strategies that meet GAAP and IFRS accounting standards. Simulate, generate, and automatically post general ledger entries. Gain a complete overview with dashboards and the ability to drill down risk positions and hedging transactions

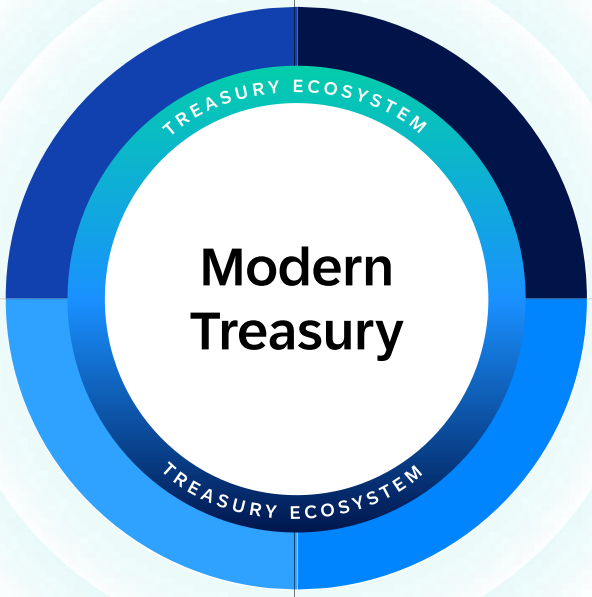
Finance: Treasury Management

1 Cash and Liquidity Management

Increase the availability and utilization of funds, ensure sufficient cash flow for operational needs while minimizing financial risks.

2 Debt, Investment and Risk Management

Optimize the capital structure, make informed investment decisions, and mitigate financial risks to maximize returns and safeguard the financial stability of an organization.



4 Working Capital Management

Effectively manage the short-term assets and liabilities of a business to ensure smooth operations, meet financial obligations, and maximize profitability.

3 Payments and Bank Communication

Facilitate secure and efficient financial transactions, enable seamless transfer of funds between parties, and provide timely and accurate information exchange with banks for effective financial management.

Finance: Commodity Management

Identify and qualify Financial risks associated with commodity price volatility resulting from physical commodity sales, procurement and trading processes and mitigate by hedging them with commodity derivatives. This includes management of full e2e life cycle of Commodity Futures, Listed and OTC Commodity Options, Commodity Swaps and Forwards

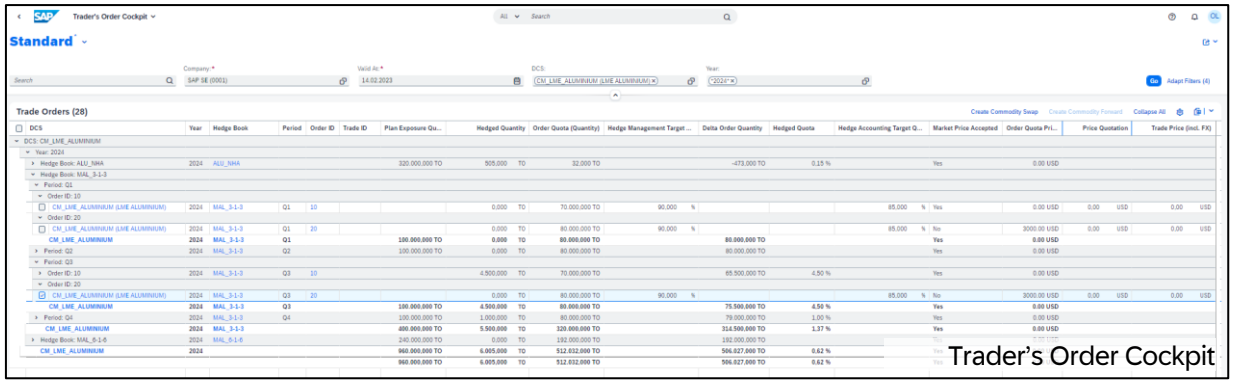
Capabilities for Hedge management and commodity price risk hedge accounting

- **Management of Planning Data, Exposures, Hedge Limits, Hedge Books, Hedge Execution plans**
- **Fiori Apps for Backoffice and Hedge Accounting administrators** to facilitate their tasks
- **System identified exceptions** to support end users to trigger required actions
- **Hedge Cockpit** for **Derivative Traders**
- **Full support and automation** for **Hedging-on-Behalf** scenarios
- **Cash Flow Hedge Accounting** for **Commodity Price Risks according** to **IFRS9**
- **Automated designations**
- **Trigger Hedging** and **Hedge Accounting for FX risks** embedded in Commodity Hedges

Benefits

- **Highly automated processes** minimize Hedge Accounting related workload
- **Improved visibility and auditable transparency** through **audit-proof process documentation**
- **Seamless accounting integration**

Commodity Hedge Cockpit



Trader's Order Cockpit

Finance: Mitigation of financial risks by monitoring and limiting exposures

Financial Risk Management

- **Balance sheet exposure – working day shift**

  Allows for reporting your net open exposures (FX risk) on a daily basis in the Hedge Management Cockpit app

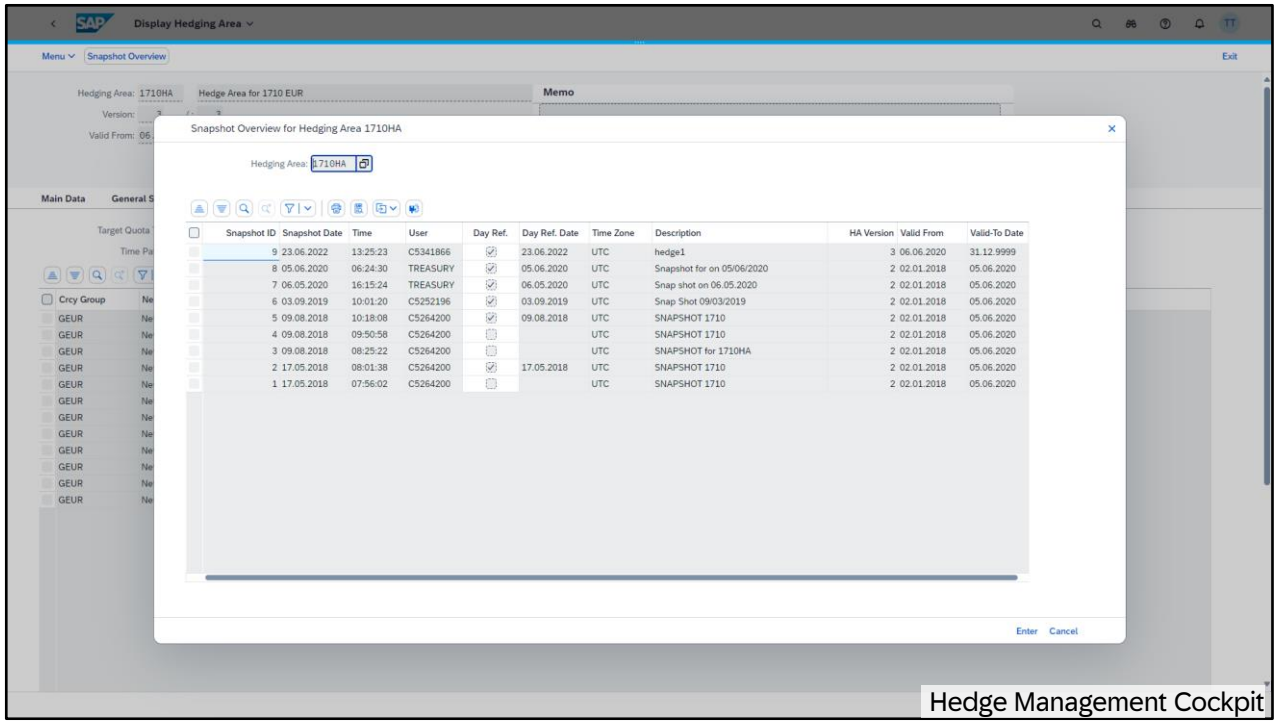
- **Hedge Management of Balance Sheet FX Risks - Enhancements**

  With these features, the following enhancements for Hedge Management of Balance Sheet FX Risks are available:

  - You can assign a specific, central factor calender for the working day check during hedge request generation
  - You can choose the **Net Due Date** instead of the **Clearing Date** as relevant for the selection of FX exposure from data source **FI Open Items**

- **Simulation of period-end closing with different rate type**

  - **Simulate and store** period-end closing results of treasury positions including **valuation, accrual and deferral** of expenses and revenues, and classification using the framework of the operative period-end closing functions and including relevant valuation results that are also generated by the real valuation during period-end closing without creating a posting.
  - Enhance the selection screen of the Simulate Period-End Closing app with the **foreign-exchange price type** used for **simulated valuation** and **simulated accrual processing**.



Hedge Management Cockpit

Finance: Enterprise, Risk and Compliance

Enterprise Risk and Compliance

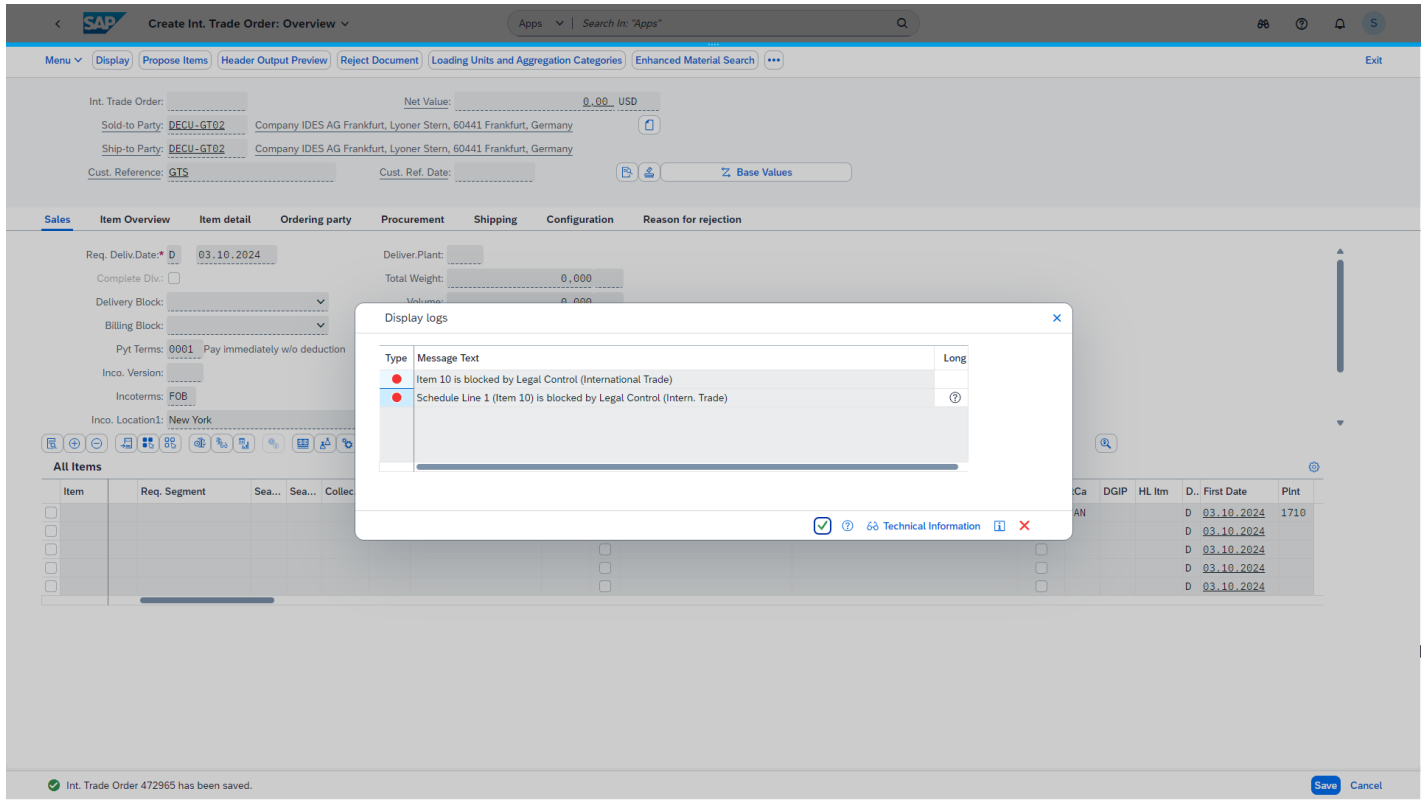
International Trade Mgmt.

Ensure export/import compliance by checking transactions for embargoes, managing licenses, and using inline blocking/release for transactions

Fulfill diverse customs needs like foreign trade zones, China's processing trade, bonded warehousing, and Intrastat compliance

Leverage free trade agreement benefits with automated product qualification, requesting supplier declarations, and issuance of customers declarations

Ensure export/import compliance by checking transactions for embargoes, managing licenses, and using inline blocking/release for transactions



Finance: SAP International Trade Management Portfolio
Key capabilities

Compliance Management

Ensure export/import compliance by checking transactions for embargoes, managing licenses, and using inline blocking/release for transactions.

Customs Management

Handle import/export customs, documentation, duties, and product classification, and optimize cost savings with trade strategies.

Special Customs Procedures

Fulfill diverse customs needs like foreign trade zones, China's processing trade, bonded warehousing, and Intrastat compliance.

Trade Preference Management

Leverage free trade agreement benefits with automated product qualification, requesting supplier declarations, and issuance of customers declarations.

Key features covered by three solutions:

Global Trade Services

Standalone, market leading global trade management; full scope of functionality

SAP S/4HANA for international trade

Embedded Intrastat, import/export control, and related classification

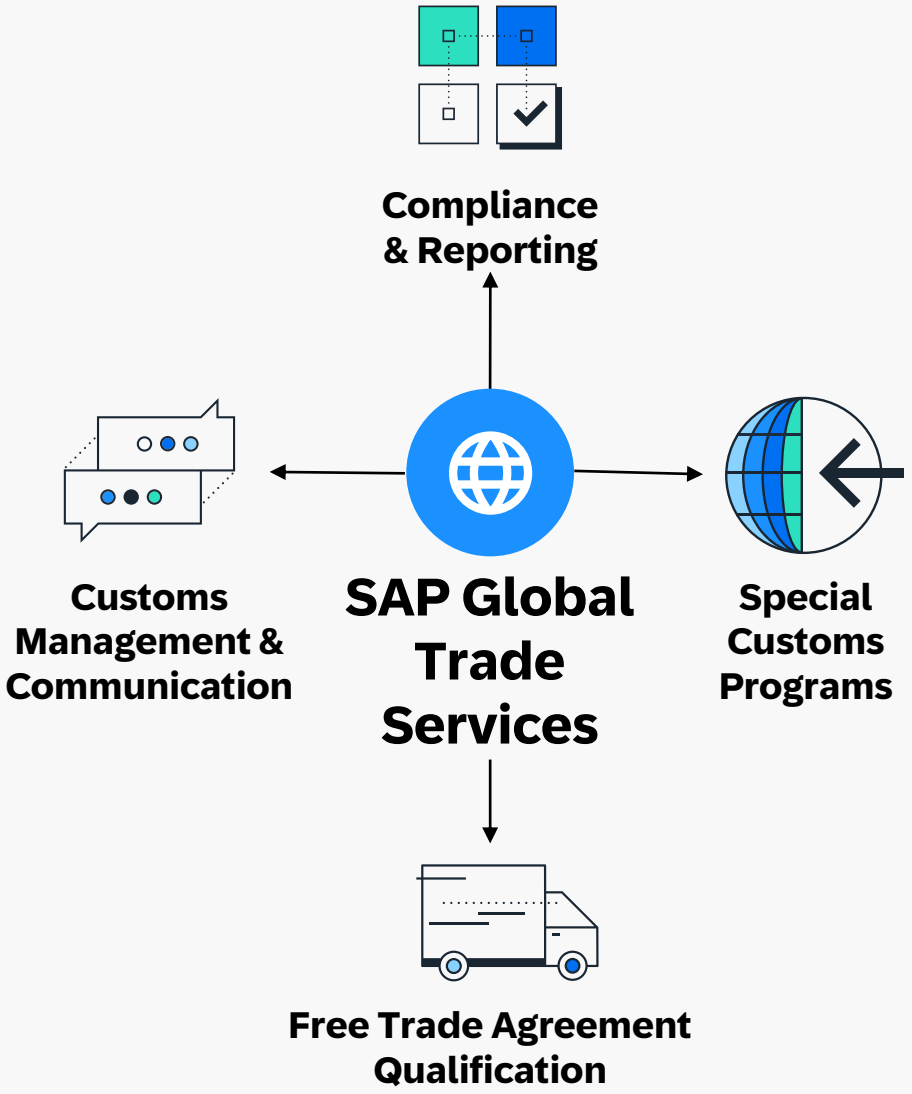
Watch List Screening

SaaS on SAP BTP | Screening only | Order in SAP store

Finance: SAP International Trade Portfolio
SAP Global Trade Services

Centralize global trade management and enhance compliance by integrating trade services into a single platform. This streamlines trade processes, reduces costs, and expedites customs clearance, helping you meet regulatory requirements and mitigate penalties.

- Manage import and export compliance, including license management, checks and assignment, and conformity with embargo restrictions.
- Improve customs processes for imports and exports through product classification, automated creation and validation of customs declarations, and customs communication through direct filing or via customs brokers.
- Screen accurately for restricted parties across business operations with inline blocking and release.
- Automate product qualification for free trade agreements and manage supplier and customer declarations.
- **Leverage** special customs processes such foreign-trade zones, processing trade in China, bonded warehousing, inward and outward processing relief (IPR/OPR) and Intrastat.



Finance: Manage trade compliance checks with ease

Enterprise Risk and Compliance | International Trade Management | 2023 FPS2

International Trade Management

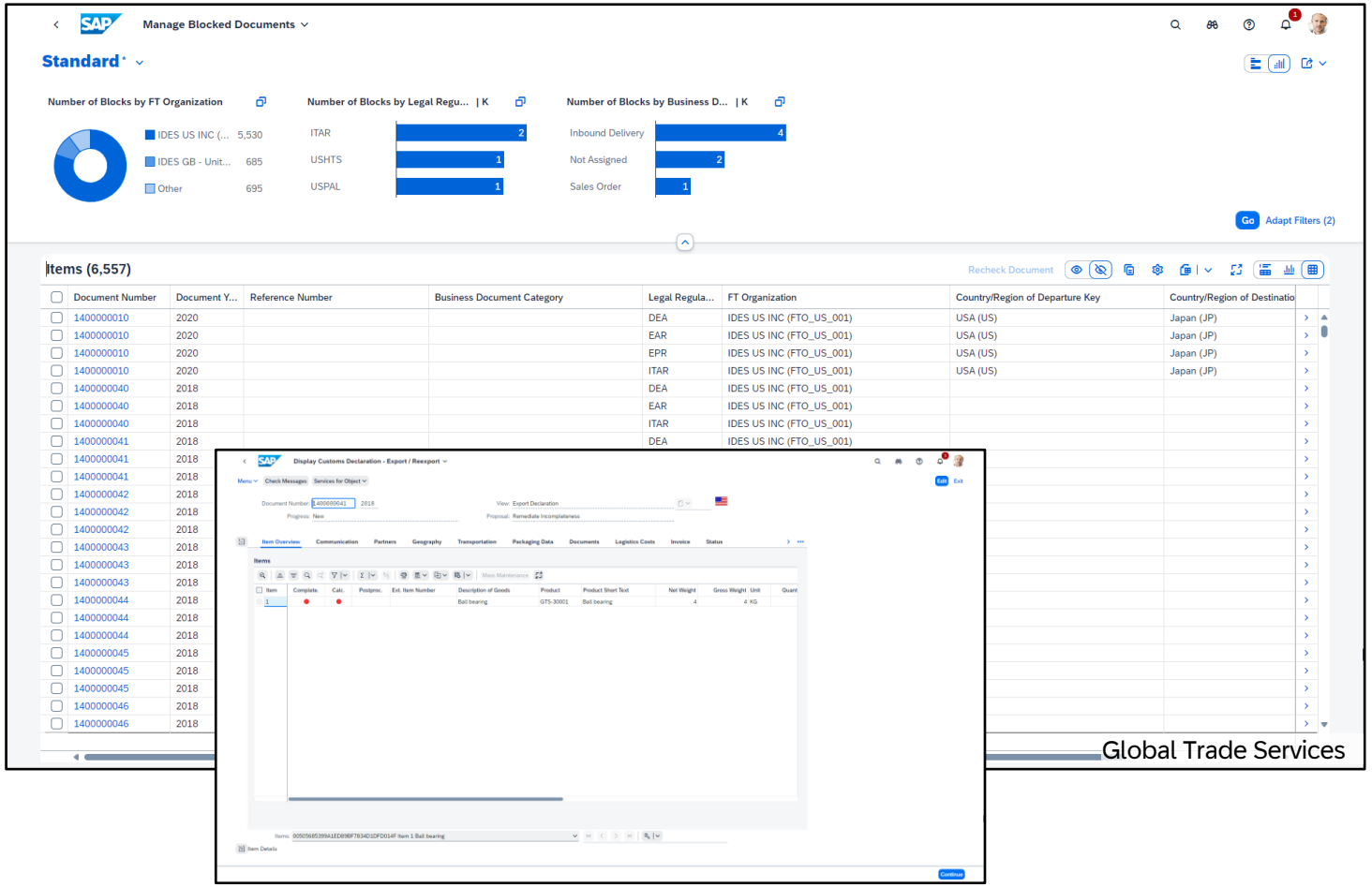
Business Background

Management of trade compliance checks for service orders, service quotations, subscription order and solution quote (SAP S/4HANA Cloud, private edition) with SAP Global Trade Services is now fully supported by SAP S/4HANA Service

SAP Global Trade Services, edition for SAP HANA: Integration with SAP S/4HANA Service

Manage trade compliance checks for service orders and service order quotations (SAP S/4HANA Cloud, private edition) with SAP Global Trade Services (SAP GTS):

- Prevent service activities with embargoed countries
- Check legal control service processes
- Resolve legal control issues with blocked service documents
- Check business partner addresses in service orders and service order quotations if they are part of a denied party list

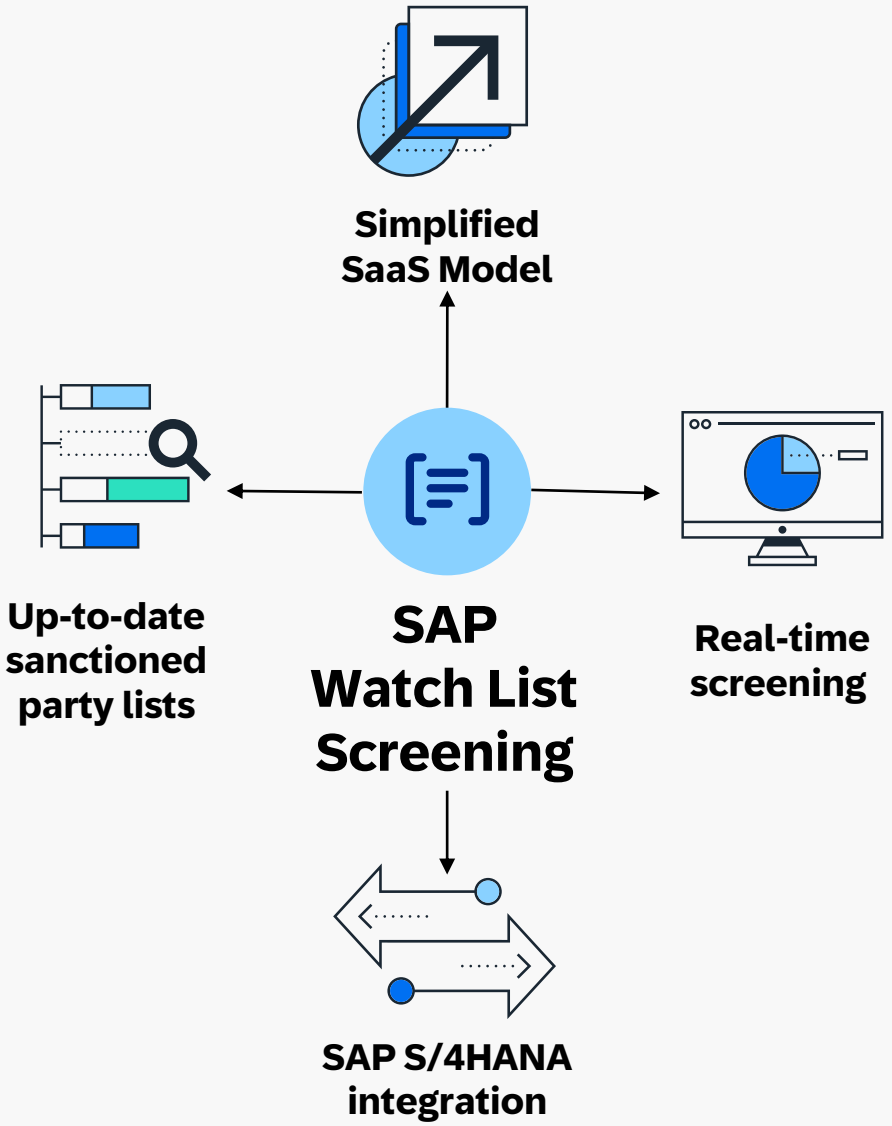


Finance: SAP International Trade Portfolio

SAP Watch List Screening

Leverage real-time restricted party screening to streamline the vetting of customers and suppliers against government-mandated denied party lists.

- Simplify screening, via on-demand SaaS model, providing instant access to up-to-date sanctioned party lists.
- Real-time compliance checks for order-to-cash and procure-to-pay processes.
- **Pre-built** integration with SAP S/4HANA and published APIs to extend to other systems.
- **Ad-hoc** screening for extended use cases.



Finance: Identify and manage sanctioned parties at first glance

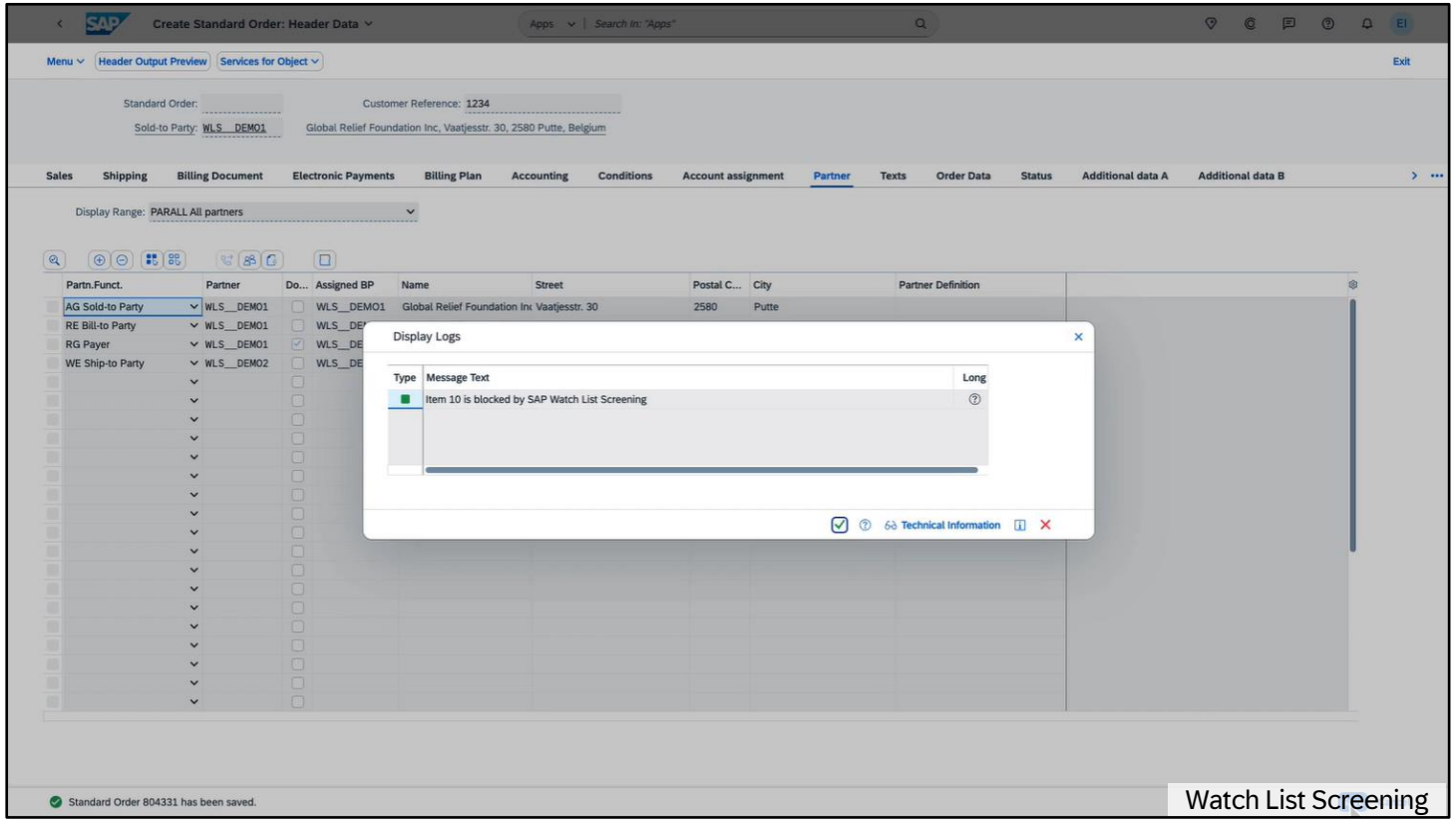
Integration with SAP Watch List Screening

Integration of SAP Watch List Screening with business partner master data in SAP S/4HANA Cloud

- Call the SAP Watch List Screening application on SAP Business Technology Platform within SAP S/4HANA, for business partners with the roles of customer or supplier
- Screen the name and addresses of a business partner **for natural persons or organizations that might be sanctioned**
- Add status fields representing the screening status to the addresses of a business partner in SAP S/4HANA
- Manage a cumulative status field on the level of general data of the business partner

Relevance for international trade documents:

When you use a business partner already screened in a trade compliance document, you can define whether the result of the business partner screening is used for the trade compliance document, or whether an additional screening is executed.



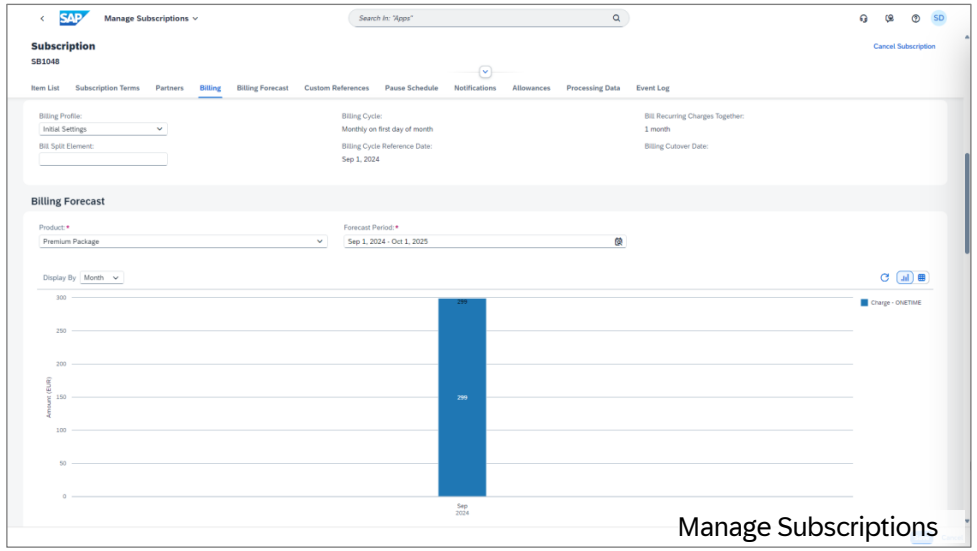
Watch List Screening

Finance: Billing and Revenue Innovation Management

Billing and Revenue Innovation Management

Subscription Order Management

Design new solution offerings from a singular product catalog, fulfill customers across sales, service and configurable subscription, while enabling upsell and cross-sell through subscription lifecycle management



Manage Subscriptions

Convergent Invoicing

Provide customers a single, converged invoice for all products and services as desired, including billing streams from legacy billing systems, reducing customer confusion and accelerating cash collection

Credit & Collection Management

Manage credits efficiently to reduce the risk of financial losses and to optimize relationships with your business partners. Determine the risk of losses on receivables from your business partners early and in making credit decisions efficiently and automatically

Improve management of past-due accounts and reduce days-sales-outstanding to accelerate cash flow. Proactively manage overdue receivables and prioritize collections efforts for maximum success

Fin. Customer Care and Dispute Management

Clarify and resolve customer payment disputes quickly and efficiently. Automate the escalation of billing disputes, proactively manage and solve those to reduce DSO and ensure customer satisfaction

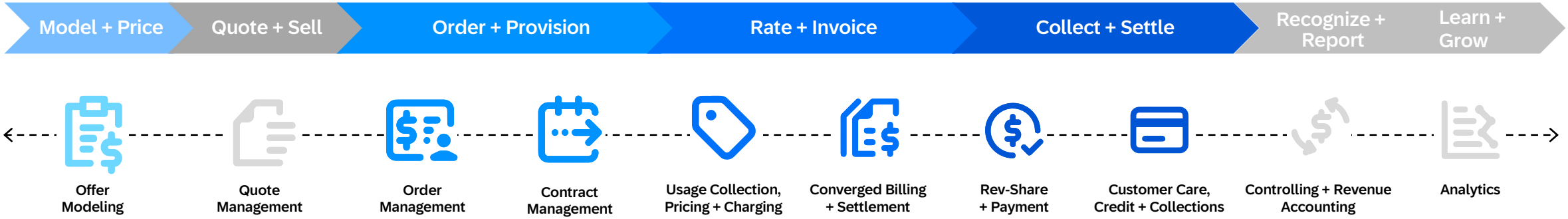
Receivables Management and Payment Handling

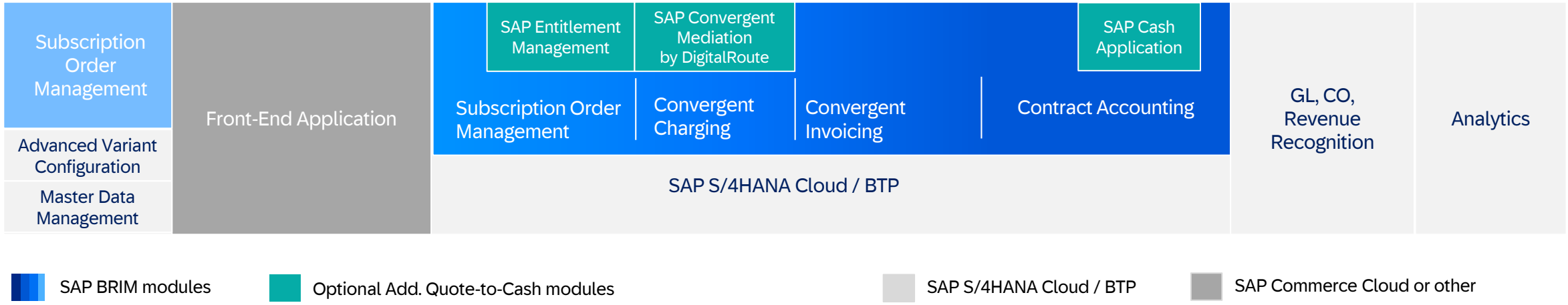
Manage customer accounts receivable efficiently. Manage and streamline Credit Checks, Collections and Disputes to take control of receivables and improve customer processes and relations

Improve service by empowering customers with a payment portal and e-billing. Electronic bill presentment and payment involves presenting bills on the web and offering customers the option of paying their bills online

Finance: Scale your digital-only business

Scale performance with increasing volume and complexity





SAP BRIM modules | Optional Add. Quote-to-Cash modules | SAP S/4HANA Cloud / BTP | SAP Commerce Cloud or other

NOTE: Actual product modules will vary based on customer-specific requirements and use cases.

Finance: Comprehensive management of the subscription lifecycle

Subscription Order Management

Manage product catalogs with flexible pricing options.

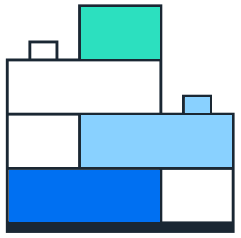
Design and model offers that combine multiple pricing and billing options.

Bundle subscriptions with physical products, services, and/or projects as a single offer.

Manage subscription lifecycle, from order capture and fulfillment to renewals and contract changes.

Support complex multi-sided business models by managing partner revenue-share agreements.

Gain complete view of order and contract history with detailed audit trail.



Product Bundling

Mix and match into one offer

- **Products + services + projects + subscriptions**
- **Recurring + one-time + usage/outcome fees**
- **Charge in advance, in arrears, installment, etc..**

Subscription Lifecycle

- **Order capture, distribution, fulfillment**
- **Renewals, extensions, cancellations**
- **Product changes**
- **Upgrades, downgrades**

Finance: Major enhancements in Subscription Order Management

Subscription Order Management

- **Integration with SAP Global Trade Services for SAP HANA: Integration with SAP S/4HANA Subscription Order Management**

  Subscription Order Management now integrates with SAP Global Trade Services (SAP GTS) to support compliance requirements

- **Enhancement of the SAP Fiori apps for contract lifecycle management to support the parameters of SAP Convergent Charging**

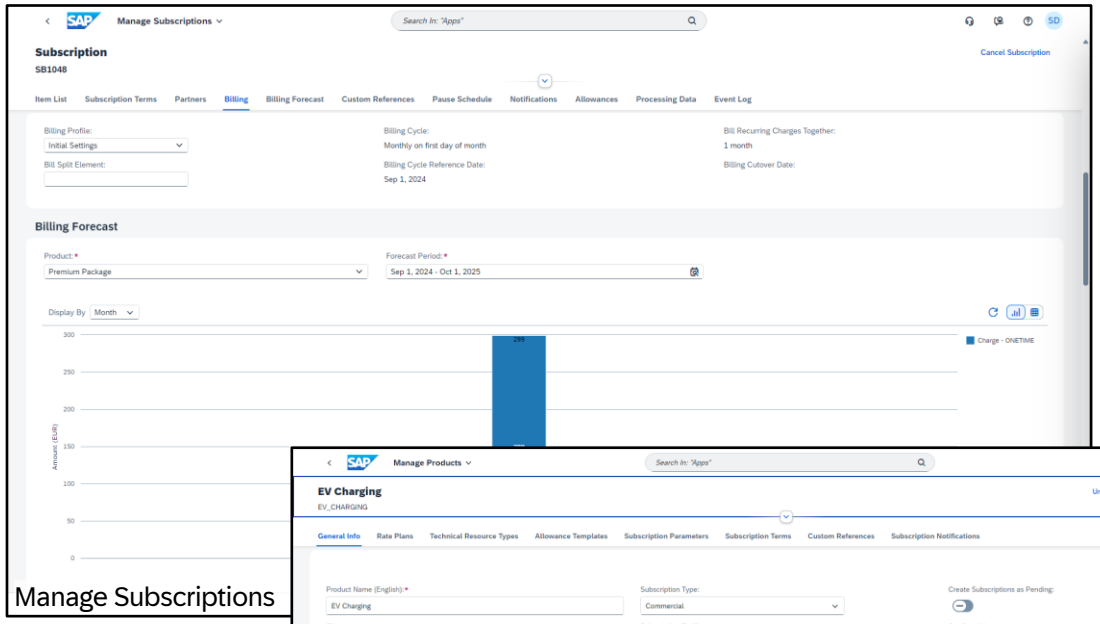
  You can now choose to either Submit your change request directly or to open the 'open Change Order app' when executing a change process.

- **Enhanced integration capabilities in subscription orders and contracts**

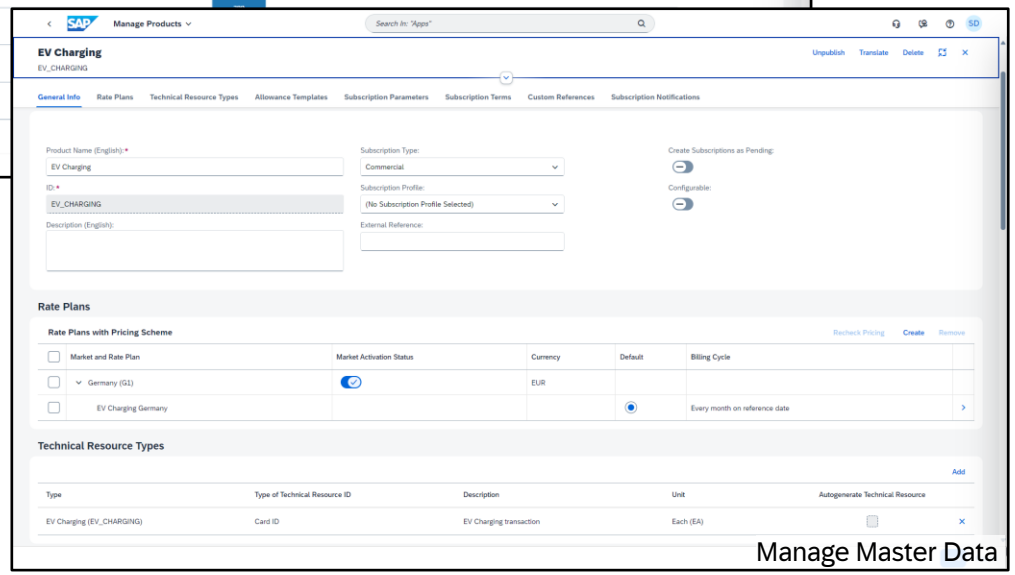
  The following OData APIs have been enhanced:

  - **Master Agreement**
  - **Subscription Contract – Read**
  - **Solution Quotation**
  - **Subscription Order (Version 0002)**

  Further details and specifics are in the notes section of this slide.



Manage Subscriptions



Manage Master Data

Finance: Advanced Accounting & Financial Close

Advanced Accounting & Financial Close

Document & Reporting Compliance

Corporate Close

Joint Venture Accounting

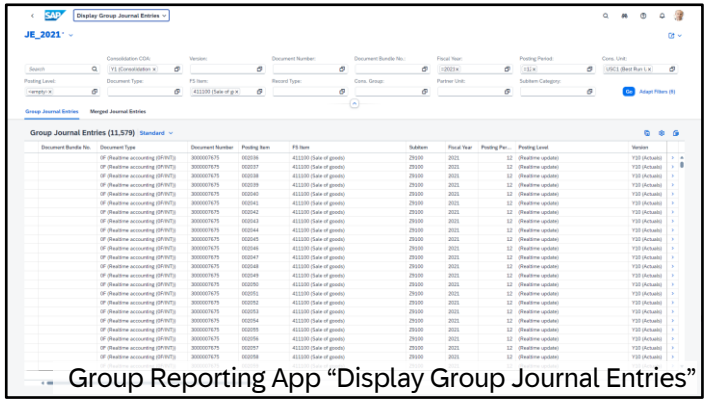
Contract and Lease Management

One holistic solution to fulfill local mandates from real-time electronic documents to statutory reports, while automating compliance operations worldwide

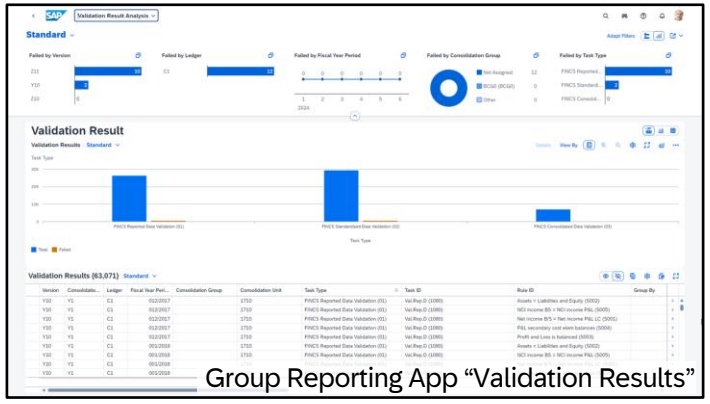
Corporate close involves releasing the local books, validating the financial data, translating local to group currency, eliminating intercompany effects, and preparing financial statements for the group

SAP S/4HANA supports complete accounting processes for joint ventures. It captures all expenditures and other joint venture transactions using functions from financial and managerial accounting as well as asset management, materials management, plant maintenance and project system

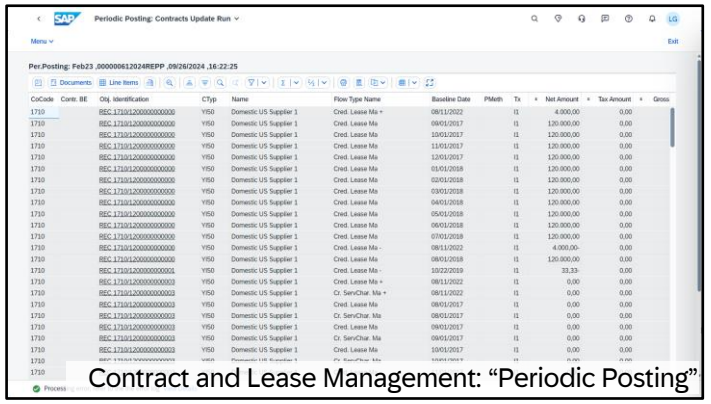
Contract and lease management involves actively managing lease agreements



Group Reporting App “Display Group Journal Entries”



Group Reporting App “Validation Results”



Contract and Lease Management: “Periodic Posting”

Finance: Tax Management

SAP Document and Reporting Compliance

Tax and Trade Management

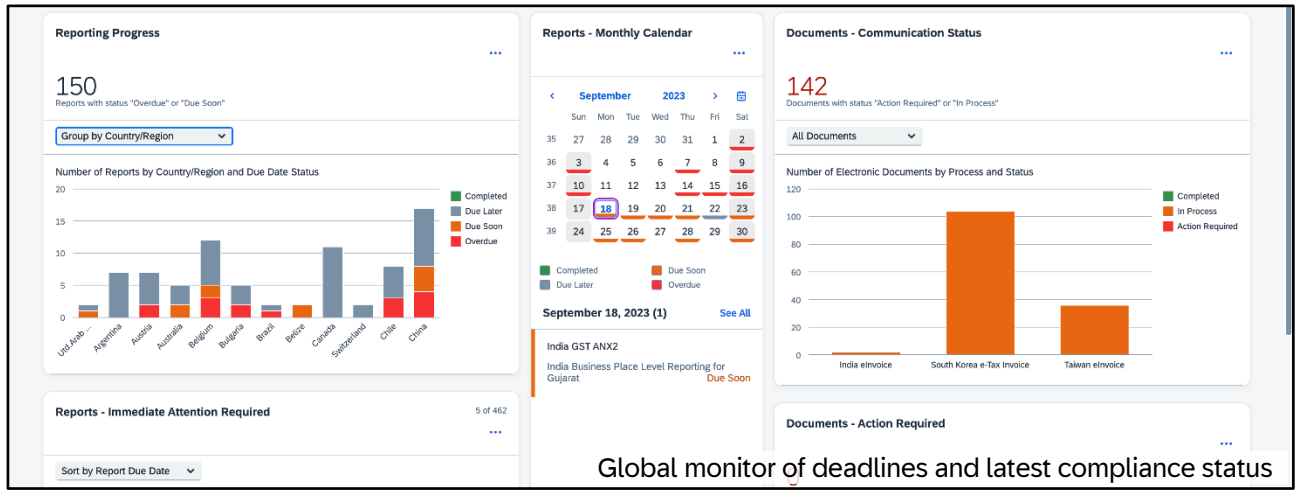
Run SAP Document and Reporting Compliance to customers to stay on top of continuously evolving e-invoicing and statutory reporting mandates driven by digitalization of authorities.

Leverage a single cloud offering integrated across LoBs to enable the submission / exchange of documents and reports to tax authorities.

1. **Standardization, simplification and automation: Standardize IT landscape and business processes, and lower total cost of ownership to comply with regulations worldwide. By Embedding compliance natively,** improve operational agility to implement legal mandates

2. **Global coverage of end to end processes: ready-to-use scenarios for over 430 regulations in more than 57 countries.**

3. **Extensibility platform for customers and partners: respond to** additional mandates and flexibly adapt to business needs for one solution worldwide.



Global monitor of deadlines and latest compliance status

- Automated checks to ensure consistency between electronic documents and authorities' portals New 2023
- Automated error notifications during electronic documents processing New 2023

Finance: SAP Document and Reporting Compliance

Comply with electronic documents and statutory reporting worldwide

2023
FPS0+1

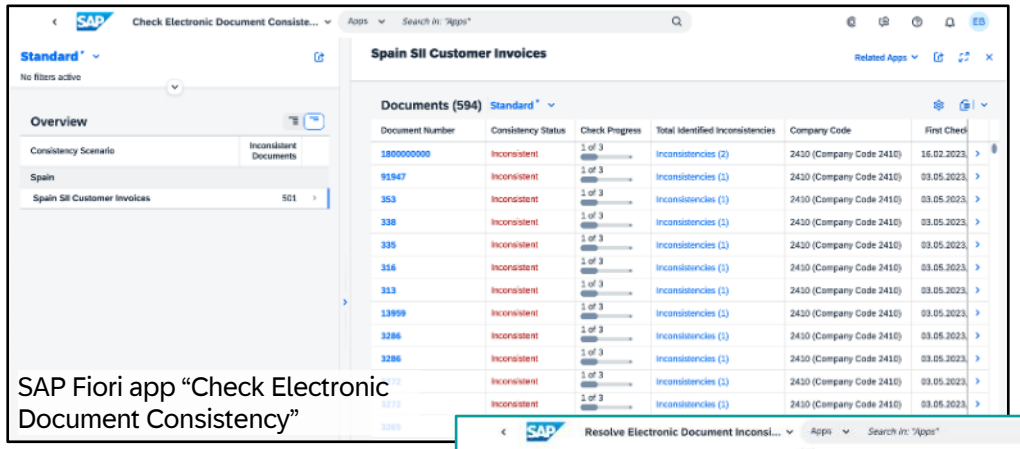
Minimized risk of noncompliance ensuring consistency between SAP S/4HANA Cloud Private Edition and tax authorities / local platforms

New SAP Fiori apps to automatically check the consistency of business transactions between SAP S/4HANA Cloud Private Edition and tax authorities' platforms to early identify discrepancies and allow enough time for corrections prior month-end. In addition, you can centrally review the findings and initiate corrections. This way, you can ensure traceability and minimize the risk of noncompliance at the time of returns submission.

- Automate consistency checks
- Centrally review inconsistencies
- Initiate corrections of inconsistencies

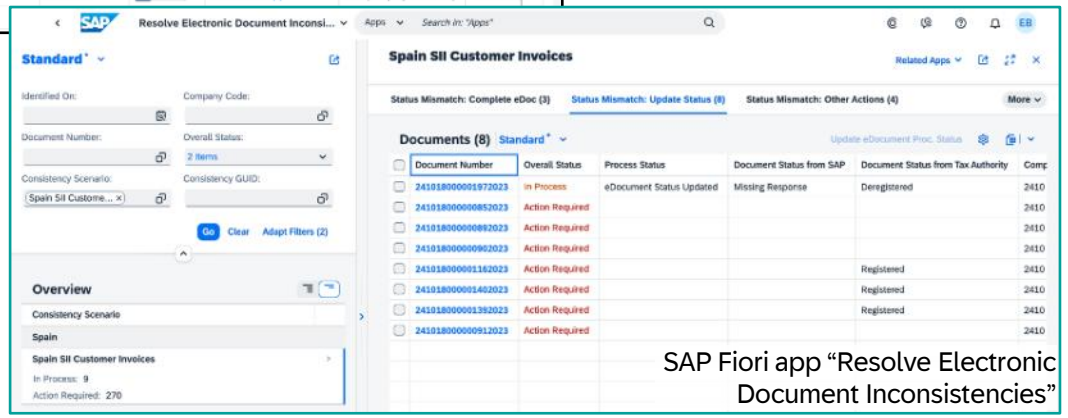
Benefit

- Gain real-time insights into compliance status.
- Proactively identify inconsistencies of electronic documents earlier in the period.
- Reduce manual effort by streamlining remediation of inconsistencies.
- Minimize risk of non-compliance when tax authorities reconcile periodic tax returns to the records collected in real-time or near-real time in their platforms.



SAP Fiori app "Check Electronic Document Consistency"

LOCALIZATION



SAP Fiori app "Resolve Electronic Document Inconsistencies"

Finance: SAP Document and Reporting Compliance

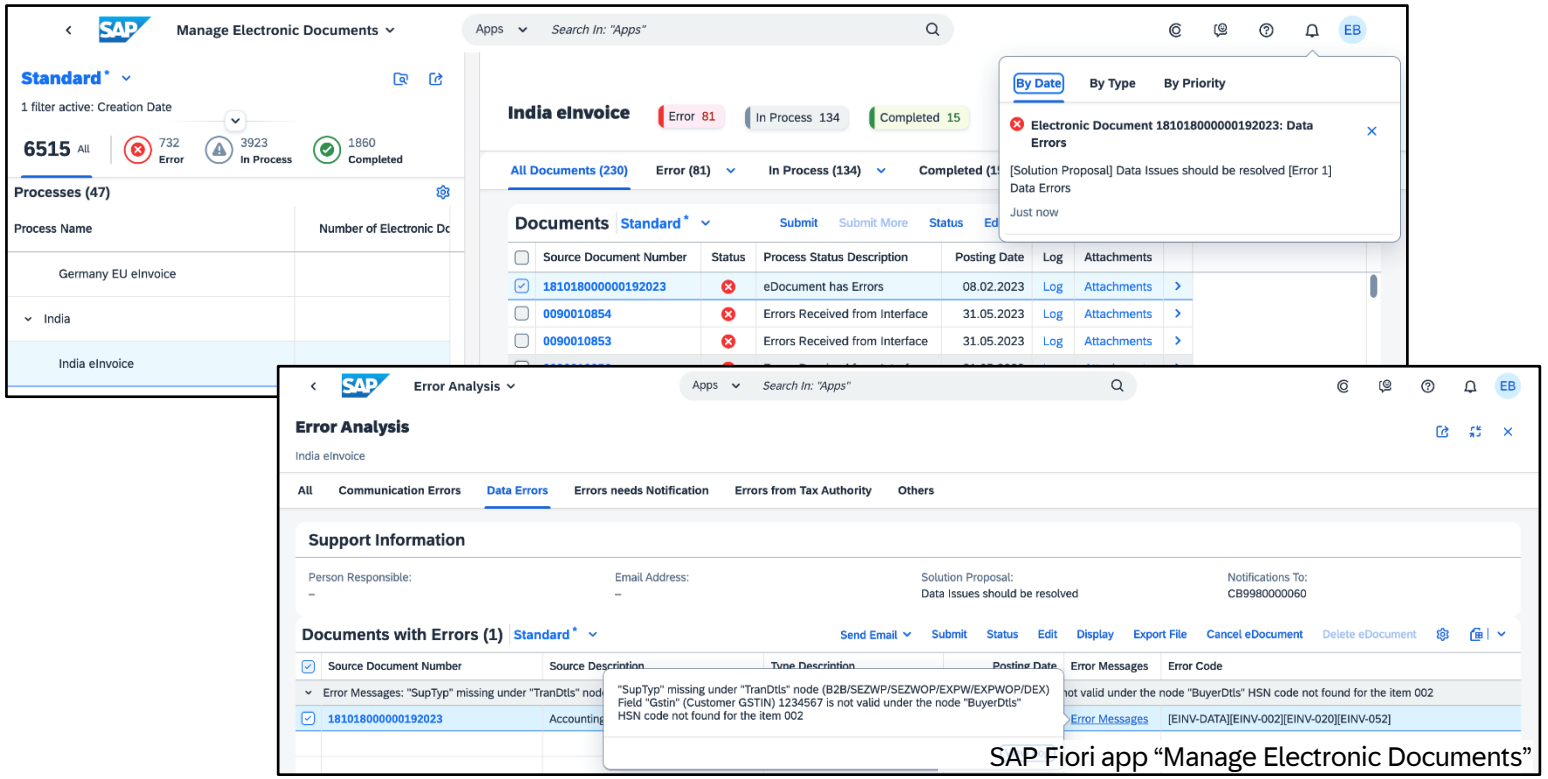
Comply with electronic documents and statutory reporting worldwide

2023
FPS0+1

Automated Error Notifications During Electronic Documents Processing

As more and more authorities mandate electronic documents, you can automate error notifications and accelerate corrections

- Set up automated error notifications for specific users by error category
- Review error by category, manually send email notification and initiate corrections
- Manually create electronic documents when automatic creation fails or original documents are deleted (new SAP Fiori app ‘Create Electronic Documents Manually - Special Cases’)



SAP Fiori app “Manage Electronic Documents”

Benefit

- Accelerate corrections by automatically notifying responsible person and avoid late submission due to errors
- Maximize efficiency by prompting user actions when required and preventing unnecessary manual monitoring
- Increased usability, from insights to actions
- Seamlessly handle special case electronic documents e.g. recreate e-documents previously deleted

LOCALIZATION

Finance: SAP Financial Compliance Management

Enterprise Risk and Compliance

SAP Financial Compliance Management allows to centralize and automate tax checks, remediation and improve the quality of tax data by addressing the issues at the source.

Financial control content for Tax Management

	Supplier Without VAT Registration	Tax Amount Above Threshold	Postings without Tax Codes
Description	The check identifies all suppliers for whom no VAT ID is recorded.	This check identifies B2B customer invoices with a VAT amount greater than a certain amount (the default is 10,000 in local currency).	This checks identify the list of documents that do not have a tax code entered.
Why this Control?	This control helps to identify suppliers with missing VAT registration value, and as result postings to this suppliers can be hold required data are maintained and verified.	This controls helps to identify and validate high value transactions and avoid unnecessary manual effort.	This controls helps to identify any business transactions without tax code to ensure reporting is accurate and complete.
Logic	VAT Registration field is checked, and record is returned if field is empty.	The amount can individually be set (the default that is predefined is 10,000 in LC). Account type: Debit. Time selection field: Posting Date.	The compliance check “Postings without Tax Codes” returns documents that do not have a tax code entered in the MWSKZ field.

Finance: Transform your IFRS Compliance with SAP

IFRS compliance with embedded intelligent processes: New IFRS and Other Legal Requirements

IFRS 15 - ASC 606

Revenue Recognition from contracts

Supports the single five-step model for recognizing revenue

Automates and simplifies revenue recognition

Provides native support for parallel reporting (multi-GAAP)

NEW Integration with Central Finance

SAP Solution:
Automated Revenue Management (ARM) portfolio (blog)
SAP S/4HANA Revenue Accounting (RA(R), video, FAQ)

IFRS 9 - ASC 815

Classification and measurement
Revised approach according IFRS9 to measure all financial assets and Liabilities

Impairments
Fundamental redesign of provisioning model for financial assets

Hedge Accounting
Reduction of Volatility of Financial Position (video)

SAP Solutions:
SAP S/4HANA & SAP Treasury and Risk Management (Blog)

Country by Country Reporting (CbCR, BEPS)

Preconfigured solution for data collection, validation and reporting

Reporting package for risk analysis and comparison

SAP Solution:
SAP S/4HANA direct tax management

IFRS 16 - ASC 842

Leases

Automated lease accounting activities

Purpose-built real property business processes

Automated process for equipment events

NEW Integration with Planon

SAP Solution:
SAP contract, lease and real estate management (aka CLM, RE-FX, FAQ)

IFRS 9 & IFRS 17 for Insurance Companies and Banks

Insurance Contracts

Supports new insurance contract liability calculations in a comprehensive subledger used by banks, insurance and reinsurance companies as wells as fintech and corporates

SAP Solution:
SAP S/4HANA for Financial Products Subledger

Finance: Entity Close Orchestration

Automation and collaboration for all close cycles

Advanced Accounting and Financial Close | Intelligent Technologies

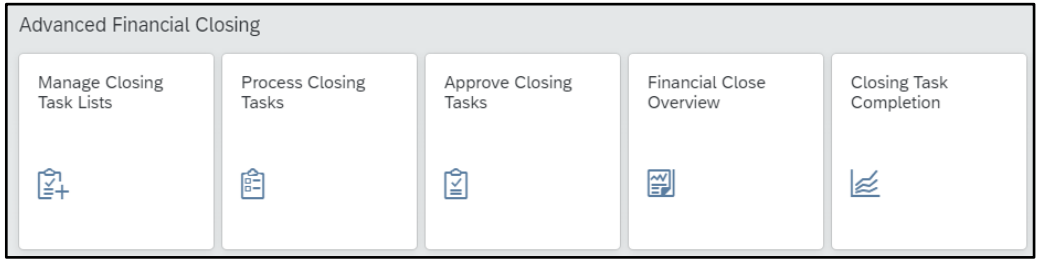
Manage Closing Task List → **Process Closing Tasks** → **Approve Closing Tasks** → **Financial Close Overview** → **Closing Task Completion**

Accounting Expert

General Ledger Accountant
Asset Accountant
AR/AP Accountant

Accounting Manager

Head of Finance, Central Controlling

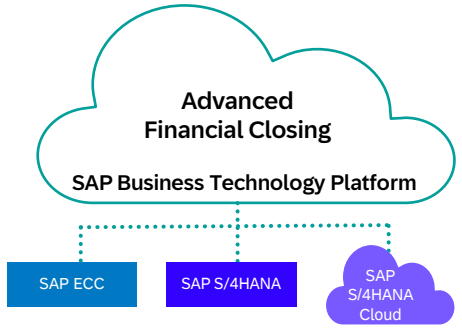


Finance: Entity Close Orchestration

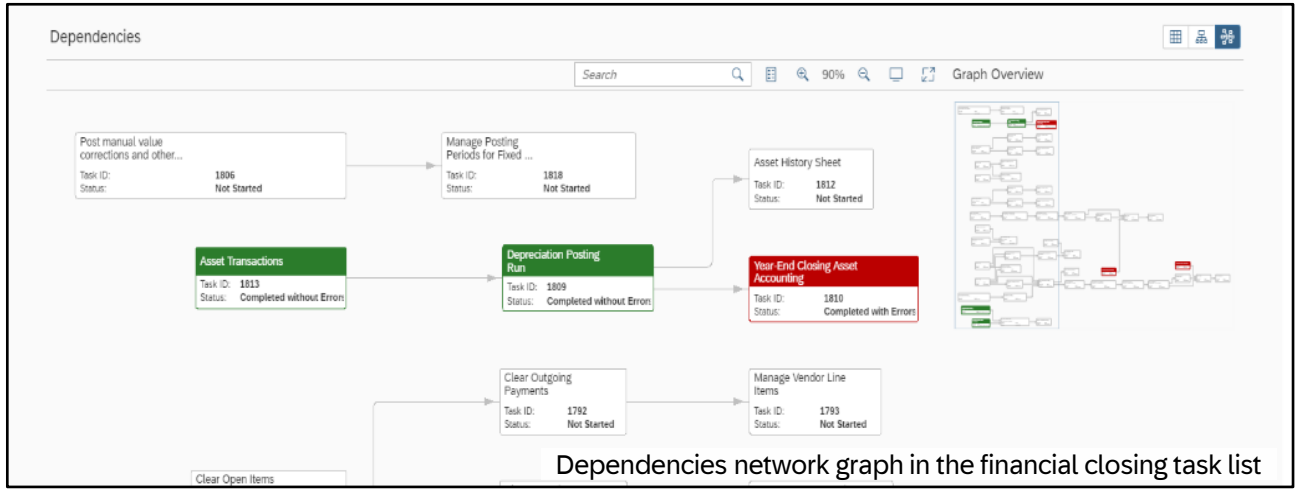
SAP S/4HANA Cloud for advanced financial closing

Advanced Accounting and Financial Close | Intelligent Technologies

Run Advanced Financial Closing in a Cloud Hub scenario to further automate, streamline, and harmonize the overall closing process.



- **Closing Hub Scenario:** enable pre-defined connectivity to On Premise and Cloud ERPs in heterogeneous landscapes (incl. Central Finance)
- **Intelligent Closing:** leverage intelligent technologies to automate and further streamline the closing process
- **Central steering:** Enable central management for entity and group close along the entire finance process Roadmap



Dependencies network graph in the financial closing task list

- SAP Build Process Automation: advanced orchestration of closing bots New 2023
- Automated supervision of closing tasks with account balance validation New 2023

Finance: SAP S/4HANA Cloud for advanced financial closing

Entity Close Orchestration

2023
FPS0+1

Closing with
Account Balance Validation

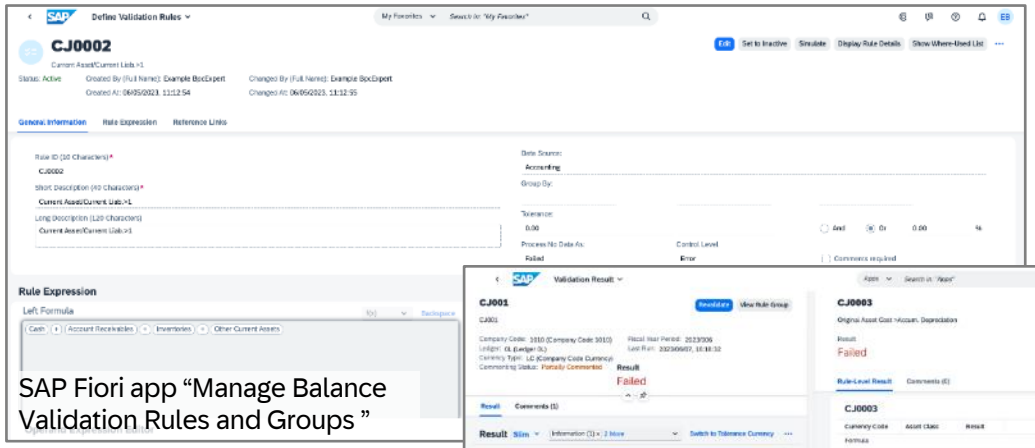
Automated supervision of closing tasks with account balance validation

New SAP Fiori apps to maintain and execute financial closing validations such as balance verifications before and after closing tasks, detection of variances between current and previous periods and more. In addition, these integrate with SAP S/4HANA Cloud Public Edition for Advanced Financial Closing to further automate execution and trigger prompt actions in case of failures:

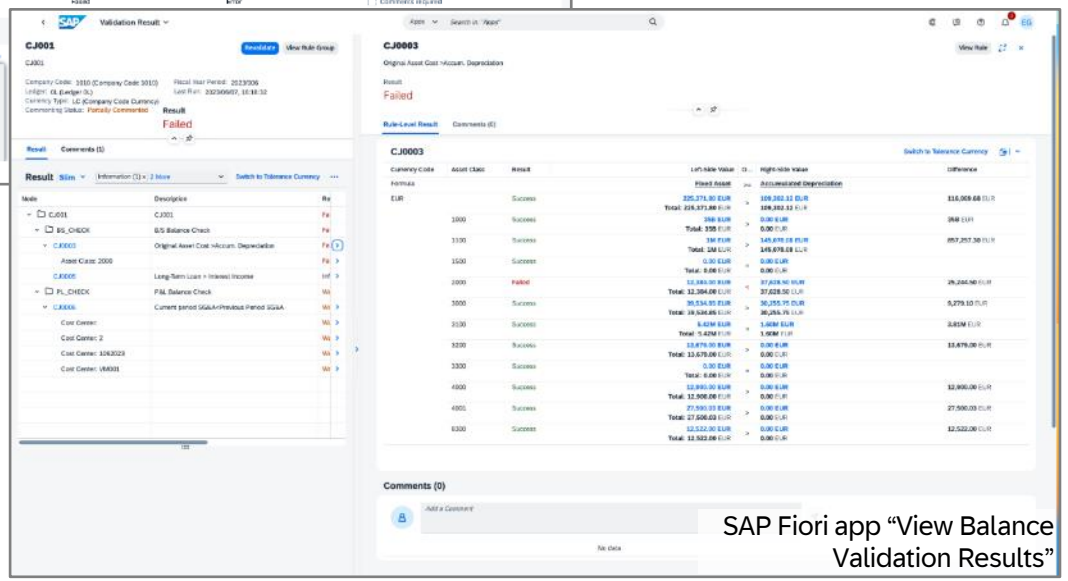
- Define account balance validation rules.
- Execute validations and analyze results.
- Plan validations as part of entity close, and orchestrate the process based on results.

Benefit

- Improve entity closing process governance with full visibility of validations.
- Reduce manual effort and accelerate the closing by automating error detection and notifications.
- Higher financial statement quality via early data qualification.



SAP Fiori app “Manage Balance Validation Rules and Groups ”



SAP Fiori app “View Balance Validation Results”

Finance: Additional LoB Finance Solutions for SAP S/4HANA

Intelligent Technologies

SAP S/4HANA Cloud for advanced financial closing – hub-based entity close orchestration for 1:more SAP Accounting systems (ECC or S/4HANA)

3rd party add-ons provide additional automation and governance

Add-on extending **Entity Close**:
SAP Account Substantiation and Automation by BlackLine – for best practice automation for the balance sheet substantiation processes

Add-on extending **Corporate Close**:
SAP Intercompany Governance by BlackLine – for governance especially related to the origination phase for non-trade intercompany processes in a heterogeneous landscape

Add-on extending **SAP S/4HANA Central Finance**:
SAP Central Finance Transaction Replication by Insightsoftware for SAP S/4HANA – standardized integration scenarios for posting non-SAP data into the Central Finance instance
SAP Central Finance Data Harmonization by Insightsoftware - for master data harmonization including data profiling, conflict detection, golden record determination, and upload into target system for central finance-specific objects and scenarios

Finance: Group Reporting

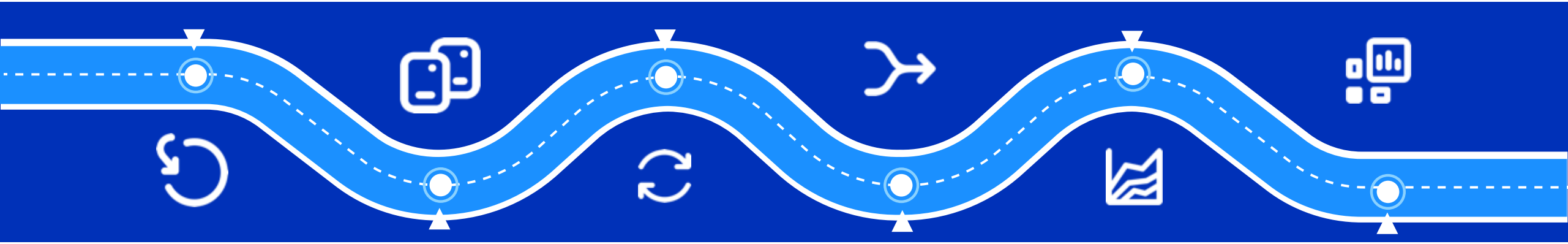
Leverage an integrated platform and simplify the entire consolidation process

Advanced Accounting and Financial Close

System basics
Customer-specific attributes for consolidation units
Consolidation unit derivation in accounting

Data preparation
Flexible restatement and simulation functionality
Integration of group planning data from SAC

Analysis
Group financial statements review booklet



Data collection
Staggered close process
Questions and answers in forms
Enhanced segregation of tasks

Consolidation
On-the-fly interunit profit elimination via group valuation ledger
Posting on cashflow reporting items

Dashboarding / Planning / Disclosures

Finance: Group Reporting

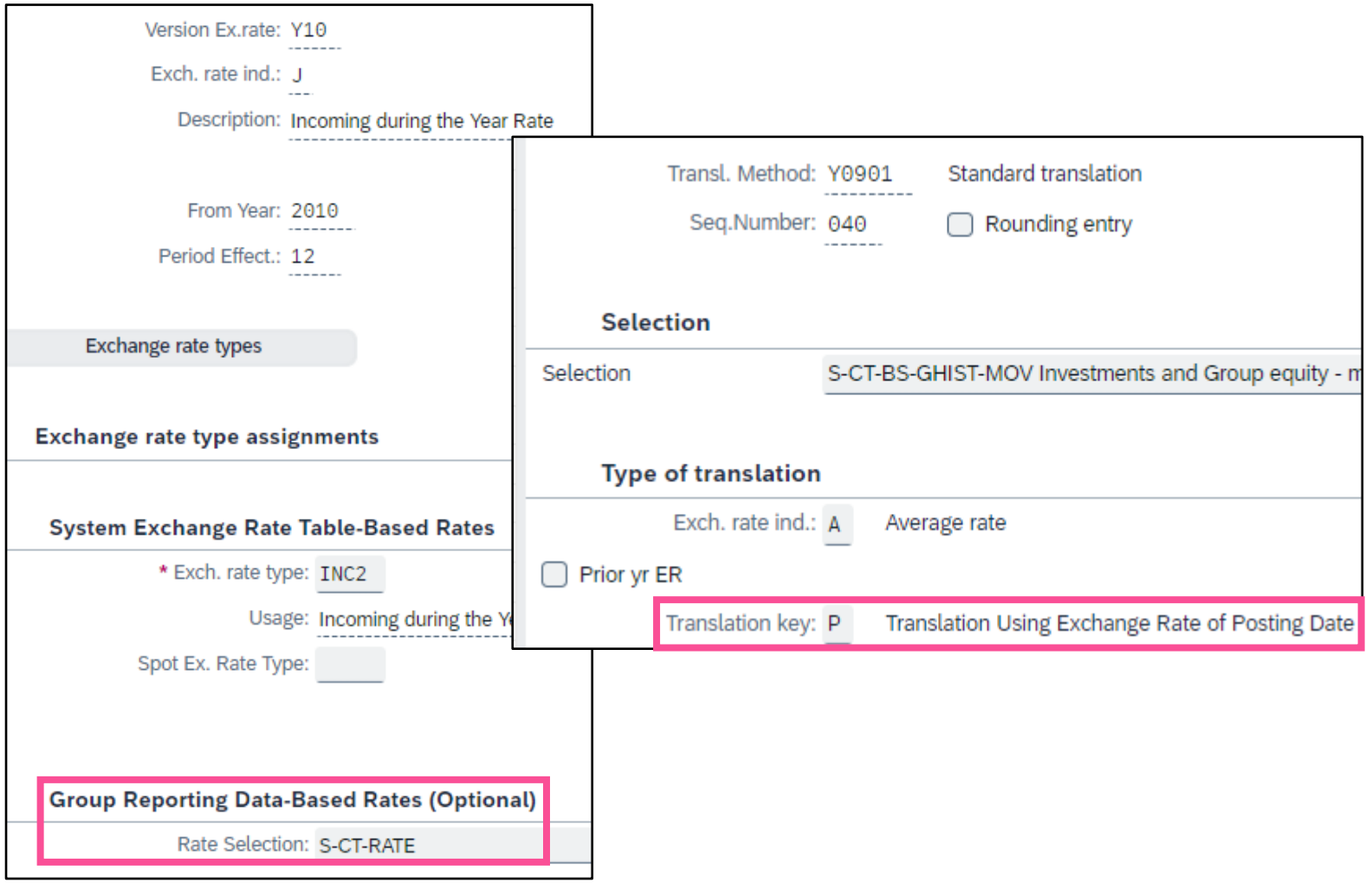
Using currency rates specific to a consolidation unit or specific to posting date

Need to translate the financial data of a consolidation unit using an **exchange rate that is specific to this consolidation unit** (Group Reporting Data-Based Rate)

Need to translate the financial data for a transaction using the **exchange rate valid for the posting date** of this transaction

Benefit

- Higher precision when translating the financial statements of a newly acquired consolidation unit
- Precise historical conversion for investments and equity leveraging the posting date of the original transaction



Finance: Group Reporting

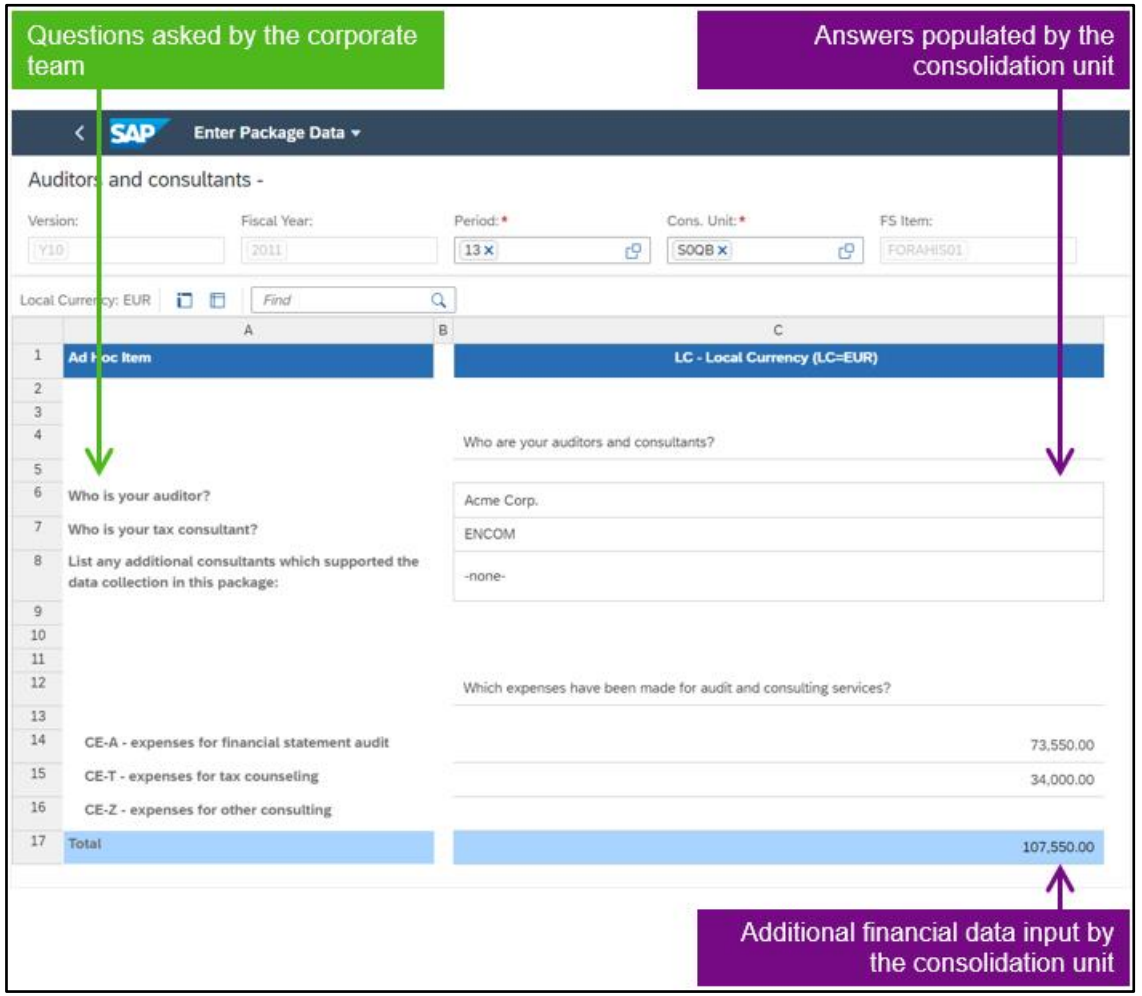
Collect multiple answers in forms and relate them to numbers

Advanced Accounting and Financial Close

Enable form designers to ask questions within a form that can now refer to numbers, such as: explain deviations, or provide supplemental information

Benefit

- Provide questions and answers a stronger semantic by referring to numbers
- Ask a question with answers for each item in a list and reduce the number of questions to create



Finance: More transparency regarding JVA-agreements than ever before

Joint Venture Accounting (JVA)

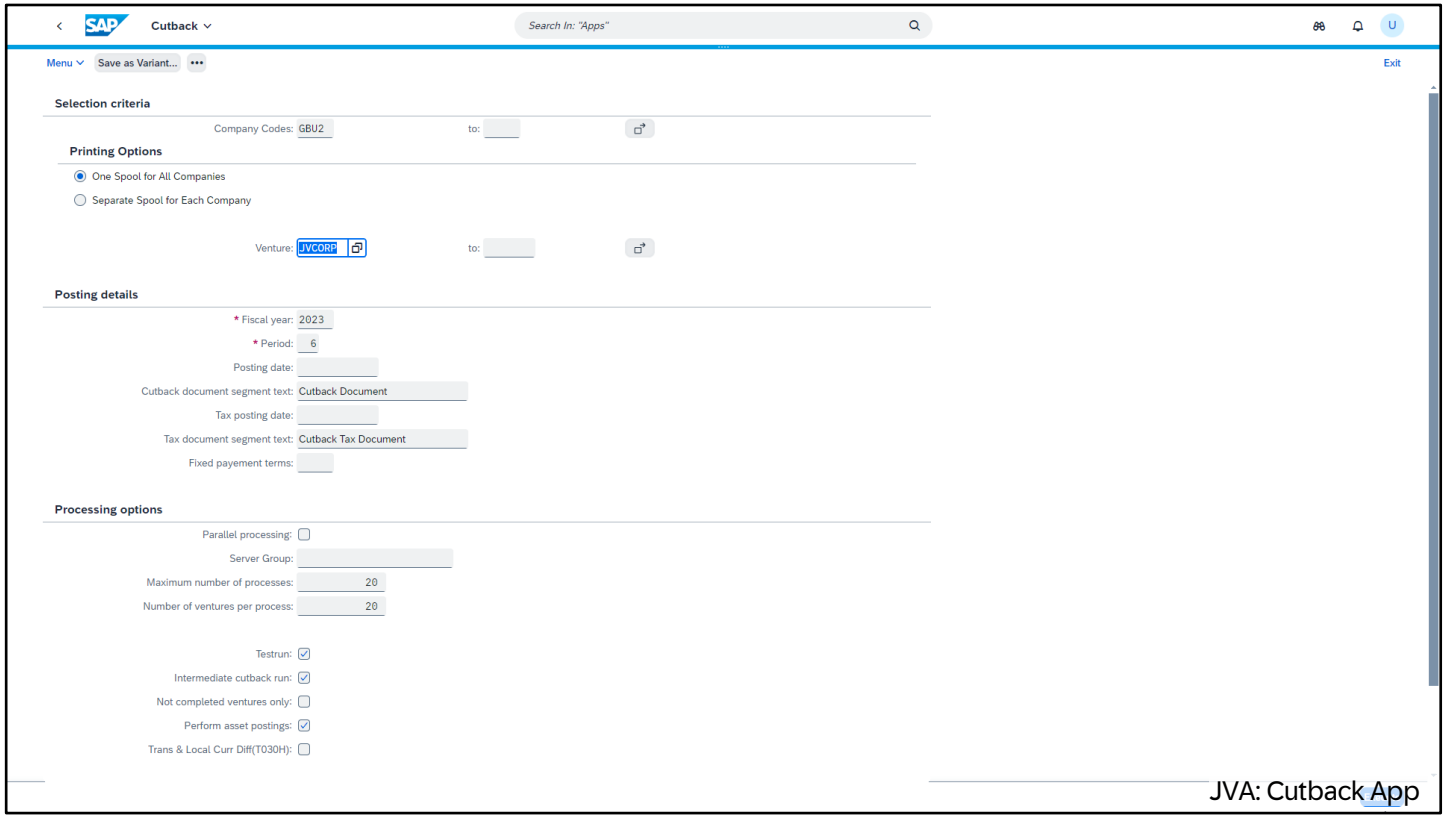
Business Background

A joint venture operating partner carries all operating costs throughout the accounting period. At the end of the accounting period, the operator‘s expenditures are shared by the non-operating partners and the operator, according to their equity shares. This process is called cutback. The SAP Joint Venture Accounting System (JVA) cutback process assigns expenses to partners.

Joint venture accounting on the universal journal: cutback mapping extensibility (CDS views) support

Enable multiple CDS views that support the exposure and consumption of joint venture cutback mappings (GJ25 - GJ32) for account and cost object types, including the following:

Cutback account mapping intracompany
Cutback cost center mapping intracompany
Cutback WBS mapping intracompany
Cutback order mapping intracompany
Cutback chart of accounts mapping intracompany
Cutback account mapping intercompany
Cutback cost center mapping intercompany
Cutback WBS mapping intercompany
Cutback order mapping intercompany
Cutback chart of accounts mapping intercompany



JVA: Cutback App

Finance: Advanced Financial Operations

Advanced Financial Operations

Collections Management

Improve management of past-due accounts and reduce days-sales-outstanding to accelerate cash flow. Proactively manage overdue receivables and prioritize collections efforts for maximum success.

Contract Accounting

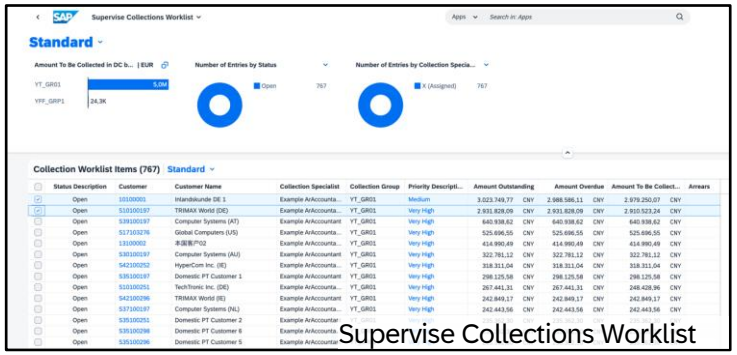
Manage accounting for a sales or service agreement that runs over an extended period of time.

Credit Evaluation Management

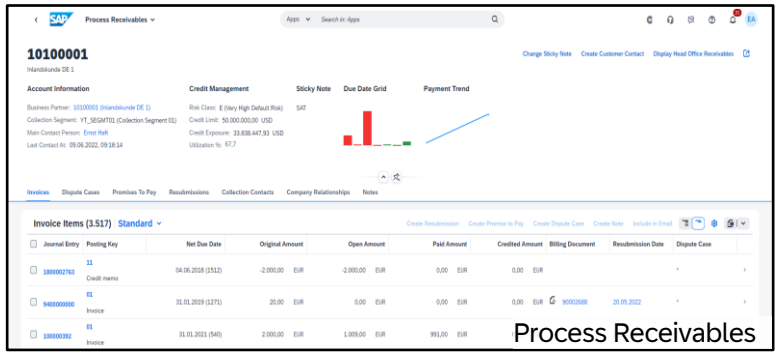
Manage credits efficiently to reduce the risk of financial losses and to optimize relationships with your business partners. Determine the risk of losses on receivables from your business partners early and in making credit decisions efficiently and automatically.

Dispute Resolution

Clarify and resolve customer payment disputes quickly and efficiently. Automate the escalation of billing disputes, proactively manage and solve those to reduce DSO and ensure customer satisfaction.



Supervise Collections Worklist



Process Receivables

Finance: Collections Management
Intelligent Cash Collections

Advanced Financial Operations

2023
FPS0+1

Insights for pro-active collections management

- Benefit from an **integrated process** from Financial Accounting to collection strategy execution in **SAP Collection Management**
- **Anticipate payment issues** - understand whether your customers will pay and when
- Segment your portfolio according to **specific risk indicators**
- Compare payment patterns and risk according to many business dimensions
- **Simulate different collection strategies** and decide which one fits best your current requirements
- Set the right priorities, focus for your collection team and execute your collection strategies, all in one flow
- Central point for **dashboards, reports and simulations** (SAP Analytics Cloud)

'With AiVidens, we now have a dynamic view on the evolution of the risk of our debt portfolio. We can better anticipate payment issues and therefore take early enough the necessary collection actions. Risk analysis was our first motivation, but the solution also helps us improve our cash position by targeting the clients that can make a big difference.'

CFO leading Media Company

30%
Overdue Amount reduction

20%
Cash Accuracy Improvement

20%
Operational efficiency improvement

Featured Partner

AiViDENS

Contact

Finance: Real Estate Management

Real Estate Management | Contract & Lease Mgmt. | Energy and Safety | Investment and Construction | Maintenance and Repair | Portfolio & Location Mgmt. | Workspace Mgmt.

Manage leases within a single application that is used to support many different leasing processes and be compliant with lease accounting standards without duplication/replication of abstracted lease data. The simplified cost allocation model supports leased in, leased out and internal allocations. Natively integrated with SAP S/4HANA Financial.

Mitigate environmental, health, and safety risks associated with energy-related fields.

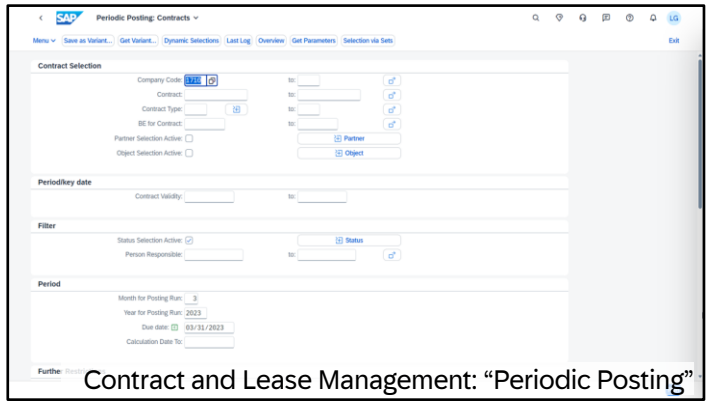
Support companies to include estimations, bid management, and project management for the efficient completion of investment projects.

Integrate with SAP Intelligent Asset Management to manage technical equipment and inventories. The extensive message, notification and order system supports the maintenance processes. It includes a systematic planning and control of all necessary maintenance and servicing measures.

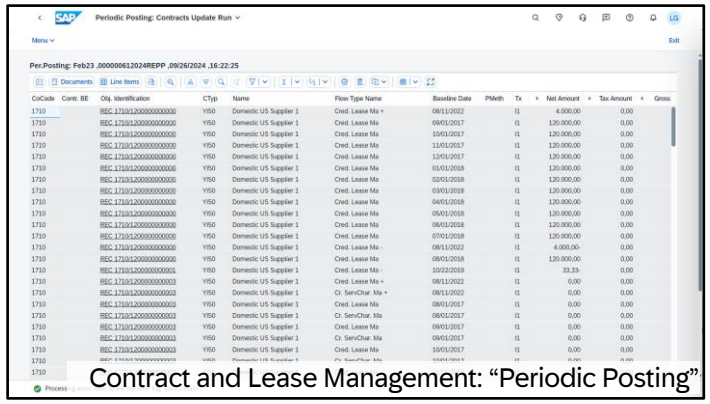
Optimize the management of your real estate portfolio and improve your building performance with master data model to enable end-to-end real estate business processes

One solution to perform space management for commercial and corporate requirements

Supports to increase the efficiency and utilization of the buildings.



Contract and Lease Management: “Periodic Posting”



Contract and Lease Management: “Periodic Posting”

Finance: Real Estate accounting, contract management and analytics at ease

Contract and Lease Management (CLM)

Intercompany Lease Processes in Real Estate Management

Enables the management of lease processes between two companies that belong to the same corporate group. The intercompany lease process allows you to do the following:

- Manage intercompany lease-out contracts
- Manage intercompany lease-in contracts
- Make periodic postings for intercompany lease contracts (accounts receivable and accounts payable)
- Run periodic valuation for intercompany lease contracts

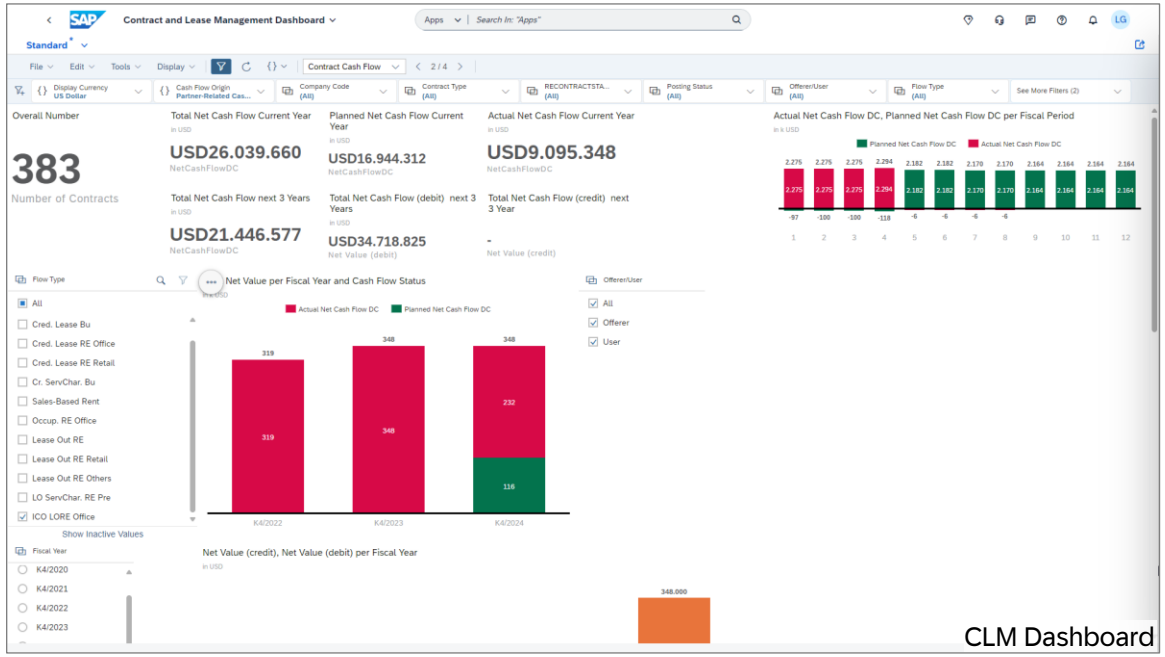
You can manage objects that are part of an intercompany lease process in the **Manage Usable Objects app** and the **Manage Rentable Objects app**.

The following new usage categories have been added to the **Manage Usable Objects** app:

- Intercompany Usable Object **with and without** Portfolio Structure

The following new usage categories have been added to the **Manage Rentable Objects** app:

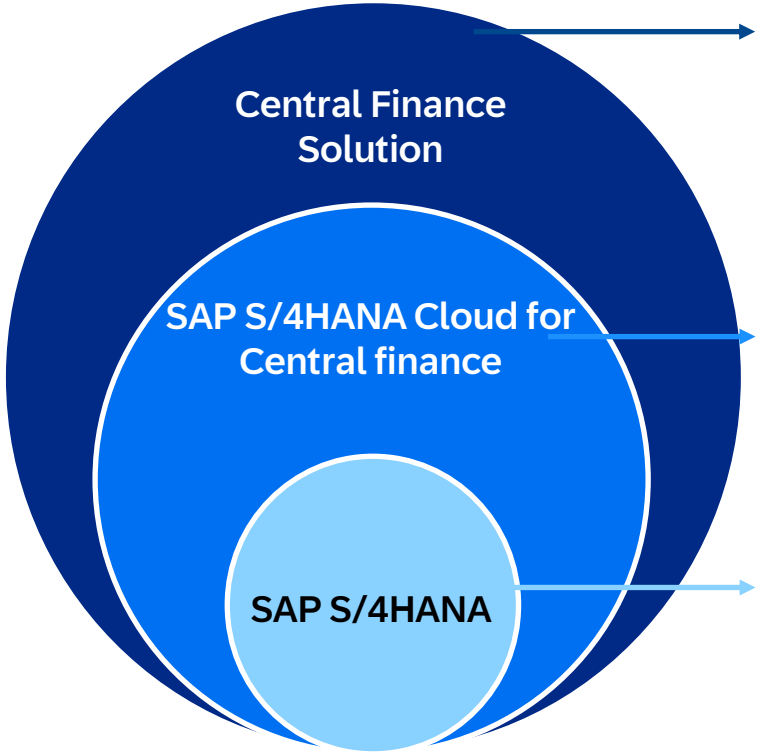
- Intercompany Rentable Object **with and without** Portfolio Structure



CLM Dashboard

Finance: Central business steering across SAP and non-SAP systems in real time

Central Finance value proposition in a nutshell



Central Finance as a solution

Central Finance Solution incorporates additional aspects and offers a comprehensive scope for a central platform in corporate finance, including group reporting for consolidation, AFC for financial closing, a treasury workstation, receivables management, and the Analytics Cloud for planning and analytics, among other features.
Central Finance enables and provides access to new **innovations** such as **RISE**, **AI**, and sustainability, particularly for large enterprises with multisystem landscapes.

Central Finance as a product

From a product point of view, the software solution Central Finance is more than a S/4HANA system. It is based on S/4HANA Cloud but it comes additionally with a set of enabling pure Central Finance technologies (like logging, replication, mapping, posting, error correction and reconciliation) and uses SAP SLT*, MDG, AIF.

Central Finance as a system

SAP S/4HANA Cloud for central finance foundation (also known simply as “Central Finance”) is a S/4HANA system installed as side-car, receiving financial accounting transactions via real-time replication from SAP or non-SAP ERP source systems. Only available for RISE Premium and RISE Premium Plus customers

Advanced reporting at segment, entity and group level

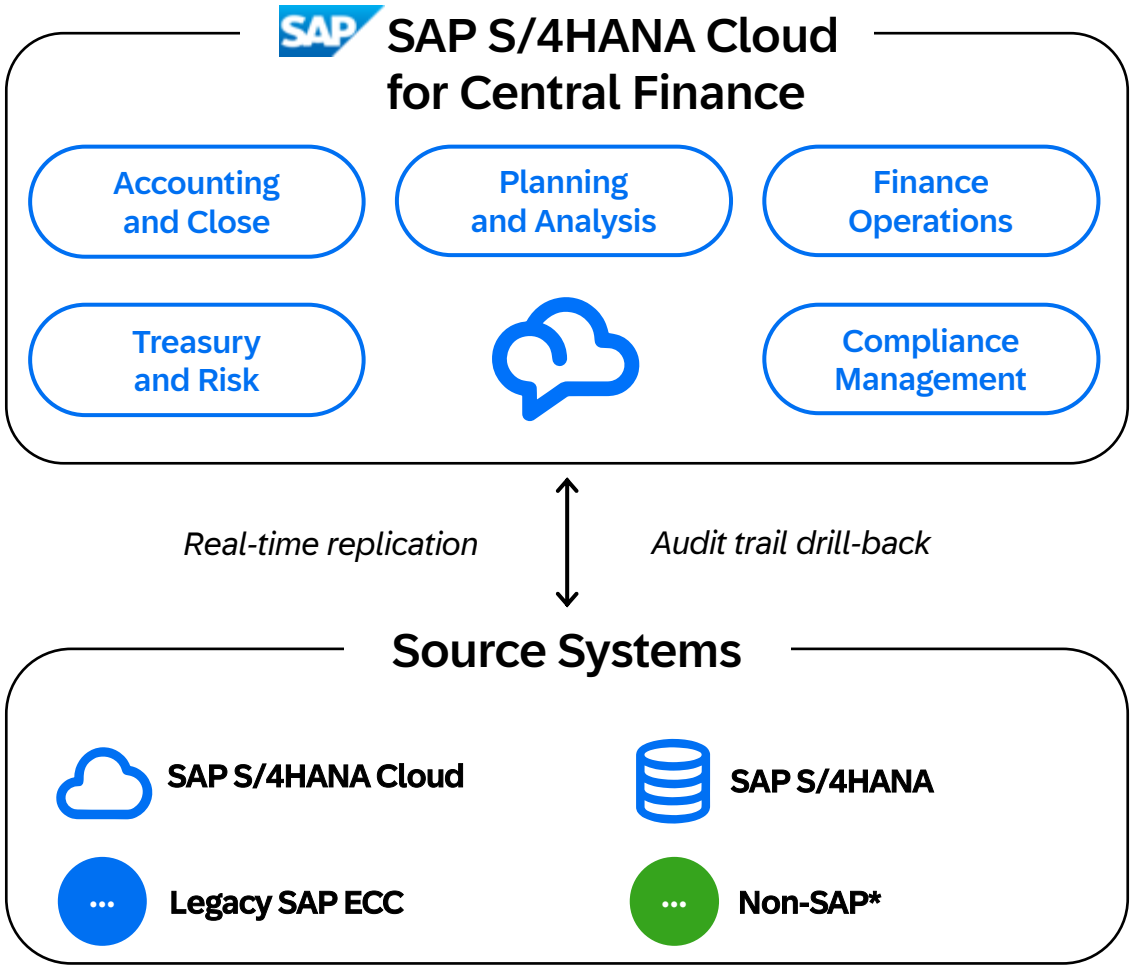
Scalable execution of local and central processes

Transformation platform for the digital business

* *SLT* ≡ System Landscape Transformation; *MDG* ≡ Master Data Governance; AIF ≡ Application Interface Framework

Finance: Getting a unified view of the business in a multi-system landscape

The non-disruptive step towards SAP S/4HANA Finance



** Non-SAP integration provided by **SAP Central Finance Transaction Replication by insightsoftware for SAP S/4HANA***

Advanced Segment, Entity, and Group Reporting

- All documents from source systems available in the **Universal Journal** in Central Finance in real-time
- Integrated financial data on the most granular level
- Consistent internal and external reporting

Scalable Local and Central Process Execution

- Reduce costs and increase efficiency by **centralizing financial processes**
- Minimize manual and re-deploy labor to value-added activities by higher degree of automation
- Access to latest technology innovations for operational excellency at all times

Transformational Platform for the Digital Enterprise

- Future-proof harmonized data model
- Retain **multi back-end** environment (SAP and non-SAP)
- Zero-touch Finance, exception-based finance management

Finance: Central Finance
Error resolution

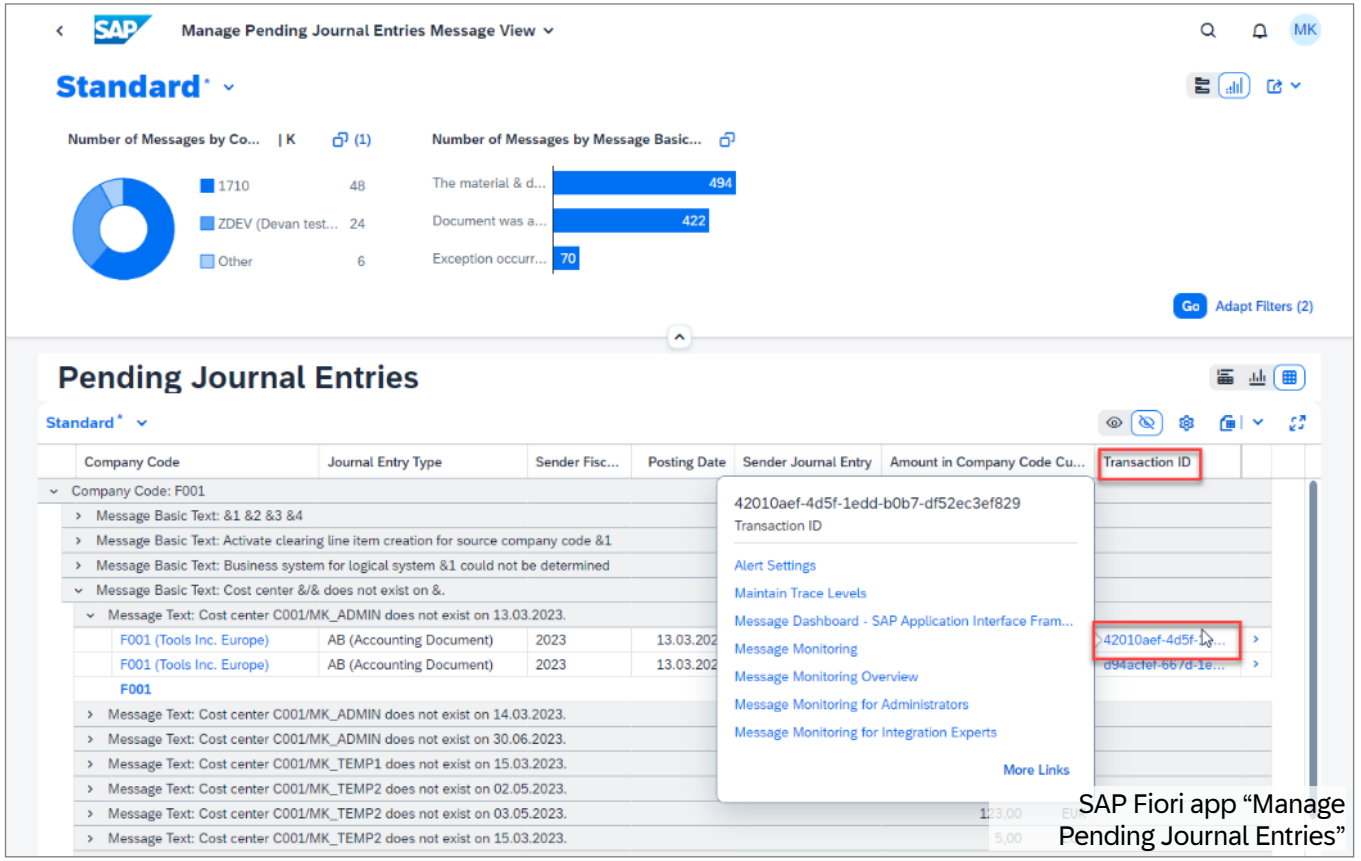
2023
FPS0+1

In the app **Manage Pending Journal Entries - Message** View, you can see all error messages from all pending journal entries including information about the financial impact of the documents. From this view, you can navigate to the pending journal entry in question and decide how to proceed.

- Distribute error messages to different recipients
- Group error messages in error categories
- Upload assignments of error messages to error categories from a spreadsheet

Benefit

- Increase efficiency by distributing error messages to the right recipients
- Improve overview and classification of different types of errors
- Lower costs by automating tasks in central finance



SAP Fiori app “Manage Pending Journal Entries”

Finance: Streamlined deviation analysis with Transfer of Plan Data app

Advanced Accounting and Financial Close | Central Finance | 2023 FPS2

Plan-versus-actual analysis with the transfer of plan data

Central Finance reporting innovation

Business Background

Using this report you can transfer period-based financial plan data for cost centers / activity types from one (SAP ERP) source system at a time to the Central Finance (SAP S/4HANA Cloud Private Edition or SAP S/4HANA) system. You start the plan data transfer from the Central Finance system, that is, you run the report in the Central Finance system per cost object type, in this case for the combination of cost center and activity type to support real-time deviation analysis for accelerated business steering based on current data

Business Value

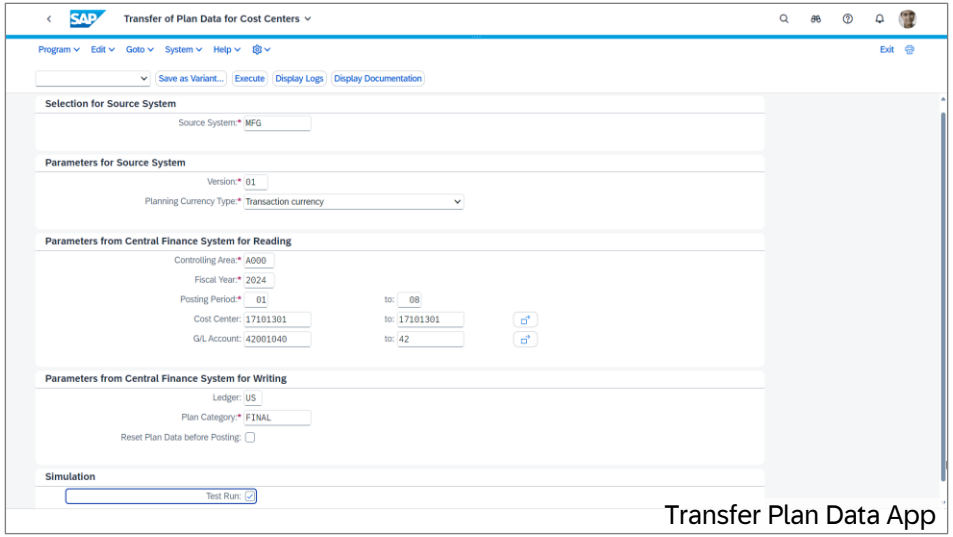
Seamless reporting and deviation analysis in Central Finance system of actual vs. plan data across multiple systems

Motivation/Background

Enabling Plan vs Actual Data Reporting in a Central Finance system

Solution/Feature

- Report to transfer plan data from SAP ECC source systems
- Replication and conversion of object-based plan data (table COSS/COSP to ACDOCP)



Transfer Plan Data App

Finance: Central and accelerated handling of asset accounting

Central Finance Purchase Order integration

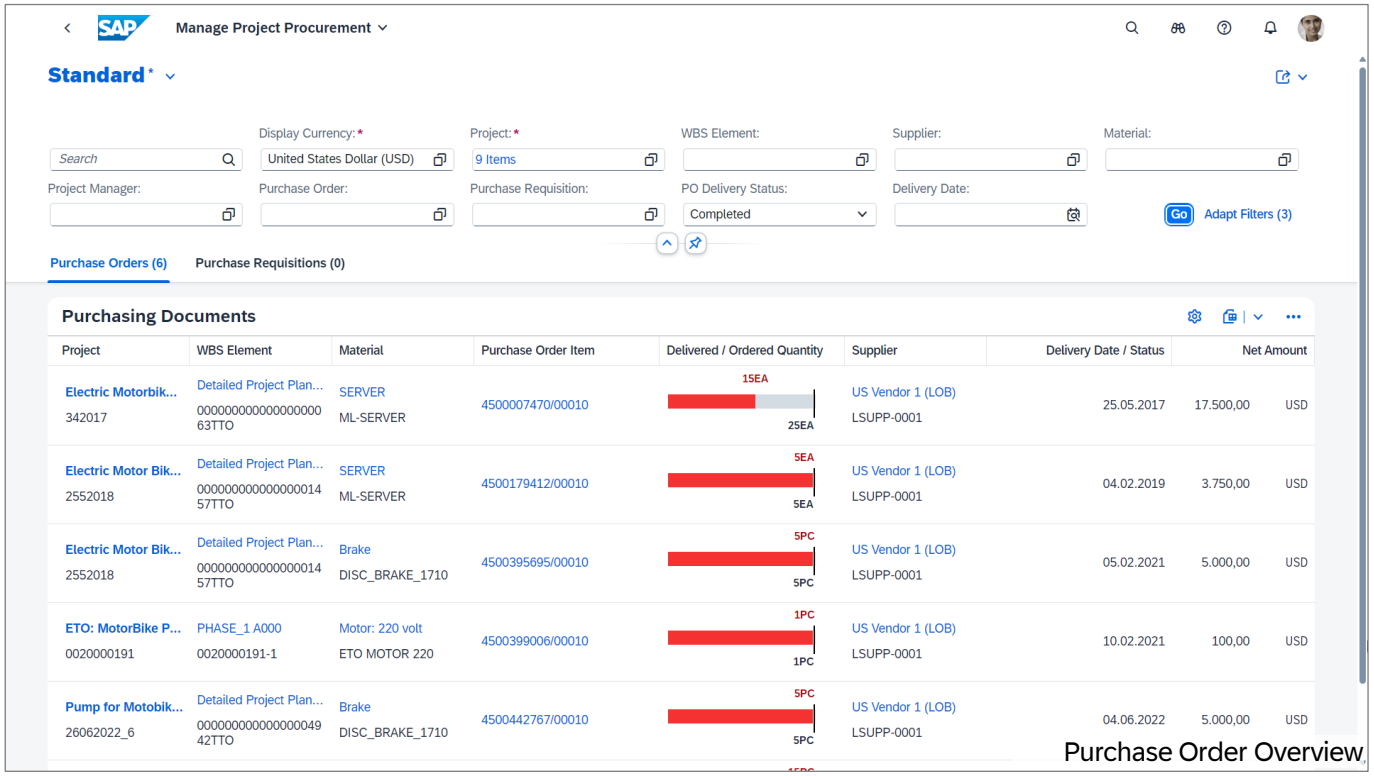
Business Background

Using the app ‘Manage Asset Assignments to Purchase Orders’ (Central Finance), you can call up a worklist that shows the replicated purchase order line items which are related to an asset acquisition based on the configuration settings, its asset assignment status, and its corresponding asset acquisition posting status. You can then decide how to handle the line items with incomplete or error statuses

Purchase order integration for central asset creation in central finance

New functionalities for central asset accounting, which currently allows management of fixed assets and asset accounting in the central finance system and enables users to switch off asset accounting in the source system for selected company codes:

- Central asset creation from a replicated accounting view of a purchase order
- Automatic asset acquisition posting in central finance

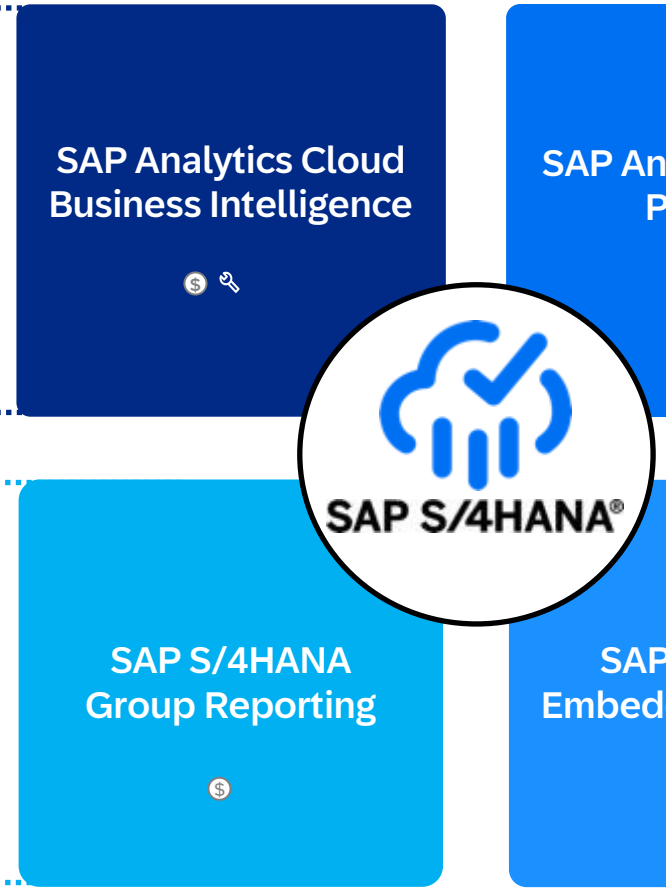


Purchase Order Overview

Finance: Strategy for Financial Planning, Consolidation, and Reporting on and within SAP S/4HANA

Strategic data visualization

- Intelligent decision-making platform
- Only analytics solution to bring together BI, Planning, and Predictive in the cloud
- Smart features deliver insights with embedded ML analytics available on any device
- Flexible, accurate, and powerful construction of planning scenarios
- Accelerated time to value
- Embedded SAP Analytics Cloud Stories and multidimensional reporting possible in SAP S/4HANA



Integrated financial planning

- Integrated financial planning and budgeting processes based on detailed and up-to-date information to support business decisions.
- Coverage of main planning processes, optimization of planning execution and support of planner by system intelligence & simulation
- Flexible and consistent modeling of planning and simulation processes across the organization
- End-user-driven processes, enabling closed-loop performance management
- Augment financial analysis with artificial intelligence to create a more accurate forecast
- Re-usability of allocation logic for actuals and plan

Integrated entity and group close

- Local and group close can share same master data and transactional data
  - No data duplication
  - Full range of universal journal dimensionality available for analysis
  - Tasks such as intercompany matching and currency translation can be run before period-end (supporting continuous close)
- Full consolidation
- End-to-end transparency with full audit trail from SAP S/4HANA Group Reporting through to the underlying accounting journals

Real-time integrated analytics in SAP S/4HANA

- Real-time operational reporting powered by SAP HANA
- Completing the process by combining analytical and transactional components
- Fact-based transaction handling and decision support (e.g. by using embedded KPI's, or work lists prioritized by facts) – "insight-to-action"
- Fast growing business content (data models and SAP Fiori-based applications)
- Strong integration with SAP Analytics Cloud and SAP BW/4HANA

Finance: Additional LoB Finance Solutions on SAP Analytics Cloud

SAP Analytics Cloud

Within the LoB Finance context, both reporting and dashboarding content as well as planning content is delivered out of the box, allowing you to make use of available best practices and decrease the implementation effort.

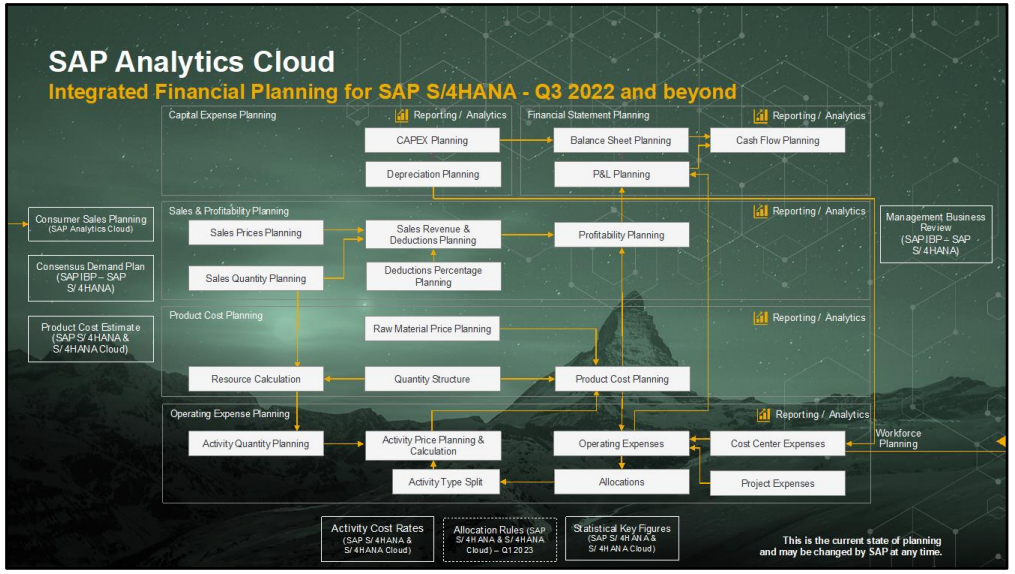
Some of the enhancements delivered in 2022 focusing on integrated enterprise-wide planning and transparency for the business user include (non-exhaustive)

Planning Integration & Content

- Financial planning content integration with sales planning
- Planning consolidation

Prediction & Collaborative Simulation

- Predictive Liquidity Planning
- Predictive accounting integration
- Restatements And Simulations (transparent changes on past closings)



Finance: Delta scope summary I

2023 FPS2

Subscription Billing and Revenue Management

- **Subscription Order Management** innovations include:
  - Enhanced capabilities in **product listing and credit management**
  - **Enhanced integration capabilities** in subscription orders and contracts
  - Integration with **SAP Global Trade Services** for SAP HANA
  - Enhancement of the **SAP Fiori apps for contract lifecycle management** to support SAP Convergent Charging parameters
- **Convergent invoicing** innovations include:
  - Credits and Debits: **support for gross and net amounts**
  - **Back Dated changes** when integrated with SAP Subscription Billing
  - **SAP Fiori app enhancements** for convergent invoicing
  - **Intercompany (ICO) postings** in convergent invoicing

Advanced Accounting & Financial Close

- **Joint Venture Accounting (JVA)** innovations include:
  - JVA on the universal journal: **cutback mapping extensibility** (CDS views) support
  - JVA on the universal journal: central-finance **replication BAdIs** for JVA master data
  - Joint venture accounting on universal journal: **cutback postings with invoice reference document number**

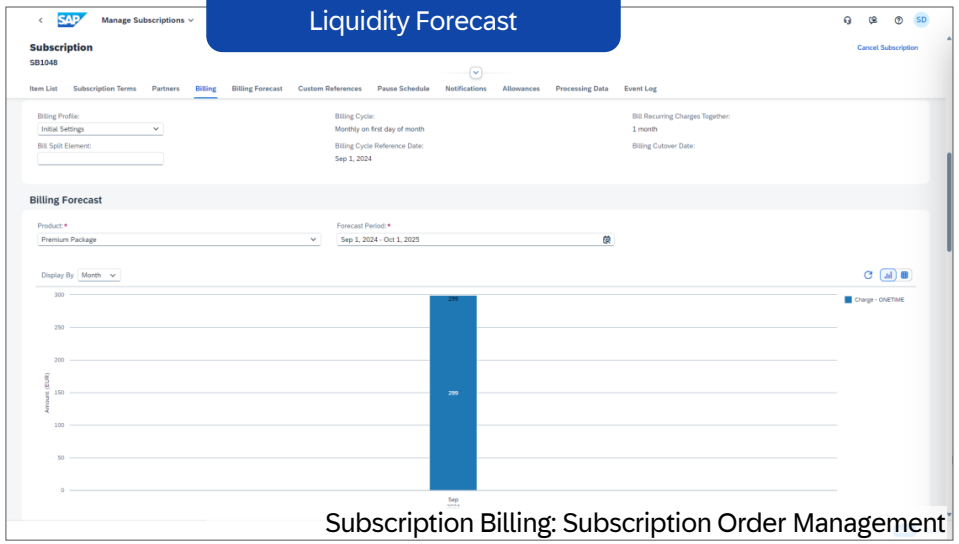
Treasury Management

- **Financial Risk Management** innovations include:
  - **Daily exposure monitoring** in the hedge management cockpit
  - Balance sheet **exposure on central calendar** – working day shift
  - FX hedge accounting flexibility: **critical terms match approach**
  - **Simulation** of period-end closing with **different rate types**
- **Payments and Bank Communications** innovations include:
  - Flexible incoming payment **approvals**

Accounting and Financial Close

- **Revenue and Cost Accounting** innovations include:
  - **Migration to optimized revenue accounting in a distributed scenario**
  - Improved error handling and usability **in SAP Fiori apps for revenue accounting**
  - Enabling projects with network activities in **event-based revenue recognition**
- Product Costing innovations include:
  - **Subcontracting** as part of universal parallel accounting

Predictive Liquidity Forecast

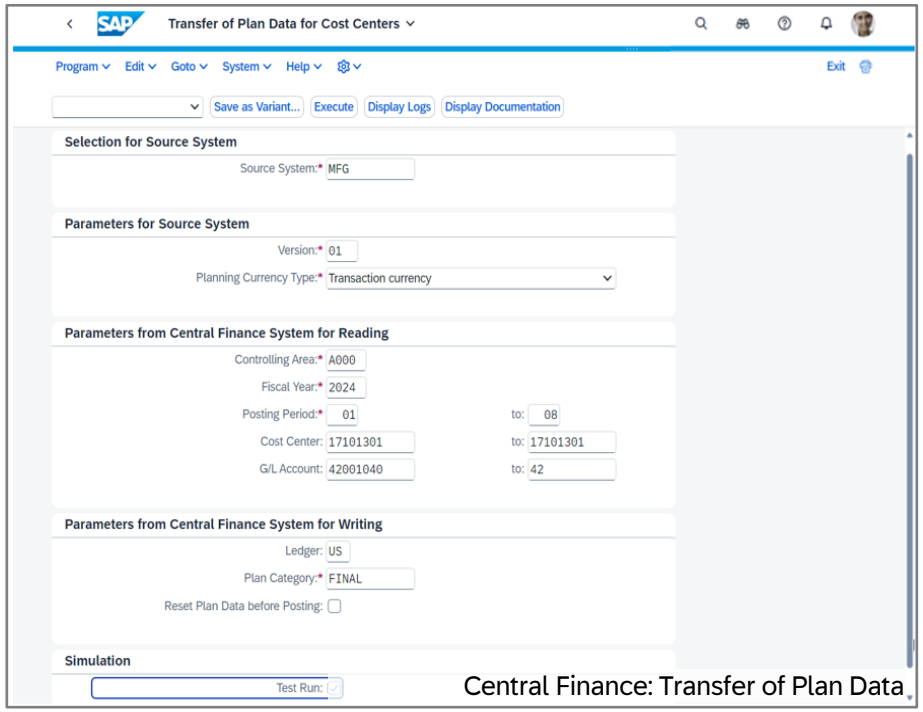


Subscription Billing: Subscription Order Management

Finance: Delta scope summary II

SAP S/4HANA Central Finance

- **Enhanced planning features** with transfer of plan data across systems
  - Increased efficiency in plan vs actual data reporting for several source systems in a Central Finance (cFIN) system
  - Planning & replication for cost center and activity type
  - Status overview with application log and message status
- **Purchase Order integration** for central asset creation in cFIN
  - Swift integration of the procurement process and asset accounting
  - Complete the asset acquisition process in cFIN
- **Harmonized material cost estimate** analysis
  - Provide a harmonized material cost estimate on one CA* currency
- **Holistic Accounting View of Logistics (AVL)**
  - Replication, deletion and enhanced reporting for the new types of sales order categories service contract and scheduling agreement Enhancing customer reporting requirements in Central Finance by expanding the service contract category within AVL tables
- **Centralized tax reporting** for replicating parked docs and more
  - Improved VAT reporting for dedicated countries
  - Integrate RITA** posting for reporting in central system



Central Finance: Transfer of Plan Data

Real Estate Management

Contract and Lease Management innovations include:

- **Plan-versus-actuals report** for usable objects
- Enabling contract management for **intercompany leases**
- Usable and rentable object data extraction to **enable cross-platform analytics** with SAP Datasphere

Enterprise Risk and Compliance

International Trade Management innovations include:

- Integration with **SAP S/4HANA Service**
- Integration with **Service Order Management**
- Integration with **SAP Watch List Screening**

**Controlling Area; **SAP RITA* ≡ Registration for Indirect Taxation Abroad

Research & Development

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

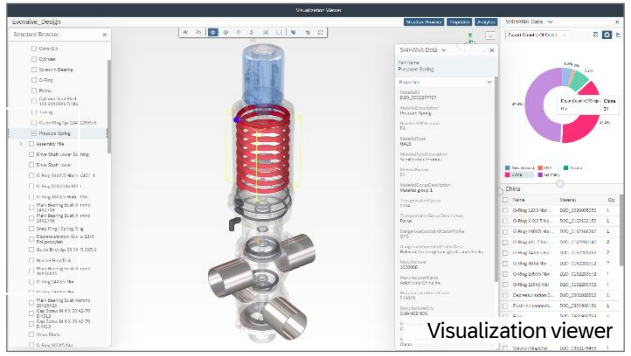
R&D: Overview

Modular Cloud LoB Solutions

additional license

additional installation

- **SAP Enterprise Product Development (EPD)** — Engineering – Visualization – Collaboration – Innovation Management -- Partner applications.
- **SAP Cloud for Projects** — Collaborative project and resource management.
- **SAP Responsible Design and Production** — Respond to Extended Producer Responsibility (EPR) obligations and other public commitments.


Visualization viewer

SAP S/4HANA LoB Apps

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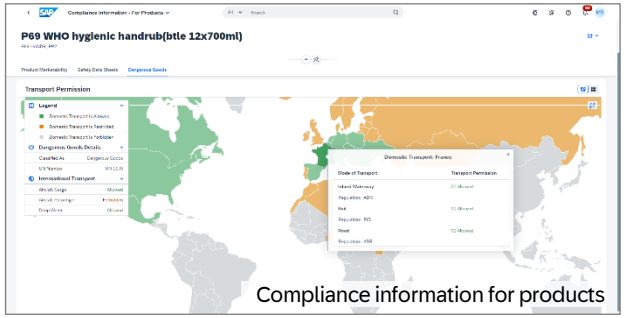
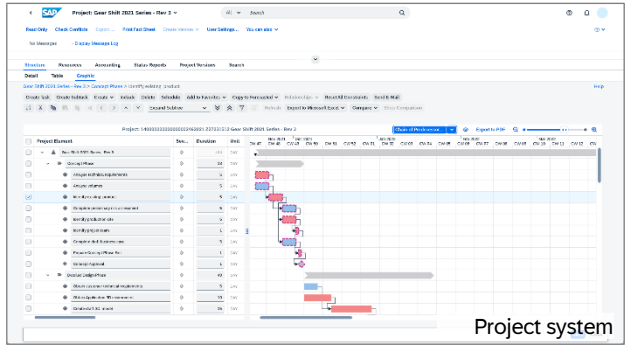
Portfolio and Project Management	***Increase*** efficiency and automation for gaining insights for products and projects into cost, time, scope, resources, and quality performance.
Product Lifecycle Management	***Manage*** product information holistically and efficiently across the complete lifecycle, ensuring end-to-end visibility from requirements to design to manufacturing to service, in process and discrete industries.
Product Compliance	***Ensure*** compliance of products and chemicals to secure the right to market, sell, and ship products. ***Provide*** safe and compliant transportation of hazardous materials.
Circular Economy	***Enable*** design, development and promotion of products that can be reused, repaired and remanufactured.



Compliance information for products

SAP S/4HANA Enterprise Management

Product Engineering	***Provide*** a 360-degree view of all relevant aspects in the early stages of a product's life, from first product idea through design to handover to manufacturing.
Project Control	***Gain*** insight into cost, time, scope, resources, and quality performance of products and projects.


Project system

R&D: Business area overview

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- **SAP Cloud for Projects** Collaborative project and resource management.
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Portfolio and Project Management	Commercial Project Management	Portfolio Management	Project Schedule Management	
	Project Management	Project Resource Management		
Product Lifecycle Management	Recipe Development	Authoring Tool Integration	Product Development	Handover to Manufacturing
	Model-Based Enterprise	Design Systems Interoperability	Product Change Management	Advanced Variant Configuration
Product Compliance	Product Marketability and Compliance	Safety Data Sheet and Label Management	Dangerous Goods Management	
Circular Economy	Responsible Design and Production			

SAP S/4HANA Enterprise Management

Product Engineering	Product Development Foundation	Variant Configuration
Project Control	Project Logistics Control	Project Financial Control

R&D: Engineering

Project Control

Project Financials Control

Define **work breakdown structures** as basis for **hierarchical project accounting**. Plan costs and budgets and track actual costs **tightly integrated** with core business processes. Monitor project progress and financial performance enabling the avoidance cost overruns on time.

Project Logistics Control

Define project structures comprising suitable **work breakdown and network structures** as basis for project **logistics** planning and execution. Use **simplified** code and optimized data model in line with a simplified authorization concept and initial set of **CDS views** for external consumption.

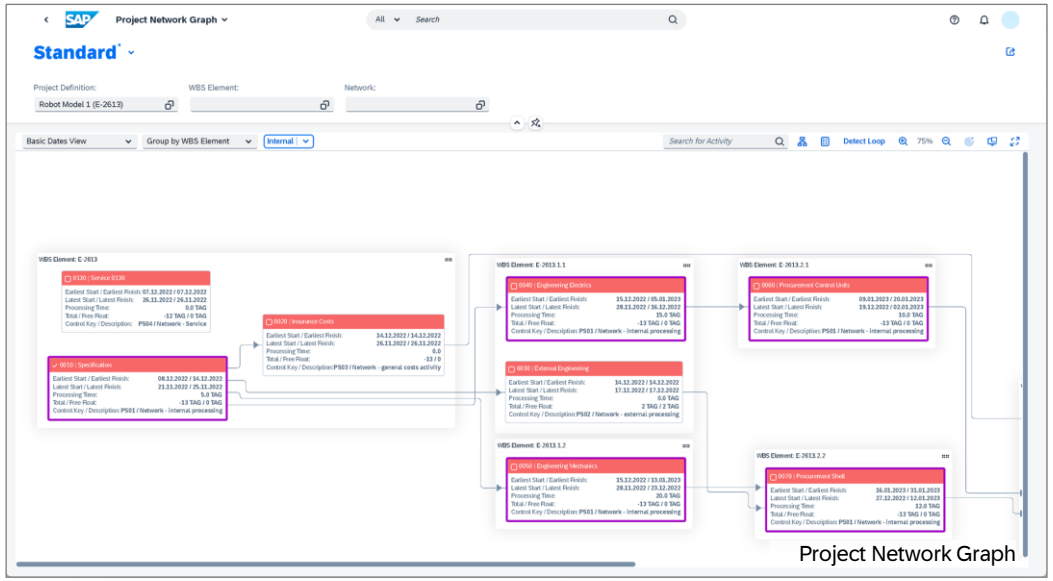
Product Engineering

Product Development Foundation

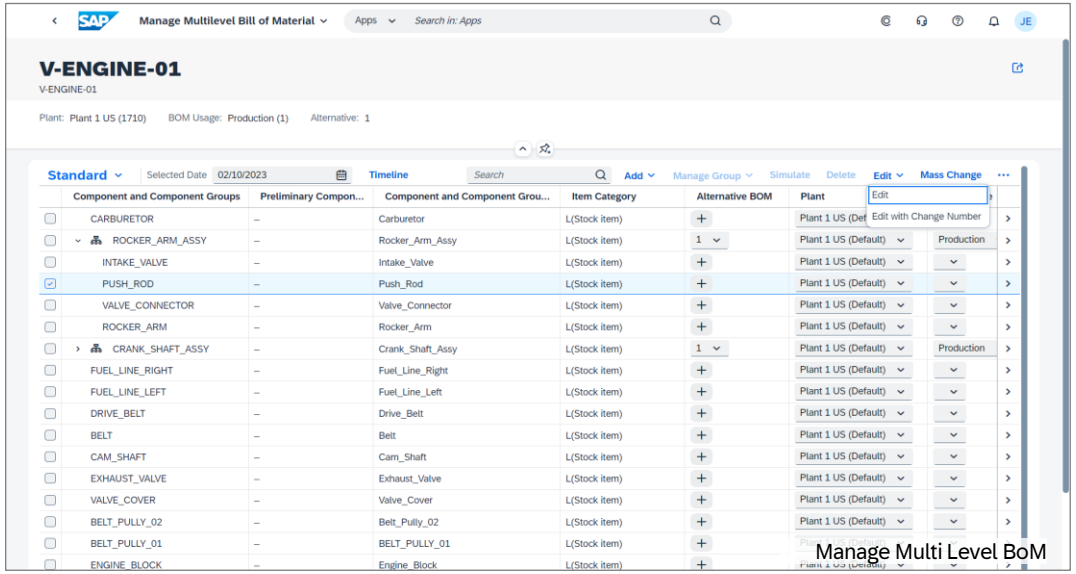
Manage and **integrate customer-driven** innovations throughout the **product development process**. Define all the **design requirements** and **constraints** while maintaining rigorous design standards. **Increase** the **reuse of components** and providing information sooner.

Variant Configuration

Define, develop, test and **simulate** the **configuration of product models**. Enable your business processes to handle highly **individualized products in engineering, sales, quality management,** and manufacturing. Allow integration of variant **configuration** and **classification** data into **embedded analytics**



Project Network Graph



Manage Multi Level BoM

R&D: Project Systems

Navigational project assistant capabilities for Joule copilot

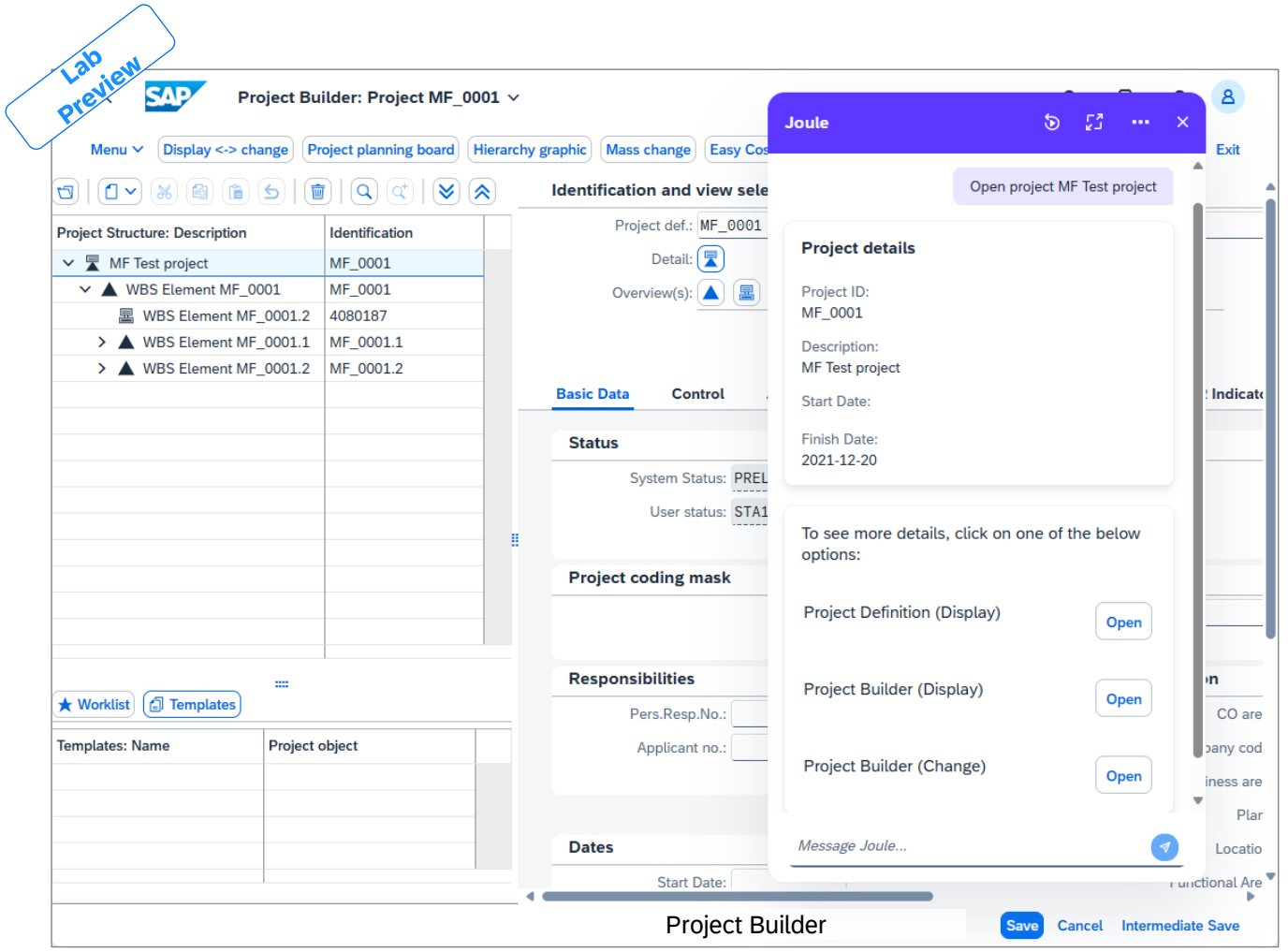
Project Control | Project Financial and Logistics Control | 2023 FPS2

Joule support for project assistants

- Increase user satisfaction by supporting navigation in the Fiori Launchpad via natural language processing in the intelligent copilot Joule
- Easily find and open apps to display project data
- Open projects, WBS elements, or networks directly in the Project Builder or dedicated object pages for display or editing purpose using natural language processing

Joule content planned for Q4:

- Improve user efficiency by querying project master data using the Joule copilot
- Change selected project master data using natural language processing in Joule

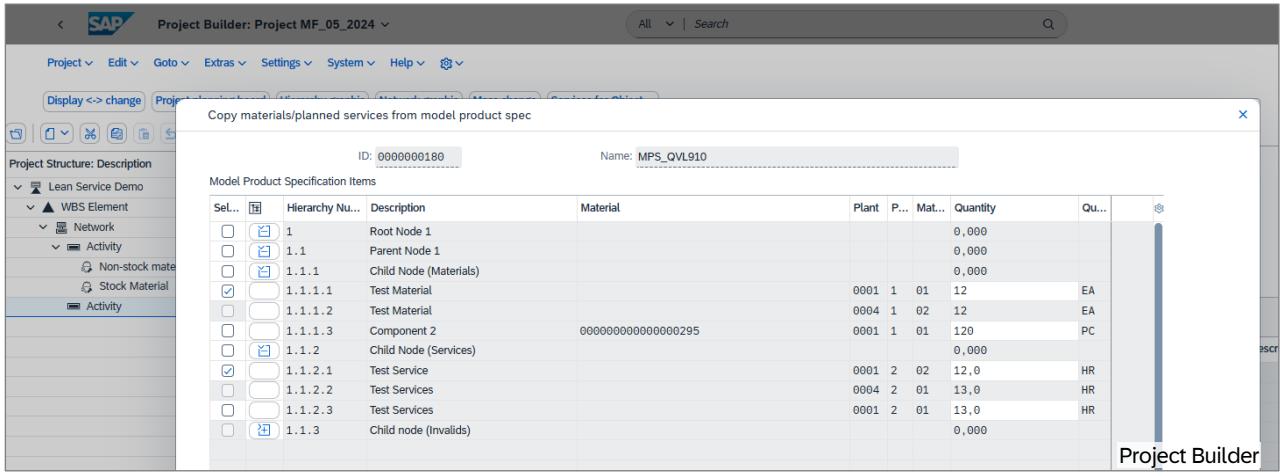


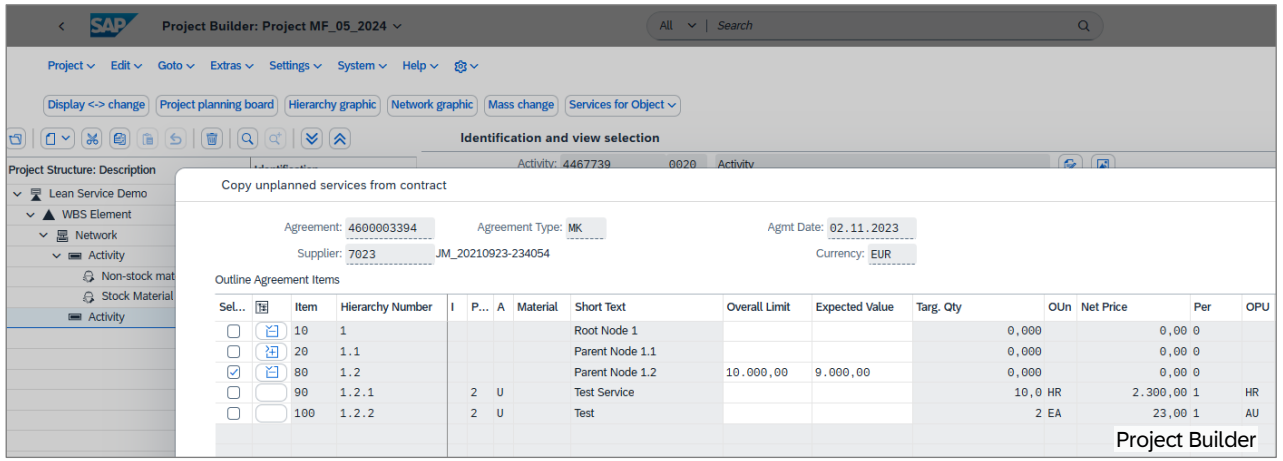
R&D: Project Systems
Enablement of lean services procurement

Project Control | Project Logistics Control | 2023 FPS2

Simplified planned services in lean service procurement

- Lean service capability enables one to plan and purchase external services as an alternative to using service activities in the Project System.
- Planning, purchasing, and monitoring of lean services from project networks is now made possible.
- Efficient project related purchasing is facilitated through grouping and planning of both material and service components - planned or unplanned - in a harmonized way.
- Simplified service selection with selection of services and materials from model product specification for planned services; ability to assign contracts or contract items to unplanned services.
- Extensibility option provided to validate overall limit and expected value for unplanned services.
- Simplify handling of unplanned services in the lean service procurement process and the service entry sheet.



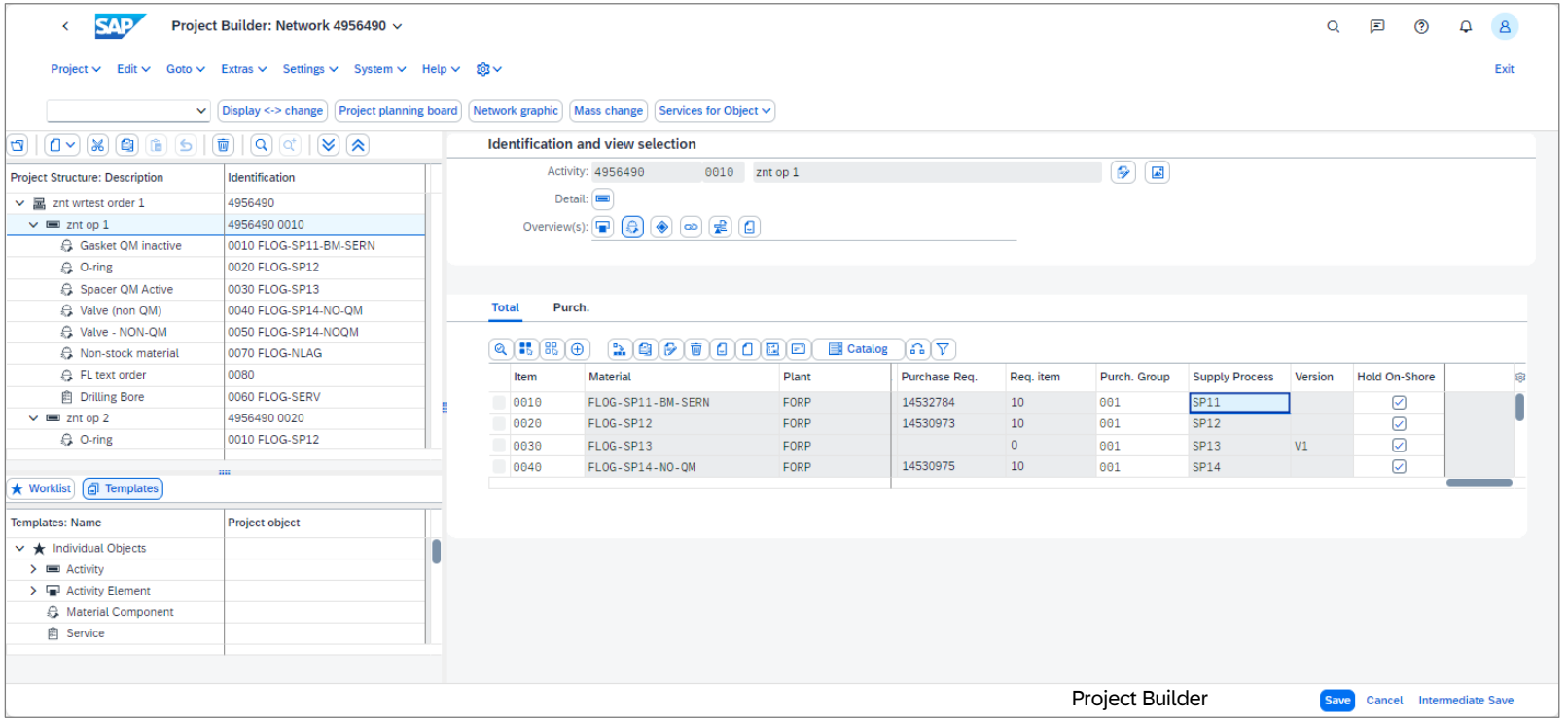


R&D: Project Systems

Integration of field logistics with project systems for network orders

Project Control | Project Logistics Control | 2023 FPS2

- Enabling project systems to support the field logistics processes - between a supplying base and remote locations
- Integrate field logistics processes with project systems starting from supply process derivation in the network order and supporting the demand initiation from projects
- Support the logistics between a supplying base and remote locations, receiving products needed for network orders at the base and forwarding them to the remote location, as well as return from the remote location to the base



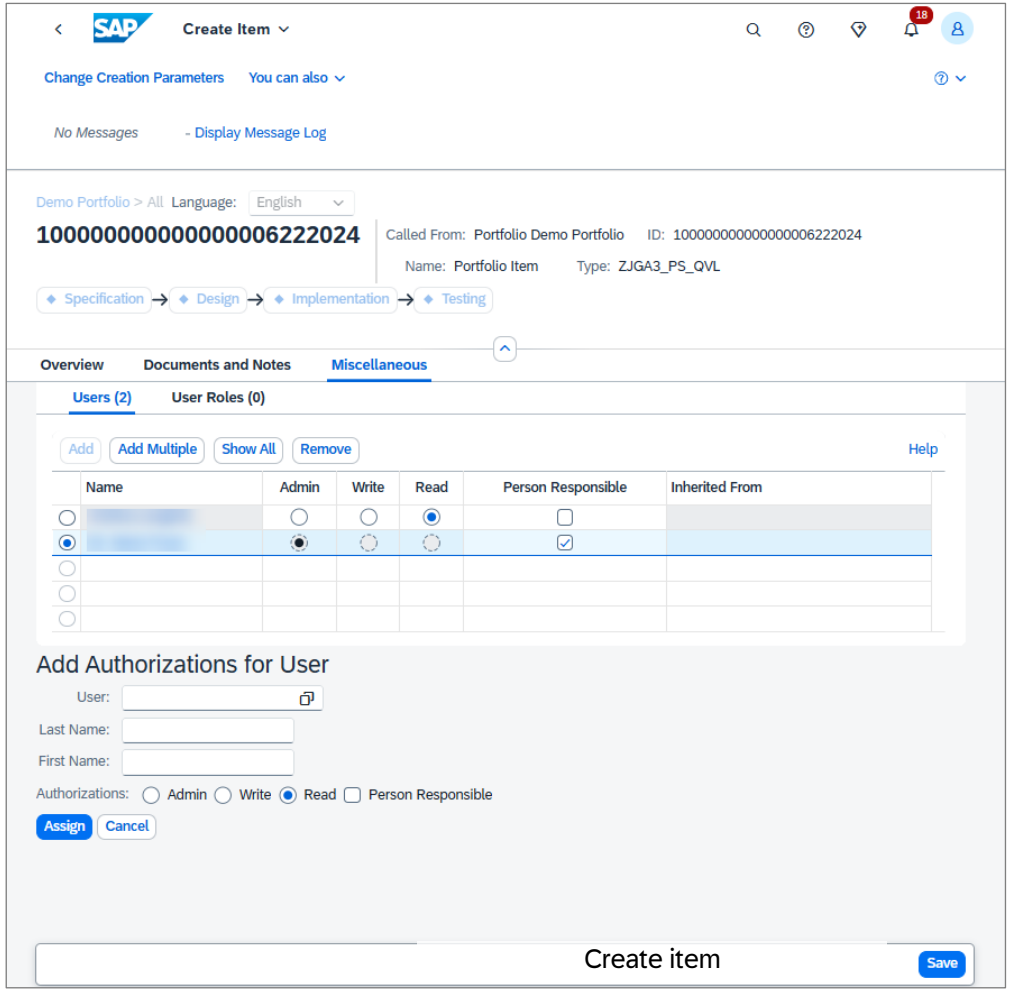
Project Builder

R&D: Portfolio and Project Management

Simplified authorization handling for portfolio management

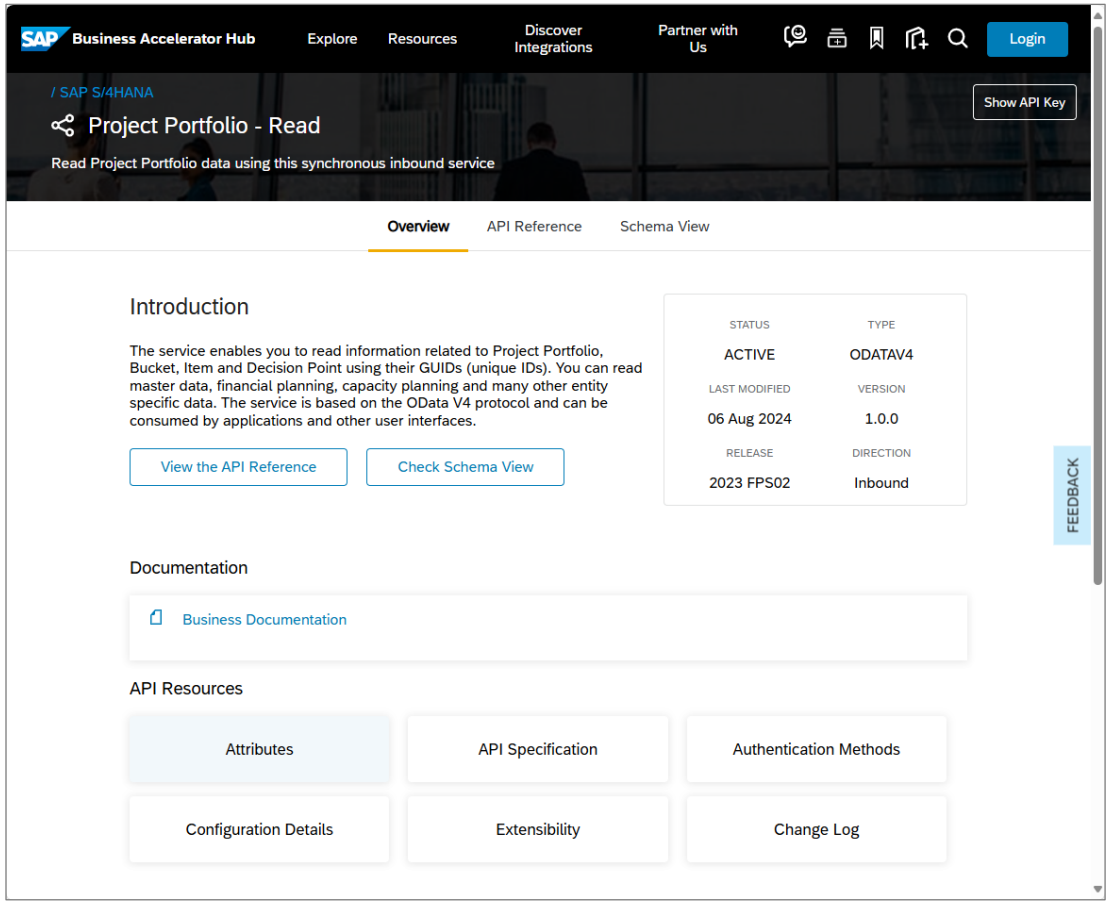
- Simplified authorization management is now available in Portfolio Management, making it easier for you to analyze and maintain user authorizations for portfolio objects.

- Accelerated and more-comprehensive authorization handling for portfolio objects through:
  - Removal of “none” authorization.
  - Removal of prioritization rules based on inheritance or authorization holder objects.



R&D: Portfolio and Project Management
Reading portfolio data using an API

- APIs for reading portfolio data incl financial information based on semantically aligned one domain model resulting in increased stability of integrations.
- New Project Portfolio – Read API enables read of information related to Project Portfolio, Bucket, Item and Decision Point. It enables the read of master data, financial planning, capacity planning and many other entity specific data.
- Improve process flexibility by using create, update, and delete APIs for portfolio financial information.
- Simplify the exchange of business objects and improve data consistency by leveraging the suite quality “aligned domain models, APIs, and events”.



R&D: Product Compliance (1)

Product Compliance

Product Marketability and Chemical Compliance

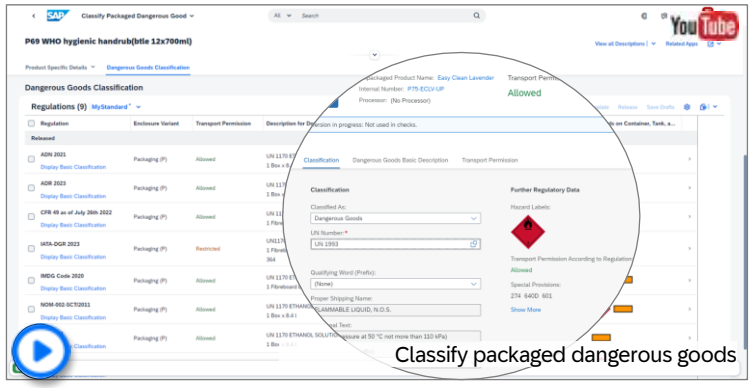
- Manage material and ingredient information and satisfy legal and customer requirements.
- Collect compliance data from suppliers and customers and publicize compliance information.
- Automatically track volumes of regulated substances, assess and verify products and materials for different **compliance requirements** including required registrations and tracked-versus-allowed quantities.

Dangerous Goods Management

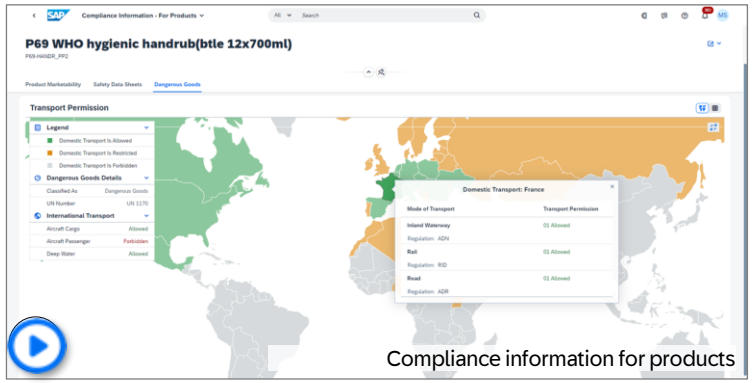
- Manage dangerous goods information centrally for all products, regions and modes of transport.
- Automate **dangerous goods classification** and leverage included dangerous goods regulatory **content**.
- Ensure that all shipments are DG compliant through integrated dangerous goods **checks**, providing adequate packaging, accurate transportation modes and routing.
- Automate the creation and provisioning of dangerous goods documents.

Safety Data Sheet and Label Management

- Manage substance and regulatory information centrally, streamline component and product classification, and automate **safety data sheet and label creation**.
- Use **regulatory content** to reduce effort and ensure ongoing compliance.
- Automate label printing and **safety data sheet shipping** integrated in logistics processes.



Classify packaged dangerous goods

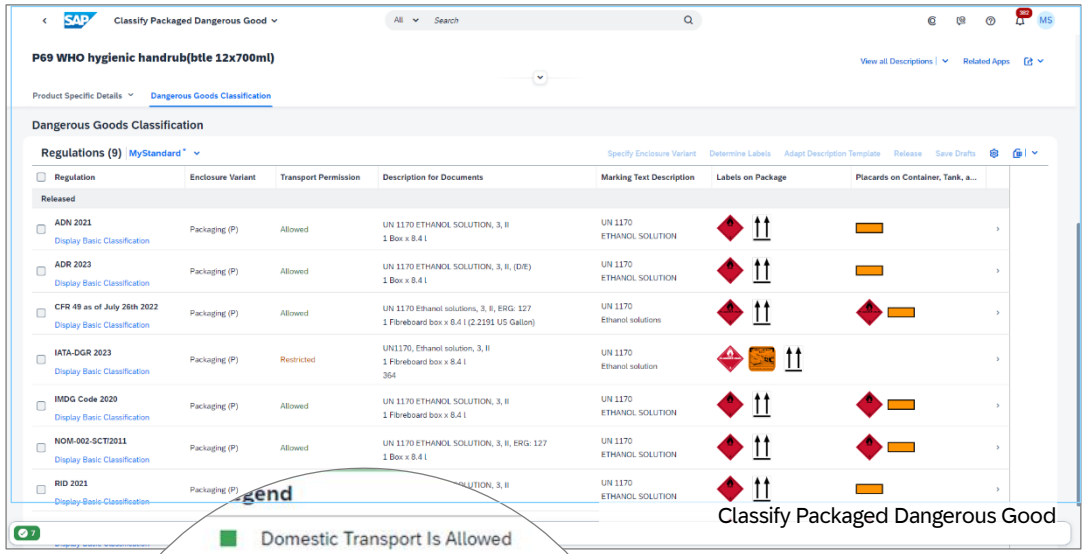


Compliance information for products

R&D: Product Compliance (2)

Product Compliance

- **Easy conversion from the classic world:** classic EHS Product Safety, based on the specification database, is available in SAP S/4HANA (perpetual scope).
  - Available since release 1809: the new, re-architected **Product Compliance** solution, introduces a new and simplified data model.
  - Completely Fiori-based: dashboards and intuitive apps.
  - Comprehensive integration in order-to-cash and procure-to-pay processes.
  - Regulation aspects (marketability, dangerous goods (DG), etc.) implemented via new data model, with multiple versions at the same time.
  - Simple customer extensibility of regulation aspects.
- **Dangerous Goods Management**: massively extended, pre-delivered regulatory DG content, incl. graphics and phrases; automated DG data maintenance.
- **Safety Data Sheet (SDS) Management**: automated triggering of SDS shipment: in delivery processing and subsequent shipment for US and EU.
- **Compliance checks:**
  - Now in all relevant sales documents (quotations, sales orders, sales contracts and outbound deliveries).
  - Now covering all check types: product marketability, dangerous goods, and safety data sheet.



Classify Packaged Dangerous Good

Compliance information for products

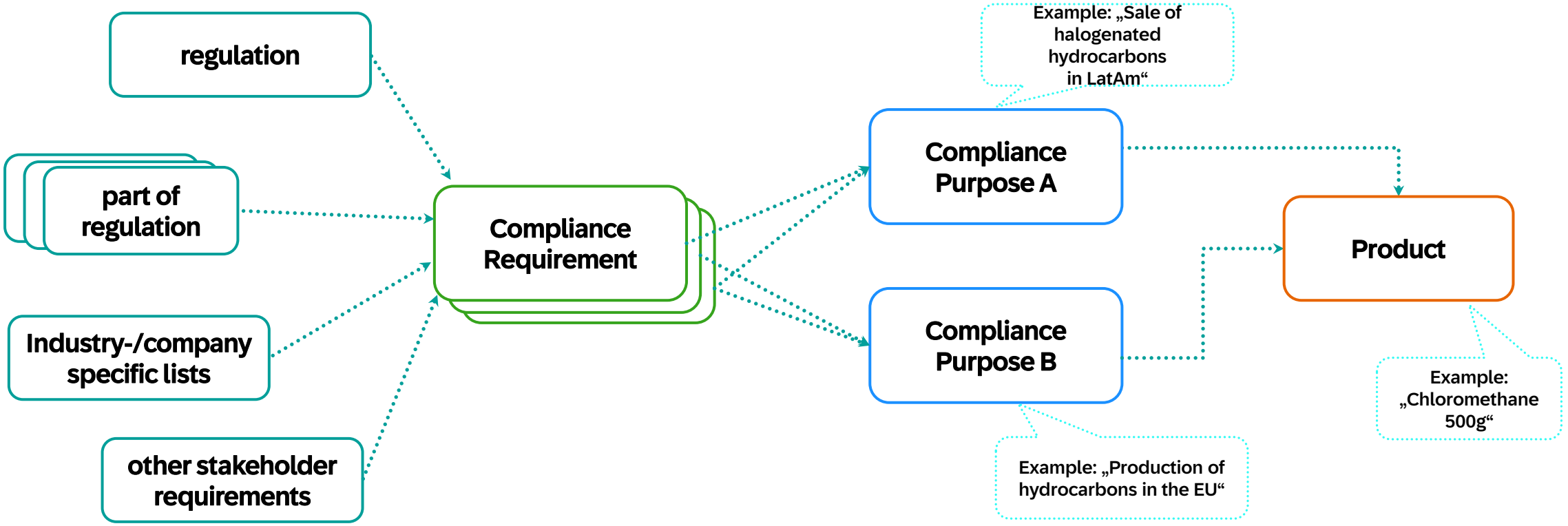
R&D: Product Compliance

New data model

Product Compliance

The new Product Compliance solution has a new data model for efficiently managing compliance requirements, business-related groupings, and their assignment to packaged and unpackaged products.

Regulatory Content is included in SAP S/4HANA Product Compliance – no additional license required.



R&D: Product Compliance

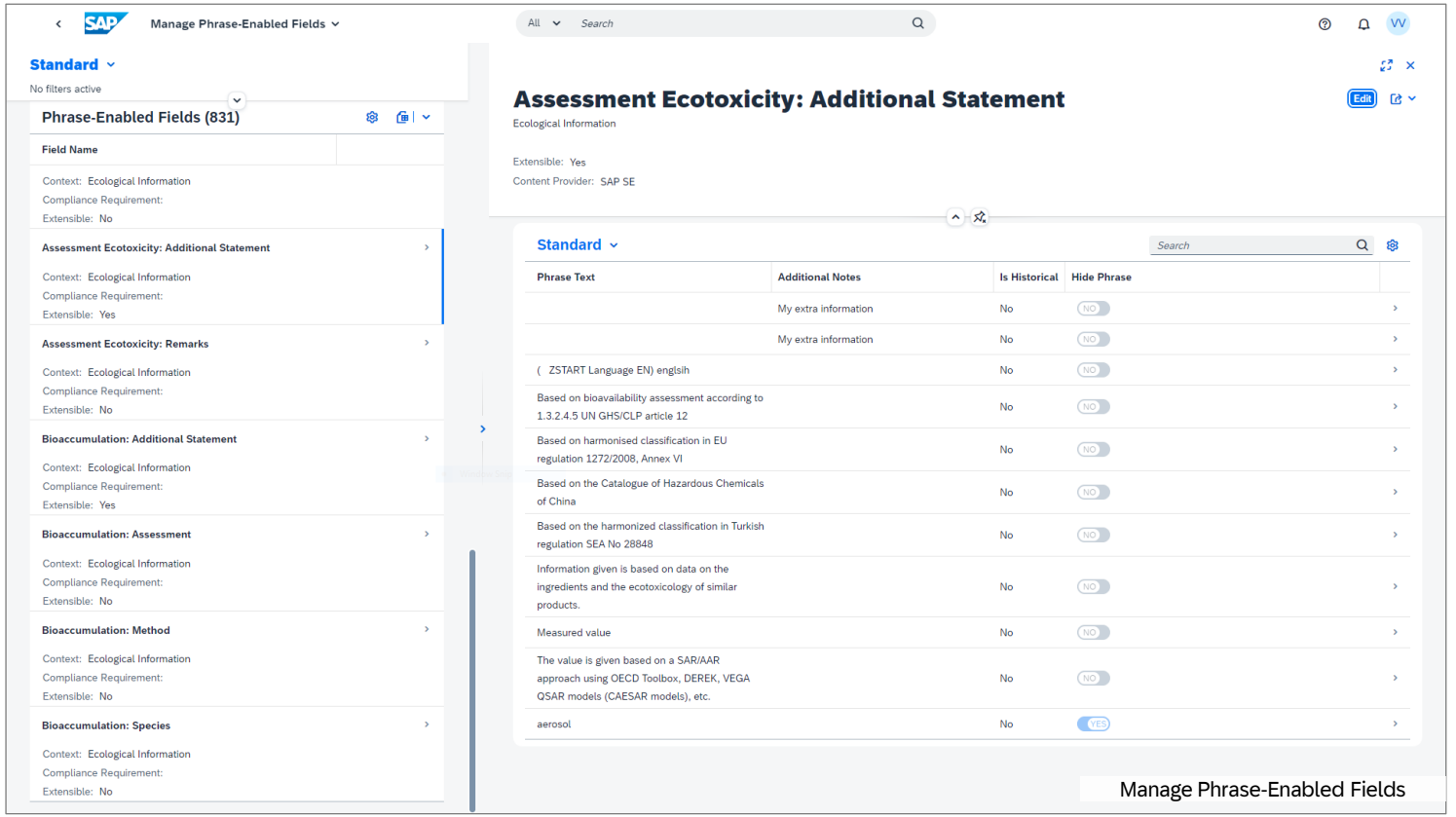
Synchronization of company owned phrases

Product Compliance

2023
FPS0+1

Synchronization of Company Owned Phrases

- Ability to manage company-owned phrases that are basically the same.
- New feature to keep company-owned phrases in sync to simplify phrase management.
- Enable use of company-owned phrases for output on documents like safety data sheets, labels, and reports.
- Automatic replication of changes to phrases, no matter which phrase has been edited within the list of sync phrases.
- Avoid multiplied data maintenance for customers to maintain phrases.



Manage Phrase-Enabled Fields

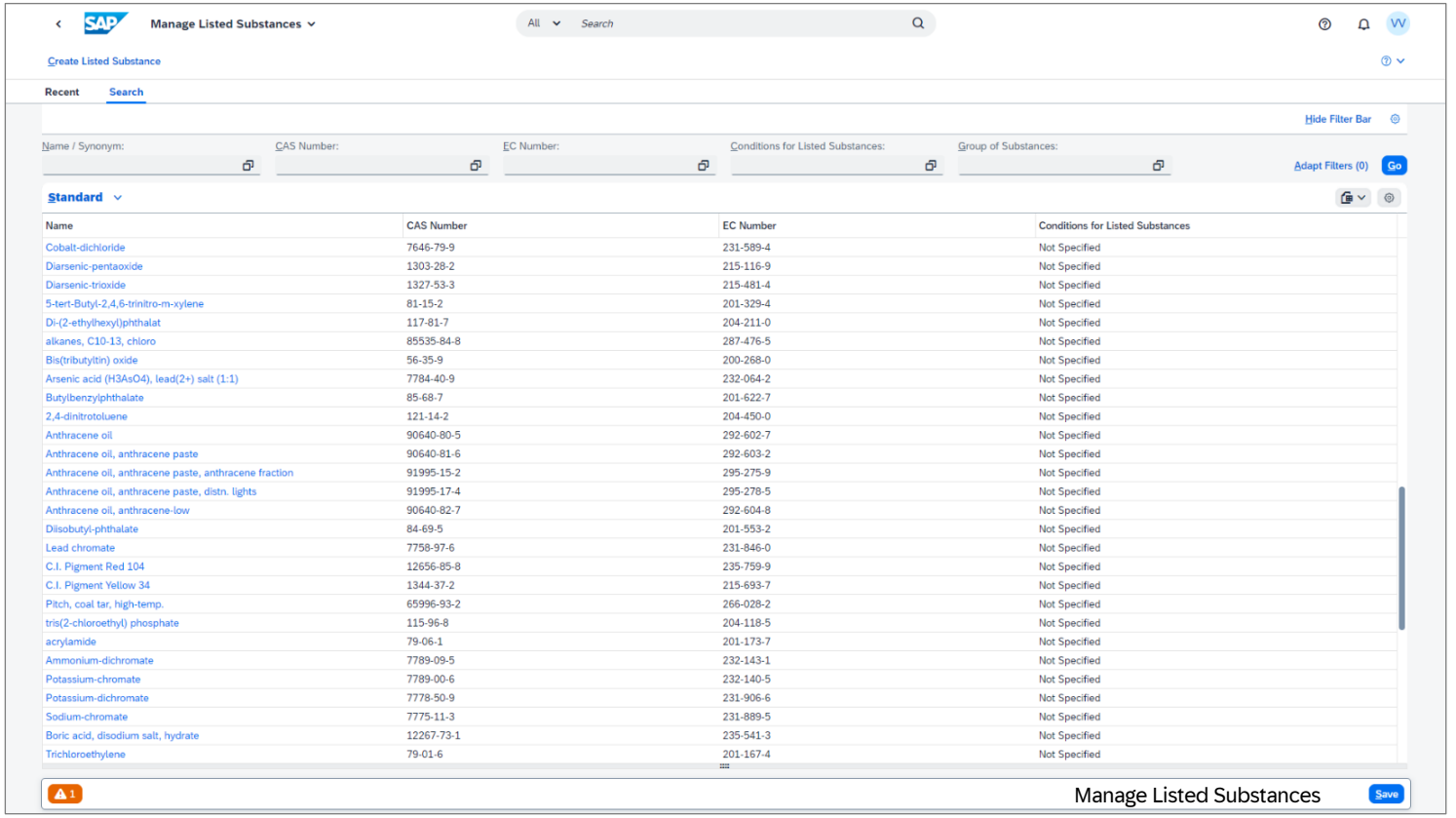
R&D: Product Compliance

Listed substance provisioning through regulatory content service

Product Compliance

2023
FPS0+1

- Ensure that customers stay up-to-date with the latest listed substances and listed substance group assignments.
- Delivery of listed substances and listed substance groups using a regulatory content service from SAP.
- Consumption of listed substances and listed substance groups into SAP S/4HANA for product compliance through a service interface.
- Automated updates of listed substances and listed substance groups in case of regulatory changes and enhancements.



R&D: Product Compliance

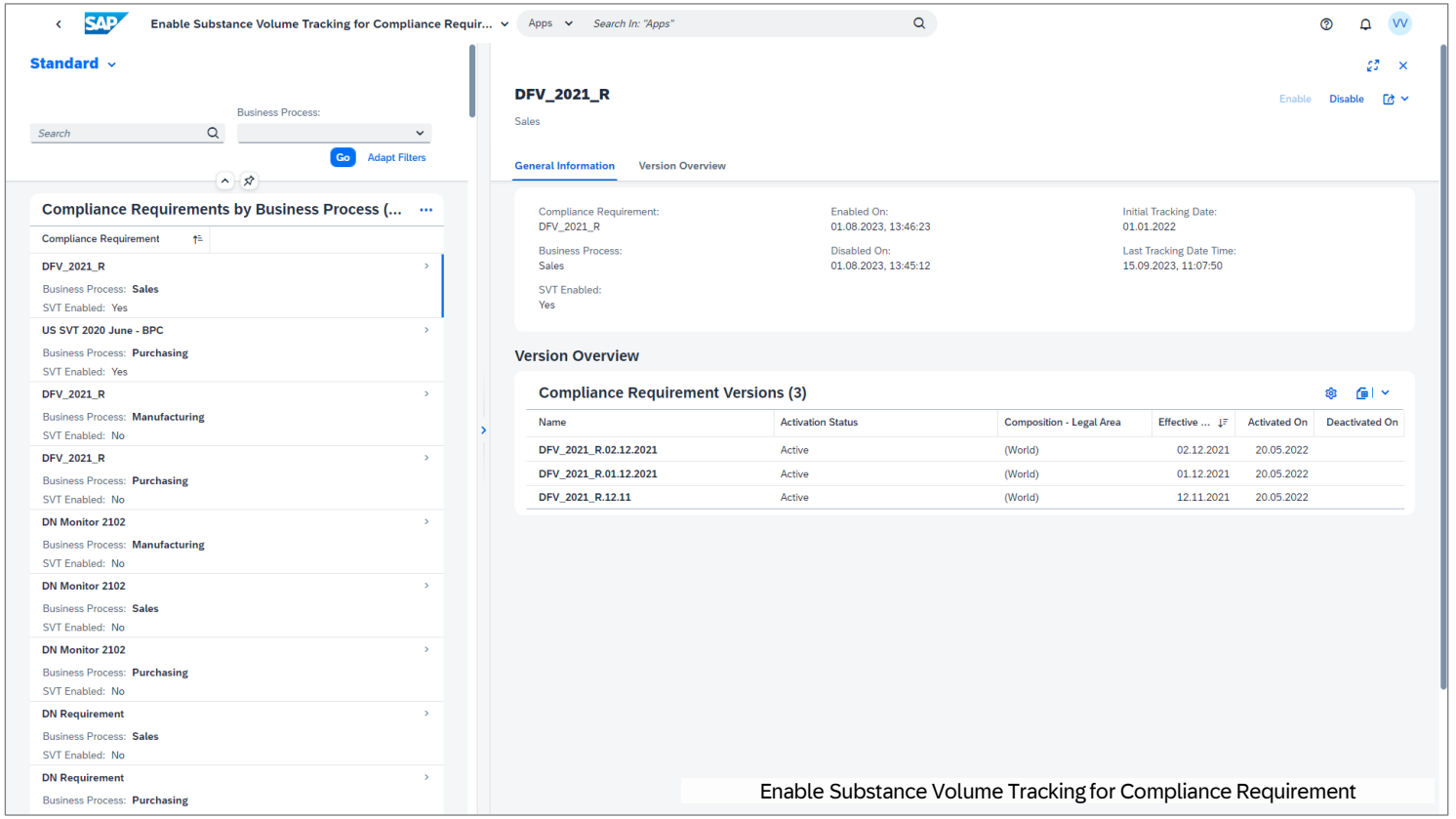
Enablement of Substance Volume Tracking for a Compliance Requirement

Product Compliance

2023
FPS0+1

Substance Volume Tracking

- Efficiently manage the substance volume tracking process with the new Fiori app.
- Possibility to start the substance volume tracking process for a compliance requirement that is relevant for tracking.
- Gain flexibility by having to the ability to switch substance volume tracking on or off for a compliance requirement and business process.
- Leverage the ability to perform a full reset for all compliance requirements, including retracking decisions.



Enable Substance Volume Tracking for Compliance Requirement

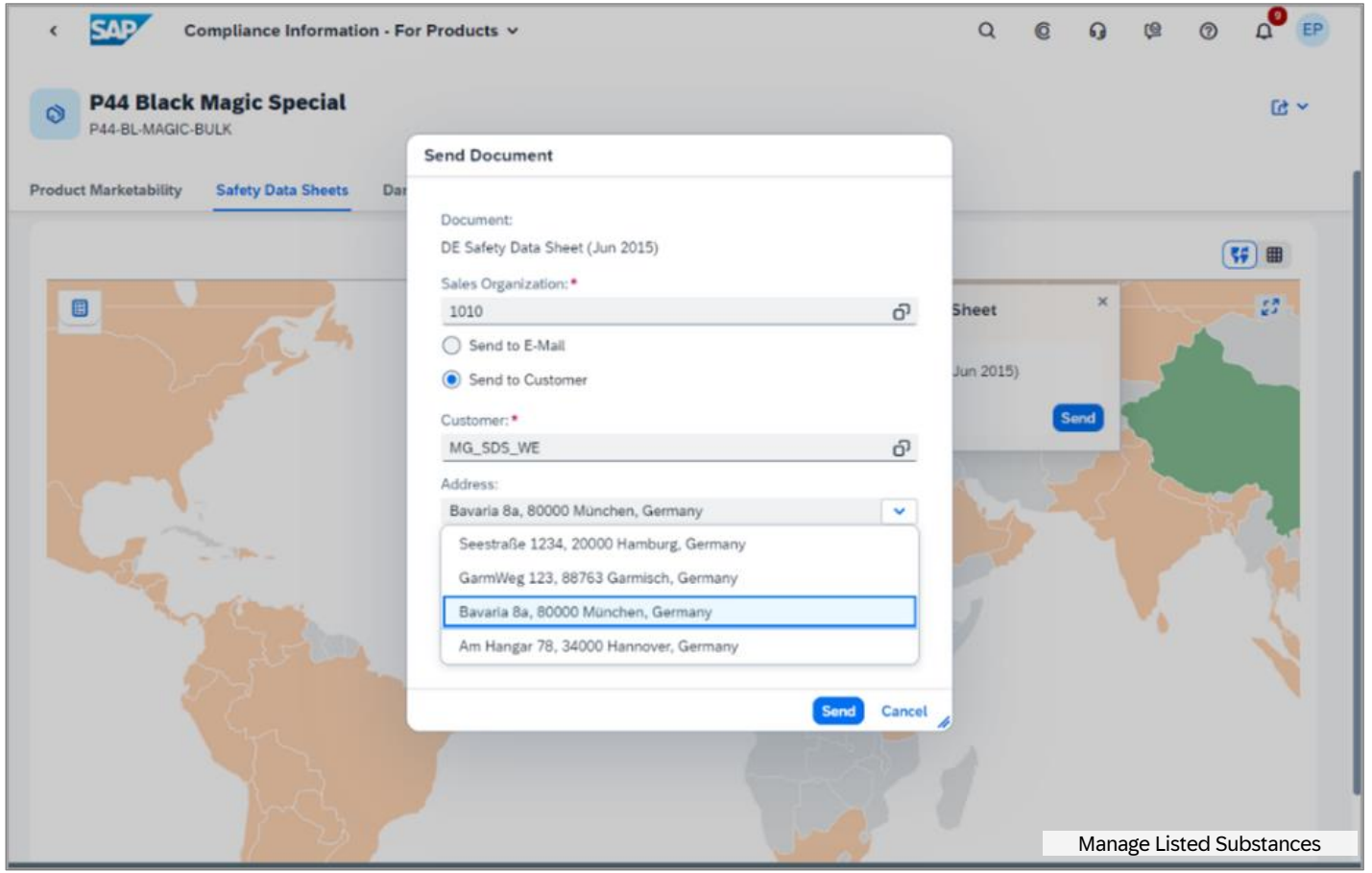
R&D: Product Compliance

Multiple address handling & international address version support

Product Compliance

2023
FPS0+1

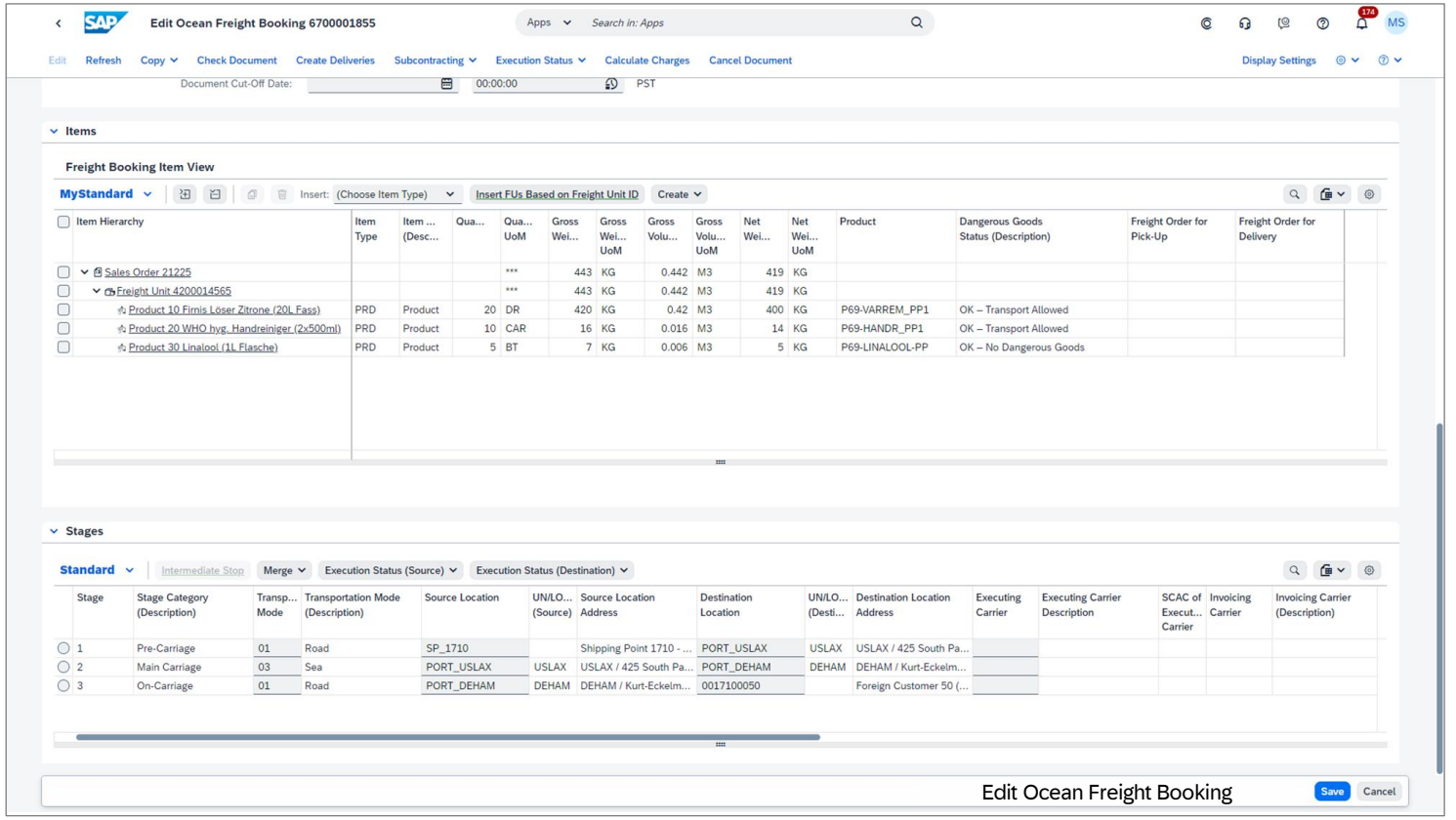
- Handling of multiple addresses in safety data sheet (SDS) processes using the business partner data model from SAP, which can provide multiple addresses with time-dependent validities and address-dependent data for each business partner master record.
- Support for international address versions (IAVs) on SDSs.
- Ability to print translations for multiple product names in chapter one of the SDS.
- Increase efficiency and comply with regulations that require printing of the product name in two languages, such as English and Chinese for a Chinese SDS.



R&D: Product Compliance
Dangerous goods movement

Product Compliance

- Make dangerous goods data available to carriers in electronic form (business-to-business interface) reducing inconsistencies and avoiding manual work
- Provision of dangerous goods data with SOAP service for road, rail, ocean, and air-cargo freight bookings to carriers
- Provide dangerous goods data within SOAP service for subcontracting road and rail freight orders to carriers for all relevant products.
- New sub-structure is added to dangerous goods segment which contains the applicable dangerous goods regulations that are determined in dangerous goods checks carried out in transportation documents.



R&D: Product Compliance in inter-company stock transfer

Product Compliance

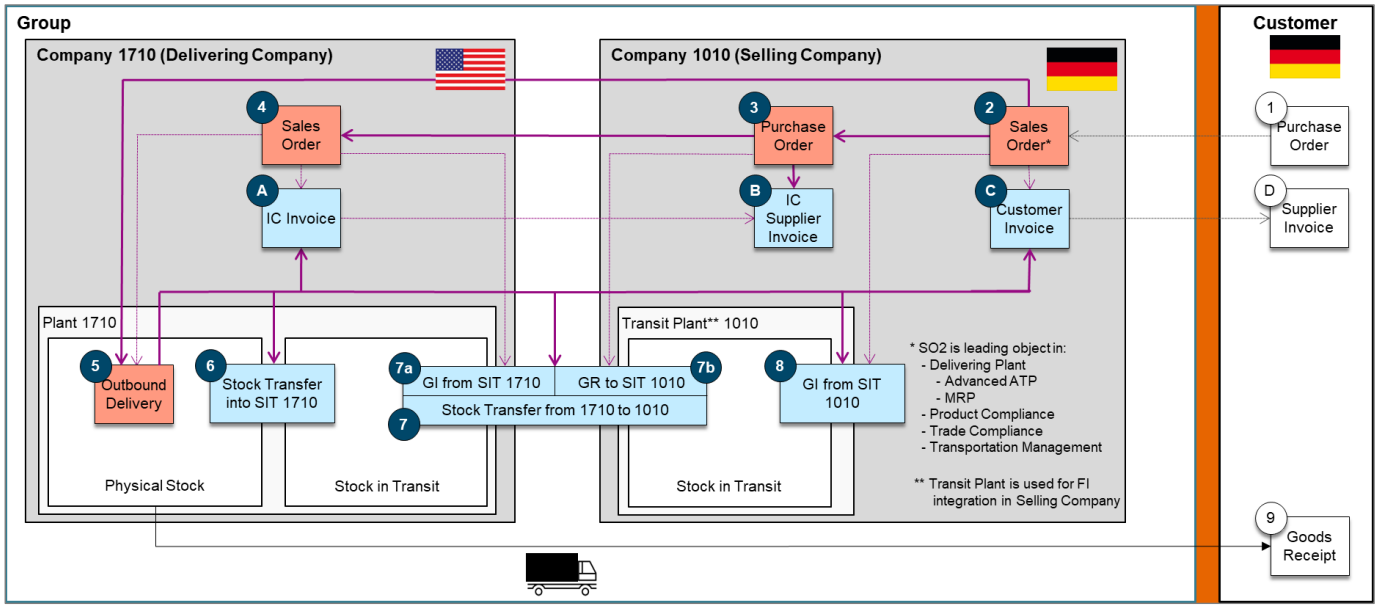
Product compliance integration in advanced intercompany stock transfer

- Use product compliance data in checks carried out in documents within the advanced intercompany stock transfer process:

- Compliance relevant products which the system carries out compliance checks in:
  - Intercompany purchase orders of the receiving company
  - Outbound deliveries of the delivering company
  - Freight orders and freight units (dangerous goods check, only)

- Create or edit one of these documents; then the system:
  - Verifies whether a safety data sheet is required and whether the relevant safety data sheet is available in the specified languages
  - Checks for products classified as dangerous goods whether transportation of the product is allowed, forbidden, or restricted

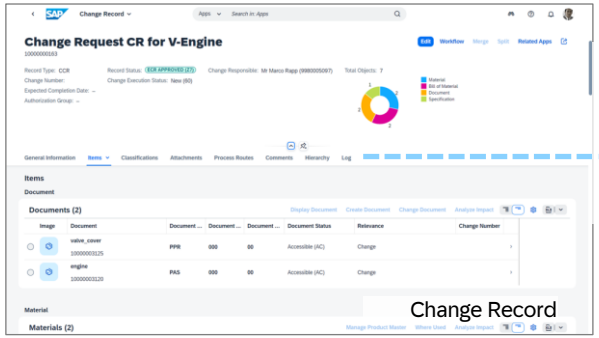
- The safety data sheet is not sent from the outbound delivery of the delivering company, because company-internal safety data sheets are available to all consumers



R&D: Product Lifecycle Management

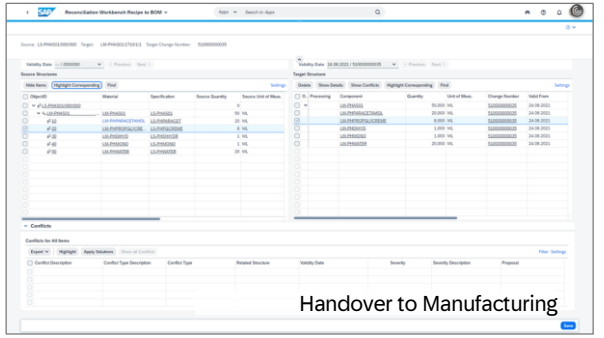
Product Lifecycle Management	Integrated Recipe Development	Integrated Product Development	Handover to Manufacturing	Advanced Variant Configuration
	PLM for **process manufacturing**: develop recipes and formulas rapidly, reusing existing ingredients. Design packaging and labeling. Collaborate with suppliers and work seamlessly with partners to accelerate product development and comply with regulations, while managing product development costs.	PLM for **discrete manufacturing**: accelerate design by integrating product lifecycle management in a single, real-time environment. Validate and control complex products structures; including the definition and management of hardware and software compatibility. Create individualized products by defining and reusing variant product structures across the supply chain.	Efficiently hand over from Product Engineering to Production Engineering by working in one integrated real-time solution. Minimize product cost by thoroughly understanding product- and resource related master data. Improve agility by deploying flexible manufacturing practices based on plant resources and capabilities. End-to-end visualization helps to eliminate errors and improve quality.	Improve sales and product engineering performance for advanced variant configuration by implementing a **new state-of-the-art configurator**. Utilize a comprehensive **simulation environment** for variant configuration models. Benefit from the user-friendly classification capabilities. Integrated advanced variant configurator supporting **multi-level** variant configuration models. Efficiently manage **constraints** without coding, supported by a new tracing and inconsistency handling functionality.

Change record:
- Support of discrete and process industry objects.
- Digital signature for change records.
- Flexible CR hierarchies.
- Visualization of status & changes.



Change Record

Use of reference designators to better identify a material / component:
- in visualization.
- handing over the information from EBOM to MBOM.
- display in shop floor routings and work instructions.

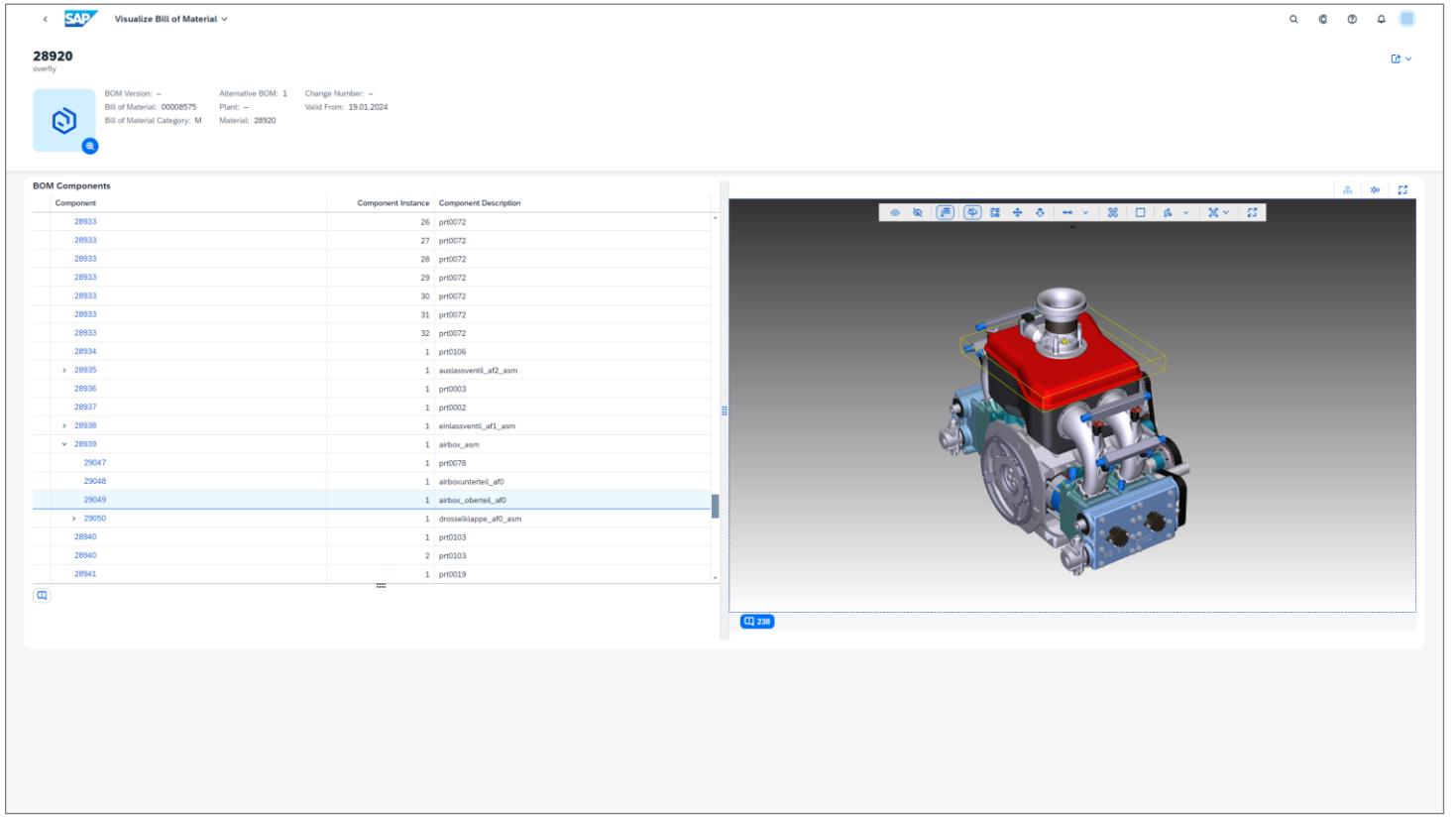

Handover to Manufacturing

R&D: Bill of Material

Dynamic viewing (3D) of the bill of materials

2023
FPS2

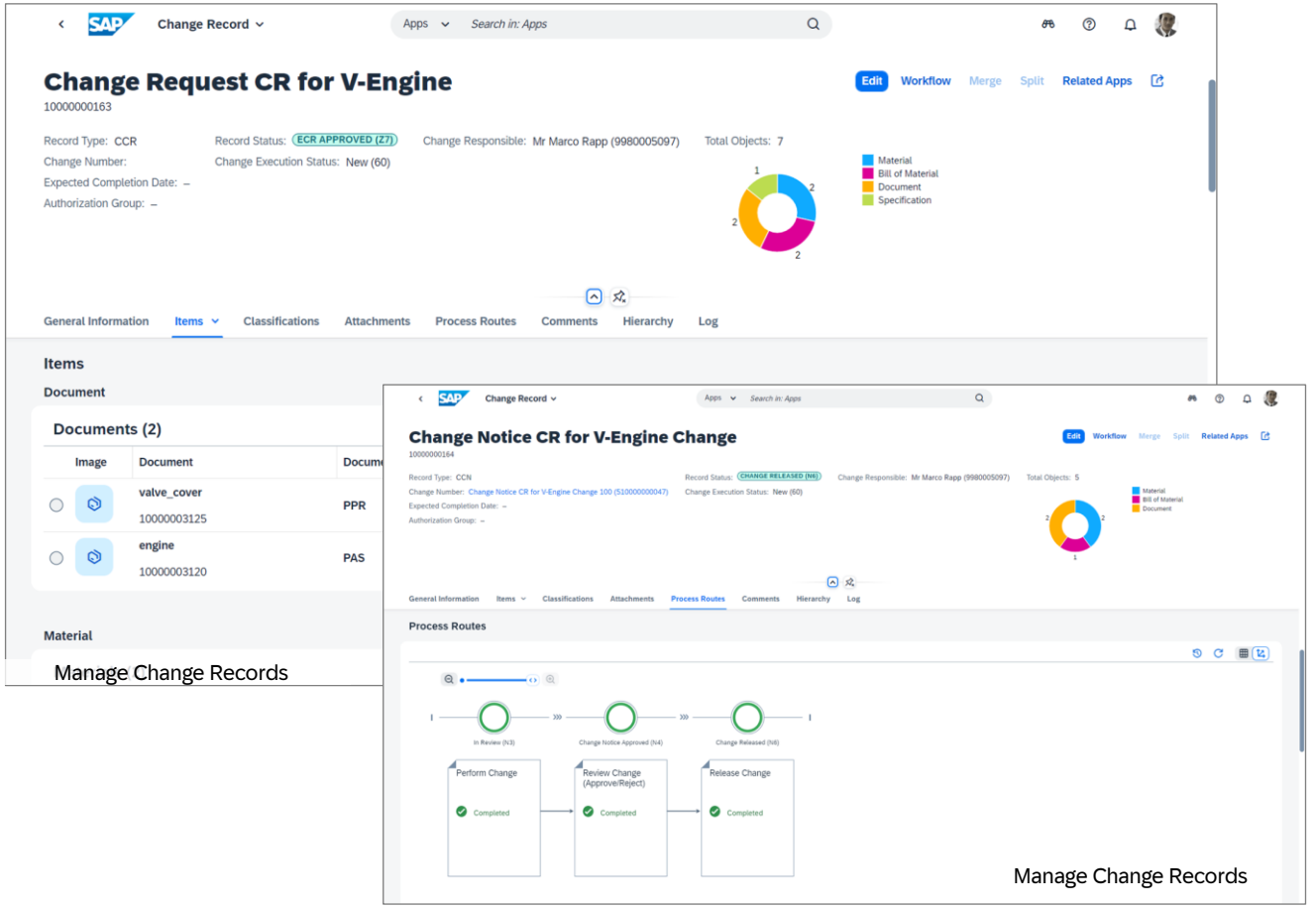
- Fiori app enabled for 3D viewing of Bill of Material.
- Support for dynamic viewing based on component visuals and the geometric information in the bill of materials (BOM).
- Capabilities to view single documents or generation of a dynamic mock-up based on the BOM explosion results.
- Simplify the validation process to decide on the accuracy of the BOM using 3D visualization of the structure.
- Get additional insights by visualizing the assembly and parts information.



R&D: Change Record

- Comprehensive change management to increase agility and responsiveness through enhancements in Change Record.

- Provide transparency in change process through impact analysis to review and understand the implications of change on objects.
- Enable effective management of product changes by enhancing change record to support different Bill of Materials (BoM) types incl material BoM, equipment BoM, Functional location BoM, Order BoM, Work Breakdown Structures (WBS) BoM.
- Enabling streamlined authorization management by allowing maintenance of an authorization group on the Change Record header level of SAP S/4HANA.
- Drive efficiency in change process by supporting multiple task list types incl. general maintenance task list, rate routing, reference operation sets, rough cut planning profiles, equipment and functional task lists in change records.
- Increased transparency over different phases of the product change by enabling the users to add the same component, with different relevancy, into a change record.



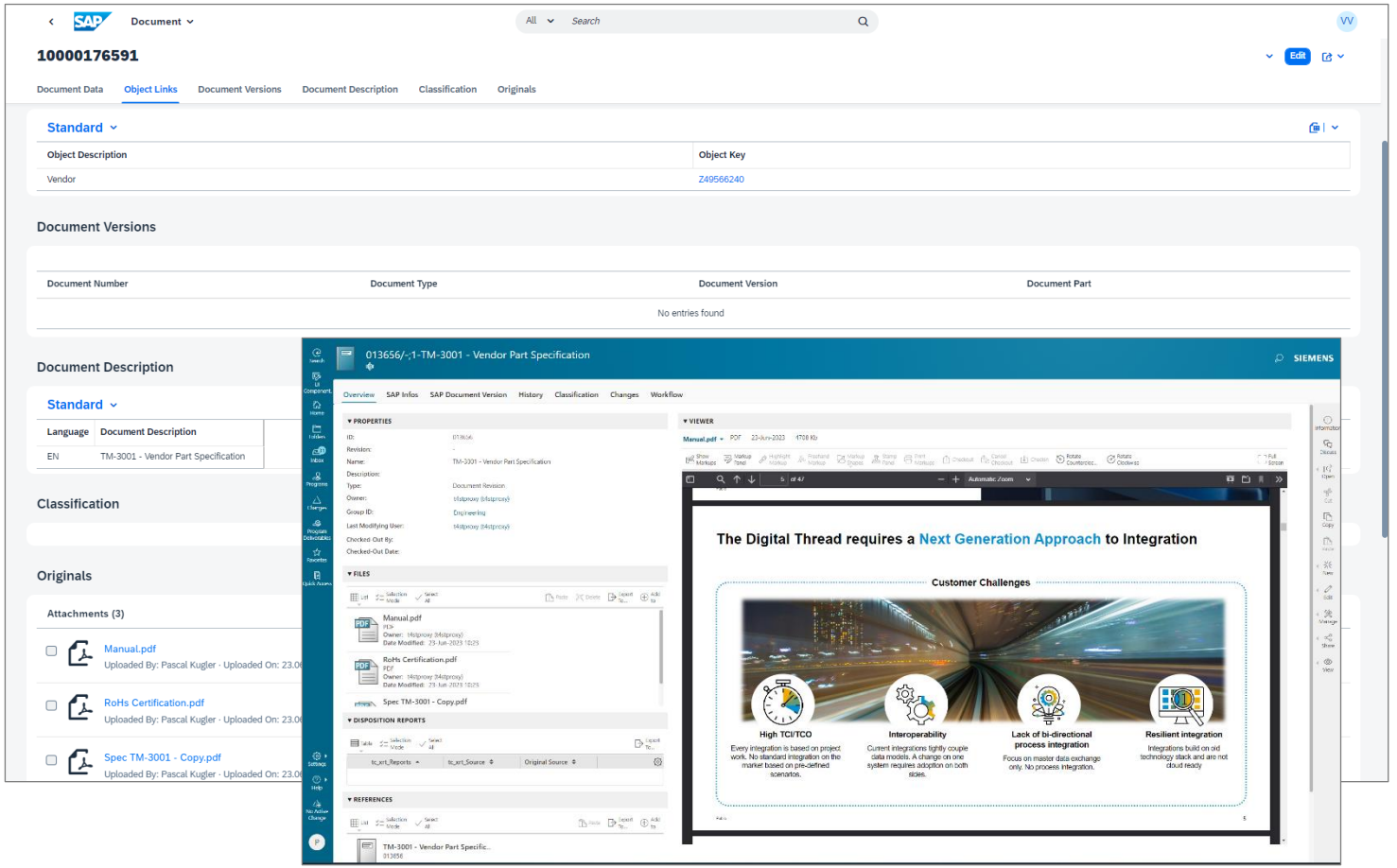
R&D: Integration to external PLM systems

2023 FPS2

Product Lifecycle Management | Design Systems Interoperability

- Bi-directional document exchange between an external PLM system.
- Integration to enable the transfer of documents from SAP solutions to an external PLM system:
    - Exchange of document details , physical files & vendors linked to the document

- Exchange required documents between the engineering system and SAP to enable all stakeholders to collaborate across domains.
- Necessary information for manufacturing engineering and transfer of inspection characteristics from an external PLM system.
- Multi-system cardinality support: Ability to connect multiple external PLM systems to single SAP S/4HANA system.



R&D: Integrated recipe development

Product Lifecycle Management | Integrated Recipe Development

Centrally Manage Ingredient and Product Details

- **Specification Management**: single source for ingredient and product information to flexibly describe raw materials, semi, and finished products.
- Composition, properties, nutrient, allergen, and diet information including declarative, compliance, and packaging information.
- Use integrated Change Management and structured workflows to manage release and review processes, integrated across the different objects.
- Contribution-based formulation - Optimized formulator:
  - check against limits and targets for compliance during formulation.
  - configurable contribution view layout.
  - more efficient calculations.
- Specification data integration:
  OData service to read and write specification data (description and compositions) supporting solution extensions such as supplier collaboration.

"Target-driven recipe development — the functionality that our product developers were dreaming of to design compliant recipes — is a revolution in terms of usability. This work was an outcome of successful design thinking on the formulation area."
Senior product manager, CPG multinational

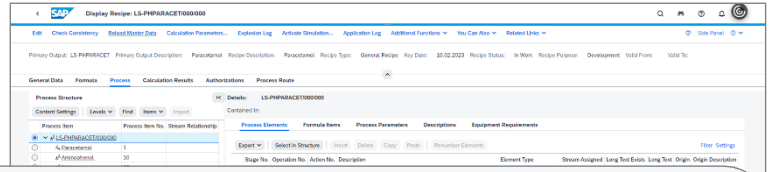
Develop Recipes - Fully Integrated

- Formulate using **multilevel hierarchies** and various calculation modes. Calculate product properties like ingredients, compositions, allergens, nutrients, diets, total solids, evaporation, nutrient losses, and costs. Describe the processing of the product using stages, parameters and equipment requirements and leverage in place analytics to get quick access to information.
- Develop recipes side by side to accelerate the trial process, create multiple **versions and variants** in one step to setup trials, compare ingredients, and calculation results of multiple recipes. Manage the release process with structured handover to manufacturing.
- **Recipe Finder**: identify change impacts across product hierarchies – find out easily where change is needed.
- **Contribution-based formulation** to visualize formulation KPIs in real-time when changing a recipe.

Validate Compliance, Prepare Product Declarations and Labeling

- Integrate **compliance** in product development to ensure marketability early on. Perform real-time compliance checks against regulatory and self-defined rules. Store and review former check runs, maintain and enhance your rules centrally.
- Develop legal and other product declaration info using labeling functionalities, define ingredients lists, nutritional facts, allergen information, statements and claims.

A brief product history of SAP Recipe Management /Recipe Development (Blog)



Contained In:

Process Elements | Formula Items | Process Parameters | Descriptions | Equipment Requirements

Show: Basic fields | Export | Hide Alternative Items | Insert | Delete | Copy | Paste | More | Filter Settings

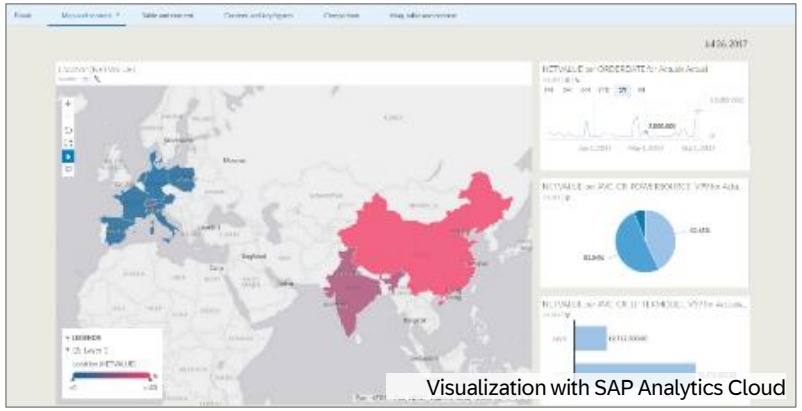
Icon	Item Number	Item Type	Specification	Description 1	Component Type	Quantity	UoM	Mass per Str. [LB]	Mass per Str. [%]	Origin	Origin Description
	1	Primary Output	LS-PHPARACET	Paracetamol	PRODUCT	17	ML	0,037479	100		
	10	Input	LS-PHAMINO	Aminophenol	INGREDIENT	2	G	0,004409	11,764706		
	20	Input	LS-PHWATER	water	INGREDIENT	15	G	0,033069	88,235294		

R&D: Variant Configuration core and advanced scope

Product Engineering | Variant Configuration | Product Lifecycle Management | Adv. Variant Configuration

Variant Configuration – easy conversion from the classic world: LO-VC

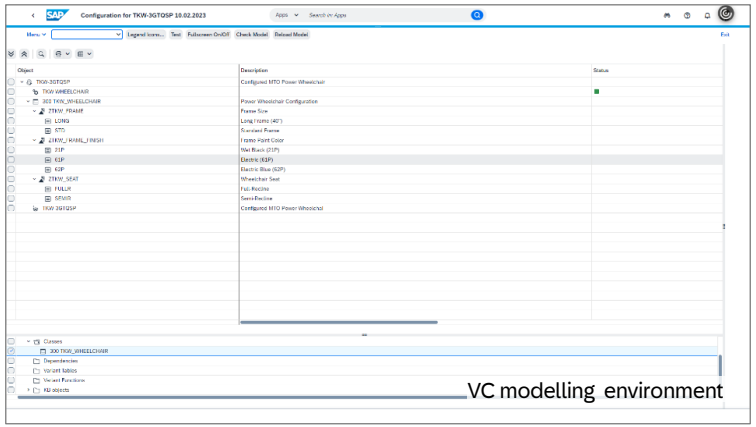
- Classic Variant Configuration LO-VC available as part of SAP S/4HANA Enterprise Management
- Immediate re-use of existing models after system conversion
- LO-VC improvements: new Fiori UIs, Embedded Analytics for Classification & Configuration
- Migration tool for LO-VC models, single- and multi-level, into the new Advanced Variant Configuration
- Integration of LO-VC into Order Engineering Workbench -> intuitive user interface



Visualization with SAP Analytics Cloud

Advanced Variant Configuration – rearchitected, constant innovations

- **New VC Engine** making full use of HANA capabilities (code pushdown)
  - Improved performance and usability
  - Single- and multi-level VC models
  - Flexible constraint modelling (operators, positive/negative)
- **Enhanced Analytics** based on CDS views for holistic analytics scenarios => visualization flexibility, e.g., via SAP Analytics Cloud
- **Enhanced UI**: Role-based overview page for Product Modeler
- **Trace view:** how are object dependencies processed in configuration engine



VC modelling environment

- **Visibility** of AVC data in purchasing and production execution
- Support for multilevel **sales kit- / SET scenarios** for configured products
- VC data in **sales order SOAP services**

R&D: Enterprise Portfolio and Project Management

Portfolio and Project Management

Portfolio Management

Align portfolios with strategy while analyzing risk and performance in real-time. Invest in the right projects and identify those which can generate the most business value by instantly scoring and ranking proposals. Gain rapid insights into the **performance of your entire project portfolio** through real-time analytics and monitoring.

Portfolio Management:
Manage risk scenarios for portfolio items and projects

Project Management

Plan, carry out, and monitor projects in real-time to minimize deviations in schedule, cost, scope and quality. Manage the **resources**, **schedule**, and **financial performance** for each project phase, from project initiation through closure. Minimize delays and prevent business interruptions by monitoring the progress of projects in real-time.

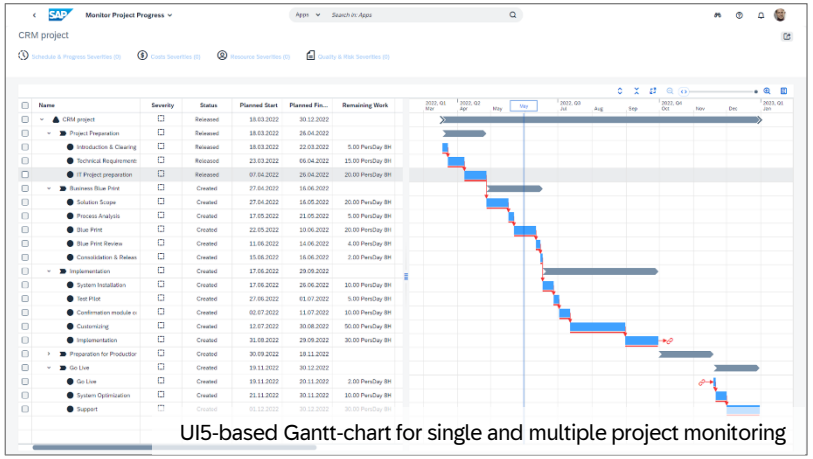
Project Management:
Automatically generate projects from a portfolio item, incl. PS and CPM projects

Commercial Project Management

Embedded Commercial Project Management (CPM) covers multiple processes in an end-to-end scenario spanning the selling, planning, performing, monitoring, and controlling of projects. Companies that sell projects (e.g., in professional services or the engineering & construction industries) can so professionalize their core business processes and expand beyond back-office capabilities.

Project Connection

Streamline and automate a **bidirectional exchange of project information** with external scheduling tools. Orchestrate the exchange through business rules defining the sequence of creating and modifying project elements – dynamically, based on project types and other criteria. Exchange plant maintenance orders with third-party scheduling tools for full processing maintenance, from planning and scheduling to execution and progress tracking.



UI5-based Gantt-chart for single and multiple project monitoring

R&D: Portfolio & Project Management process

Portfolio and Project Management | Portfolio Management | Project Management

From Ideas to Project Success with Ext. Enterprise Portfolio & Project Management

Idea Management

- Collect & evaluate ideas
- Collaborate, discuss & vote
- Identify experts
- Rank ideas
- Execute on ideas
- Track performance from idea to product
- Document idea & innovation process

Portfolio Management

- Draft project timeline
- Financial & capacity planning
- Risk assessment
- Technical feasibility
- Evaluate commercial success, draft KPIs
- Project total score & ranking
- Project what-if / simulation
- Decision support
- Strategic direction

Project Planning

- Use templates
- Structure project
- Schedule tasks & activities
- Planning of project efforts & costs
- Manage milestones
- Manage authorization (ACL)
- Archiving
- Import/export...

Project Resource Management

- Plan resource demand
- Role demand in project
- Identify available resources via candidates, resource pools & teams
- Resource assignment
- Workflow & notification
- Resource overview
- Resource allocation
- Availability control

Project Execution

- Phase approvals
- Project accounting
- Time recording
- Multi project management
- Project versions / snap shots
- Document management
- Engineering change management

Monitoring

- Progress tracking
- Budget control
- Availability checks
- Plan vs. actual
- Embedded analytics dashboards

R&D: Commercial Project Management

Portfolio and Project Management > Commercial Project Management

Create change requests and report issues

- Report project issues and create a change request for a project via SAP Fiori app.

Change-request approvals and print form configurations

- In addition to the existing change-request approval process, users are able to leverage simpler approvals for change requests using the overall status of the change request.
- Users are able to configure multiple print forms for the same change request and to select and print one of them in the change-request application.

Cut-off date, Period KPIs, and Forecast Accuracy

- Cut-off dates – forecasting in the application based on real-time data; enhancement that allows users to conveniently specify a cut-off date for considering actual postings (such as cost, revenue, or quantity); project manager ability to view and forecast information on accurate data, for example, if relevant postings were made until last Friday, project manager ability to run a forecast based on that cut-off date
- Period KPIs – enhanced management of commercial projects; ability to work with real-time information; ability to augment information with notes from the project manager (such as details of a particular situation last Friday); period KPIs that bring this information into the same view of current data, allowing project managers to accurately assess progress.

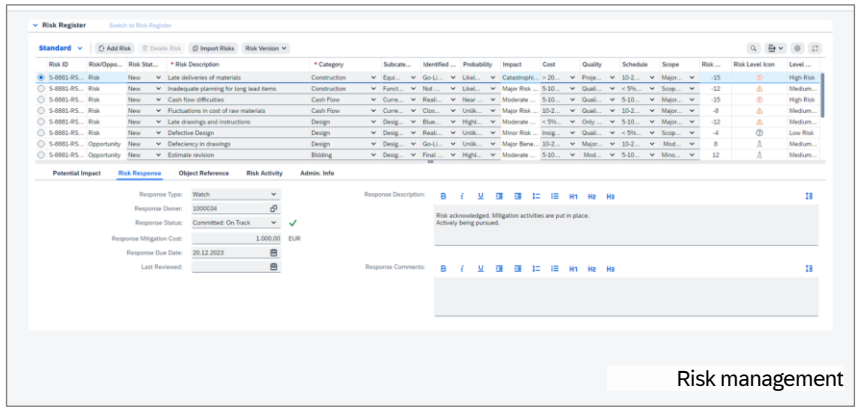
Simplified approval workflow for change requests

- Based on BRF+; trigger = status of CR or activity within the CR

Improved functionality for monitoring and forecasting of commercial projects

- Better documentation of manual adjustments to system-generated forecasts by project manager
- Cut-off dates for running actuals reports
- “Period KPIs” to show situation until / as-of certain date, versus real-time
- Additional reports and queries providing S-curve information or KPI trends, embedded in the existing forecast workbook application
- Versioning of risk scenarios

Flexible printing of PDF forms from issue or change requests



Risk management

R&D: Delta scope summary 2023

2023 FPS2

Product Lifecycle Management

Design Systems Interoperability

- Bidirectional document exchange between SAP S.4HANA and external PLM systems
- Transfer of inspection characteristics from an external PLM system

Product Change Management

- Increased transparency over different phases of the product change by enabling the users to add the same component, with different relevancy, into a change record

Product Development

- Simplifying the validation processes and driving the accuracy of Bills of Material BOM using 3D Visualization of the structure

Product Compliance

Product Marketability and Compliance

- Enable use of company-owned phrases for output on documents like safety data sheets, labels, and reports by keeping company owned phrases in synchronized
- Flexibility to enable substance volume tracking for a compliance requirement

Dangerous Goods

- Regulatory content update 2023: New and updated content for the Dangerous Goods movement incl ADN 2023 , ADR 2023, CFR 49 as of July 26th 2022, IATA-DGR 2023, IMDG Code 2022, JT/T 617.3-2018, NZS HB 2021, RID 2023
- Handling of dangerous goods in tanks and bulk containers
- View the labeling and marking information for all items that are included in a business document

Safety Data Sheet

- Multiple address handling, international address version support, and multi-name print support for safety data sheets

Portfolio and Project Management

Portfolio Management

- Enhanced transfer of financial planning values to portfolio item

Portfolio Management

- Simplified authorization handling for portfolio management (FPS2)
- APIs for reading portfolio data incl financial information based on semantically aligned one domain model resulting in increased stability of integrations (FPS2)

Project Control

- Reading project cash management data from universal journal
- Use responsibility management teams to assign employees to network activities
- Support for purchasing services in through lean services enablement (FPS1)
- Project assistant capabilities for Joule: Enabling Project System users tasks by enabling navigational and transactional capabilities (FPS2)

Project Logistics Control

- Simplify handling of unplanned services in the lean service procurement process and the service entry sheet (FPS2)
- Integration of field logistics with project systems for network orders (FPS2)

Product Engineering

Product Development Foundation

- New item category of ‘non-plant item’ to enable the addition of service, subscription, and project items without regard to plant assignment in configurable BoMs

Asset Management

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Asset Management: Overview

Modular Cloud LoB Solutions

additional license

additional installation

- **SAP Asset Performance Management**
- **SAP Service and Asset Manager**
- **SAP Asset Intelligence Network**

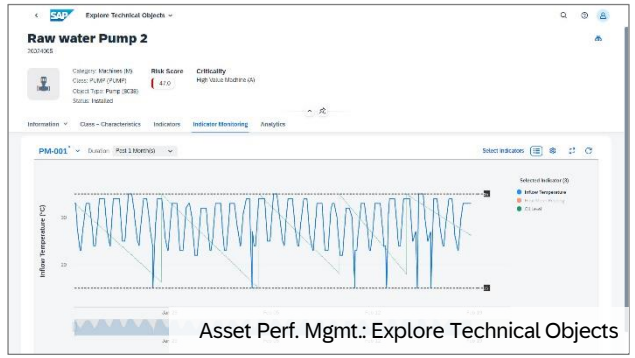
SAP S/4HANA LoB Apps

additional license

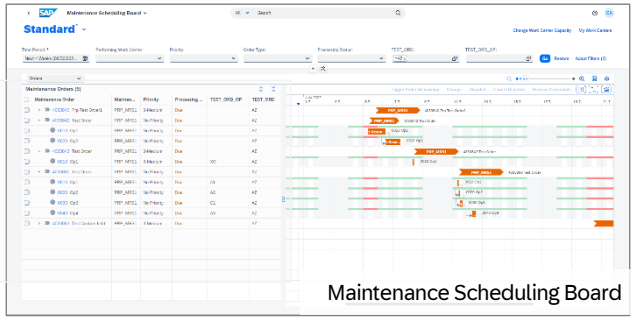
SAP S/4HANA Enterprise Management

Maintenance Management (ext.)	**Combine s**patial and asset data to describe, locate, and manage maintenance activities for linear assets (e.g., pipeline, road, railway, etc.) and **extend core scheduling functionality with detailed scheduling capabilities and resource planning.**
Environment, Health, and Safety	**Work Permit and Isolations Management**
Maintenance Management	**Leverage** a holistic approach including planning, execution, improvement, and collaboration. Combine material management and plant maintenance functionalities to plan and achieve a holistic strategy for maintenance management. Track costs and conduct thorough damage analysis.

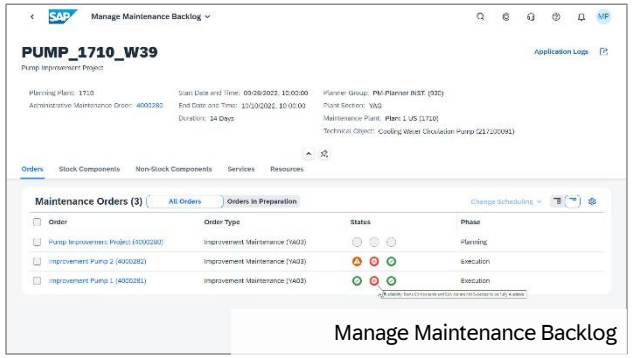
* SAP categorizes EHS to which work permit capabilities belong under Manufacturing. We list the work permit and work clearance management (WCM) here in Asset Management considering main customer use cases .



Asset Perf. Mgmt.: Explore Technical Objects



Maintenance Scheduling Board



Manage Maintenance Backlog

Asset Management: Business areas and capabilities

Modular Cloud LoB Solutions

additional license

additional installation

- **SAP Asset Performance Management**
- **SAP Service and Asset Manager**
- **SAP Asset Intelligence Network**

SAP S/4HANA LoB Apps

additional license

Maintenance Management (ext.)	Asset Spatial Enablement	Asset Management Resource Planning
Environment, Health, and Safety	Work Permit and Isolations Management	* SAP categorizes EHS to which work permit capabilities belong under Manufacturing. We list the work permit and work clearance management (WCM) here in Asset Management considering main customer use cases .

SAP S/4HANA Enterprise Management

Maintenance Management	Asset Fault and Incident Response Management	Asset Data and Information Management	Asset Costing and Valuation
	Tactical Asset Management Planning	Asset Configuration Management	Asset Performance Analysis
	Maintenance Execution	Asset Refurbishment	

Asset Management: Maintenance Management

Maintenance Management

Asset Fault and Incident Response Management

Systematically respond to asset failures and incidents by detecting and identifying issues, conducting fault analysis, and applying standard responses.

Create, screen, and process maintenance requests for different types of work including corrective, preventive and condition-based maintenance with any device such as mobile devices or desktops, or automatically by the system.

Tactical Asset Management Planning

Develop and implement plans and activities for effective asset inspection, maintenance, repair, replacement, and disposal. This includes specified timescales and costs for completion, as well as the necessary resources, such as people, tools, materials, services, documents, permits, and authorizations.

Maintenance Execution

Perform planned or emergency maintenance.

Manage asset information for maintenance orders, maintenance, measurements, inspections, metering, and inventory in order to improve safety, environmental impact, and operational results.

Asset Refurbishment

Repair or **remanufacture** defective technical objects, such as machinery and equipment to restore them to operational status after wear or malfunction.

Extend the lifespan of assets, delaying the need for expensive replacements.

Track refurbishment costs to help in financial reporting and decision-making.

Asset Data and Information Management

Create, update, delete, and archive asset master and transactional (such as time series and events) **data**.

Manage relevant business rules, unstructured data (documents, drawings of design models, and pictures), **and location information** across asset types including historical data according to data quality requirements.

Asset Configuration Management

Identify, record, and manage the **functional and physical attributes of assets** and related documentation including the **links between the components of a system**. It enables **systematic control of changes to the identified asset attributes** for maintaining integrity and traceability throughout the asset lifecycle.

Asset Costing and Valuation

Monitor asset maintenance costs, from planning to closing, including labor and materials consumed, with recognizing and adopting appropriate valuation practices.

Asset Performance Analysis

Collect and analyze operational data, maintenance records, and other key metrics to identify opportunities for improving reliability, availability, efficiency, and effectiveness

Leverage analytical insights to optimize asset utilization, minimize downtime, and reduce maintenance costs.

Asset Management: Resource planning

SAP S/4HANA Asset Management for resource scheduling

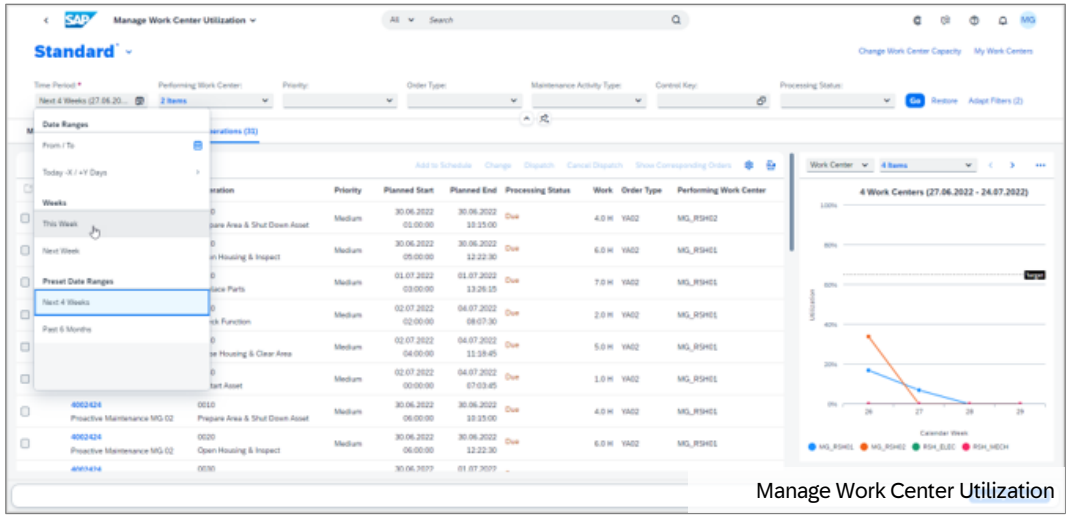
Maintenance Management (ext.) | Asset Management Resource Planning

Optimize maintenance schedule with availability windows for maintenance, work center capacity, and maintenance plans.

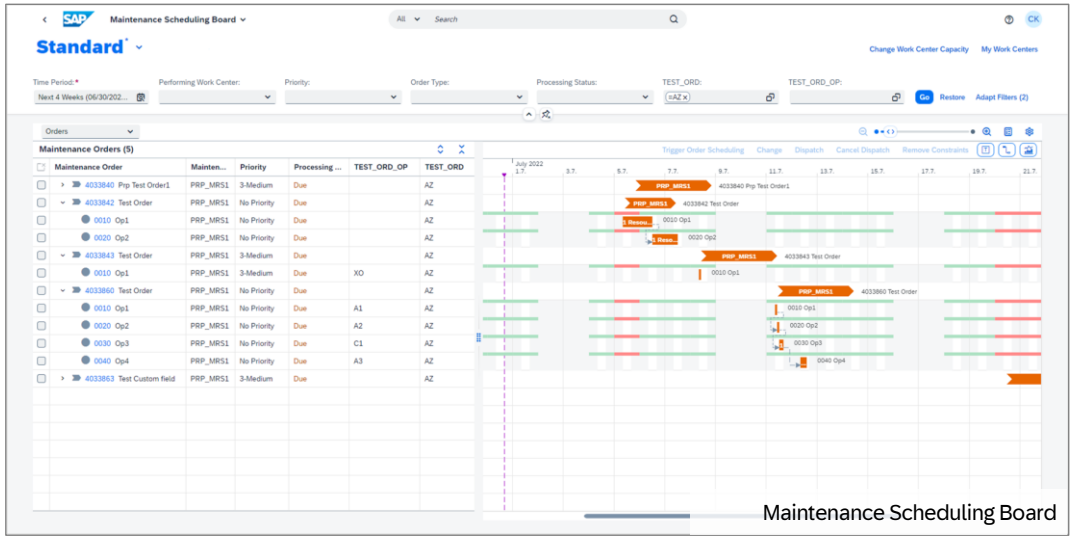
Use **SAP S/4HANA Asset Management for resource scheduling** for embedded resource scheduling.

- Gain insight into your maintenance workload and available capacities for current and upcoming maintenance activities
- Identify critical planning situations early and take action to improve planning-relevant KPIs
- Plan maintenance orders efficiently based on work center utilization to make sure that all maintenance jobs can be completed
- Adjust work center capacity quickly
- Assign statuses to schedules and optimize work center capacity.
- Visualize the maintenance orders in your work centers to gain transparency about what needs to be done when
- Set up, share, and monitor schedules
- Provide feedback for a schedule and plan your own work accordingly

Optionally, **Multi-resource Management** can still be used.



Manage Work Center Utilization



Maintenance Scheduling Board

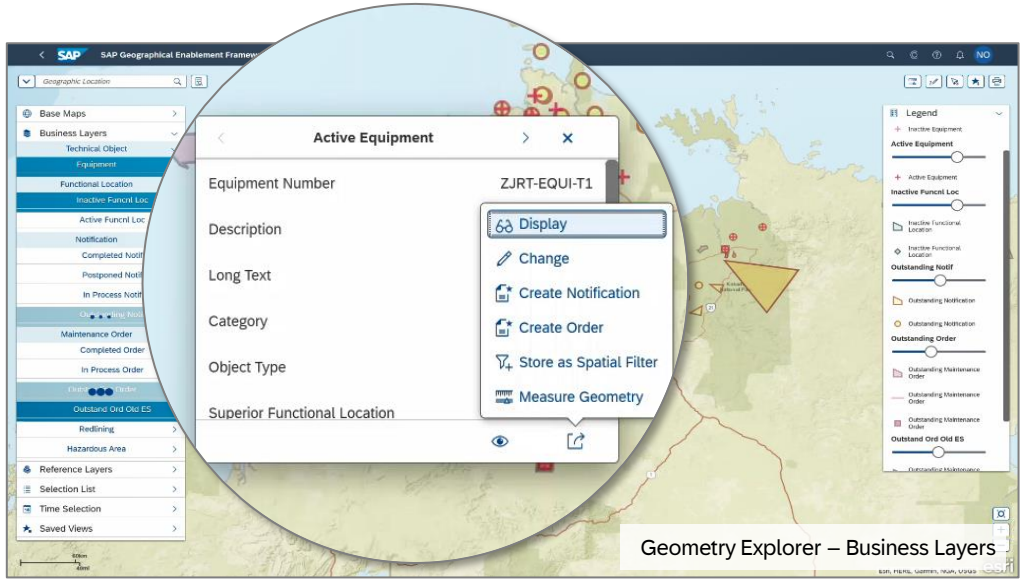
Asset Management: Spatial Asset Enablement

SAP Spatial Asset Management for SAP S/4HANA

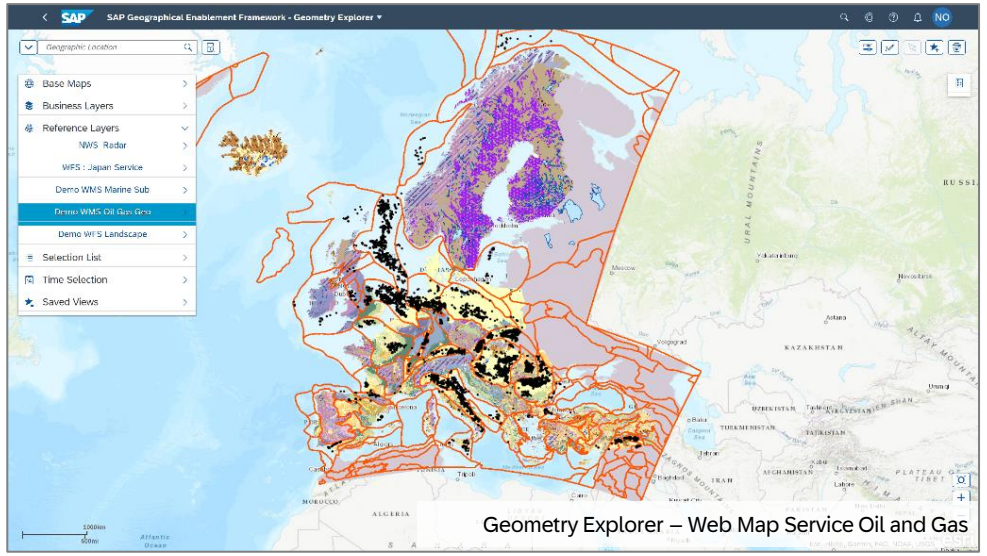
Maintenance Management (ext.) | Asset Spatial Enablement

Seamlessly integrate with geographical information systems (GIS) and business spatial data providing **end-to-end spatial workflows**

- Run SAP business transactions from a map on any device
- Create and manage geometry for business objects (equipment, functional location, notification, and work order)
- Support for multiple business layers, reference layers, and geometry types (points, lines, and polygons)
- Bi-directional and real-time visualization of SAP spatial data and external geographical information systems (GIS)
- Linear data modeling – enhancement of technical object functions and classification system to support the definition of a linear asset – e.g., power lines, pipelines, roads, and rail tracks)
- Linear asset work management – enhancement of work order processing to support linear work definition including notifications, measurement points and counters, measurement documents, work orders, confirmations, and maintenance plans to support linear information



Geometry Explorer – Business Layers


Geometry Explorer – Web Map Service Oil and Gas

SAP Service and Asset Manager

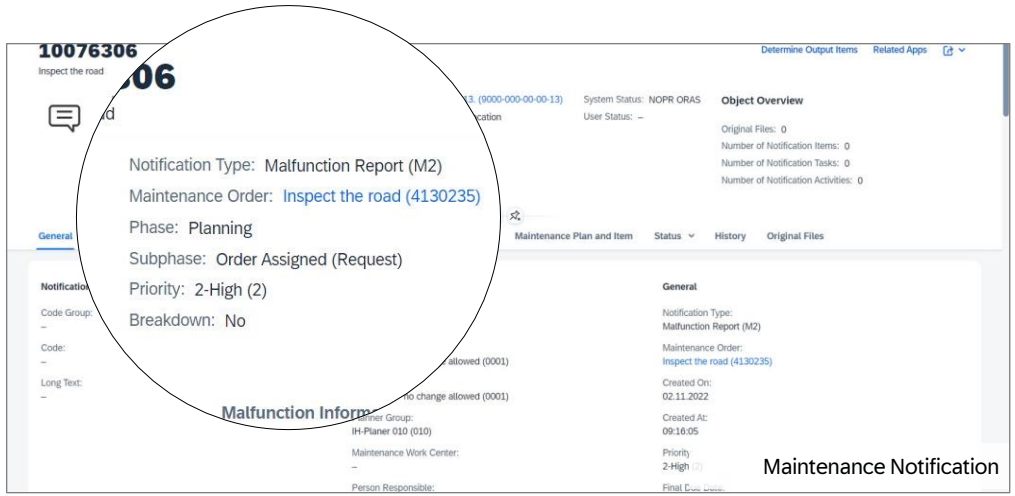
SAP Service and Asset Manager

SAP Service and Asset Manager enables your field workers to see, record, and update data for maintenance and field service execution whether they are connected or working remotely in the field.

- **Streamline your execution process** giving your technicians real-time access to asset data, work orders, and documentation they need to complete tasks faster and with greater accuracy.
- **Ensure compliance** with regulations, standards and a digital workflow that guides technicians through the required procedures.
- **Improve accuracy of the data captured** and reduce paperwork and administrative tasks increasing the time available to perform the job.
- **Perform diagnostics remotely** to address maintenance needs before the escalate into costly downtime.
- Facilitate a **seamless communication and collaboration** between technicians, supervisors and back-office teams.

Asset Management: Phase-based maintenance process

The phase-based maintenance process helps eliminate the needs for complex user status customizing and implement a standard process across different sites with unified data – key for data-driven decision-making.



Maintenance Notification

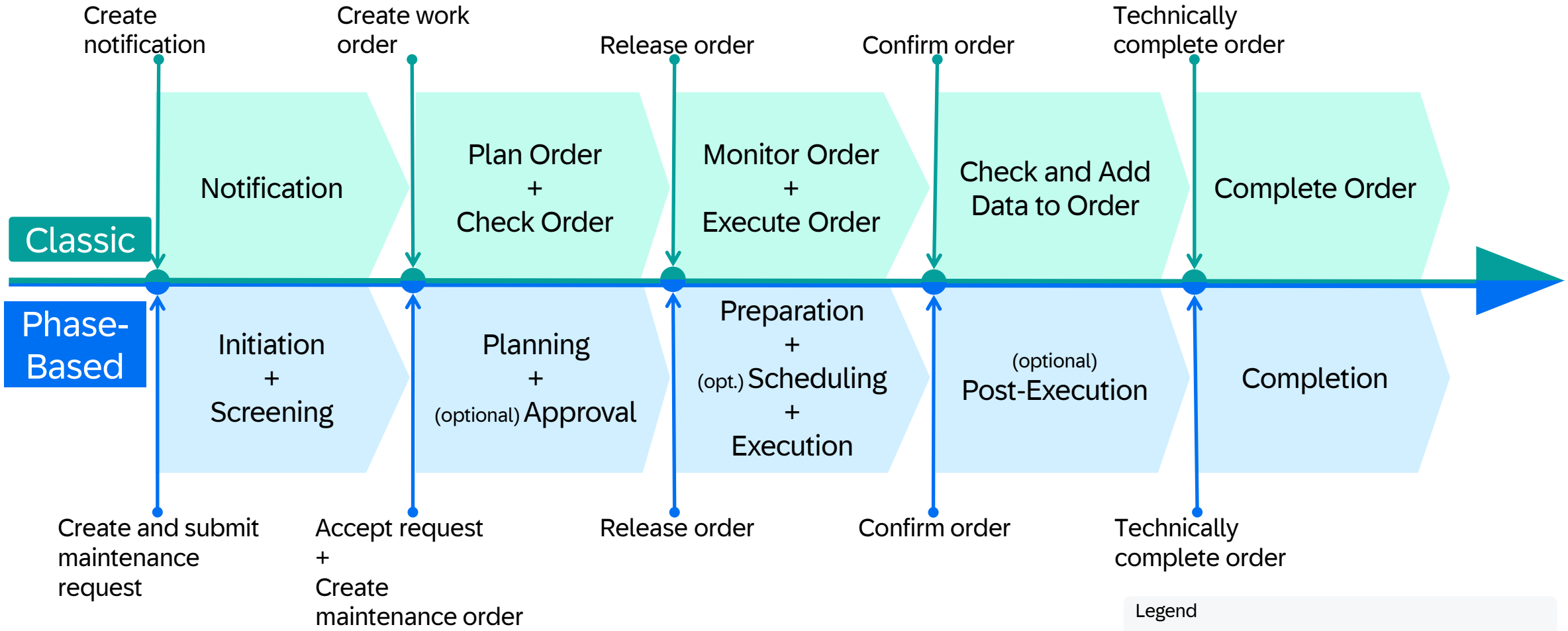
1 Initiation
2 Screening
3 Planning
4 Approval
5 Preparation
6 Scheduling
7 Execution
8 Post-Execution
9 Completion

- Submitted for Approval
- Approved
- Rejected

The maintenance process is divided into phases, each of which is further broken down into subphases. These phases and subphases track progress in the overall process. You can filter, sort, and group the maintenance orders by phase or subphase across various order list views

Asset Management: Phase-based maintenance process

Comparison of classic and new phase-based maintenance processes



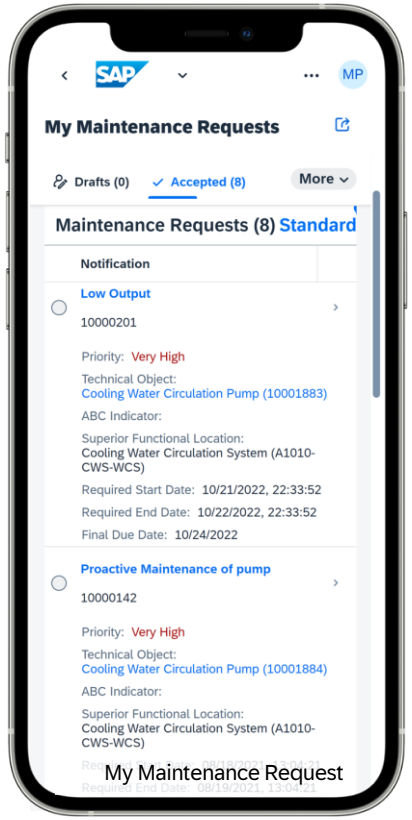
Asset Management: Maintenance request and screening

Maintenance Management | Asset Fault and Incident Response Management

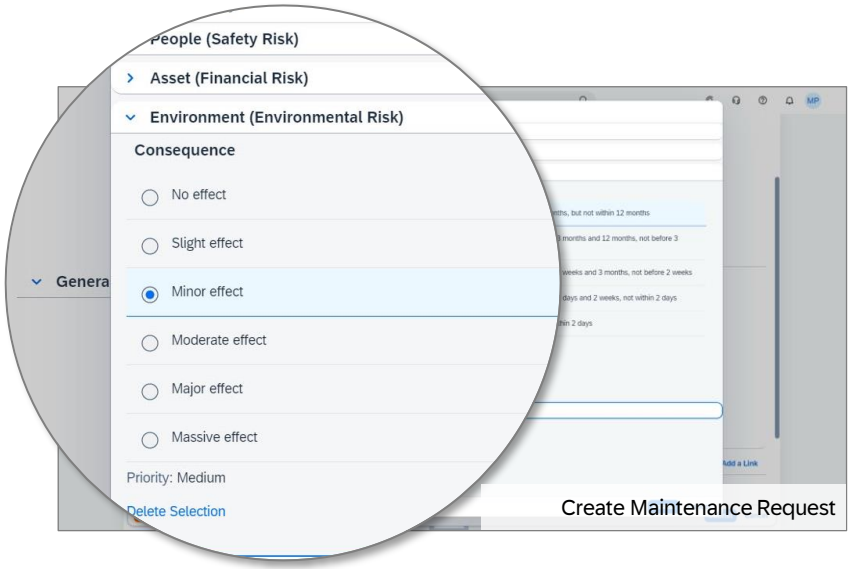
1 Initiation

Risk Assessment

You can include a risk-based assessment of the priority of work request by evaluating expected consequences of failure and their likelihood.



My Maintenance Request

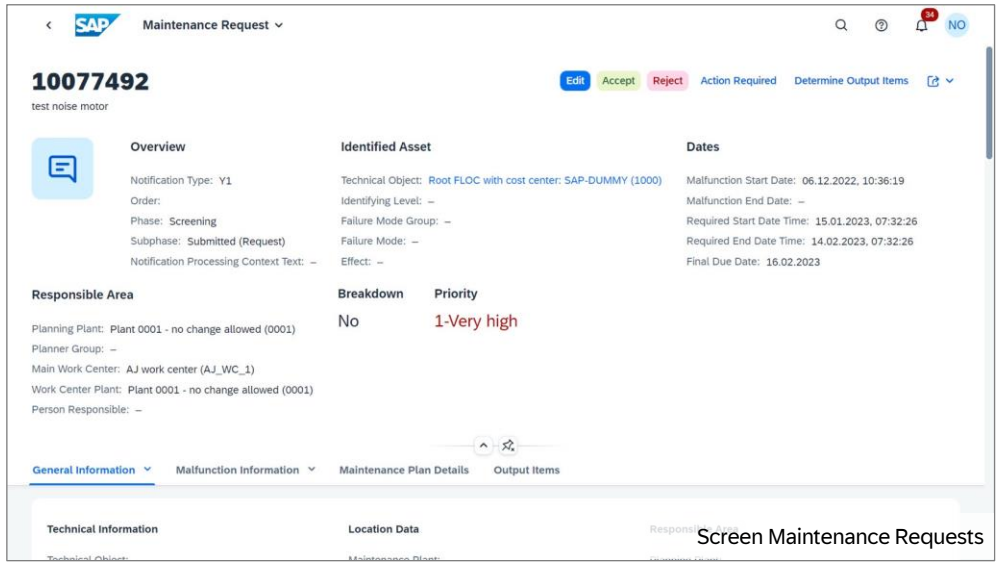


Create Maintenance Request

2 Screening

Screening

Maintenance supervisors / planners can review maintenance requests and edit details. You can return a maintenance request to the initiator for additional information. You can proceed to the next phase by accepting the request.



Screen Maintenance Requests

Asset Management: Minor work

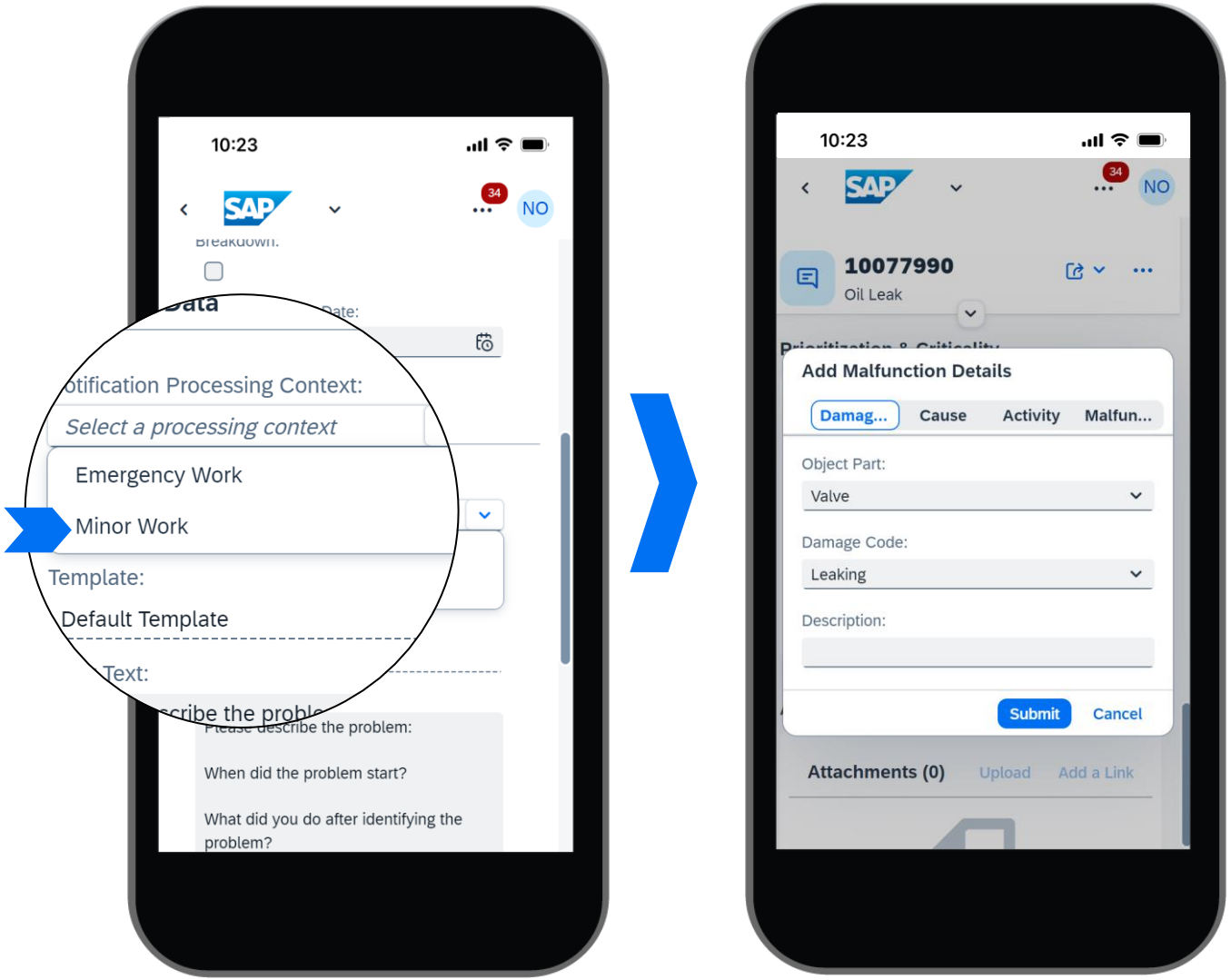
Maintenance Management | Asset Fault and Incident Response Management | Maintenance Execution

1 Initiation

7 Execution

Simplified process to raise minor work maintenance request and record the work done.

Record malfunction detail as a standardized data point that can feed into the asset health monitoring and machine learning process for damage code recommendation.



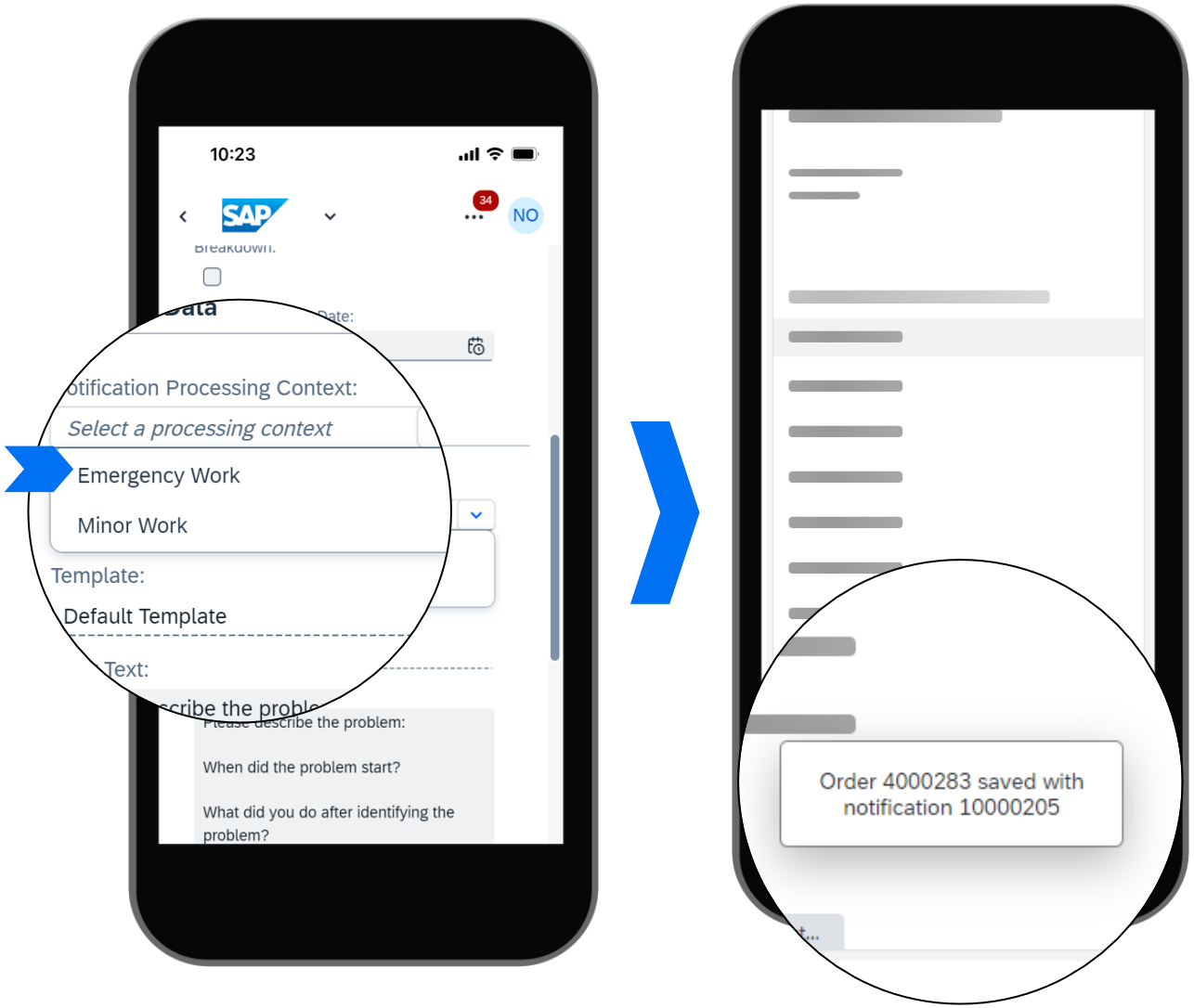
Asset Management: Emergency work

1 Initiation

7 Execution

For emergency work, you can get the system immediately to create a maintenance order on saving the emergency work request to get technicians to commence working immediately.

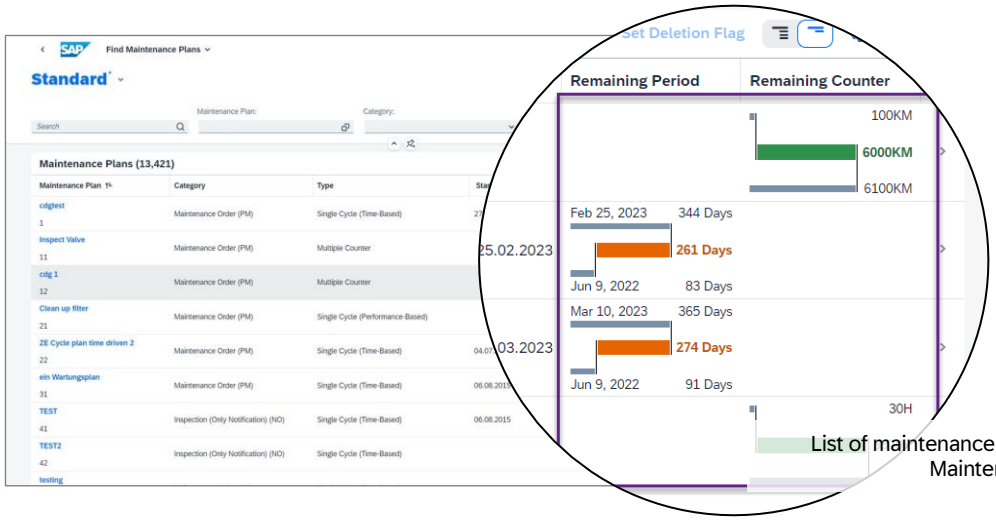
You can add **operations, etc. and dispatch them manually.**



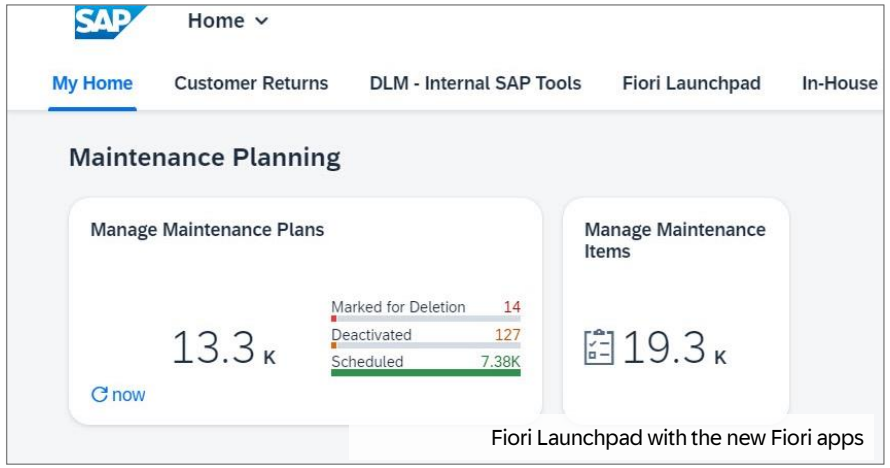
Asset Management: Maintenance plan

3 Planning

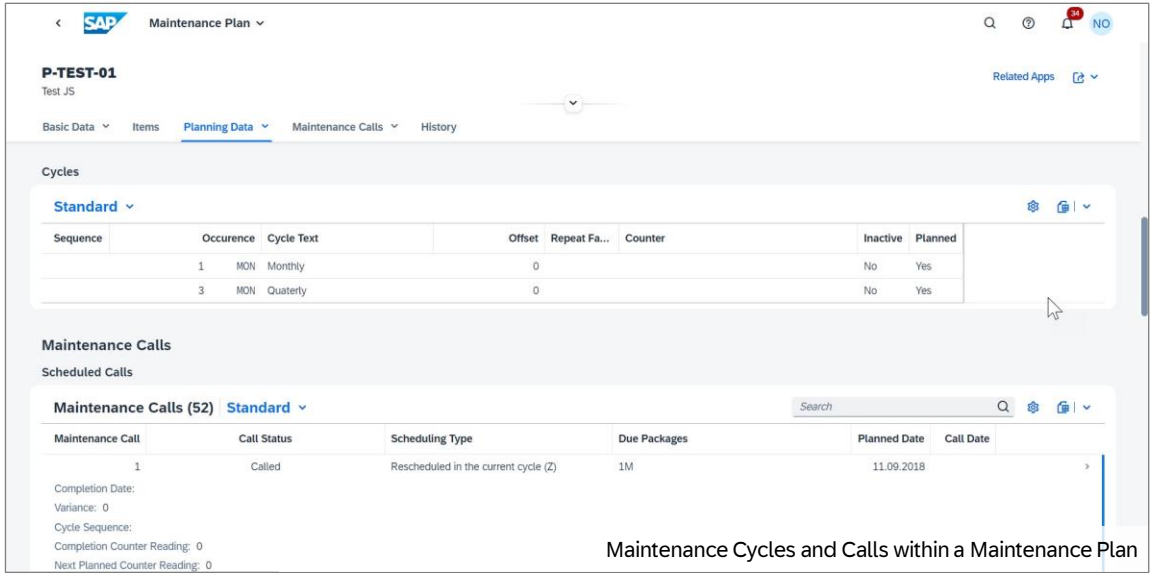
New easy-to-use Fiori apps to manage maintenance plans and maintenance plan items. Graphical representations with color codes to highlight what needs attention.



List of maintenance plans in Manage Maintenance Plans App



Fiori Launchpad with the new Fiori apps

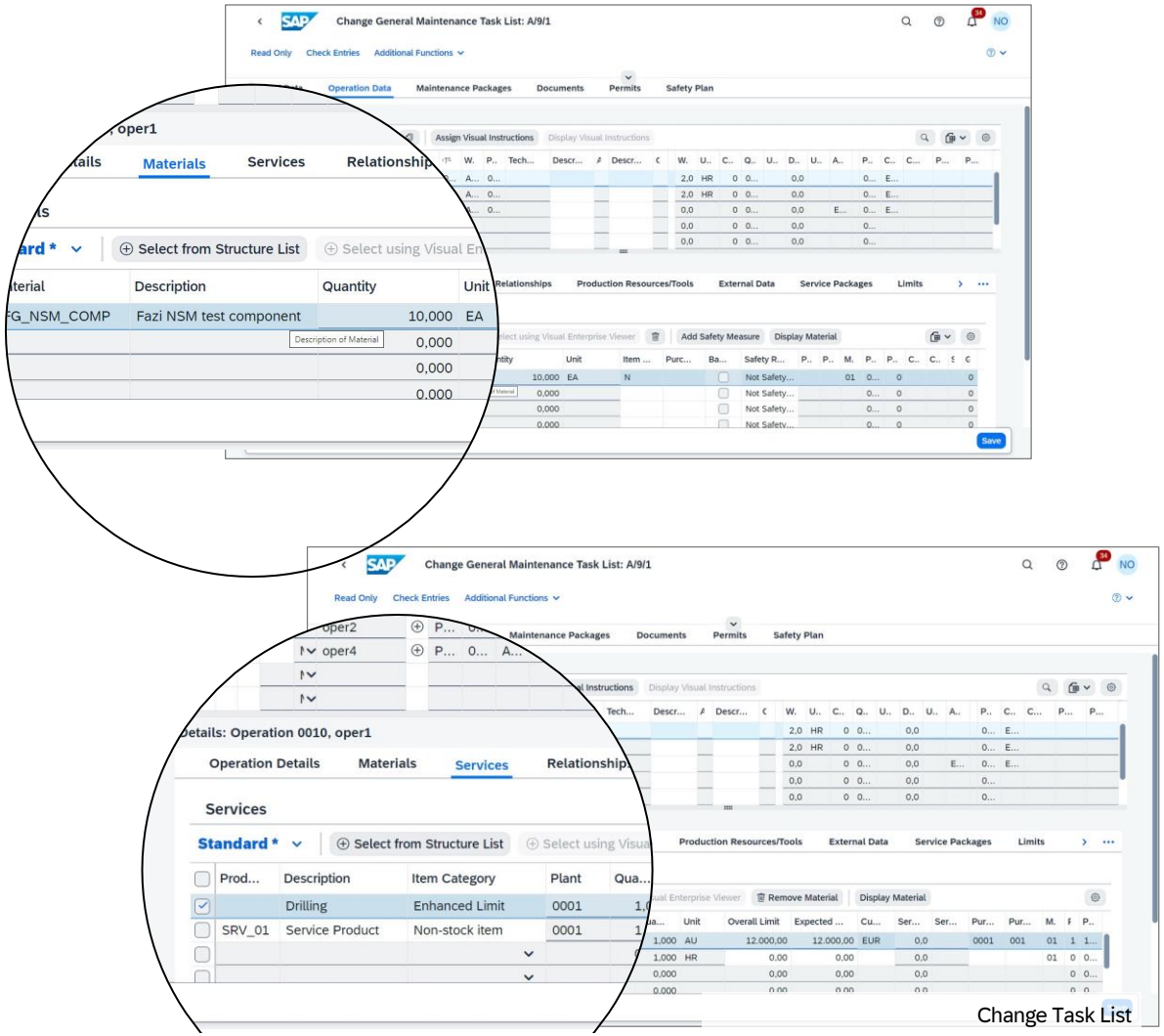


Maintenance Cycles and Calls within a Maintenance Plan

Asset Management: Task lists
Non-stock materials & lean services

3 Planning

Now you can add non-stock materials and services to task lists.
It can be added from product master (material master, non-stock or service) or can be added as a description.
Enhanced limit service can also be added.

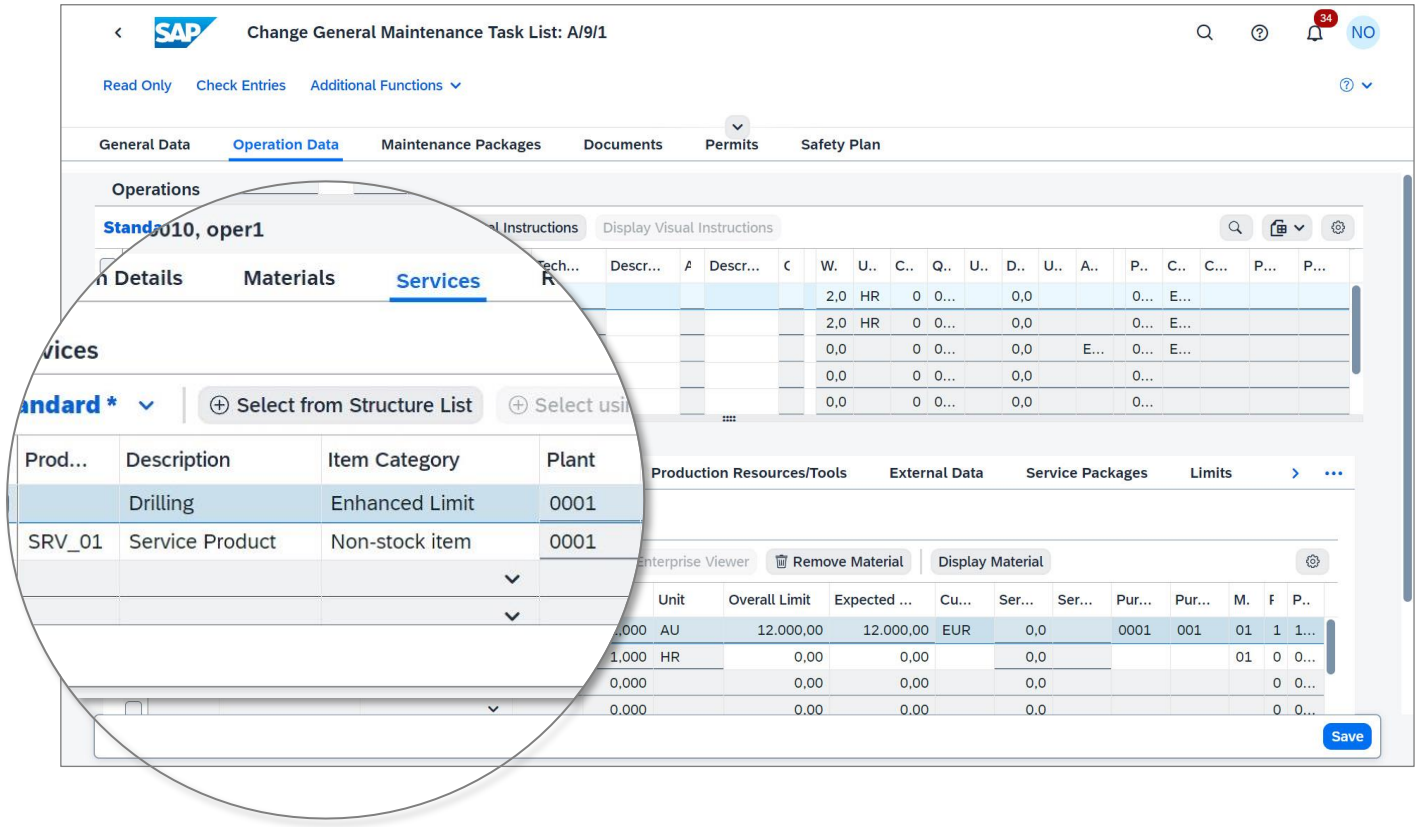


Change Task List

Asset Management: Lean service procurement

3 Planning

- Lean service can be enabled for select work order types
- Users can also use enhanced limit value-based services for each operation or sub operation of the work order
- Identification for service type is enabled using item category

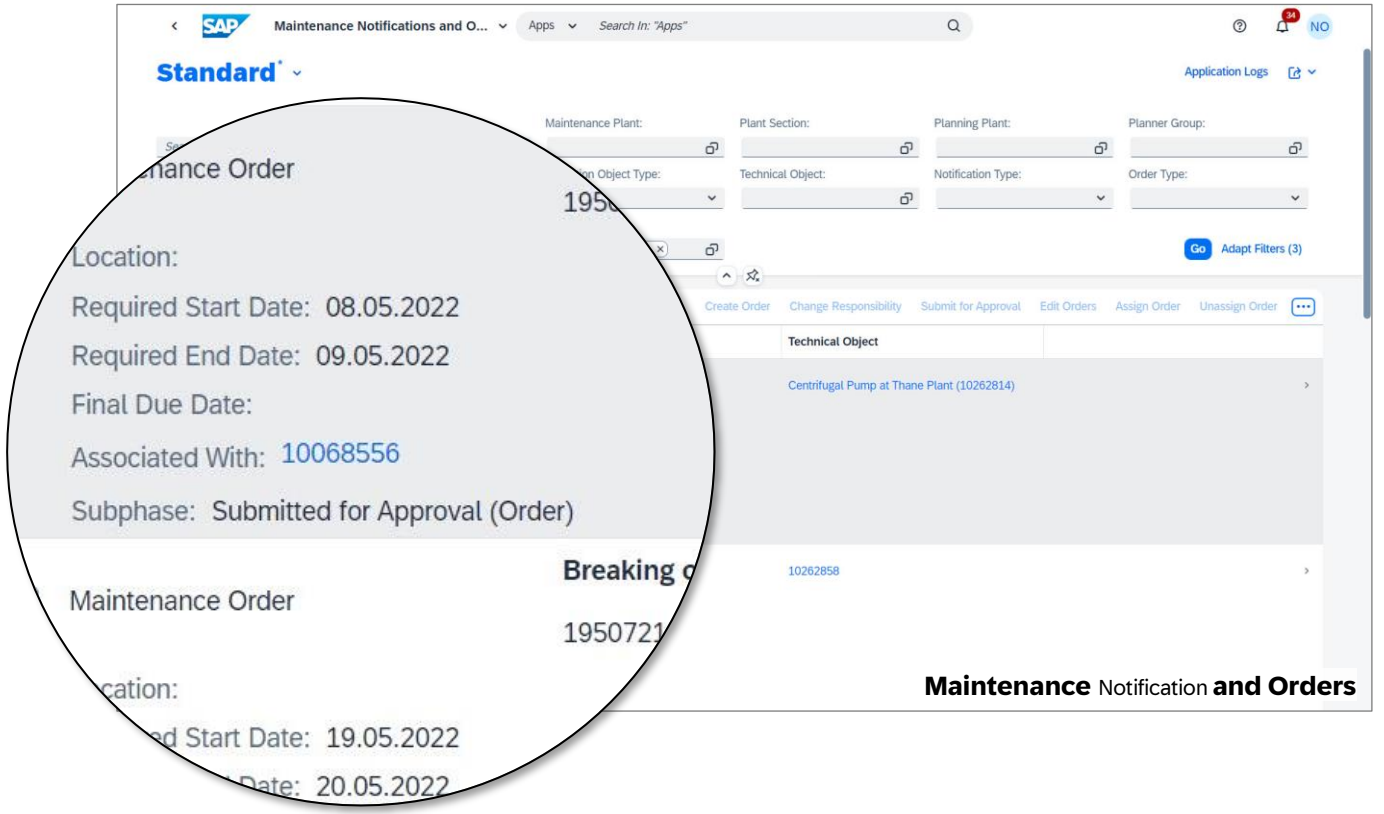


Asset Management: Approval

Manage workflows, teams, and responsibilities

3 Planning → 4 Approval → 5 Preparation

You can initiate an approval process and manage the approval workflow for maintenance orders. As a configuration expert, you can configure workflows to optimize the approval process for maintenance orders.

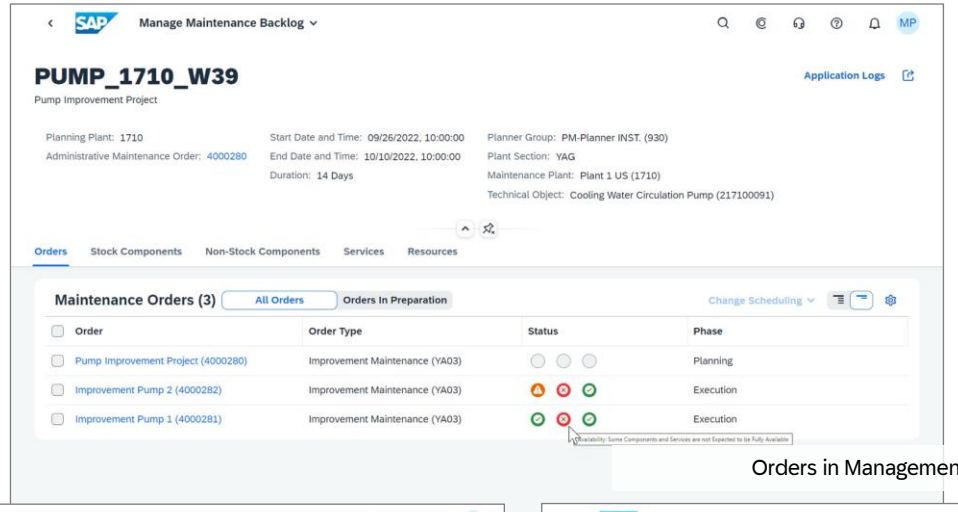


Maintenance Notification **and Orders**

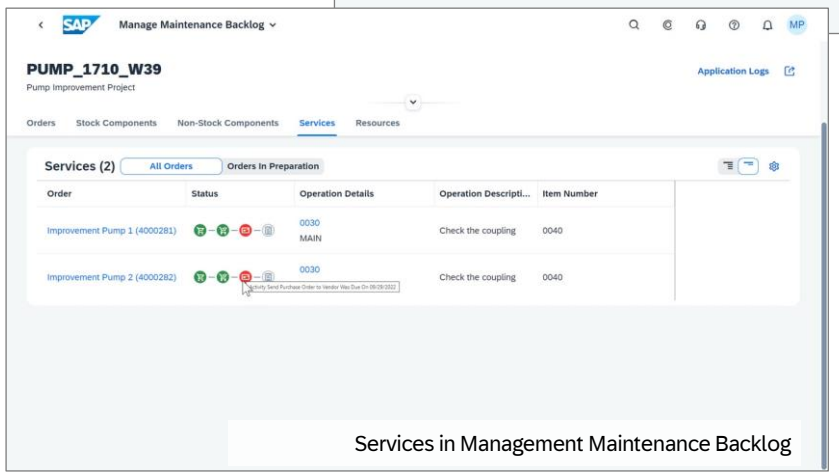
Asset Management: planning buckets and backlogs

3 Planning → 4 Approval → 5 Preparation

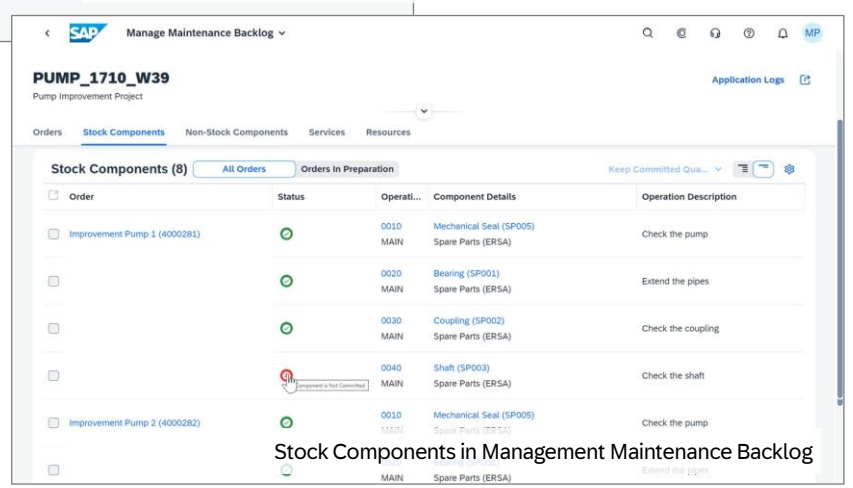
By defining maintenance planning buckets, you can divide the maintenance effort into manageable groups based on their scope. The scope of a planning bucket includes time, but also other important attributes of the maintenance jobs such as the planner group. Based on this scope, the system groups maintenance orders and assigns them to the corresponding planning buckets.



Orders in Management Maintenance Backlog



Services in Management Maintenance Backlog



Stock Components in Management Maintenance Backlog

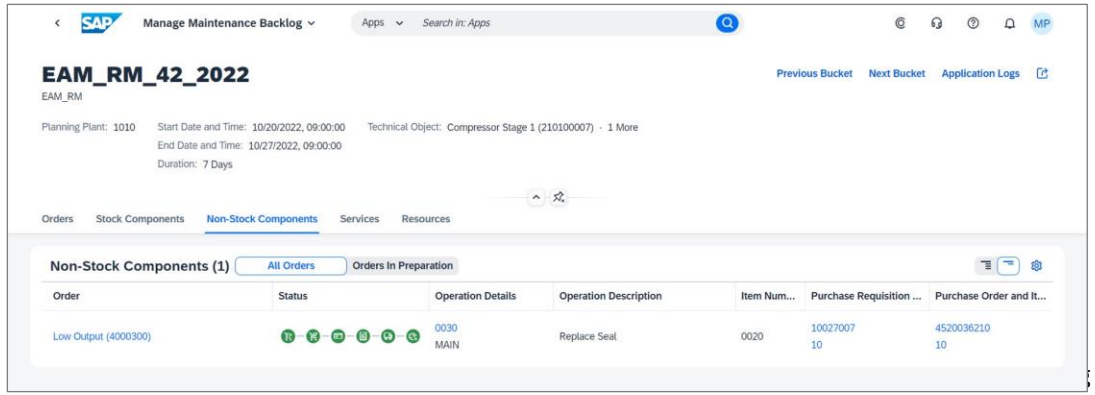
Asset Management

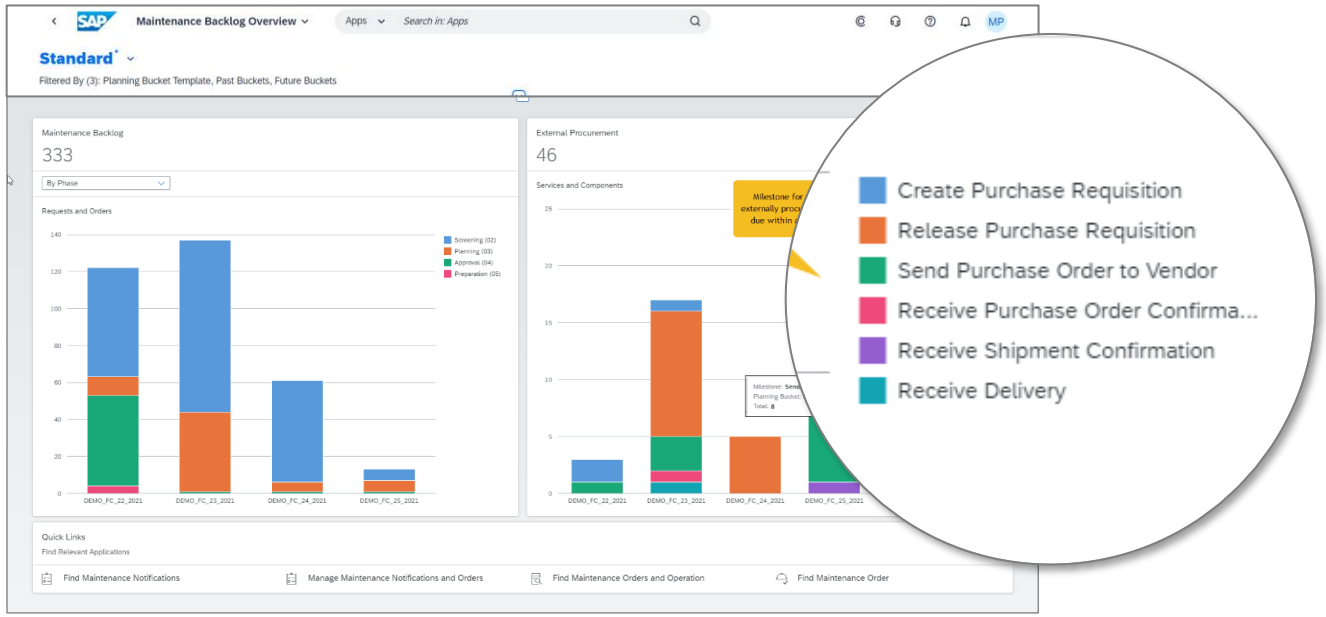
Backlog overview & procurement milestones

3 Planning → 4 Approval → 5 Preparation

You can use Maintenance Backlog to monitor the procurement of non-stock materials and services by means of procurement milestones.

The completion of some milestones depends on changes in the purchase order and posting of the goods receipt for non-stock components.



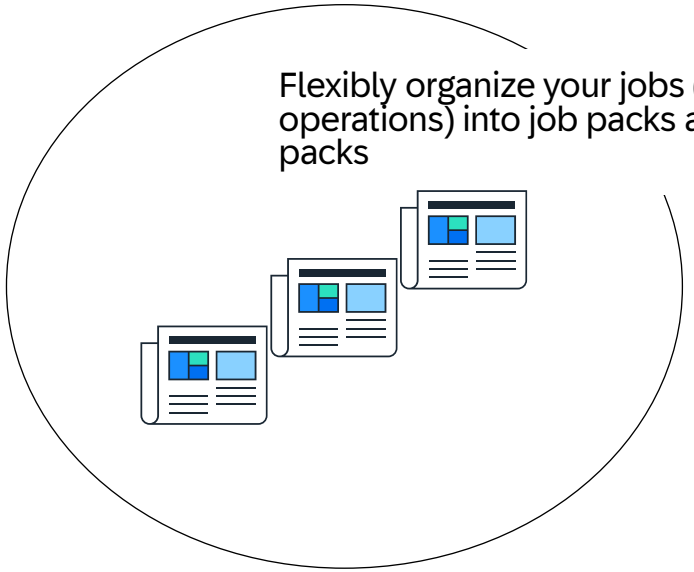


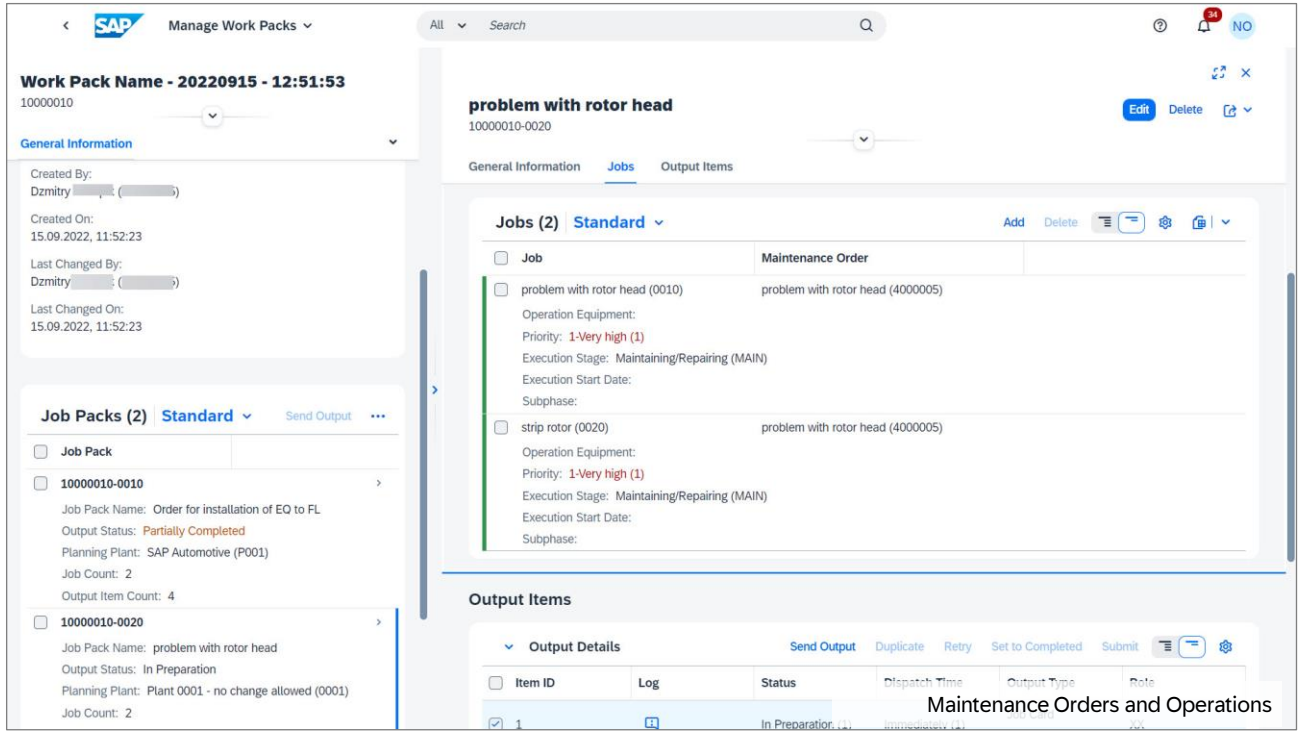
Asset Management: Work packs and output

Maintenance Management | Tactical Asset Management Planning

5 Preparation | Scheduling | 7 Execution

Create a work pack (a group of operations) from a list of operations of work orders for mass output





Maintenance Orders and Operations

Asset Management: Product catalogs search

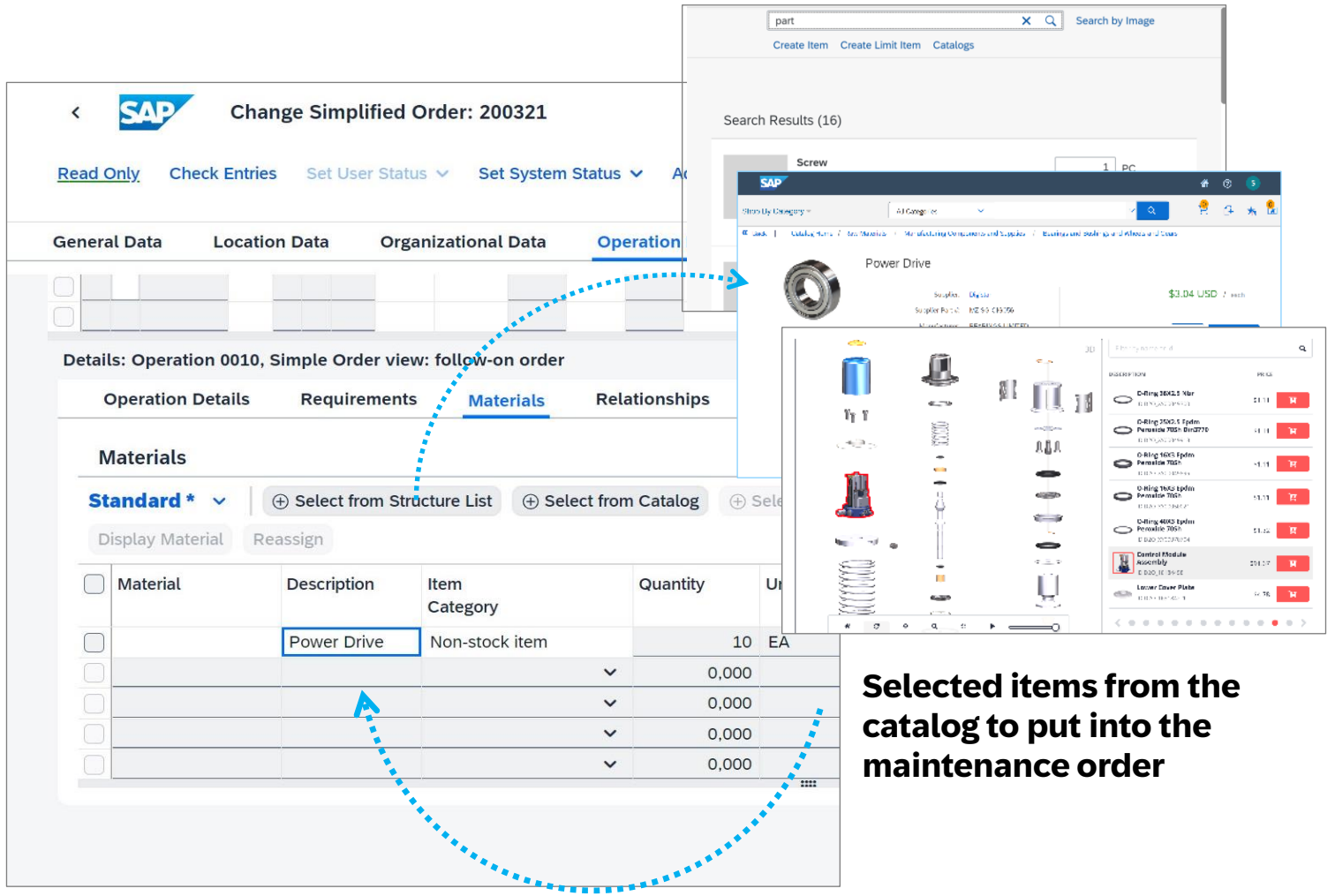
Maintenance Management | Tactical Asset Management Planning

5 Preparation | Scheduling | 7 Execution

Work closely with the procurement department to let maintenance teams have easy access to the approved item and supplier lists.

Search product catalogs with the open catalog interface (OCI) in the maintenance orders. This can be a catalog provided by suppliers and internal catalogs.

Multiple catalogs can be connected for the user to choose from.



Selected items from the catalog to put into the maintenance order

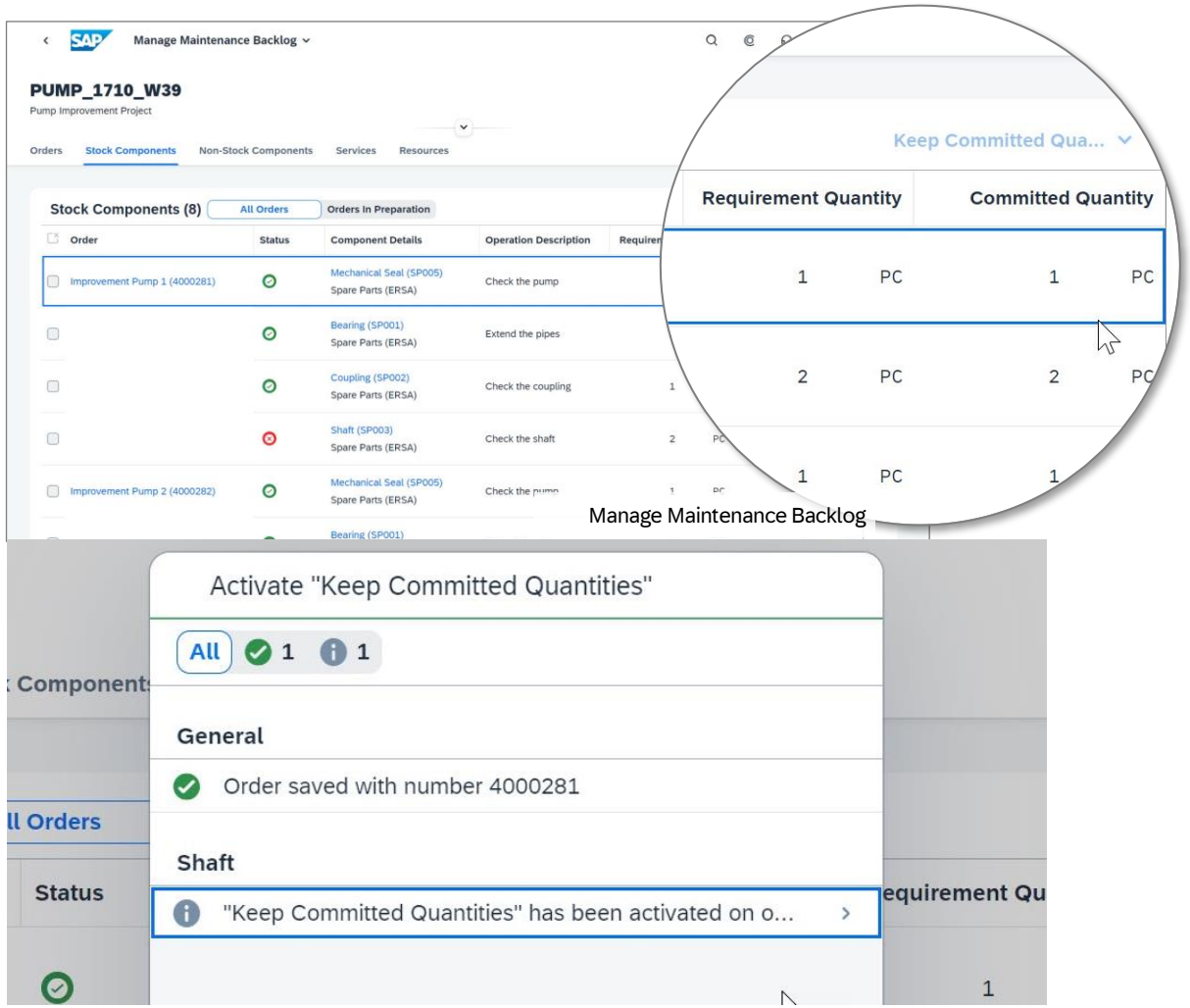
Asset Management: Enhanced availability check

Maintenance Management | Tactical Asset Management Planning

5 Preparation | Scheduling | 7 Execution

Perform an enhanced material availability check for maintenance orders and reassign committed stock material to the orders with the highest priority and urgency.

you can manually determine that committed quantities of individual components should not be cleared and reassigned during a material availability check by selecting the Keep Commitment checkbox. In this case, available quantities will only be assigned to the respective maintenance order but cannot be removed by the availability check.



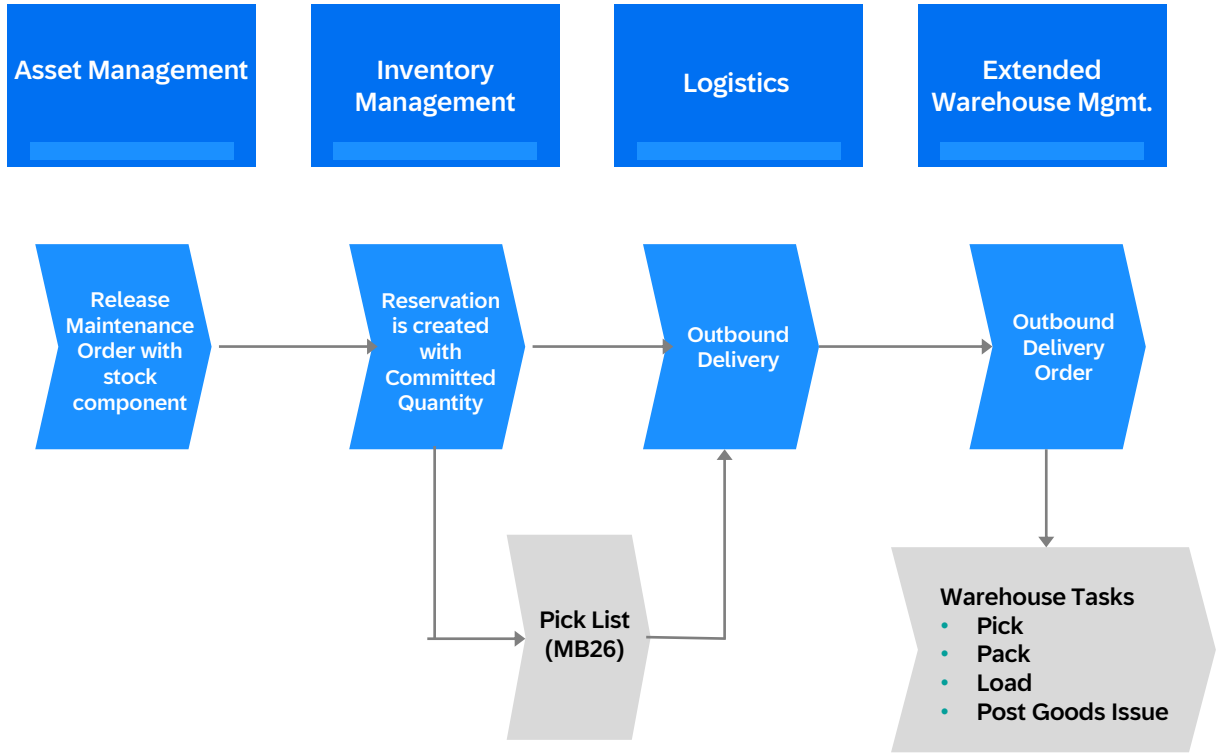
Manage Maintenance Backlog

Asset Management: Extended Warehouse Management

5 Preparation | Scheduling | 7 Execution

For large-scale warehouse, a new master data object has been introduced: **recipient location**. It identifies the location where the intended recipient can receive the component.

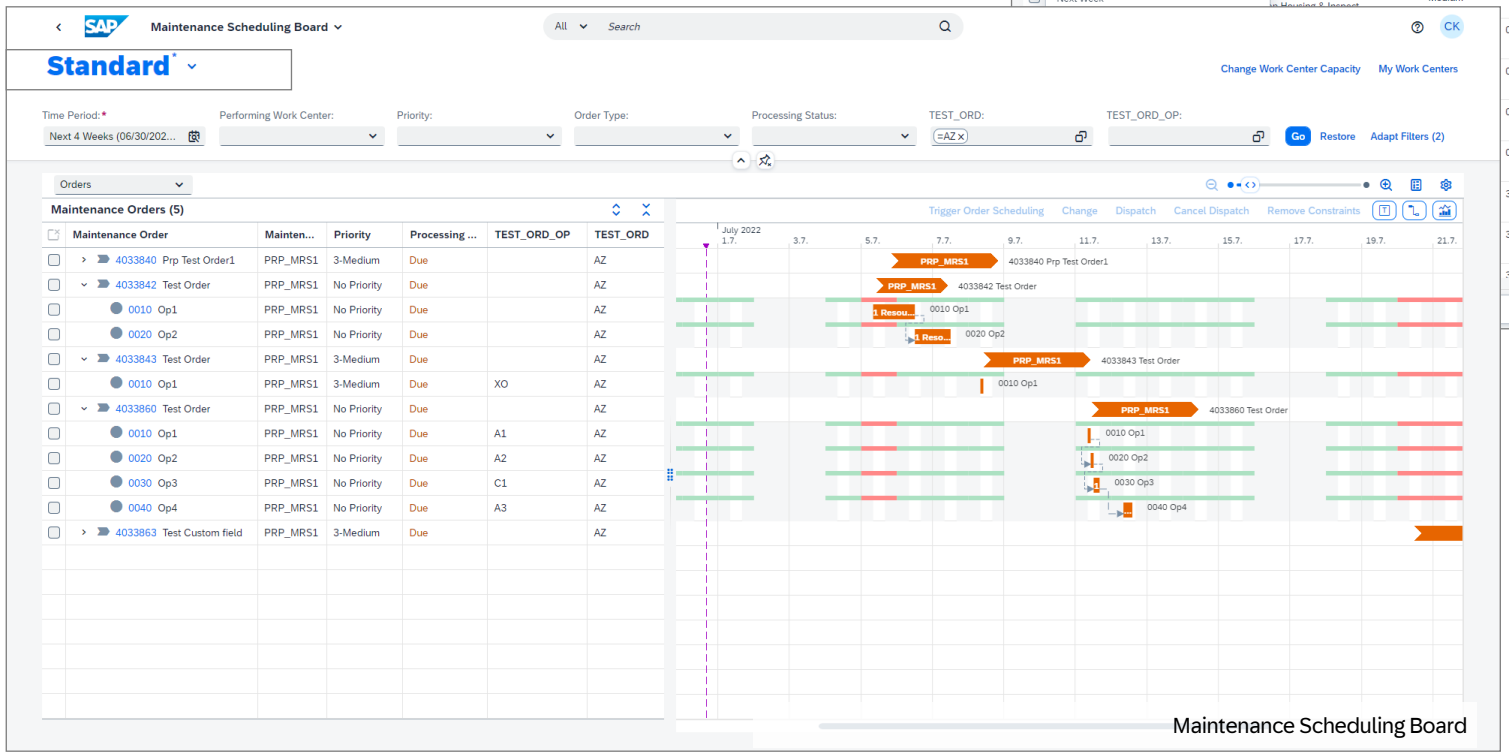
The integration between maintenance order and extended warehouse management establishes seamless flow between asset maintenance, inventory management, and warehouse, thereby enabling easy tracking of requested stock components across the end-to-end process.

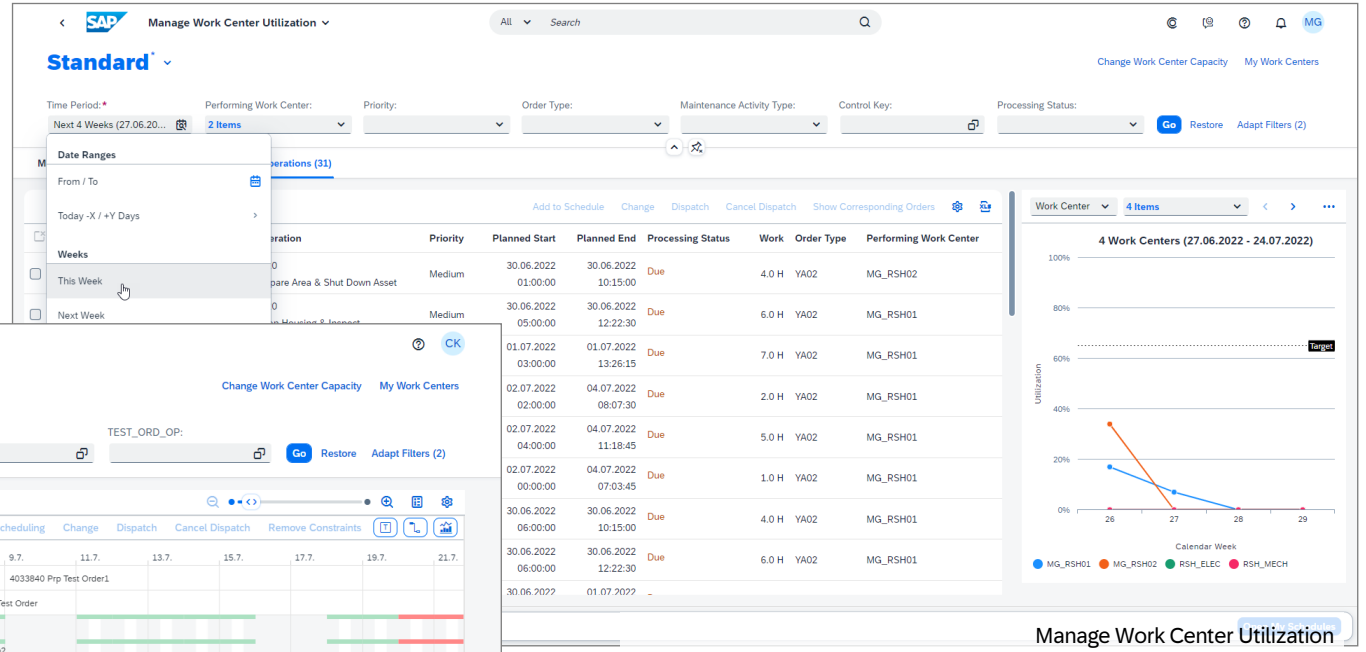


Asset Management: Resource scheduling (1/2)

6 Scheduling

Resource Scheduling has had various useability and functional improvements.





Asset Management: Resource scheduling (2/2)

Maintenance Management (ext.) | Asset Management Resource Planning

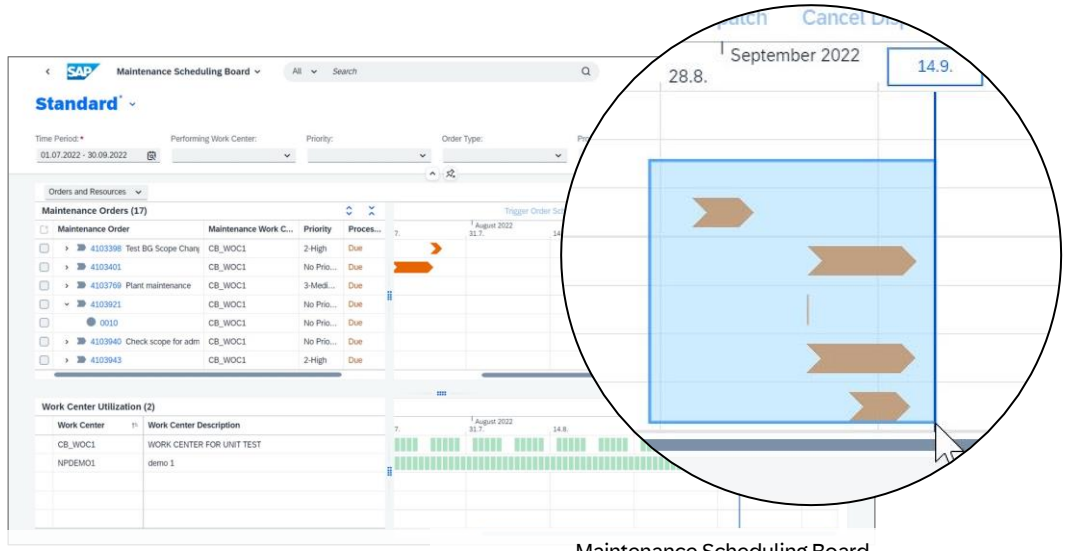
6 Scheduling

Intuitive user interface with

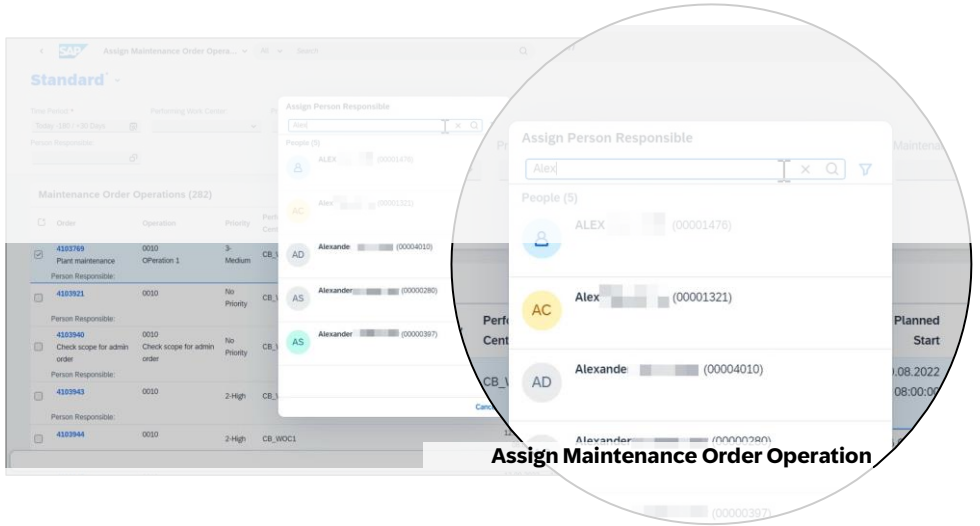
- Drag-ang-drop to change schedules of maintenance orders
- Drawing a “lasso” with mouse to select multiple elements
- Drop-down selection to visually show work center utilization

Team assignment to work centers with using the Teams and Responsibilities framework

... and more new features



Maintenance Scheduling Board



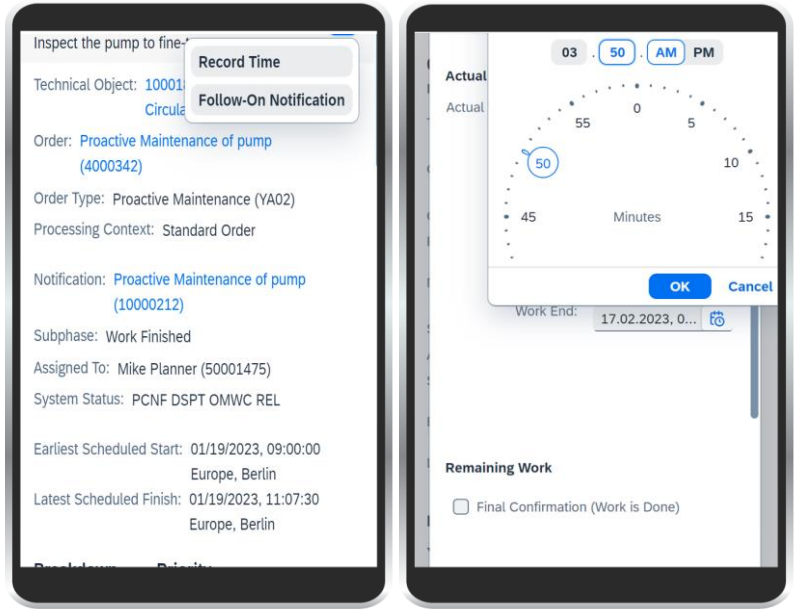
Assign Maintenance Order Operation

Asset Management: Job confirmation

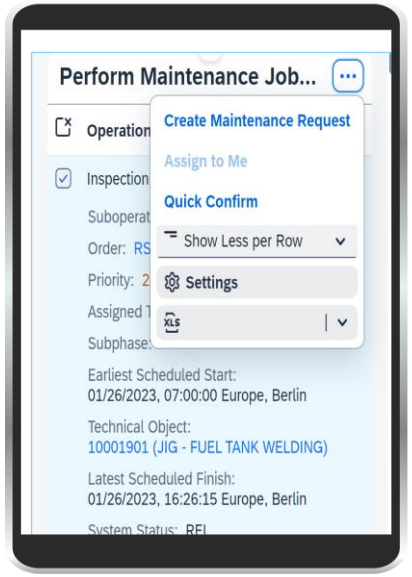
7 Execution

Data entered by maintenance technicians are important input to the whole process asset management. Various features have been added to make their job easy from within the same Fiori app – on the mobile device or desktop.

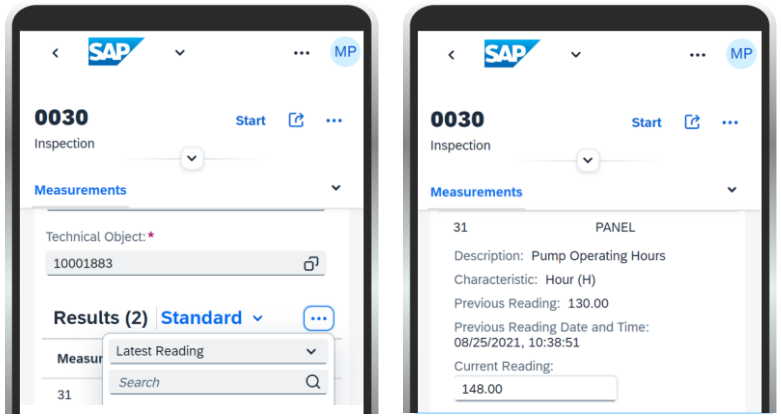
Intuitive time recording for a job



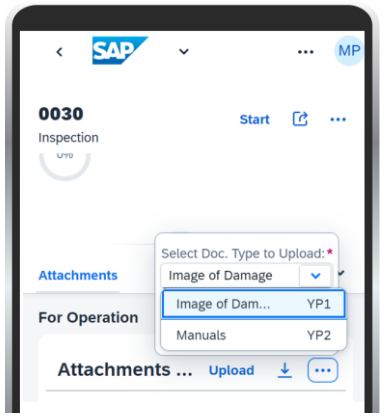
Quick confirm for multiple jobs from the list



Record measurements



Upload attachments



Asset Management: Inspection checklist

- Enable inspection checklist process from creation of inspection plans, results recording, and follow-up actions – e.g., new checklist tab on maintenance orders
- Create inspection checklist templates for combinations of technical objects and recurring maintenance tasks; e.g., monthly electrical check-ups

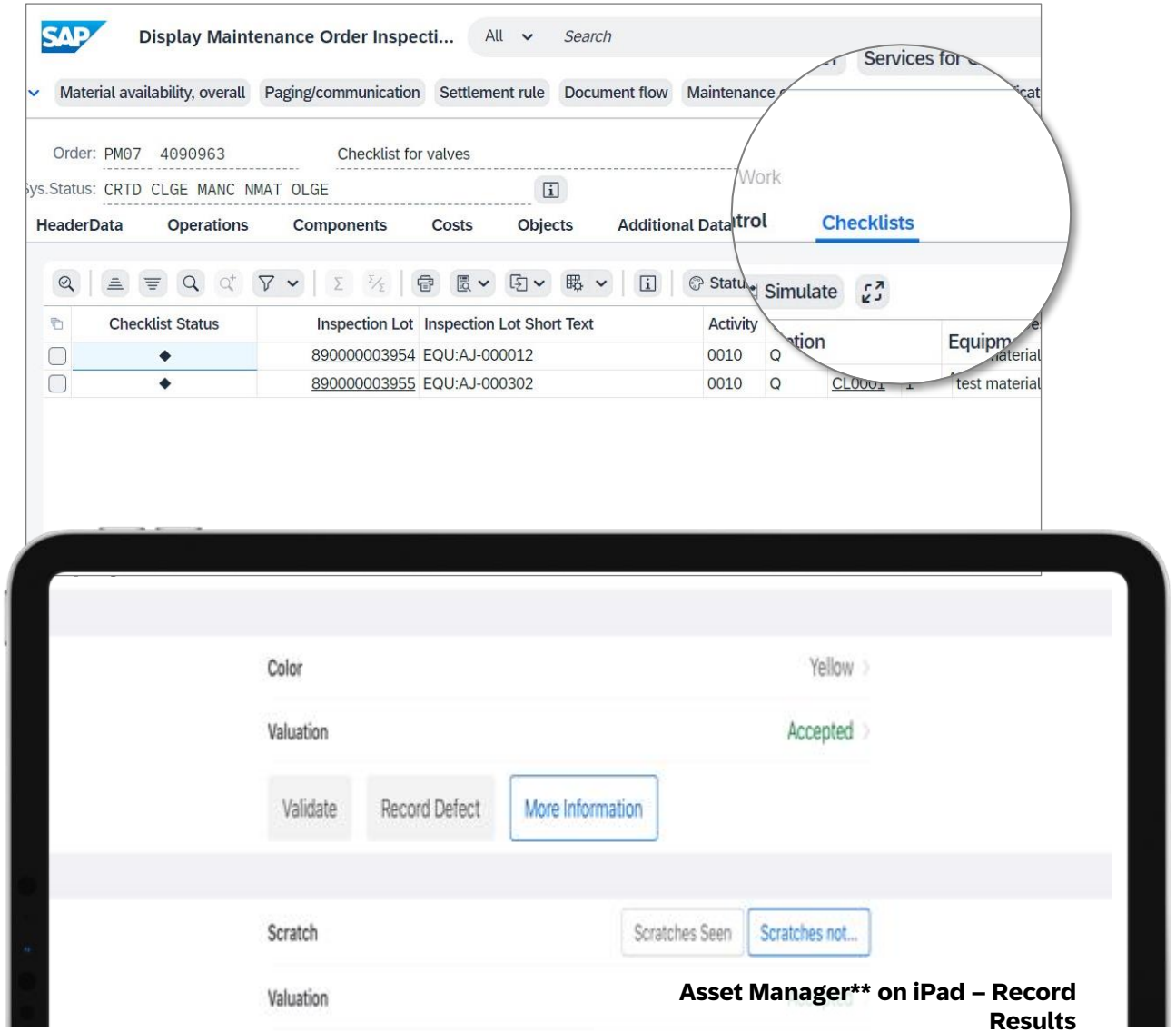
Work Order Object List
- Create work order manually or from maintenance plan
- Generate object list manually or from a maintenance plan or after creation of a work order

Inspection Checklist
- Generate inspection checklists after object list generation manually or automatically at order release

Results Recording
- Record results for checklist items, that is, inspection lot characteristics

Completion Follow-Up Actions
- Set usage decision for inspection lots
- Complete maintenance order (status TECO - technically completed)
- Execute follow-up actions after usage decision

Inspection Checklist Process

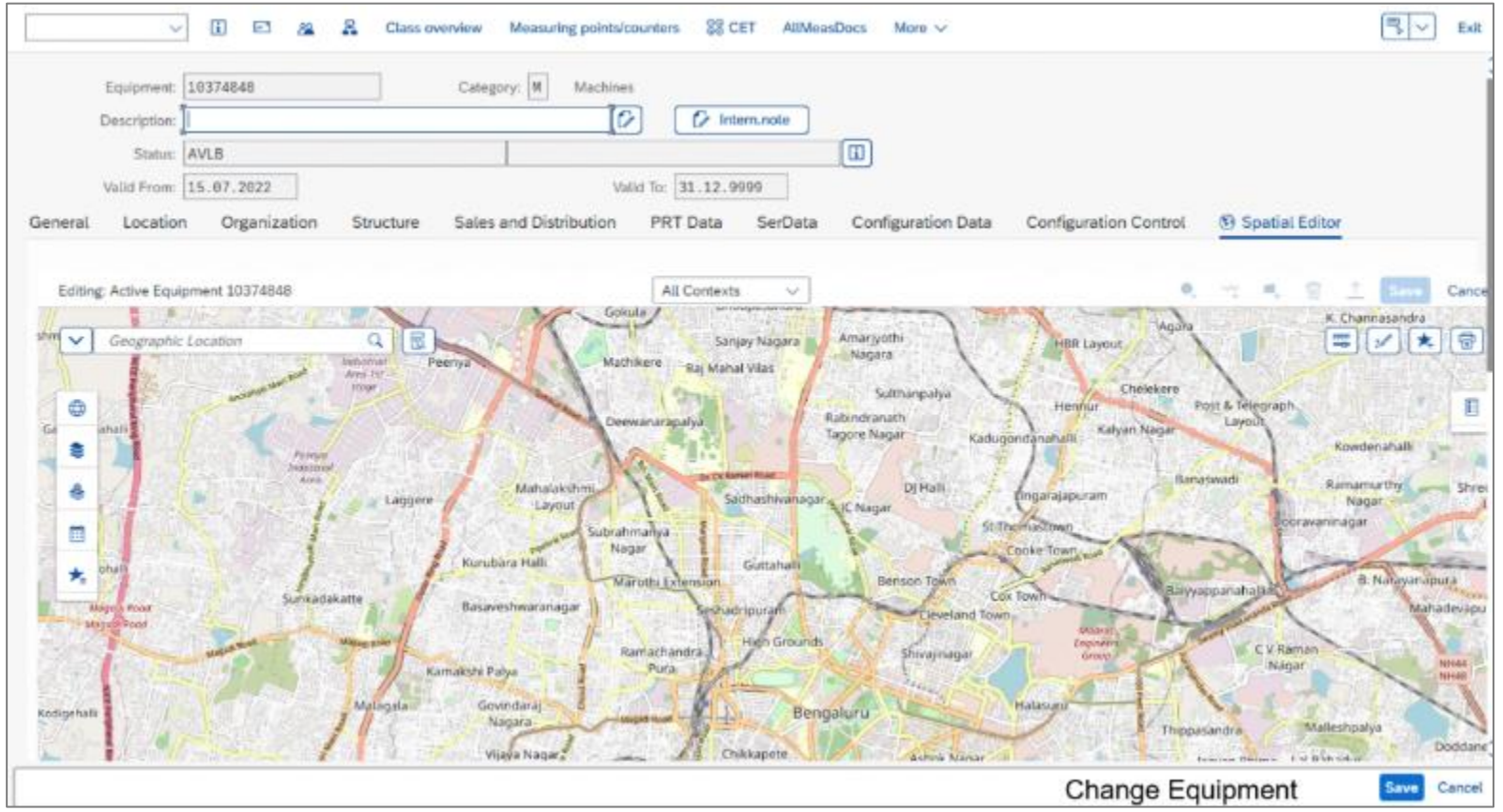


Asset Manager on iPad – Record Results**

Asset Management: Asset Spatial Enablement

Embedding Spatial Editor in Change Equipment (IE02) and Change Functional Location (IL02) transactions.

Open the equipment or functional location in change mode and the "Spatial Editor tab will be enabled. The user can now geo-enable the object.

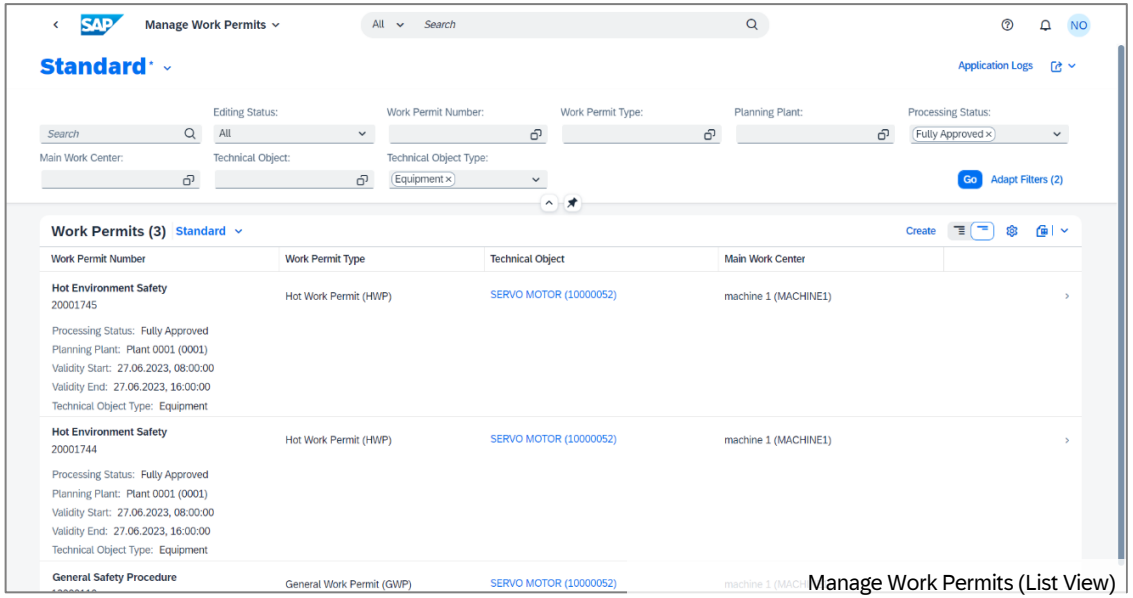


Asset Management: Work Clearance Management

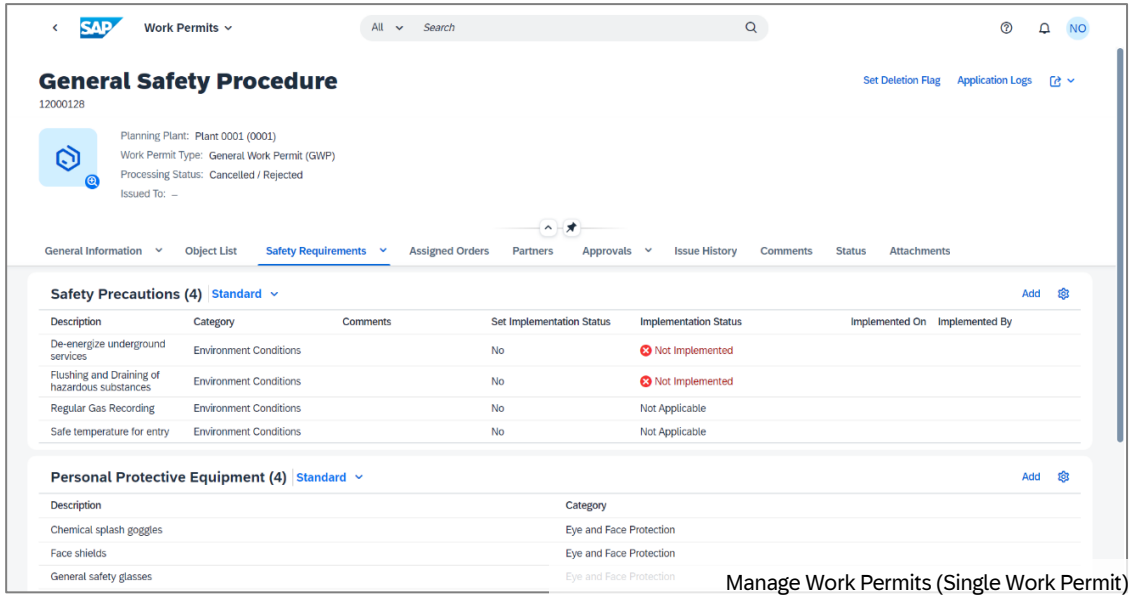
Work permits

Environment, Health, and Safety

Work Permit and Isolations Management



Manage Work Permits (List View)



Manage Work Permits (Single Work Permit)

Controlling maintenance work through clear safety instructions and permits.

Ability to establish an integrated process between asset management and EH&S in order to communicate pertinent safety risks and control the maintenance work being performed.

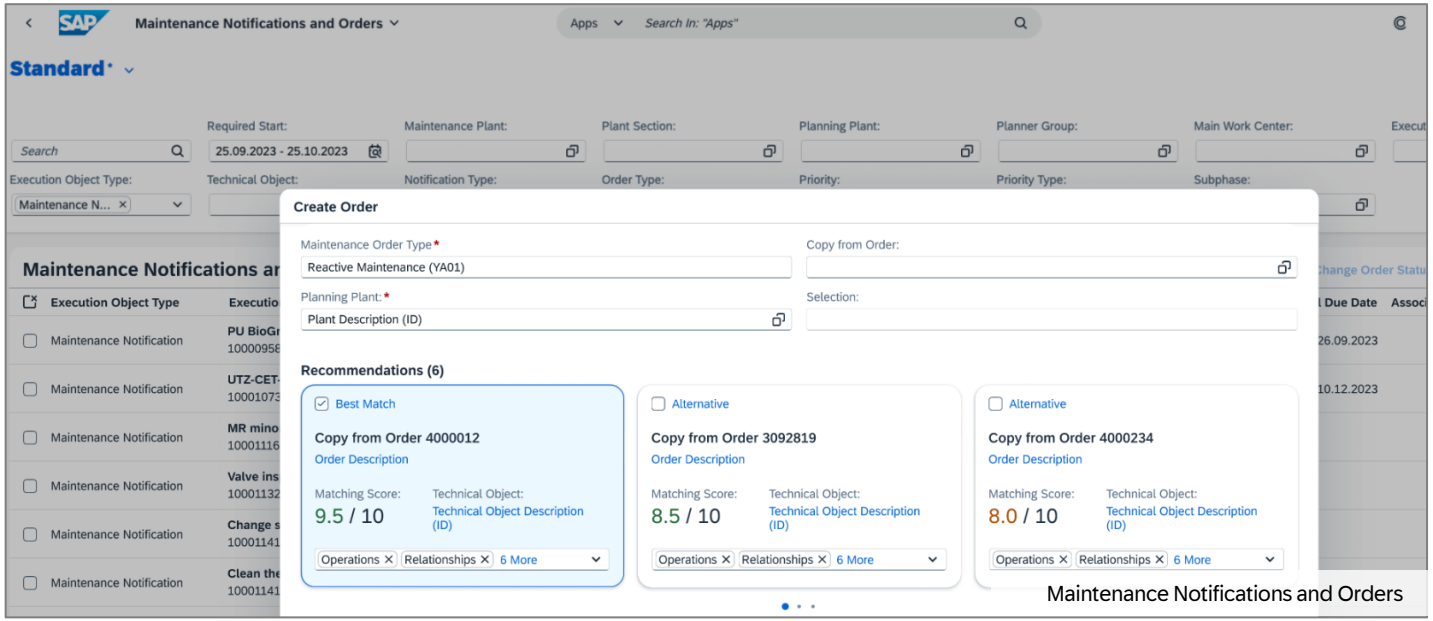
Asset Management

AI-assisted maintenance order recommendation

Maintenance Management | Tactical Asset Management Planning | 2023 FPS2

AI-assisted maintenance order recommendation

Let AI recommend maintenance orders that solved similar incidents from maintenance history. You select one to copy to create a new maintenance order.



Maintenance Notifications and Orders

Benefits

- Minimize disruptions of inadequate planning and execution by analyzing and learning from past data that align with best practices with a higher likelihood of success
- Improve efficiency by leveraging historical data from maintenance orders and maintenance notifications to provide planners with templates for resolving new maintenance requests
- Reduce the time to plan a maintenance order by providing a maintenance order recommendation feature with self-learning capabilities

Asset Management: Task list in maintenance request

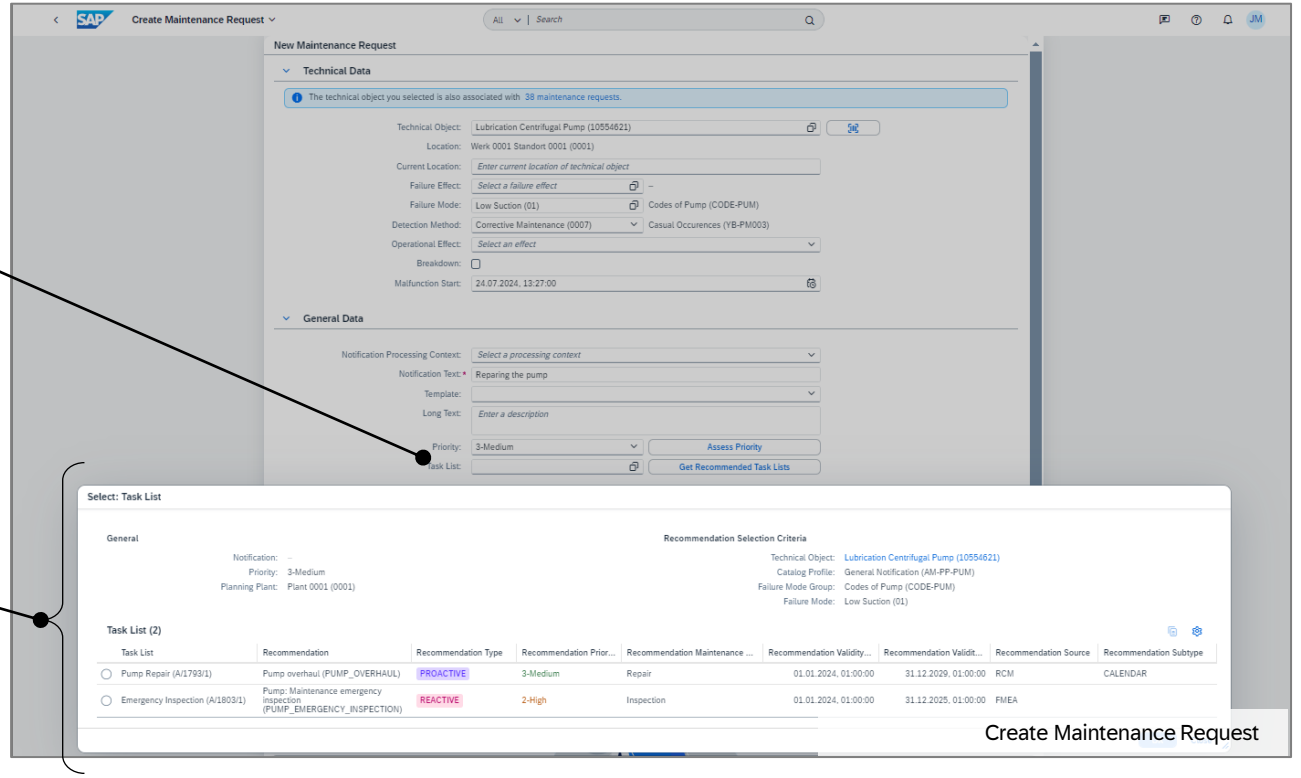
Recommendations from SAP Asset Performance Management

Maintenance Management | Asset Fault and Incident Response Management | 2023 FPS2

You can now **assign a task list to your maintenance request**, copying the operations, materials, relationships, PRTs and documents from the task list to the maintenance order once this order is created based on the maintenance request.

This is especially useful for emergency work.

You can now get **task lists recommendations by your reliability engineers** for the failure mode for the asset while creating a maintenance request – integration with SAP Asset Performance Management (SAP APM).



Asset Management

New Manage Inspection Checklists app

Maintenance Management | Tactical Asset Management Planning | Maintenance Execution

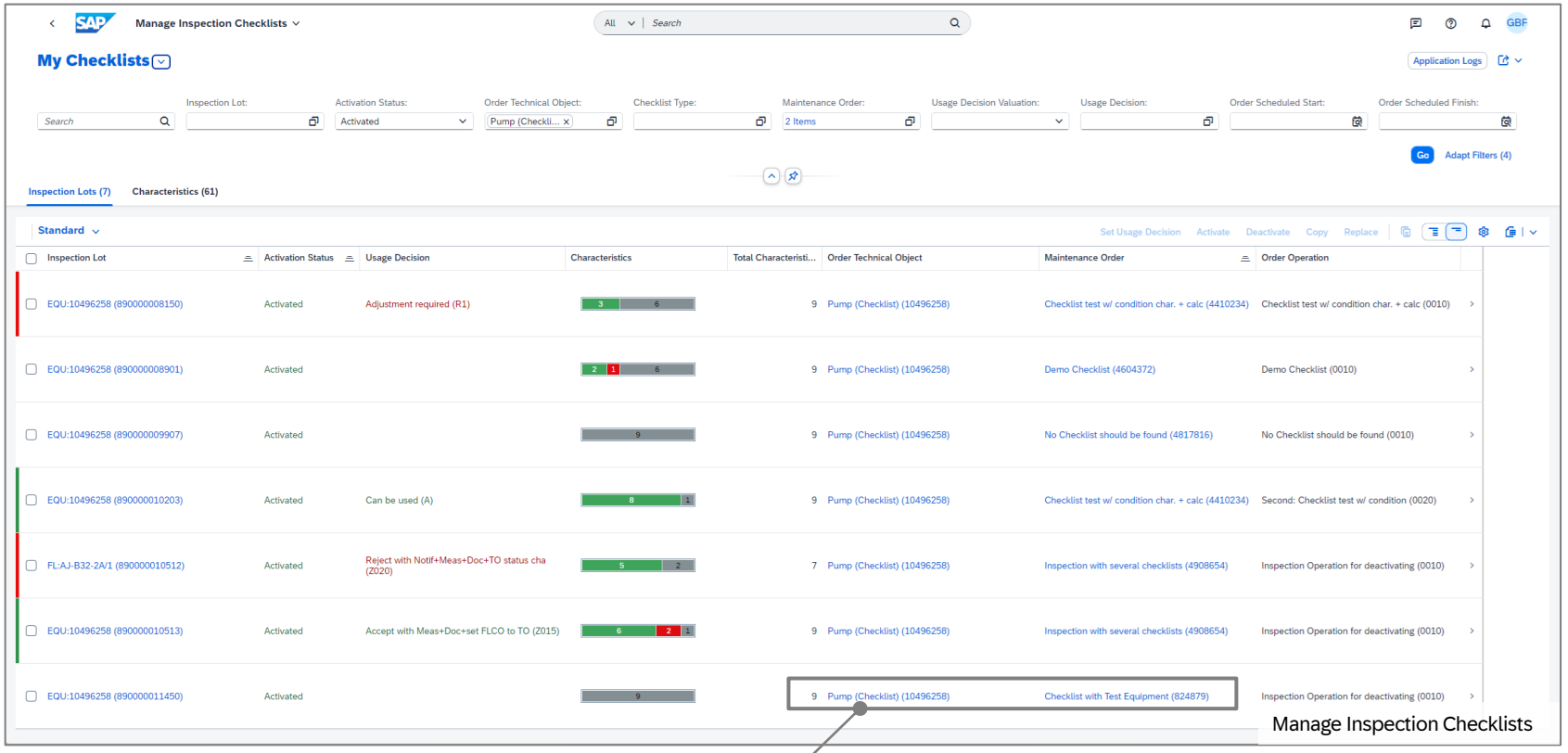
2023 FPS2

Manage Inspection Checklists (new app)

Manage Inspection Checklists app is newly available with SAP S/4HANA 2023 FPS2 for use by maintenance planners.

This app shows an overview of inspection checklists in the Inspection Lots view, or the corresponding inspection characteristics in the Characteristics view.

The planner can filter the result list and also perform actions, like setting the usage decision.



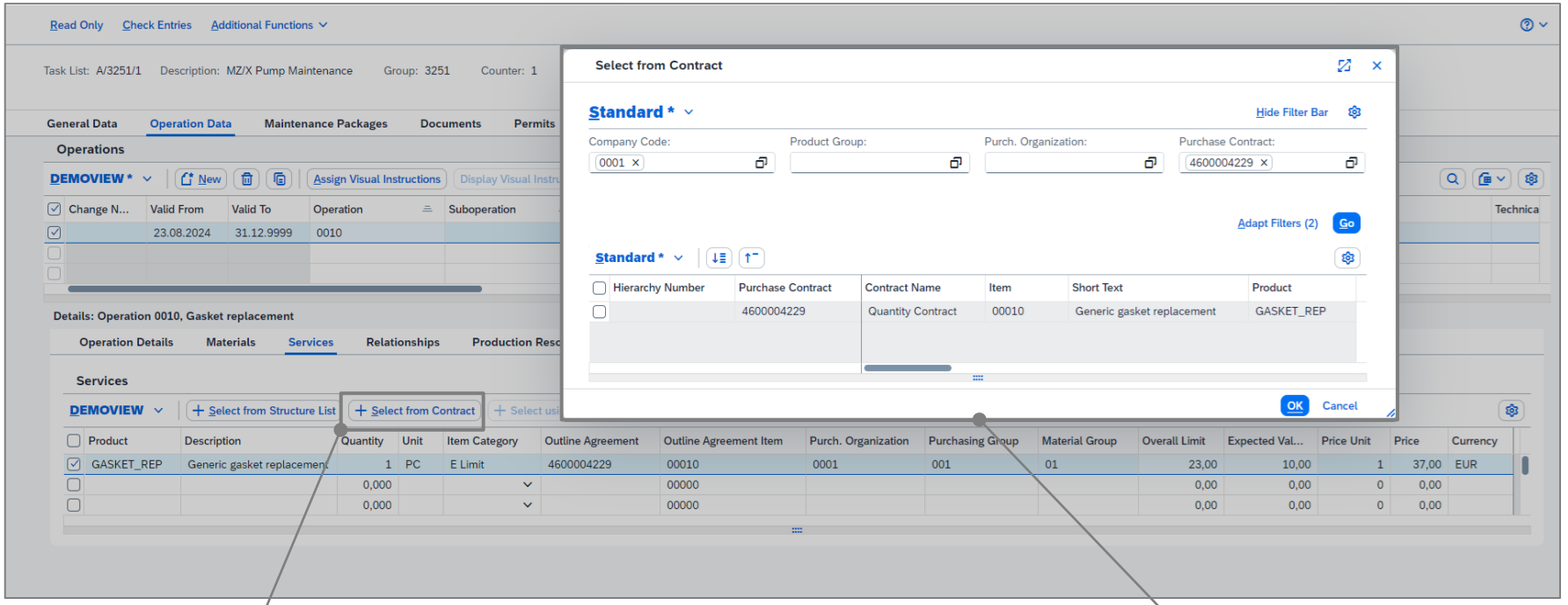
- Blog on Expert Talk
- YouTube video: Expert Talk on Inspect Checklist

Asset Management: Purchasing contracts in task lists

You can now enter purchasing contracts (outline agreement) in your task lists.

Contracts can be entered for non-stock components as well as for enhanced limits.

You can now also create a non-stock component or enhanced limit by using the new Select from Contract button and selecting a contract to create a component from.



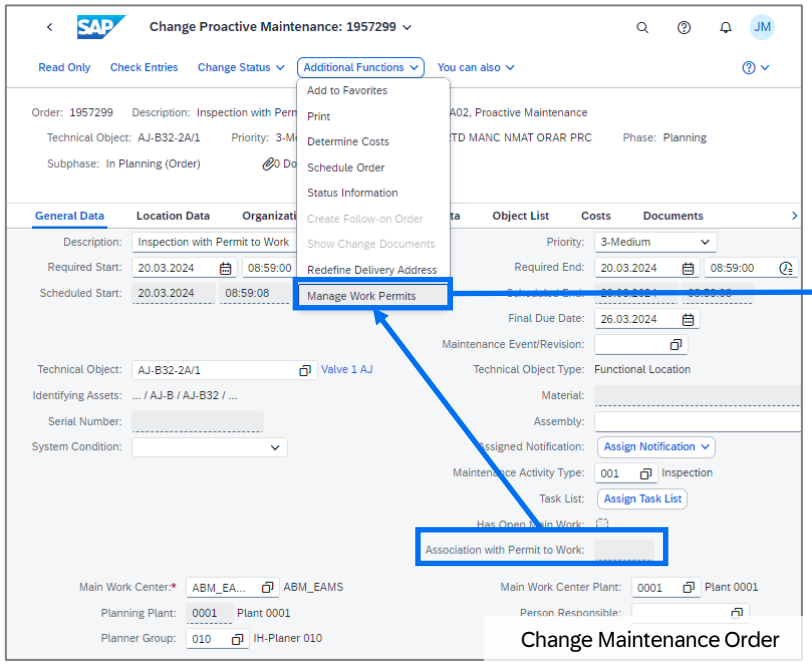
New button Select from Contract available to create a new component based on a contract

For enhanced limits you can also enter the limits with the selection

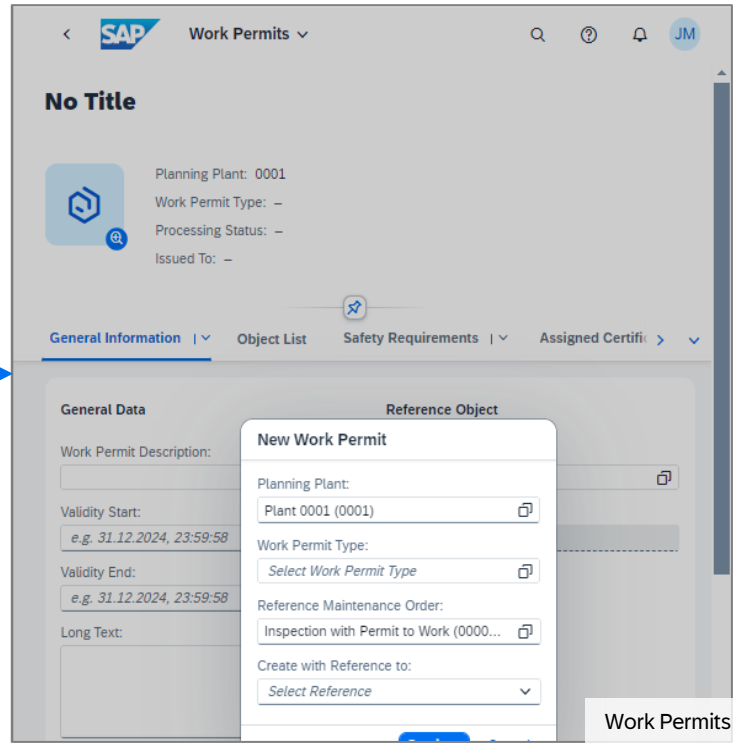
Asset Management: Work permit

You can now create a new work permit or view assigned work permits while processing a maintenance order.

Additionally, you can now automatically generate work permits and any associated safety certificates for maintenance orders using the program **Mass Generation of Permit to Work Objects** (transaction PTWMASSGE).



Change Maintenance Order



Work Permits

Asset Management

Recommendations from Asset Performance Management 1/2

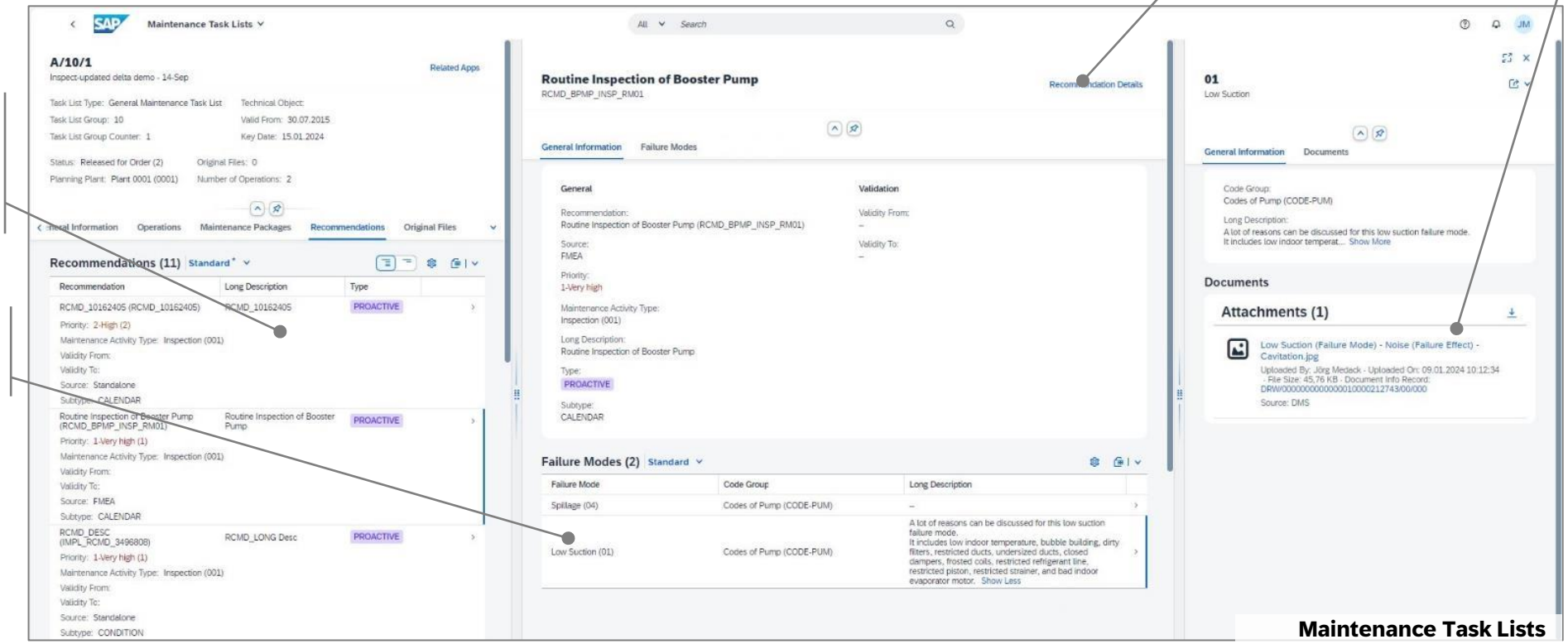
Maintenance tasks lists and maintenance items are enhanced by the related commendations from the reliability engineers working in APM. Below is an example screen from a maintenance task list.

Navigation to APM

Documentation for the failure mode

Information of recommendations assigned to the task list

Overview of the failure mode



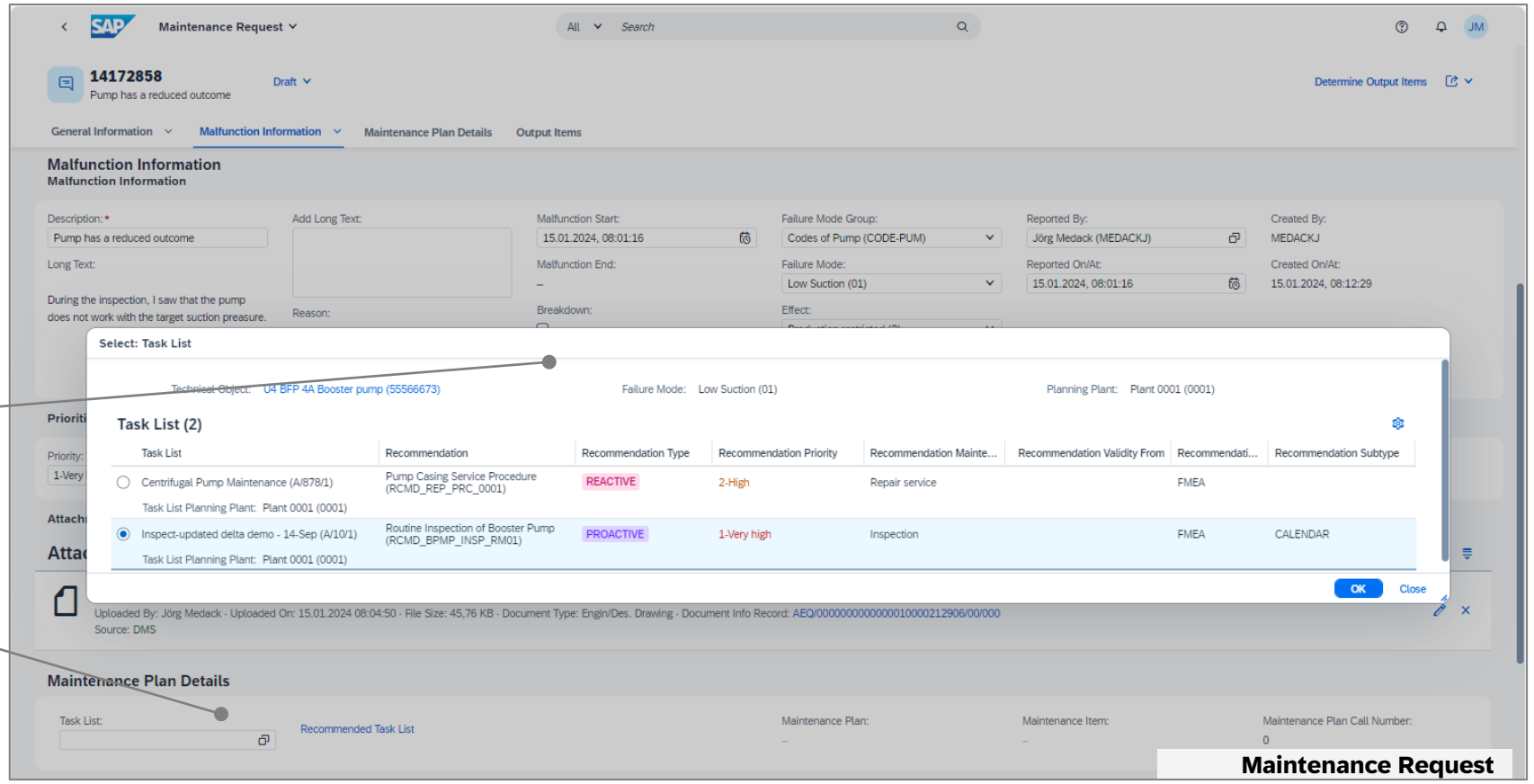
Asset Management

Recommendations from Asset Performance Management 2/2

While screening maintenance requests, supervisors can use the recommendations from APM to select a task list.

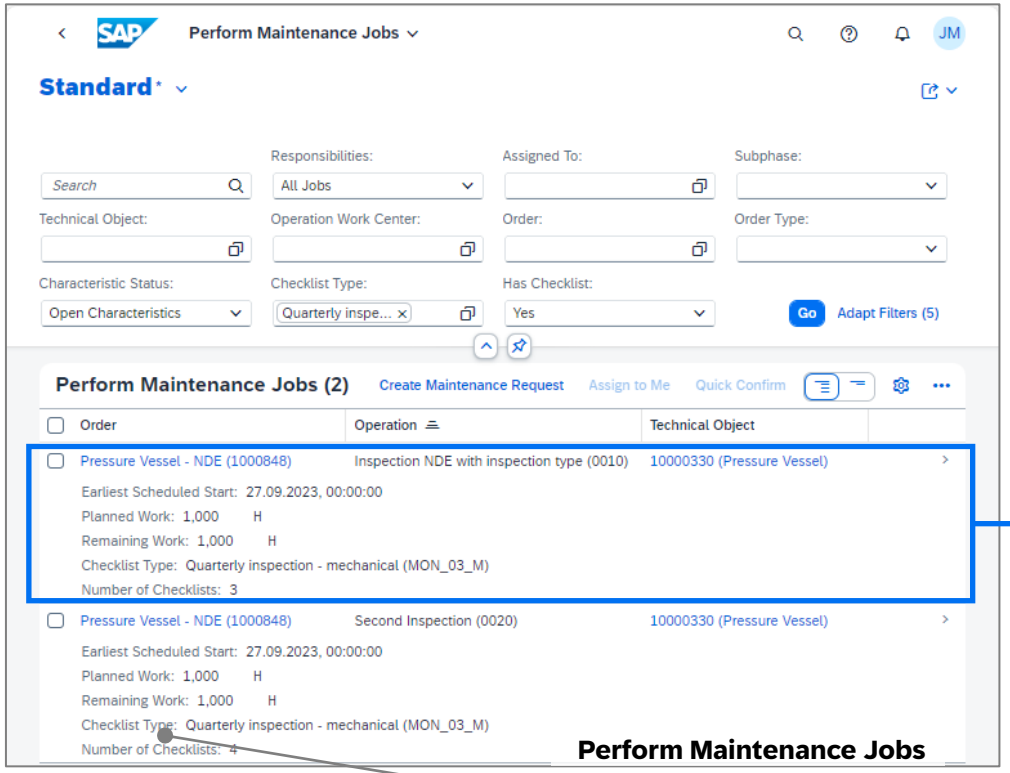
The recommended task lists from APM recommendations

New action "Recommended Task List"

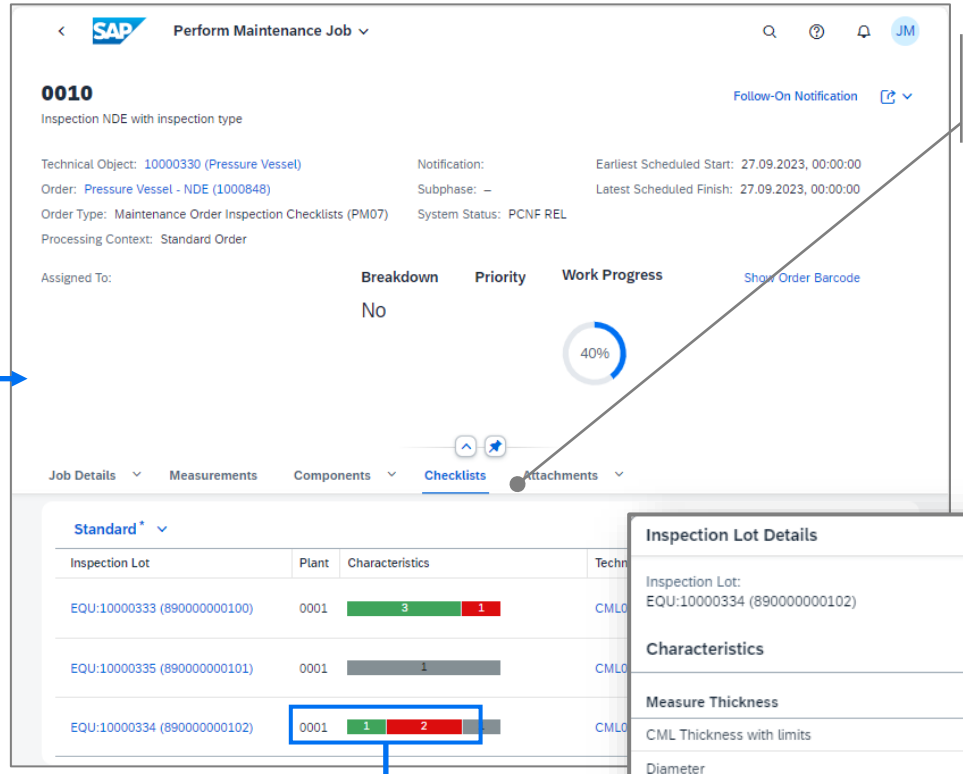


Asset Management: Inspection checklist process

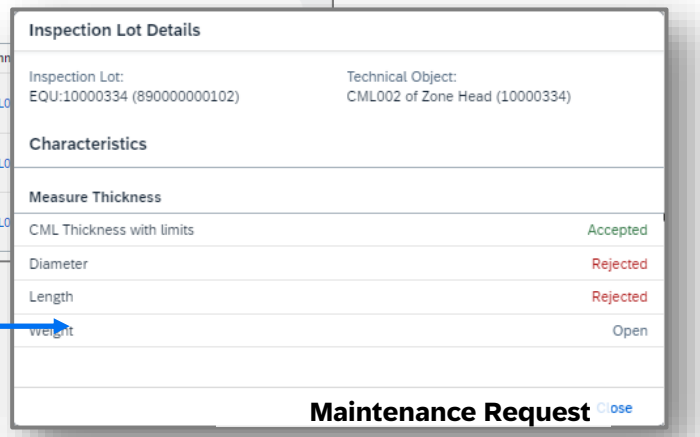
Maintenance Management (ext.) | Asset Management Resource Planning | 2023 FPS0+1



Perform Maintenance Jobs



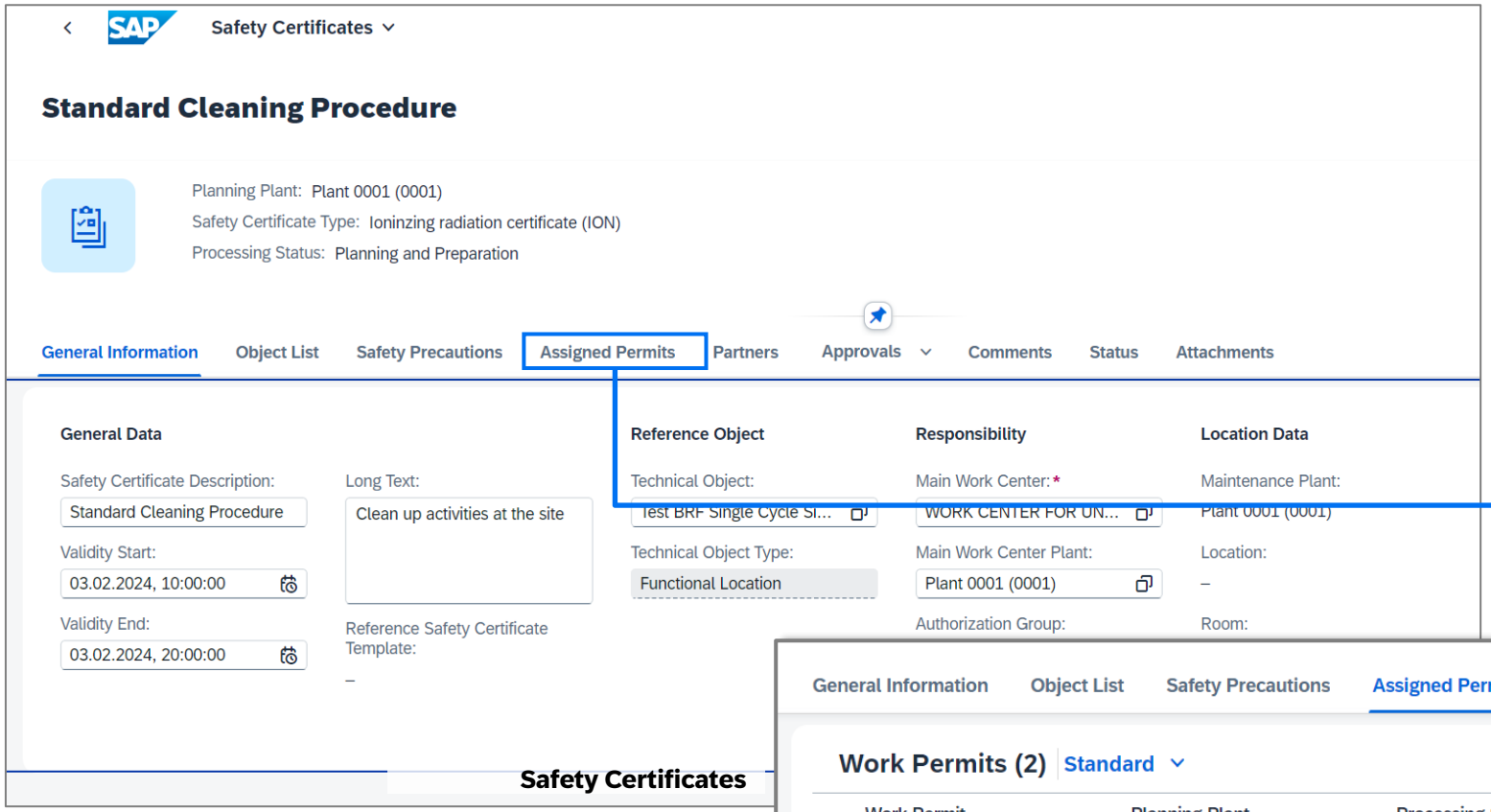
New Checklists tab



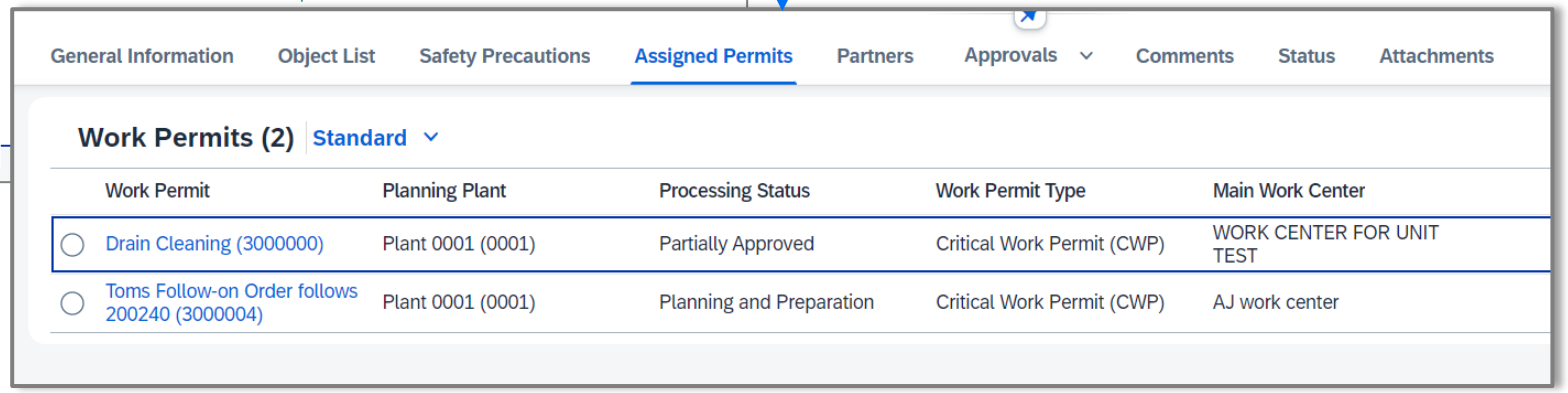
The search and list display within Perform Maintenance Jobs app are now enhanced with additional information, search criteria, and filters

Asset Management

Safety certificates and integration with work permits*



Safety Certificates



A safety certificate goes through an approval process that adheres to a four-eyes principle.

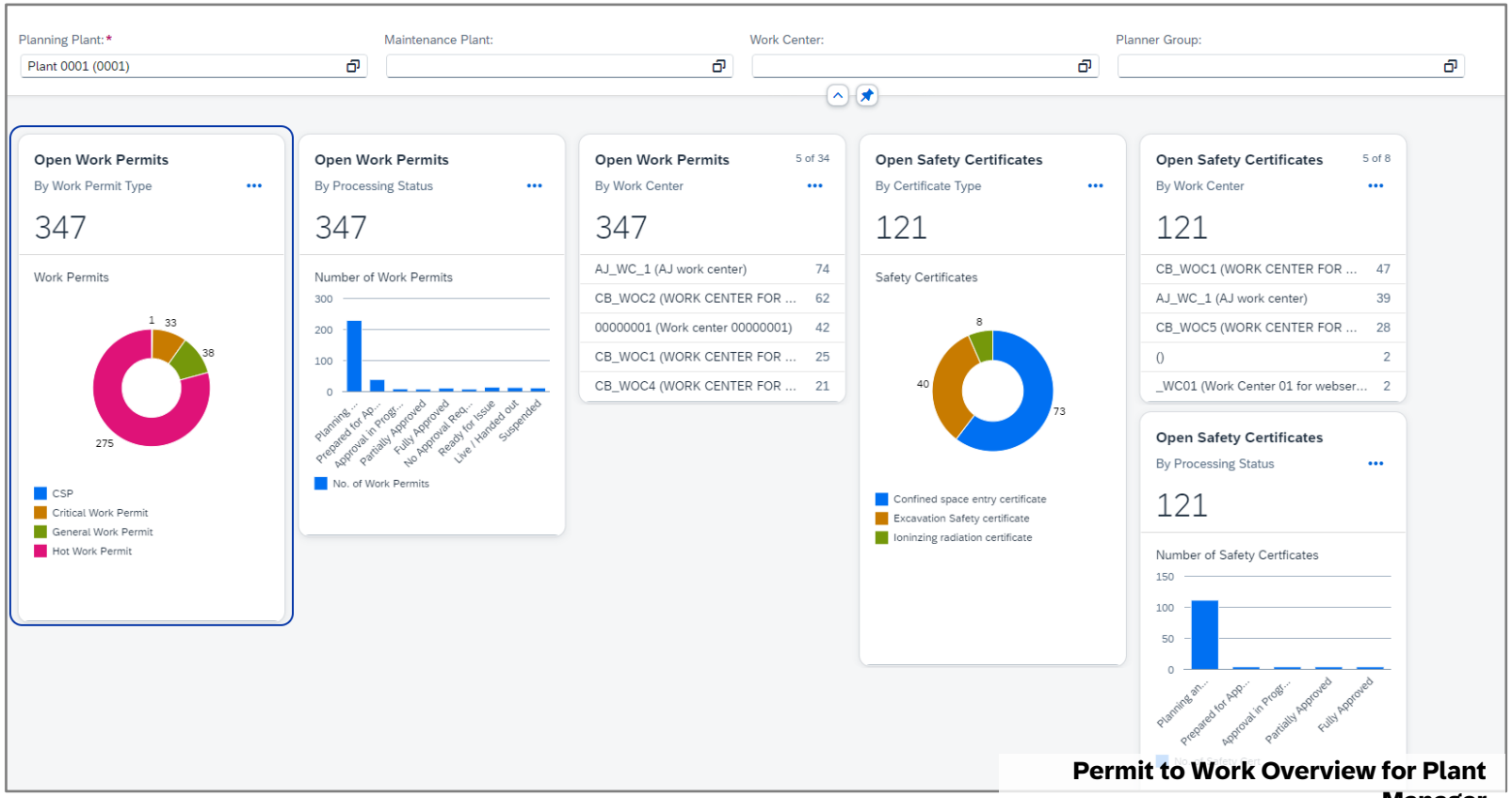
A safety certificate can be used together with a work permit when the maintenance job requires additional control measures and help ensure safety requirements are followed through.

*** SAP categorizes Environment, Health and Safety to which work permit capabilities belong under Manufacturing.**

Asset Management

Permit to Work Overview for Plant Manager

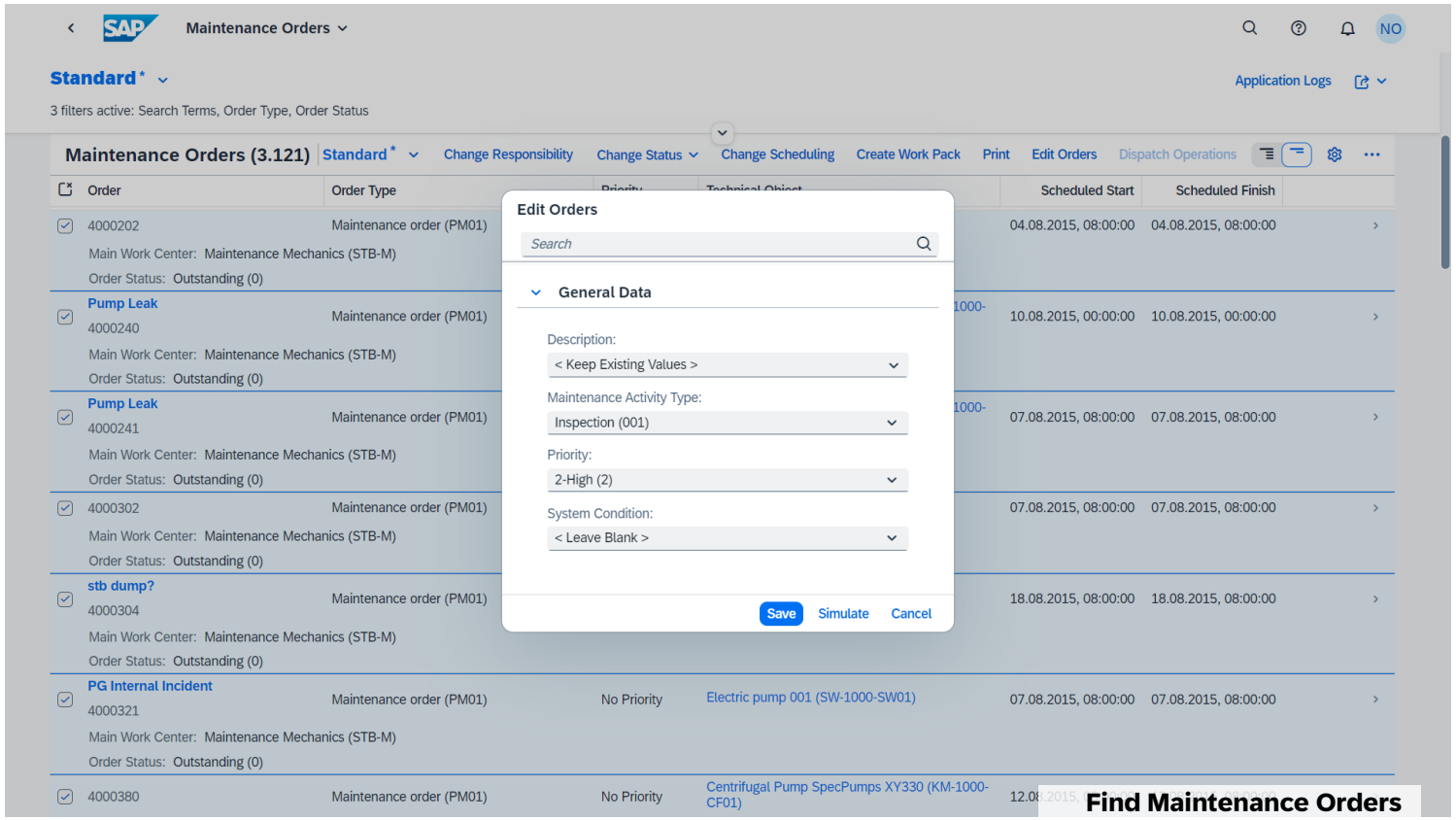
With this app, you can view a summarized view of the open work permits and safety certificates associated with a planning plant.



Permit to Work Overview for Plant Manager

Asset Management: Mass editing
Header details of maintenance orders

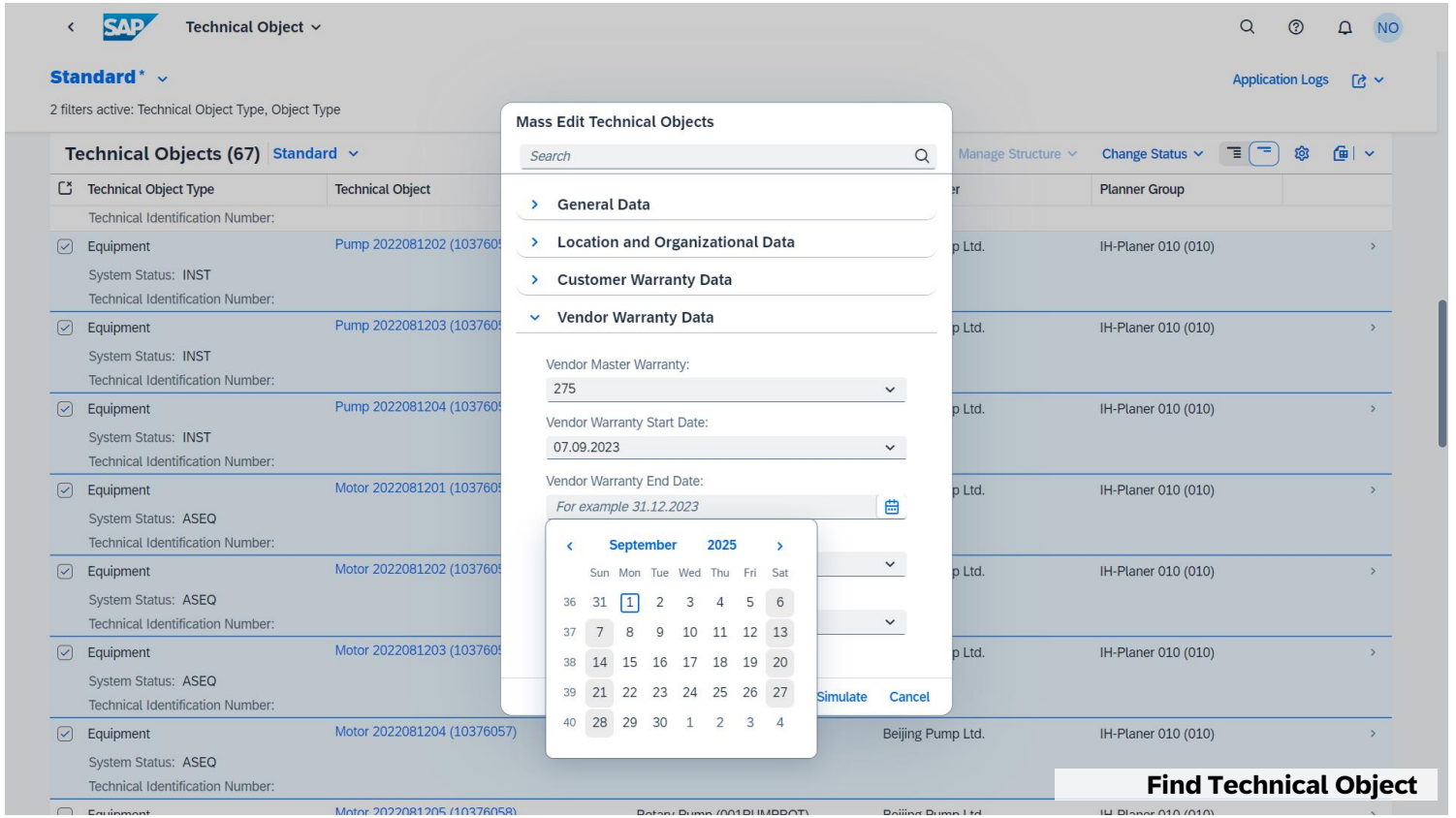
This feature enables you to edit the following header details of one or more selected maintenance orders using the new Edit Orders quick action in the Find Maintenance Orders app: order description, maintenance activity type, priority, and system condition.



Find Maintenance Orders

Asset Management: Mass editing
Warranty details of technical objects

You can now select one or more technical objects and edit customer warranty and vendor warranty details in the Find Technical Object app (F2072).



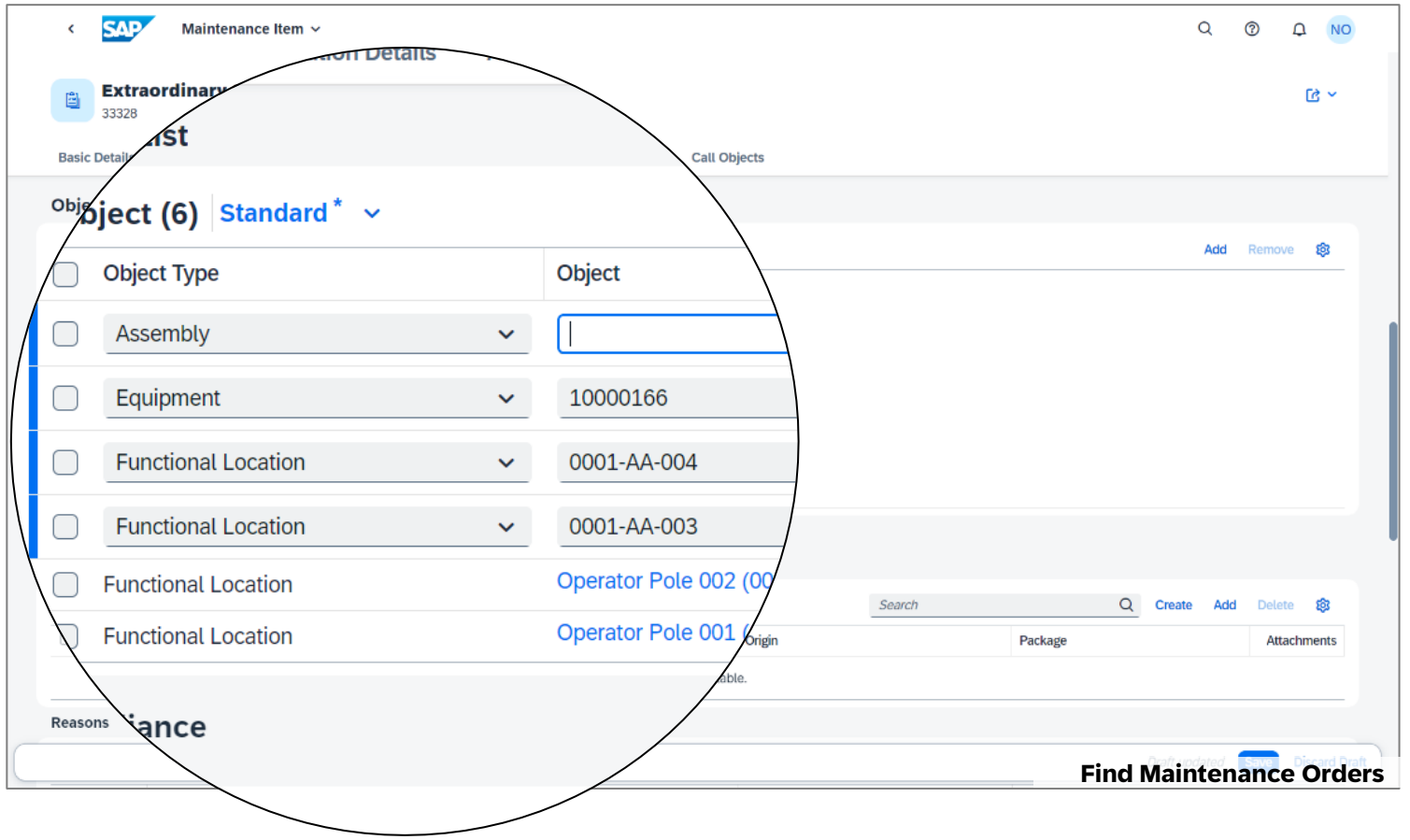
Asset Management: Object list

Adding object list entries to maintenance items

You can now assign a list of objects to a maintenance item using the Manage Maintenance Items app. The objects that can be assigned are:

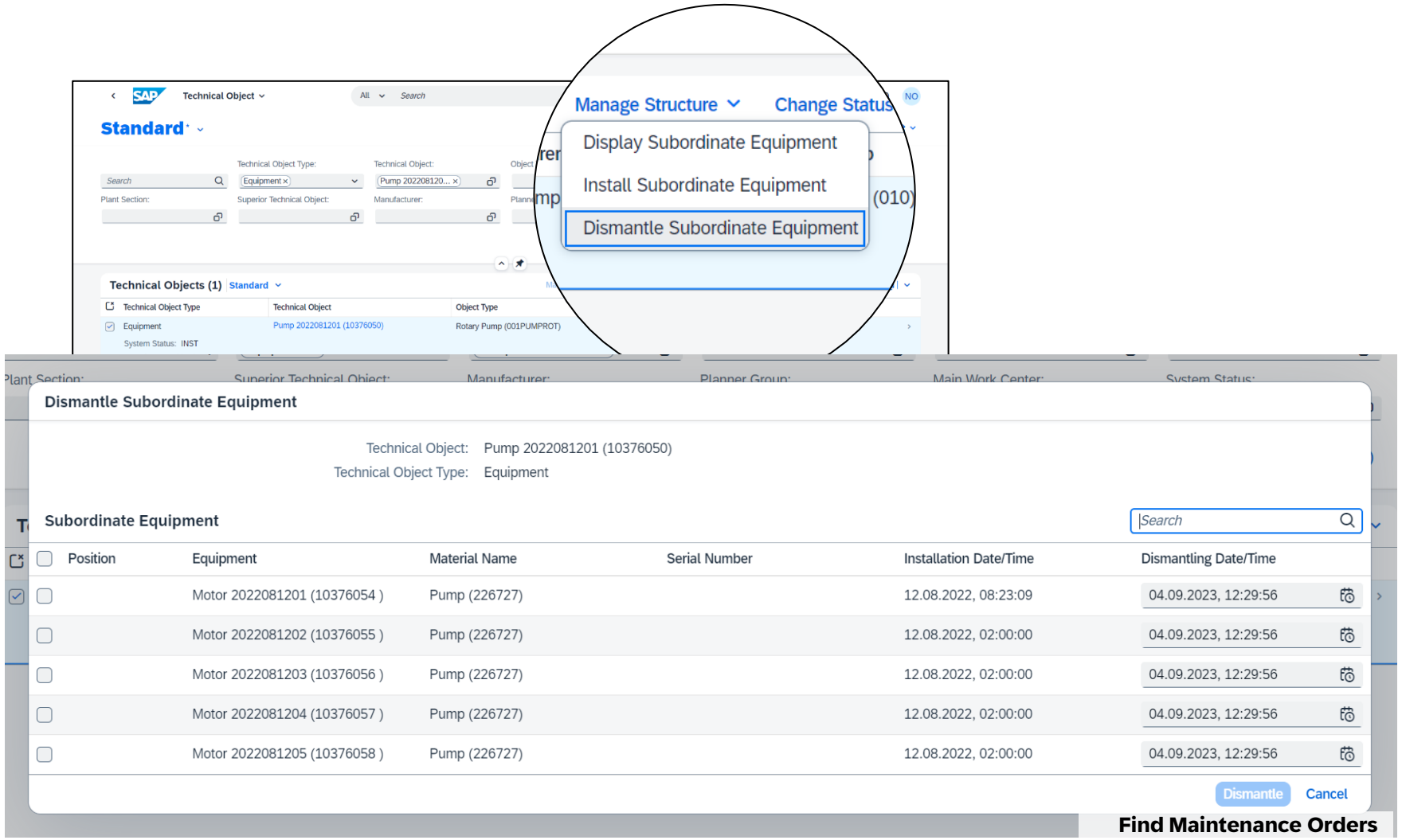
- Functional location
- Equipment
- Assembly

The maintenance operations are defined as a maintenance task list in the maintenance item and are associated with all the assigned technical objects using object lists. The object list items are carried forward as maintenance order object list items.



Asset Management: Equipment structure

You can now install equipment on the equipment or dismantle equipment from the equipment using the options that are available in the Manage Structure dropdown list in the Find Technical Object app (F2072).

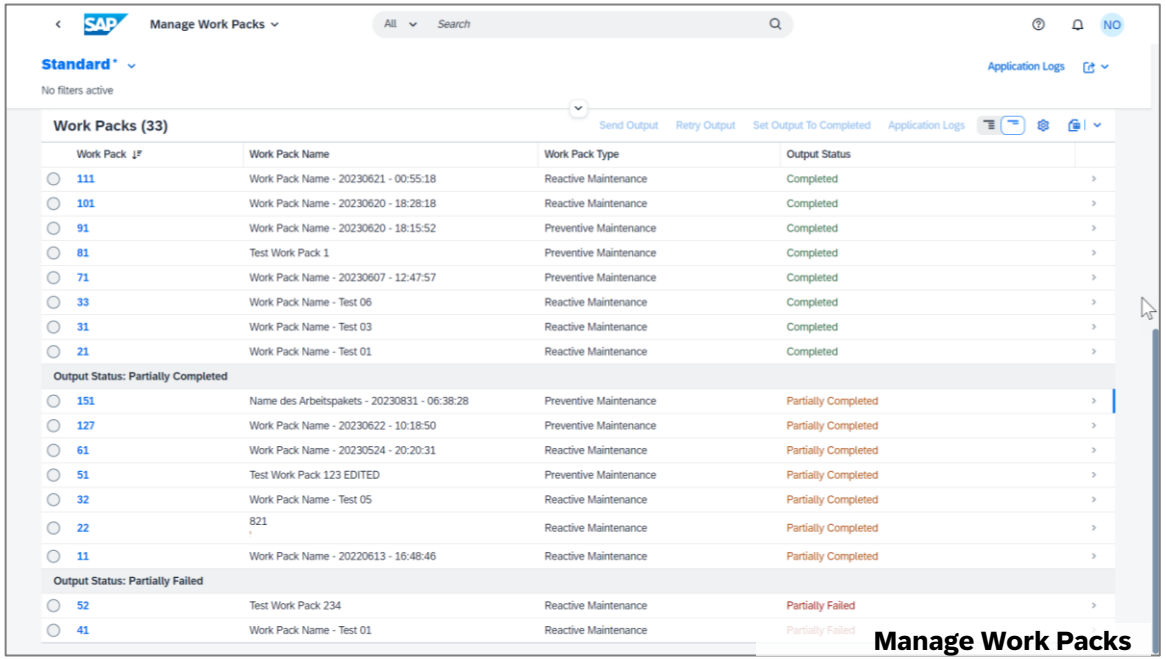


Asset Management: Printing

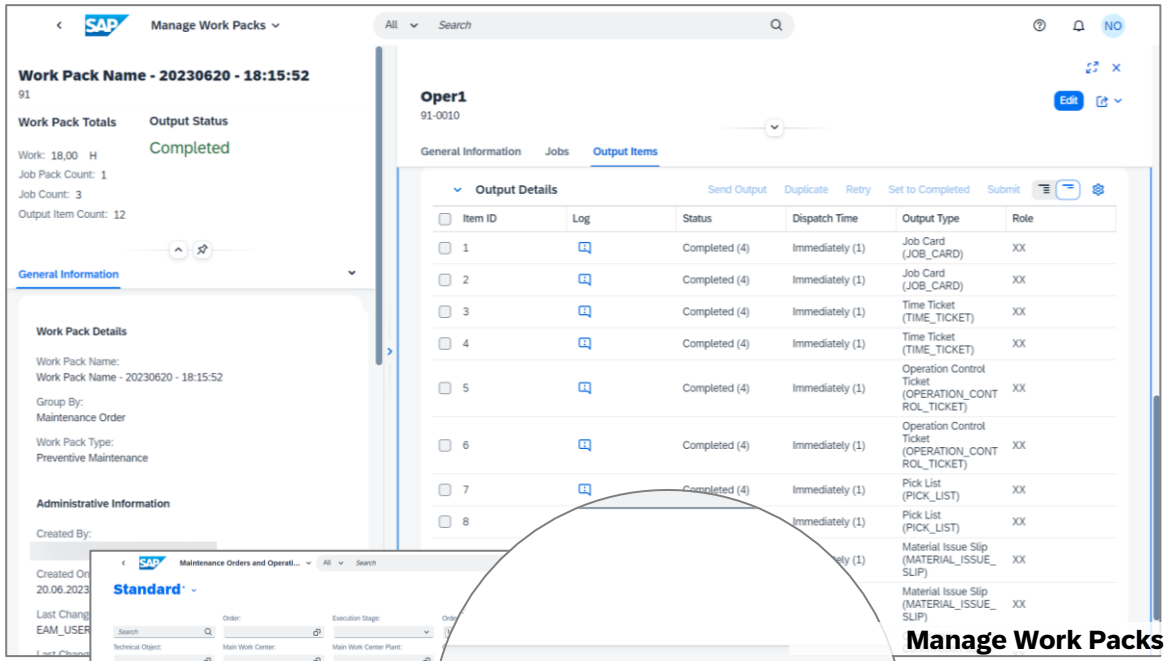
Maintenance Management | Tactical Asset Management Planning | Maintenance Execution

2023 FPS0+1

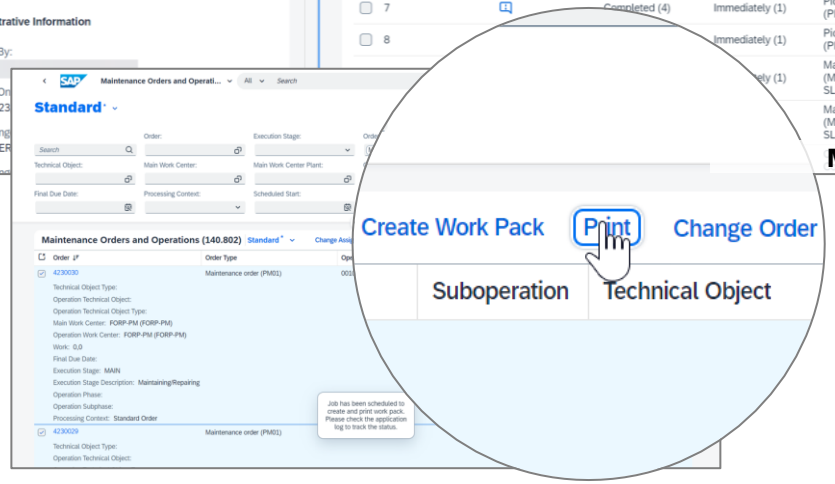
Automatic Attachments for Output Items



Manage Work Packs



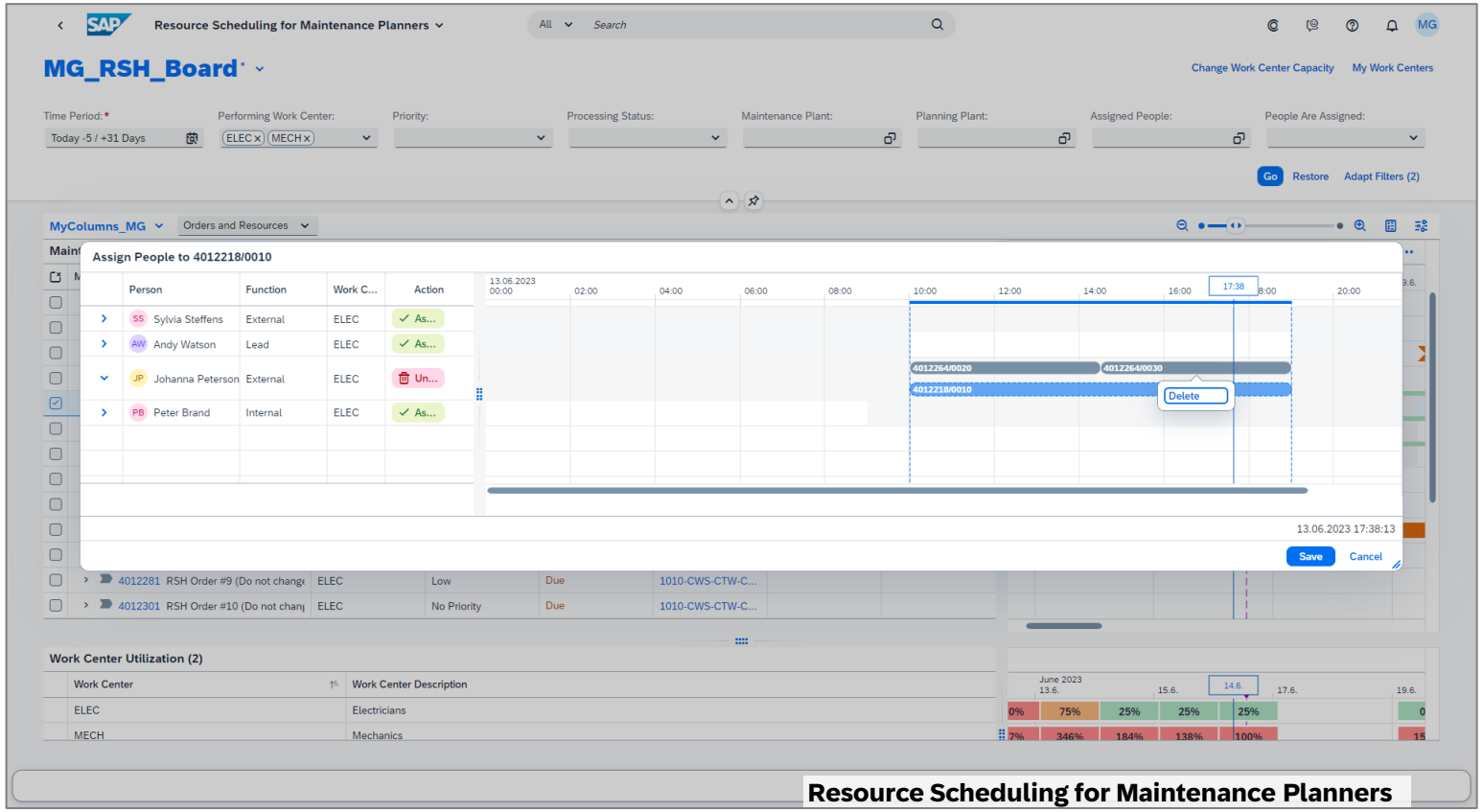
Manage Work Packs



- Output Management: Enable Automatic Attachments for Output Items
- Simplified Printing for Multiple Orders and Operations

Asset Management: People Gantt
Maintenance Scheduling Board

In the Maintenance Scheduling Board you can select one or more operations and then call up the People Gantt to see all the people in the work center team. You can choose to assign one or more people to carry out the operations.



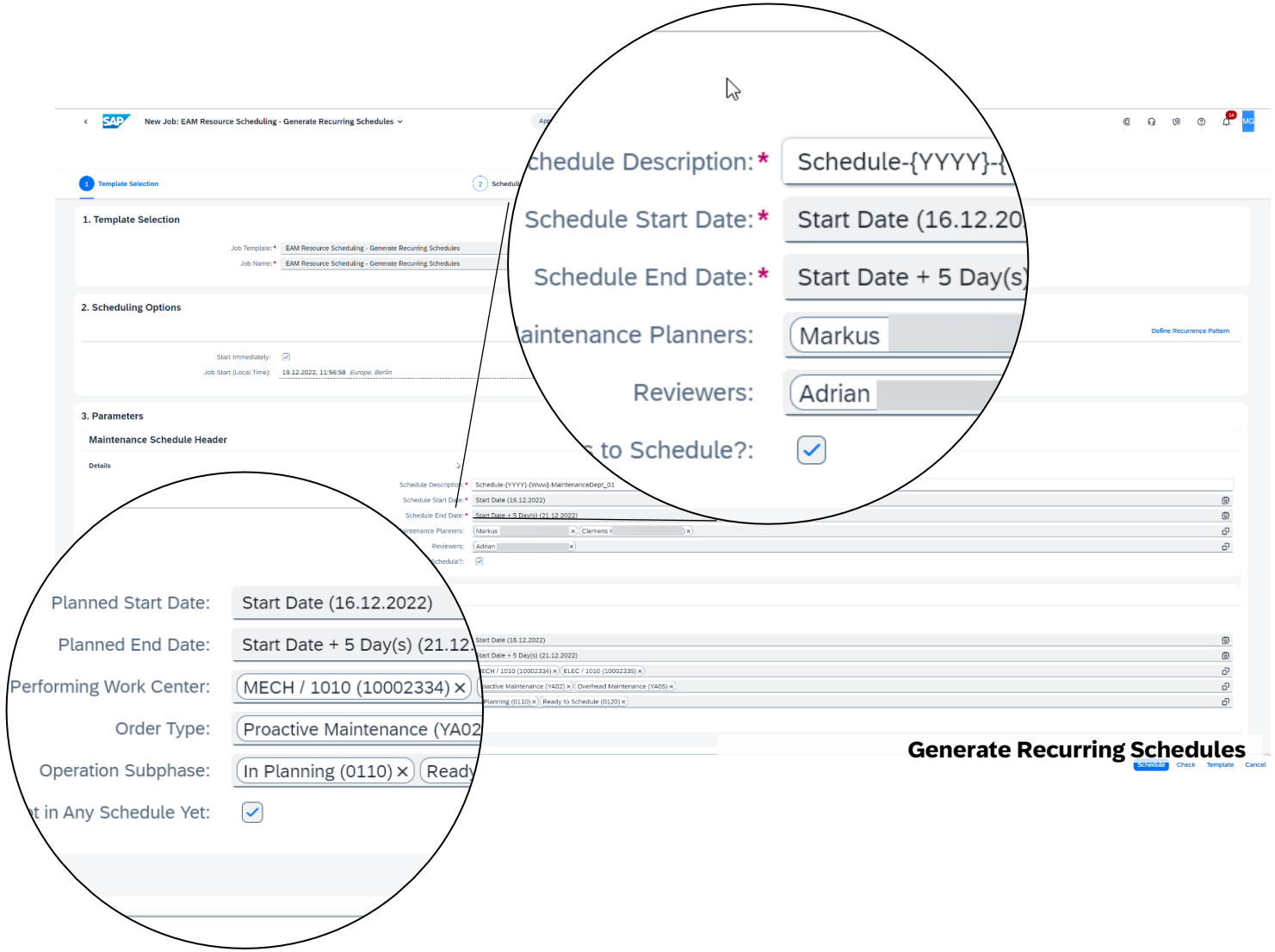
Asset Management: Generate recurring schedules

Maintenance Management (ext.)

Asset Management Resource Planning

2023 FPS0+1

If you have schedules that are repeated at regular intervals (for example, every week), you can now have them automatically generated for you. Regular maintenance planners or reviewers only have to be assigned once. Standard tasks, such as adding relevant operations automatically, providing they meet certain criteria (for example, are assigned to specific work centers), can be carried out for you.



Generate Recurring Schedules

Asset Management: Delta scope summary

2023
FPS2

Joule and Business AI

Tactical Asset Management Planning

- AI-assisted maintenance order recommendation

Environment, Health, and Safety

Work Permit and Isolations Management

- Simplified **work permit** creation from maintenance orders, and mass generation

Maintenance Management

Tactical Asset Management Planning

- New Manage Inspection Checklists app & other enhancements
- Add **purchase contract** details to materials and **lean services** in maintenance orders and task lists

Asset Fault and Incident Response Management

- Assign a task list for emergency work directly within a maintenance request.
- Get **task lists recommendations** from reliability engineers for the failure mode for the asset (integration with SAP Asset Performance Management – SAP APM)

Asset Management: Delta Scope Summary

2023
FPS0+1

Asset Management Resource Planning

Multiple enhancements

- Maintenance Scheduling Board: People Gantt
- Generate Recurring Schedules Automatically
- Multiple Apps: Stable Colors
- Manage Work Center Utilization: Flexible Time Period for Utilization Chart
- Resource Scheduling for Maintenance Planners: Resizable Cards

Environment, Health, and Safety: Work Permit and Isolations Management

- Work Permit Relevance Flag in Assigned Maintenance Orders
- Manage Safety Certificates and Integration with Permit to Work (FPS01)
- Permit to Work Overview App (FPS01)

Maintenance Management

Mass Processing

- Mass Editing Header Details of Maintenance Orders
- Adding Object List Entries to Maintenance Items
- Mass Editing Warranty Details of Technical Objects
- Manage Structure in Find Technical Object App
- Output Management: Enable Automatic Attachments for Output Items
- Simplified Printing for Multiple Orders and Operations

Tactical Asset Management Planning:

- Integration of Recommendation from Asset Performance Management (FPS1)
- Inspection Checklist Process on the Web UI (FPS1)

Maintenance Execution:

- Perform Maintenance Jobs: Clear Open Reservation

Others:

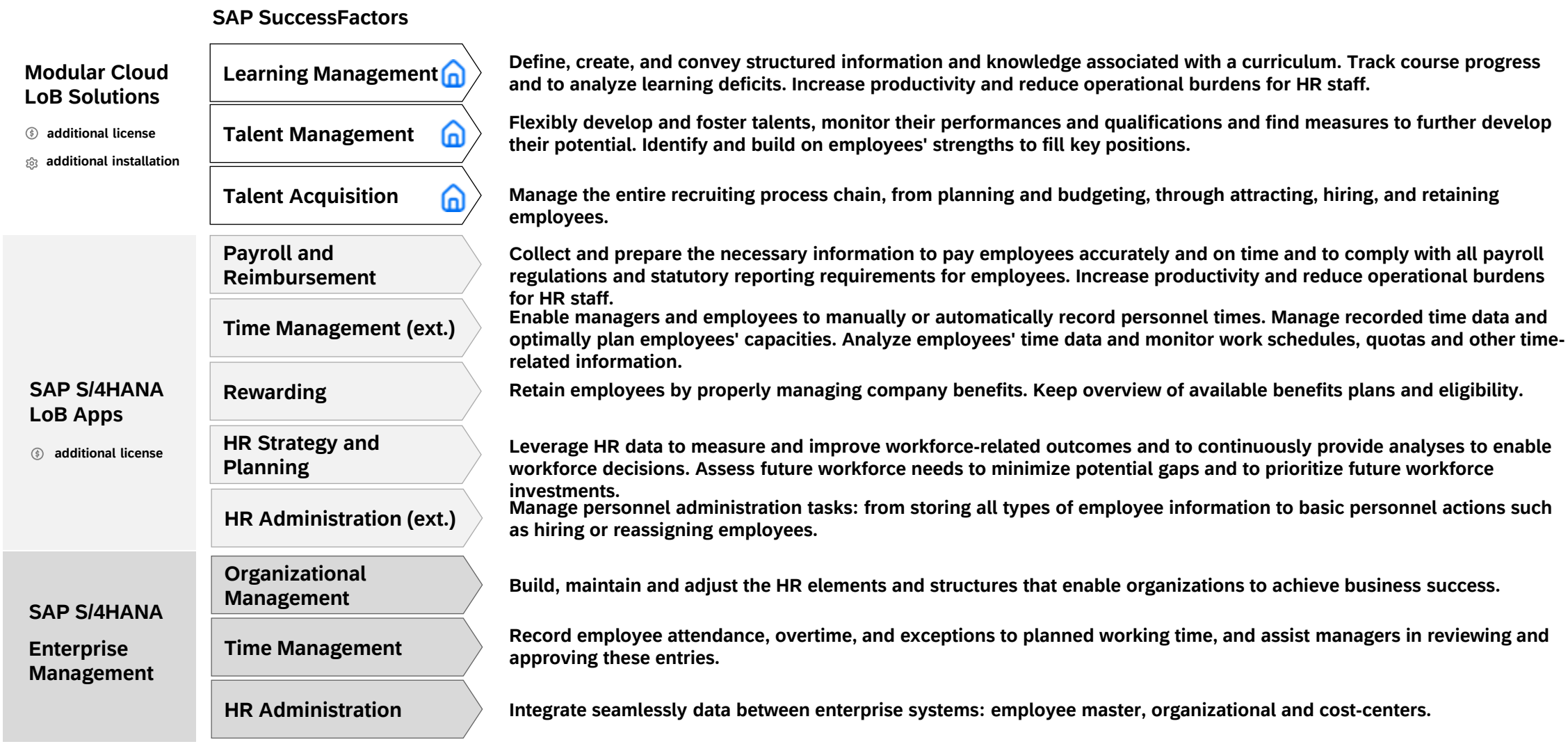
- Additional Options to Filter Task Lists and Task List Operations
- Manage Material Serial Numbers App
- Maintenance Request Drafts
- Improvements in Maintenance Backlog Overview

Human Resources

SAP S/4HANA Cloud Private Edition

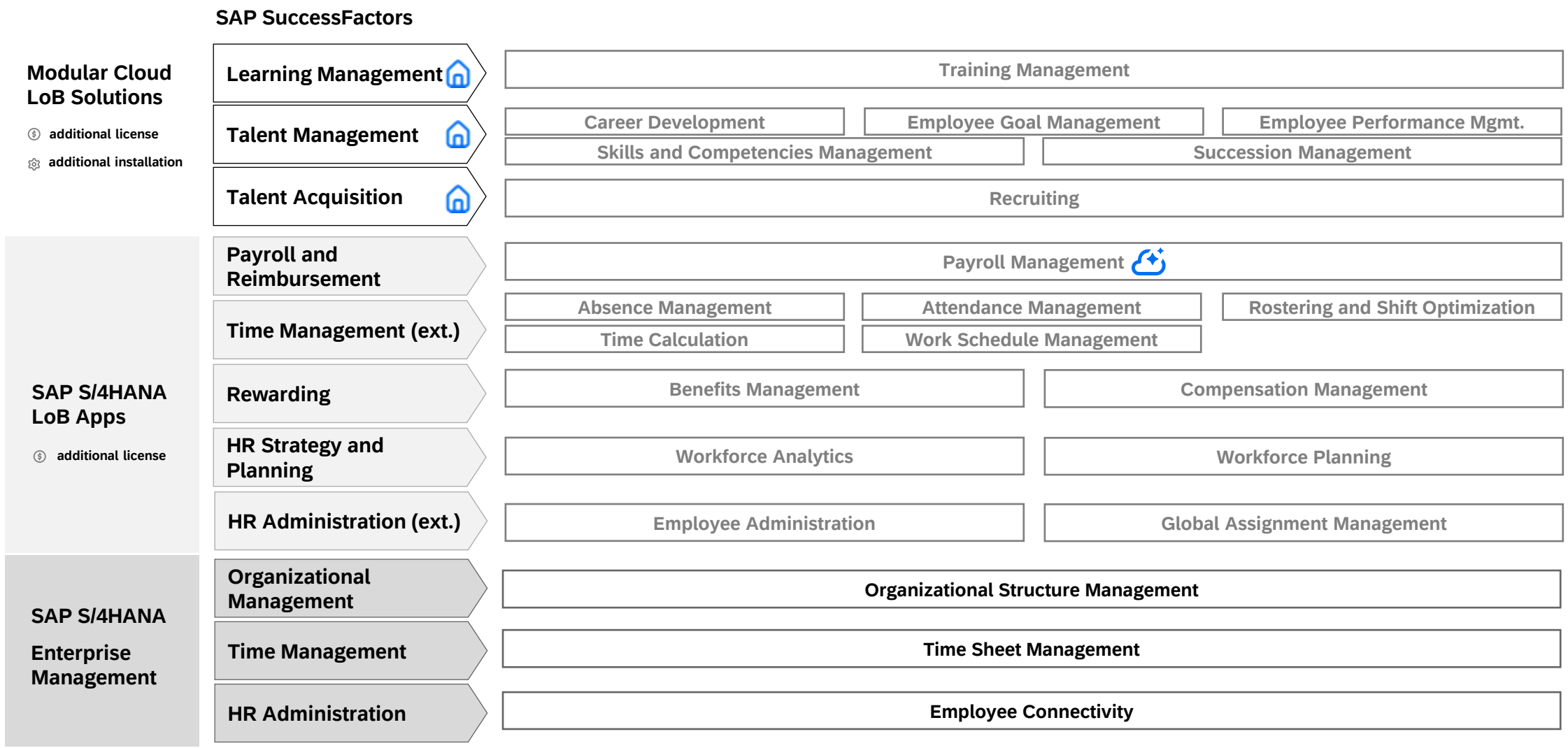
(based on SAP S/4HANA 2023)

Human Resources: Business area overview



Only available in SAP SuccessFactors and SAP S/4HANA on-premise

Human Resources: Business area overview



Only available in SAP S/4HANA Cloud

Only available in SAP SuccessFactors and SAP S/4HANA on-premise

Human Resources: Capabilities available exclusively in SAP SuccessFactors and SAP S/4HANA on-premise

Learning Management	Training Management	**Define and create adapted training for your employees in different formats depending on company's and employees' needs.**
Talent Management	Career Development	**Provide the right tools, knowledge, and opportunities for employees to develop short- and long-term career goals. It also allows you to monitor your employees' progression.**
	Skills and Competencies Mgmt.	**Define qualifications required for certain positions in your company.**
	Employee Goal Management	**Manage the process of setting objectives. Integrate company-wide objectives breakdown to departmental level, including task planning and –fulfillment for individual employees.**
	Succession Management	**Identify key jobs and positions and ensure the best fit between employees and requirements for critical roles.**
	Employee Performance Mgmt.	**Monitor employees' performances; find the best matches for key positions.**

Human Resources: Structure

Licenses	Solution Capabilities	Deployment Models	
		SAP S/4HANA Cloud Private Edition	On-premise
Core Human Capital Management	▪ Employee Administration incl. Global Assignment Management ▪ Organization and Position Management ▪ Benefits Management ▪ Compensation Management ▪ Goal and Performance Management ▪ Skills and Competencies Management ▪ Career Development & Succession Management ▪ Work Schedule Management ▪ Absence Management	Talent Mgmt: SAP SuccessFactors	
Time Tracking	▪ Work Schedule Management ▪ Absence Management ▪ Attendance Management ▪ Time Calculation ▪ Rostering and Shift Optimization		
Payroll Processing	▪ Payroll ▪ Pension funds ▪ VADM		
E-Recruiting	▪ Recruiting	SAP SuccessFactors	
Learning Solution	▪ Training Management	SAP SuccessFactors	

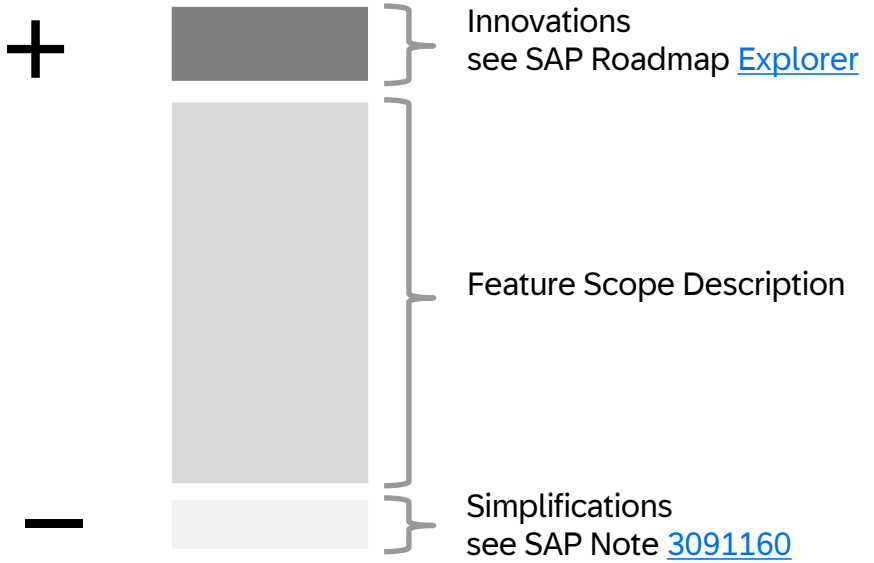
Human Resources: Innovation and simplification

SAP ERP HCM
and
SAP S/4HANA
HCM Compatibility Package

minimum release: 2022

SAP Human Capital Management
for SAP S/4HANA

1. Conversion / Upgrade to SAP S/4HANA 2022+
2. New licensing structure
3. Activation of Business Function

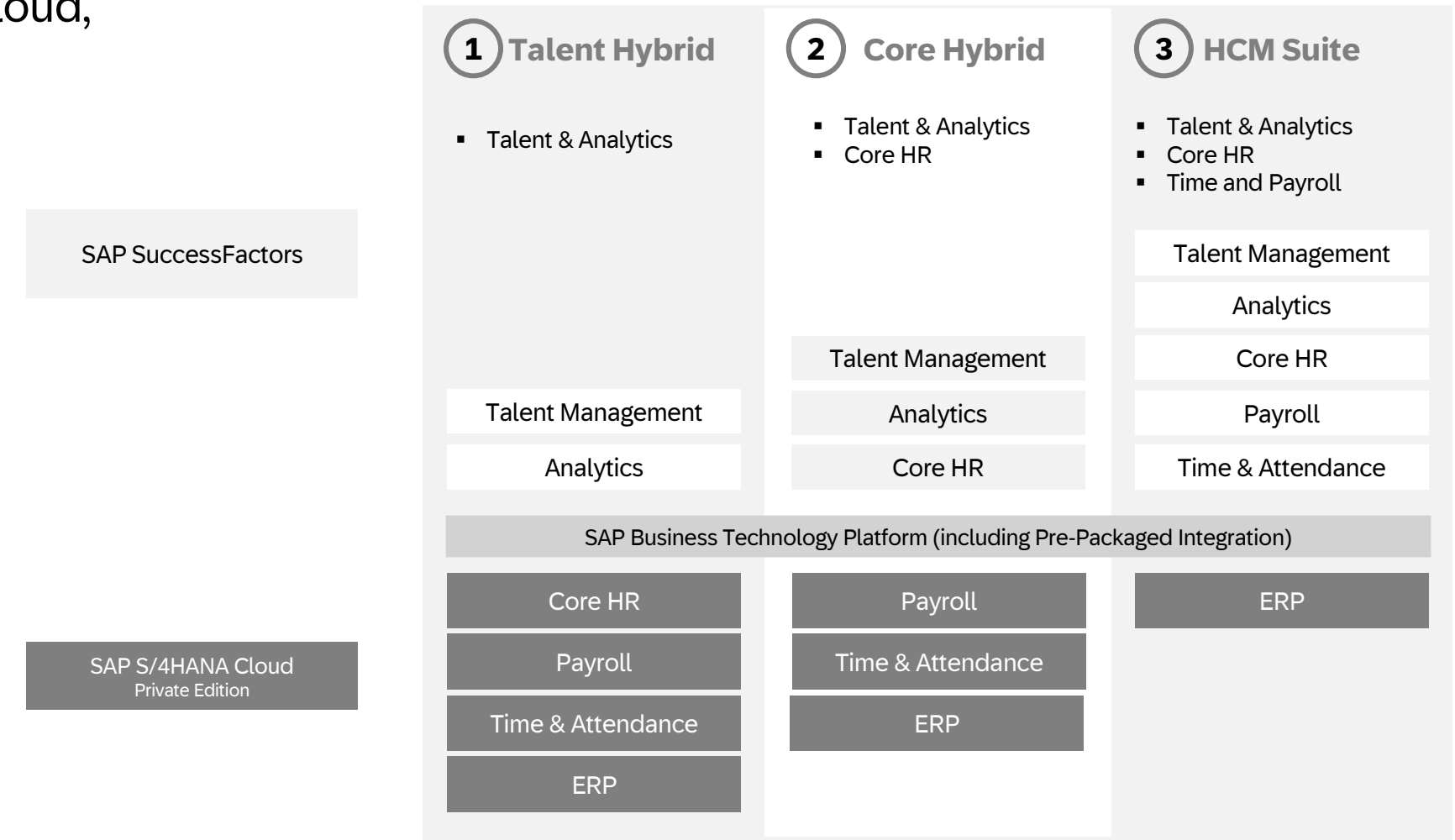


Important SAP notes:

- SAP Note 2273108
- SAP Note 2269324
- SAP Note 3091160
- SAP Blog SAP HCM for S4

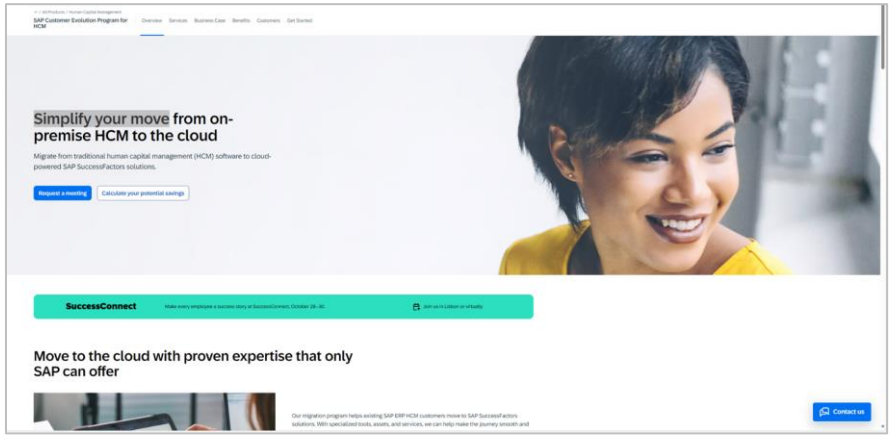
Human Resources: Human capital management transformation options

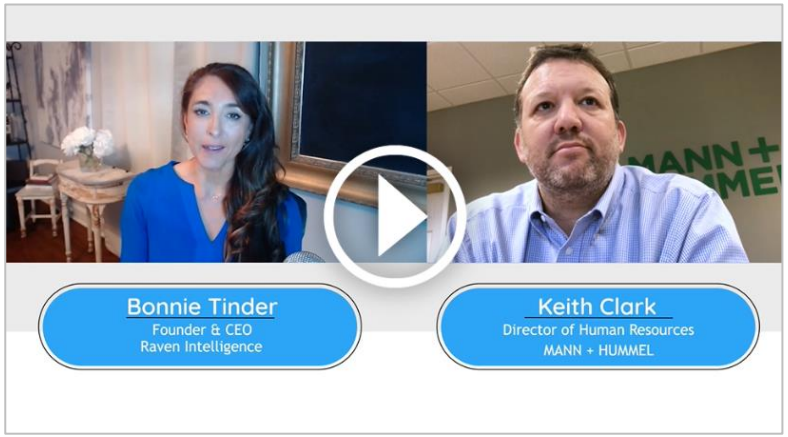
Move HCM to the public cloud, SAP SuccessFactors, via three deployment options



Human Resources: Customer evolution program for HCM

More information: [Simplify your move]





Understand the economic benefits of moving to the cloud

SAP Learning
free online training class
“Hire-to-Retire”

- Overview course
- Strategy, Implementation and Operations

Human Resources: Delta scope summary

2023 FPS0+1

Employee Administration

- Redesign of the “My Team Calendar” app in SAP Fiori 3 user experience
- New SAP Fiori app “My FSA Claims” for employees
- Generic search for employees based on Enterprise Search

Training Management*

- New SAP Fiori app “Manage Course Participation” for managers and administrators

2023 FPS2

Employee Administration

- Quick view for SAP Fiori apps for SAP Human Capital Management for SAP S/4HANA
- Access to an employee's public profile via enterprise search

Attendance Management

- My Team Calendar app: additional view owner for shared views
- New report to take over views from the old to the new “My Team Calendar” app

Payroll Management

- New tool for payroll schema comparison
- Parallel running of posting program RPCIPE01 in the HR Process Workbench

*** Only available in SAP SuccessFactors and SAP S/4HANA on-premise**

Human Resources: Delta scope 2023 - Details

2023
FPS0+1

Employee Administration

Redesign of the “My Team Calendar” app in the Fiori 3 user experience, providing managers and employees with:

- Absences and attendance of colleagues, plus manager ability to access the absences and attendance of direct reports
- Filtering to display the absent or available employees only
- Sharing the calendar with employees outside of the organizational unit
- Creating new views to focus on the employees the user primarily works with
- Sharing user defined views with members of the view

The new “My FSA Claims” app enables employees to:

- Get an overview of all FSA claims
- Create new FSA claims
- Update existing FSA claims
- Delete existing FSA claims
- Accept the rejected FSA claims

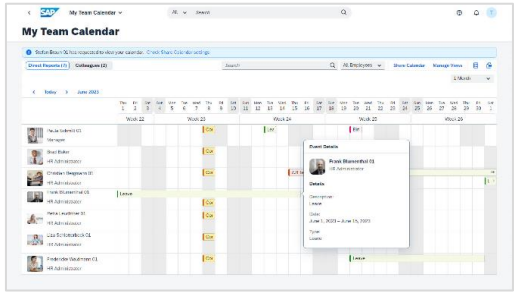
The new Employee Search now leverages HANA Enterprise Search capabilities

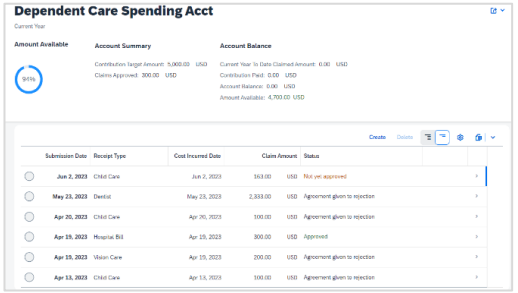
- Improved performance
- Fuzzy search
- Link to organizational chart
- Two-step search via result lists, which can be filtered
- Directly contacting employees by clicking on email or phone number

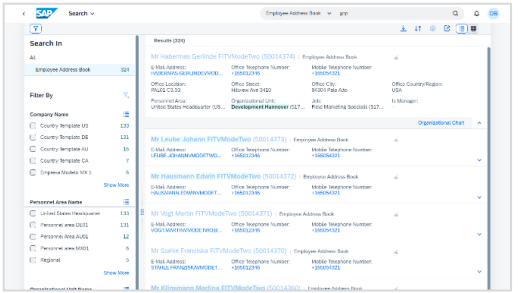
For further information, refer to SAP Note 3304275

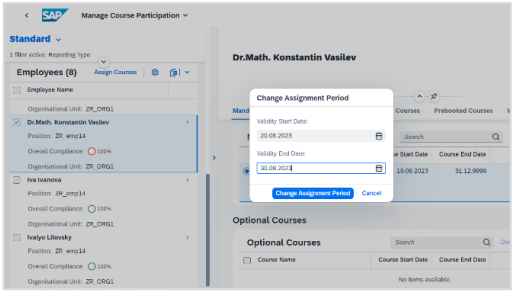
Training Management*

With the "Manage Course Participation" app, managers can assign trainings to their employees and view the completion status of the trainings, be it mandatory or optional trainings. It allows them to track the compliance level of their employees who are directly and indirectly reporting to them.









*** Only available in SAP SuccessFactors and SAP S/4HANA on-premise**

Human Resources: Delta scope 2023 FPS02 - details

2023 FPS2

Employee Administration

Quick view for SAP Fiori apps for SAP Human Capital Management for SAP S/4HANA

- Launch cross-app functionality, provided in several SAP Fiori apps such as “My Team Calendar” and “Approve Timesheet,” when clicking on an employee's name:
- Provide the contact and organizational information of an employee, including name, phone, e-mail, cell phone, office address, local time, and time zone
- Allows navigation to the SAP Fiori app “Organizational Chart”

Key Benefits

- Enable fast provisioning of contact information of an employee without leaving self-service

Access to an employee's public profile

- Launch employee's public profile from result list of the employee address book using the “enterprise search” functionality
- System navigates to employee's public profile when user clicks on employee's name, displaying job description, organizational unit, cost center, location information, employee’s picture, manager attribute, list of direct reports etc.

Key Benefits

- Retrieve important information for all employees, consistently

Attendance Management

My Team Calendar app: additional view owner for shared views

- Define additional view owners for user-specific shared calendar views in the My Team Calendar app, granting them the same functions and rights as the view’s creator
- Enables them to add / remove employees, rename / unshare the view

Key Benefits

- Increase the independence of individual view owners

New report to take over views from the old to the new “My Team Calendar” app

- Migration from the previous My Team Calendar app for SAP Fiori 2.0 to the successor My Team Calendar app for SAP Human Capital Management for SAP S/4HANA, F1309B. The new report that allows to take over user-defined team calendar views.

Key Benefits

- Easy migration to the new and redesigned My Team Calendar app for SAP Human Capital Management for SAP S/4HANA

Payroll Management

Parallel running of posting program RPCIPE01 in HR Process Workbench

- Enable parallel execution of RPCIPE01 through HR Process Workbench, which is particularly beneficial for larger employers dealing with tight posting deadlines
- Create a new program category designed for parallel processing, resulting in the creation of multiple parallel jobs for the posting step in the HR Process Workbench

Key Benefits

- Improves the performance of posting runs that involve a substantial number of employees, streamlining the overall payroll process
- Allows the split of employees into multiple sets that can be processed simultaneously

New tool for payroll schema comparison

- Enhance the display format through visualization of an ALV tree structure
- Highlight the differences of the schemas concerning the functions used and their parameters
- Facilitate comparison against a standard schema, not just customer schemas, and support remote comparisons

Key Benefits

- Intuitively analyze and compare payroll schemas through the improved display format and tree structure visualization using an ALV tree
- Make it easier to maintain custom copies of standard schemas

Human Resources: Delta scope highlight 2023 FPS02

New tool for payroll schema comparison

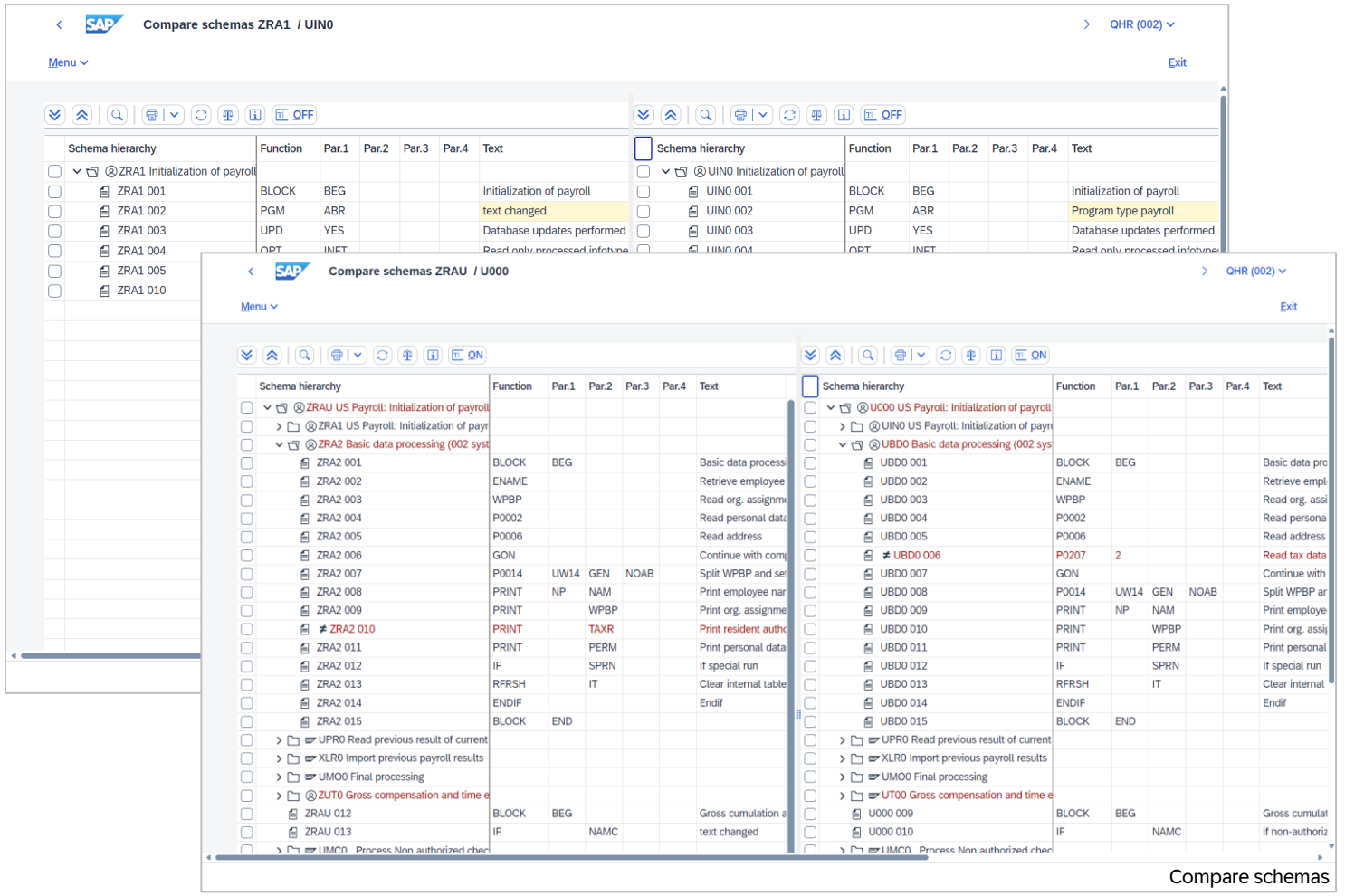
Payroll Management

2023 FPS2

- Visualization via an ALV tree structure enhances the display format
- Highlights the differences between schemas concerning the functions used and their parameters
- Facilitates comparison against a standard schema, not just customer schemas, and supports remote comparisons between systems

Benefits

- Intuitive analysis and comparison of payroll schemas through the improved display format and tree structure visualization
- Easier maintenance of custom copies of standard schemas



Compare schemas

Cross Topics

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

Cross-topics: Master Data Governance

Master data excellence for the Digital Business

2023
FPS2

AI-assisted
Master Data Governance

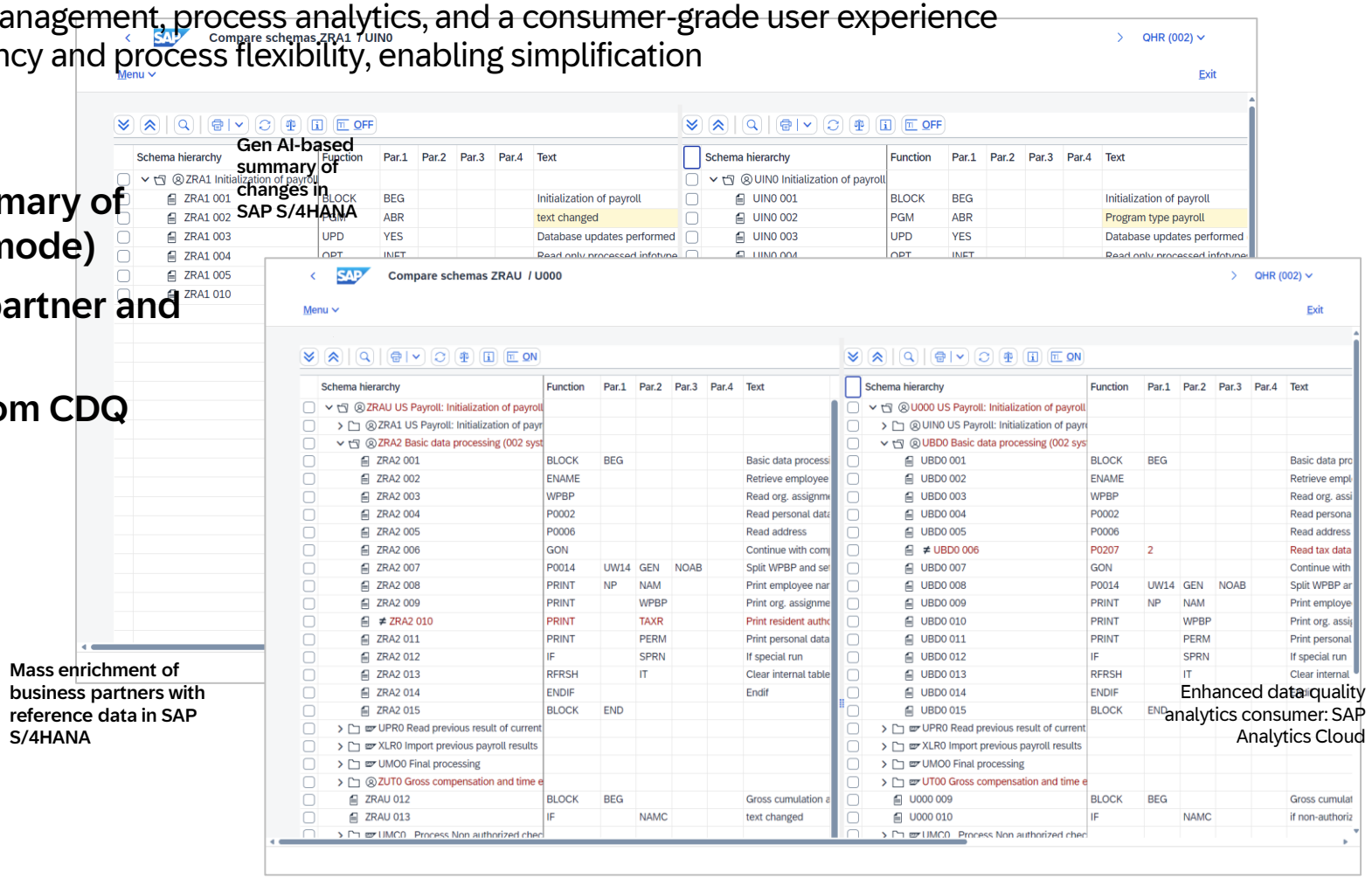
Comprehensive processes for the entire master data lifecycle, covering central governance and consolidation
Empowering business agility with data quality management, process analytics, and a consumer-grade user experience
Strong foundation for improved business efficiency and process flexibility, enabling simplification

Generative AI for assisted changes/summary of changes in central governance (classic mode)

Data Quality Analytics 2.0 for business partner and product master data

Mass enrichment of business partner from CDQ reference data

Continuous Improvements



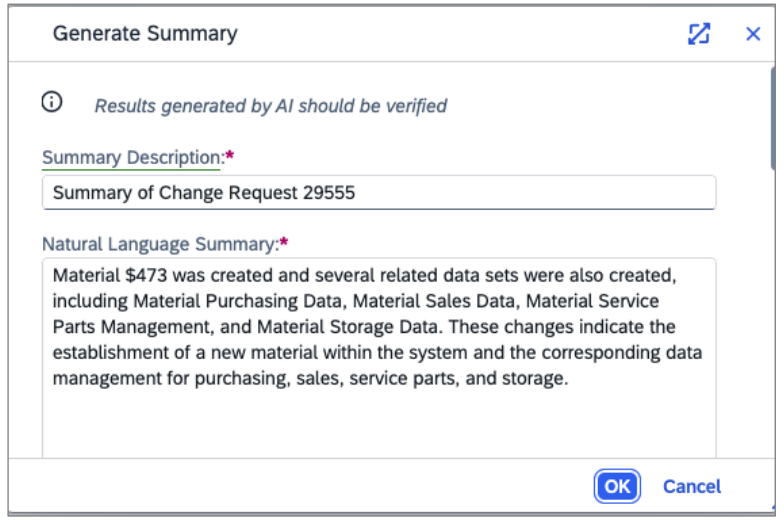
Cross-topics: Generative AI for assisted changes/summary of changes in central governance (classic mode)

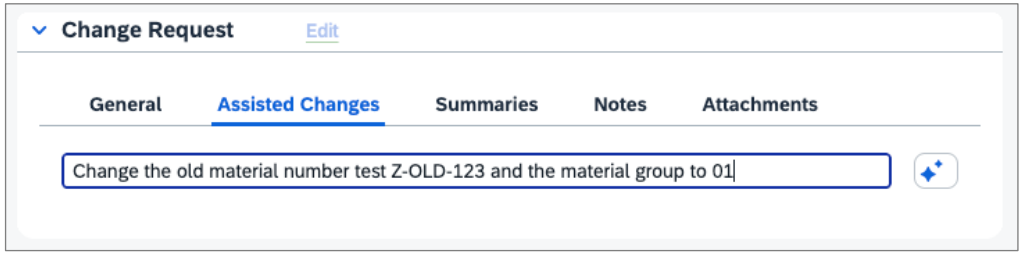
Feature Highlights

Summarize Changes:
Get an overview on unsaved and saved changes in natural language (using a Large Language Model) to:

- verify the completeness and/or correctness of master data changes
- get a brief overview of the changes comprised in an MDG change request
- prevent useless revisions based on incomplete changes
- have a non-technical summary of changes (in contrast to change documents)
- facilitate approver's final checks

Assisted Change:
Change master data attributes with as little effort / few steps as possible so that applying changes to a master data object is time efficient. A user makes prompts in natural language to make field changes.





Business value : Increase effectiveness through AI in central governance

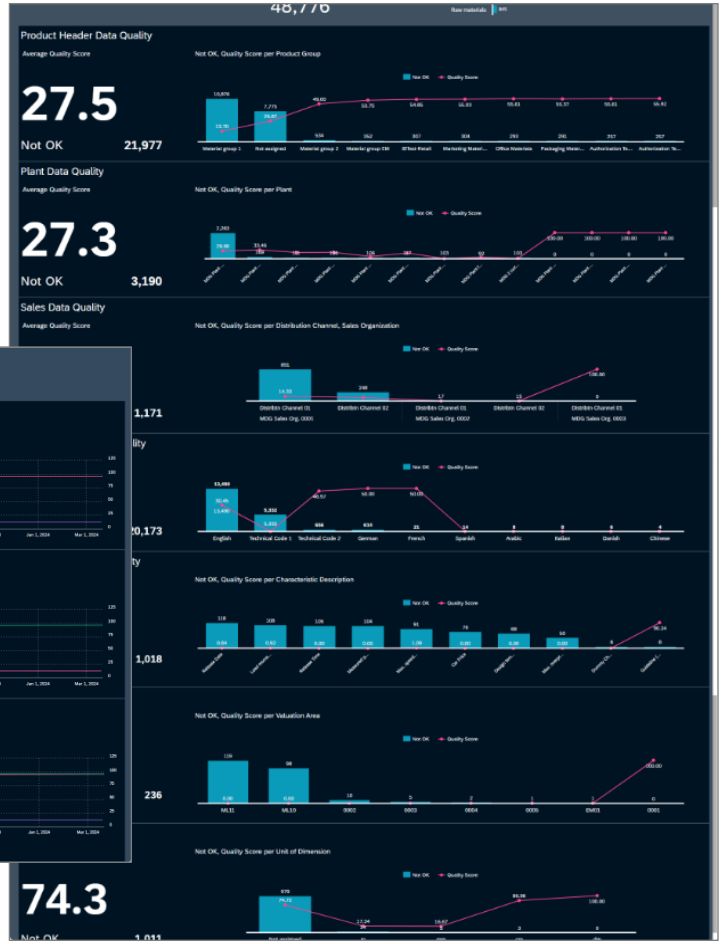
Cross-topics: Data Quality Analytics 2.0 for products and business partner in SAP S/4HANA and SAP Analytics Cloud

Feature Highlights

Dashboard for chief data officers and master data specialists that provides a real-time overview of master data quality and history trends.

- Data quality overview in 3-level reporting structure: by category, dimension, and rule
- Data quality analytics for 7 business partner data segments, e.g., business partner core data, customer sales data, or supplier purchasing data. Each can be drilled down using master data attributes or/and organizational unit e.g., country or company codes.
- Data quality analytics for 7 product master data segments, e.g., plant data, sales data, or classification data. Each can be drilled down using master data attributes or/and organizational unit, e.g., product group or plant.
- Embedded authorization control via live data connection
- Extensibility with custom fields
- SAC Integration with MDG system for data remediation

Enhanced data quality analytics in SAP Analytics Cloud



Enhanced data quality analytics consumer: SAP Analytics Cloud

Business value

- Data quality insight for business decisions
- User-friendly quality visualization and responsive interaction for master data analytics
- Extended analytics with low TCO

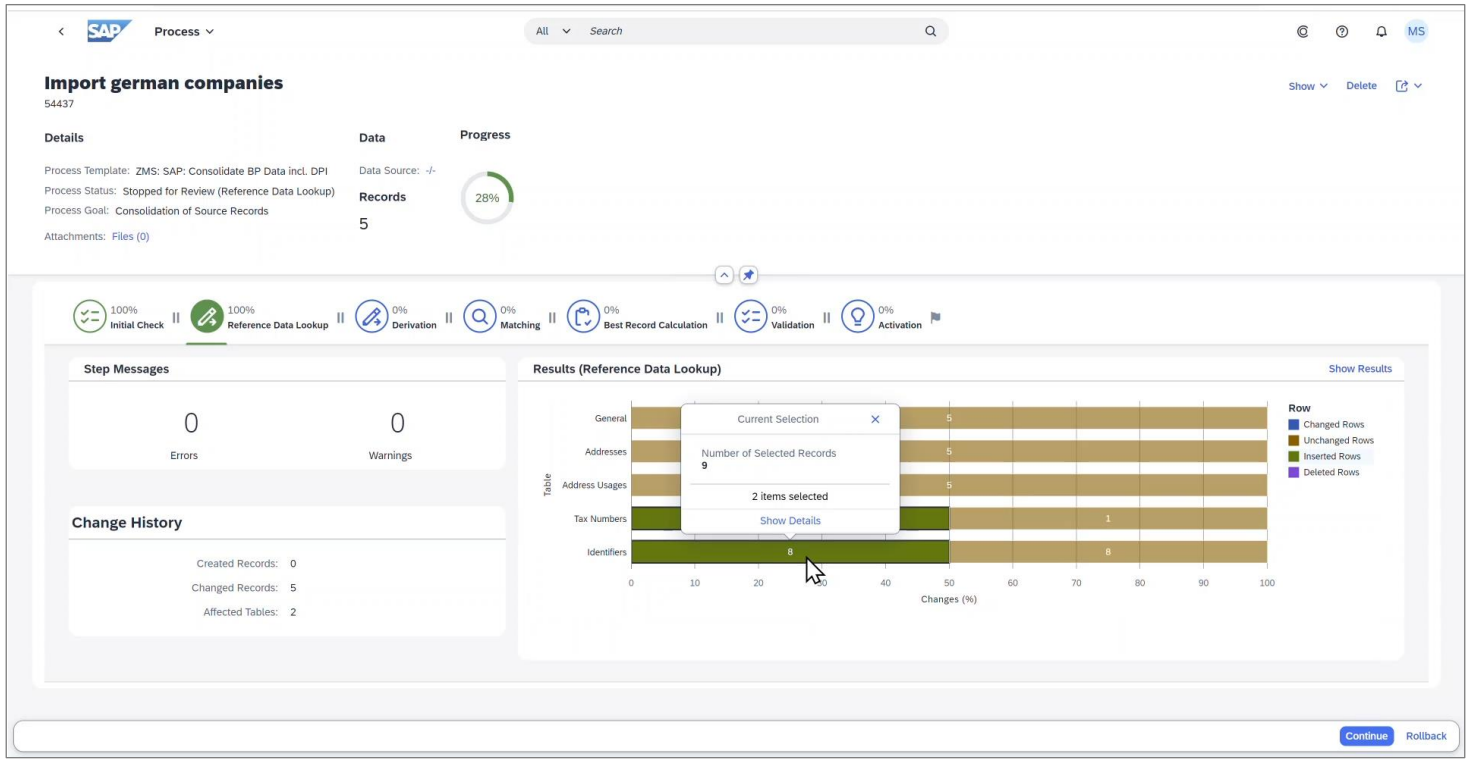
Cross-topics: Mass enrichment of business partners from CDQ reference data

Feature Highlights

Enable enrichment of business partner records from reference data as an integrated part of single and mass processing, consolidation, and federation processes

Business value

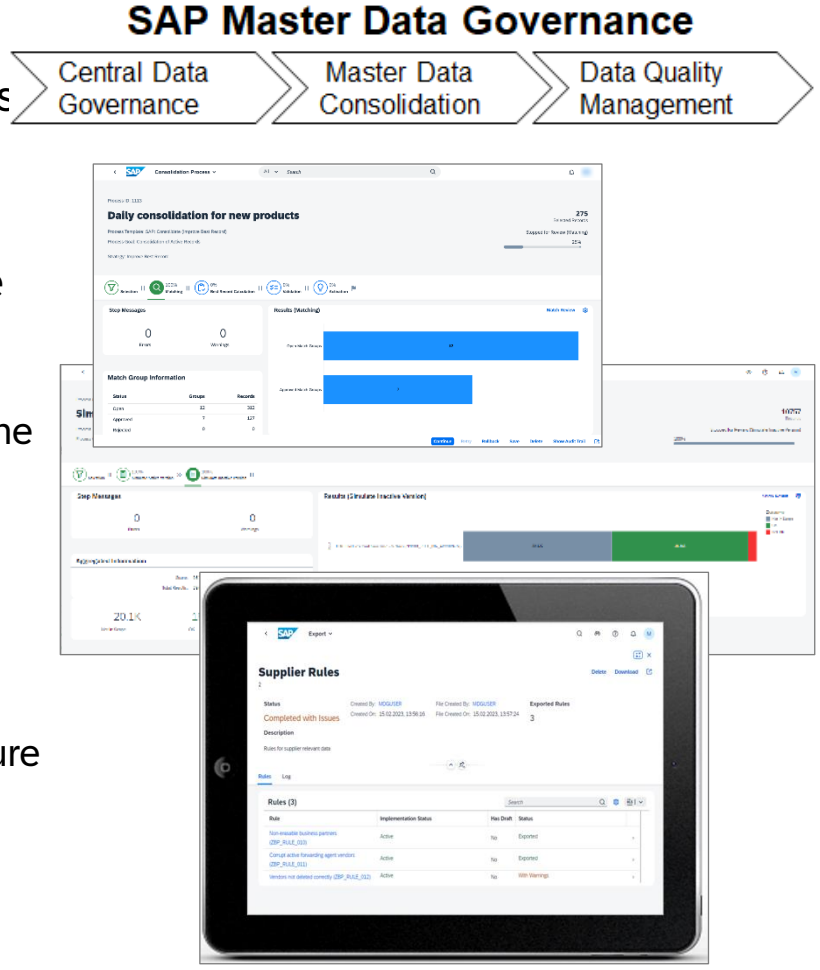
Increase usability and effectiveness of reference data with the ability to integrate data providers through full process integration



Cross-topics: Master Data Governance Summary

SAP Master Data Governance on SAP S/4HANA: the efficient way towards consistent and high-quality master data – the foundation of your Digital Business

SAP MDG on SAP S/4HANA provides preconfigured, domain-specific master data governance as well as a flexible framework for custom data models and processes. This allows to de-centrally manage and consolidate, or centrally manage and distribute all master data for your company's complete system landscape.



The clean master data from SAP MDG on SAP S/4HANA enables you to accelerate your enterprise software journey, and to enable new digital business models. For example...

- SAP MDG on SAP S/4HANA supports your system landscape simplification and move to the cloud with synchronized master data across on-premise and on-demand applications
- Leverage SAP MDG on SAP S/4HANA's harmonized master data and SAP's platform capabilities to connect transactional and IoT or other big data, and derive real business value
- Mobilize your business with simplified master data access and efficient scenarios for request, approval, or to monitor KPIs and trends
- MDG can support your SAP S/4HANA move: get experience with a controlled subset, ensure master data quality before the implementation, and maintain quality after go-live

Cross-topics: Business Technology Platform (BTP)

Find all scenarios here:
https://d.dam.sap.com/a/hHzXdEW?rc=10

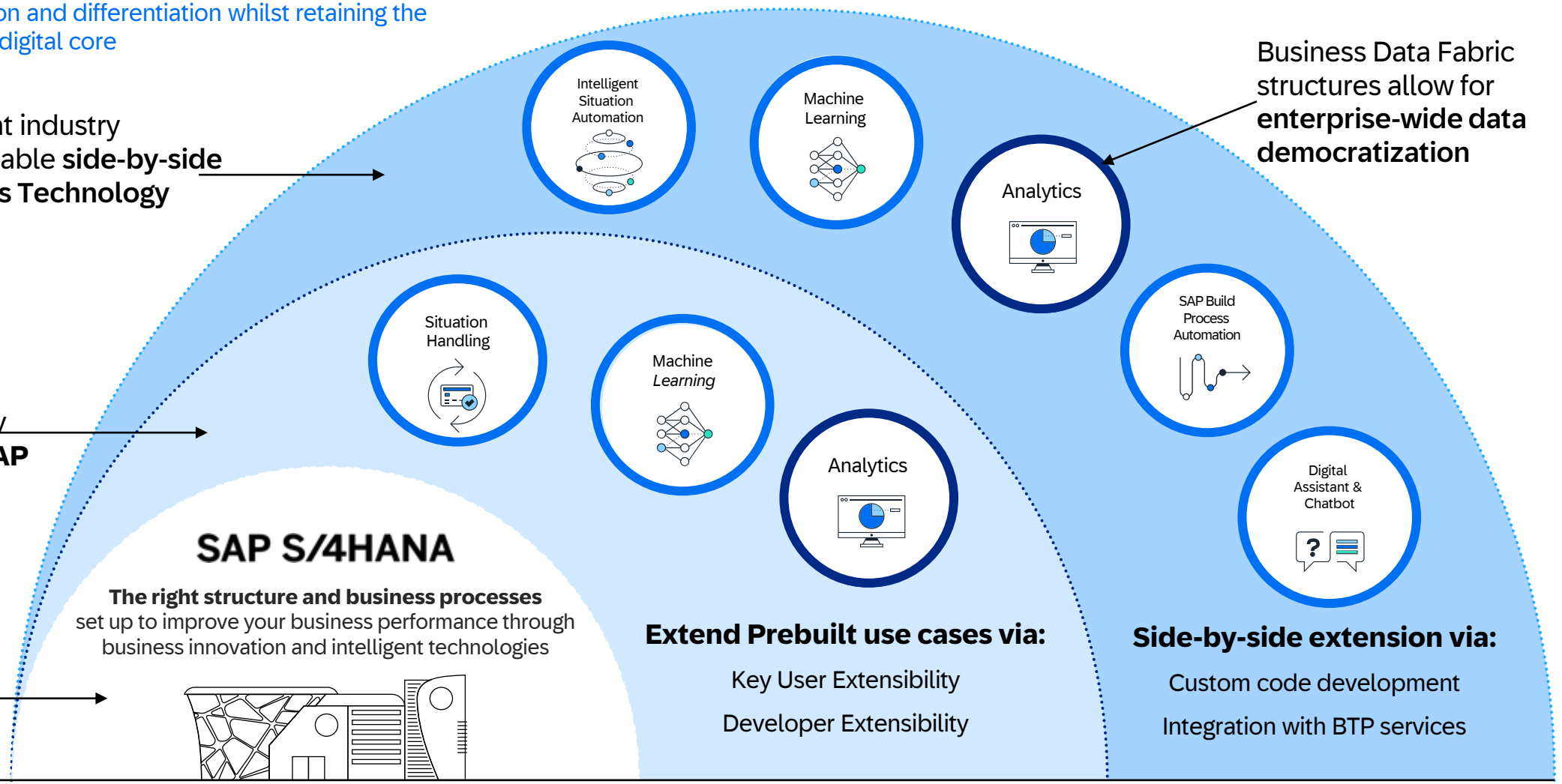
Comprehensive extensibility capabilities to allow cloud lifecycle compliant innovation and differentiation whilst retaining the benefits of a clean digital core

Business Data Fabric structures allow for **enterprise-wide data democratization**

Further intelligent industry capabilities available **side-by-side via SAP Business Technology Platform**

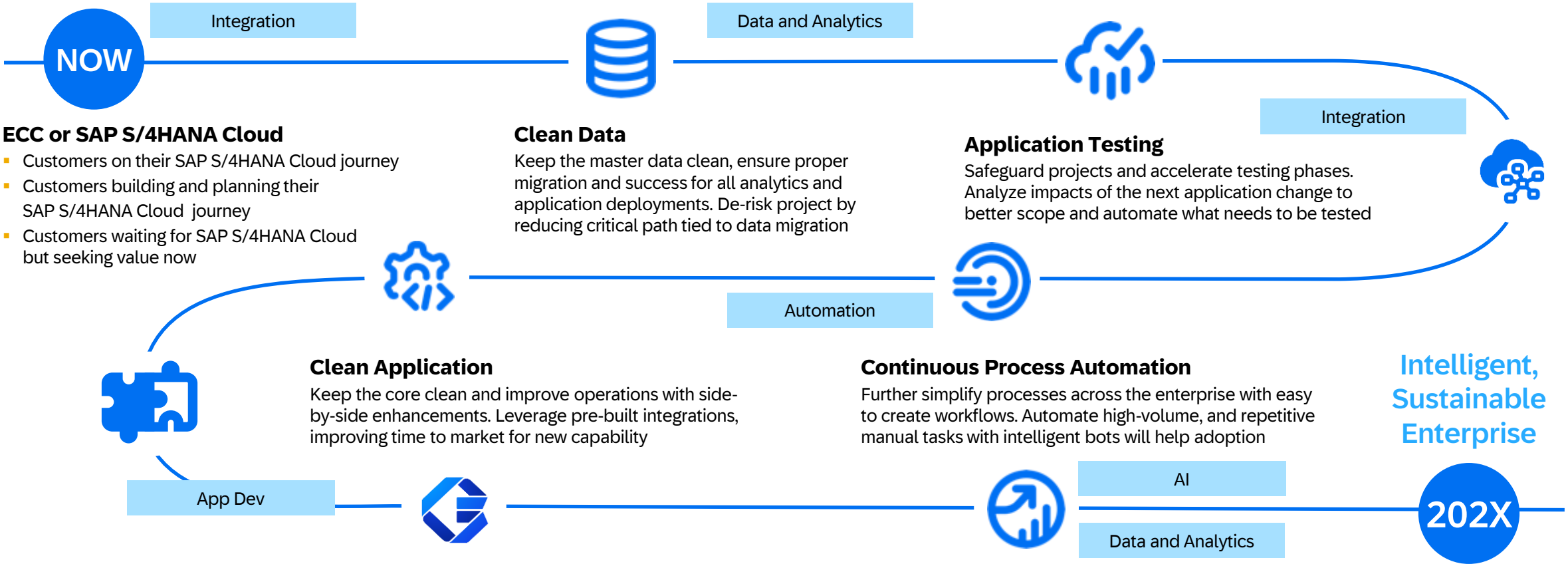
Intelligent technologies fully **embedded in SAP S/4HANA Cloud**

Digital core & backbone



Cross-topics: BTP Helps Accelerate Transformation to an Intelligent Enterprise

How to get from an SAP ECC to an SAP S/4HANA Cloud environment and keep the speed



ECC or SAP S/4HANA Cloud

- Customers on their SAP S/4HANA Cloud journey
- Customers building and planning their SAP S/4HANA Cloud journey
- Customers waiting for SAP S/4HANA Cloud but seeking value now

Clean Data

Keep the master data clean, ensure proper migration and success for all analytics and application deployments. De-risk project by reducing critical path tied to data migration

Application Testing

Safeguard projects and accelerate testing phases. Analyze impacts of the next application change to better scope and automate what needs to be tested

Clean Application

Keep the core clean and improve operations with side-by-side enhancements. Leverage pre-built integrations, improving time to market for new capability

Continuous Process Automation

Further simplify processes across the enterprise with easy to create workflows. Automate high-volume, and repetitive manual tasks with intelligent bots will help adoption

Low-Code Extensions

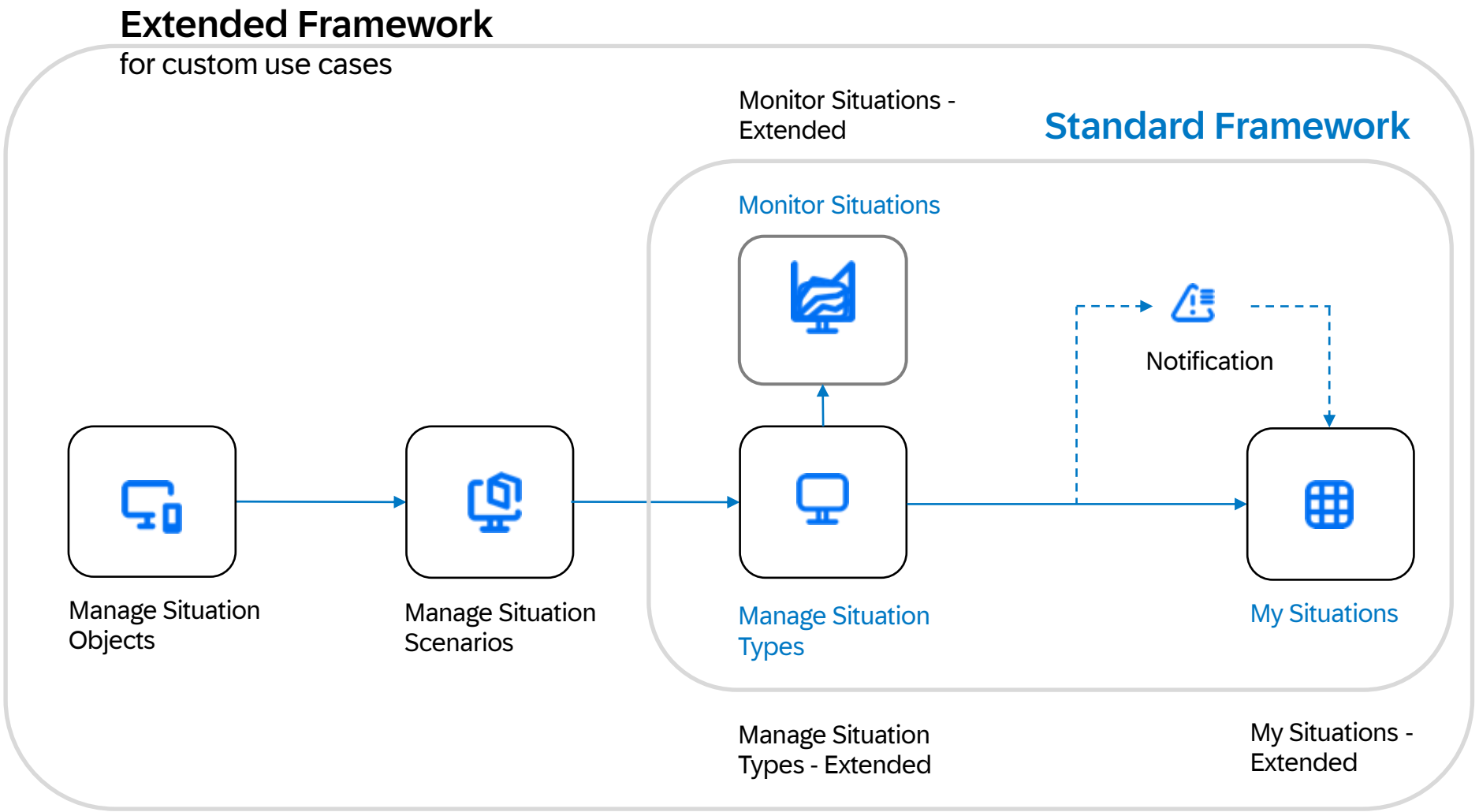
Starting to change behavior with a new application is often the linchpin to success. Enabling low-code/no-code solutions help organization deploy new capabilities weekly and keep up with dev backlog

Data-Driven Decisioning

Enabling cross-process data-driven decision-making will significantly improve a customers return on asset

Initial focus around cash and spend management will help the success of the project and ensure organization stability

Cross-topics: Situation Handling
Standard and extended framework

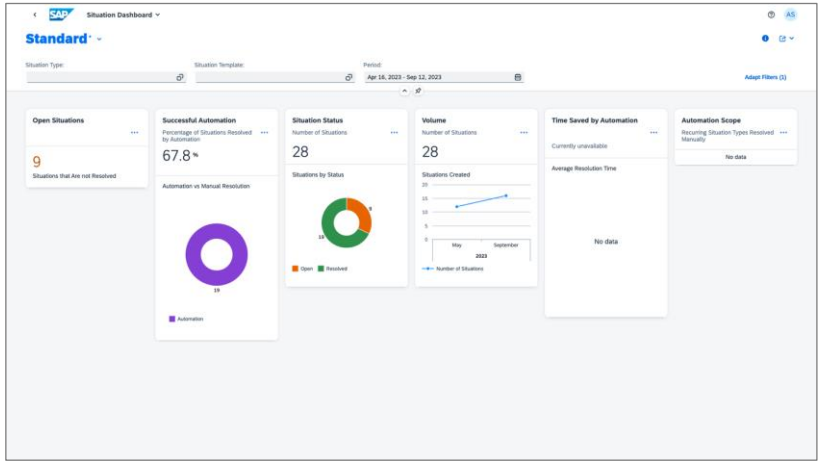


Cross-topics: Intelligent Situation Automation Service on SAP BTP

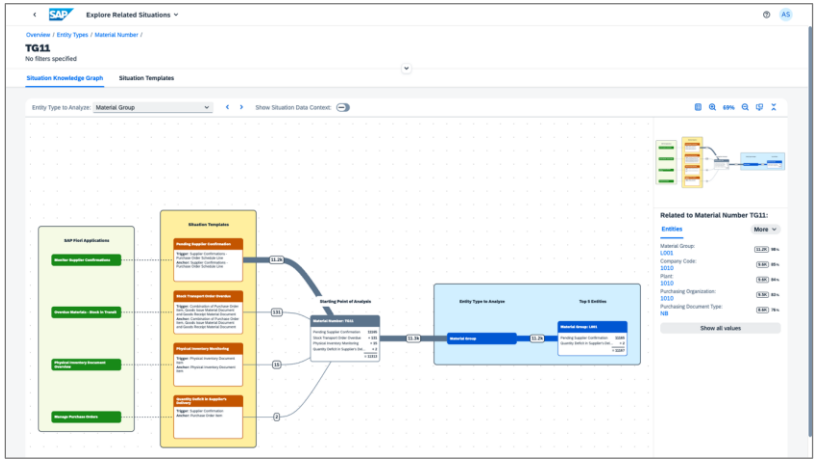
Key applications

All situations are **tracked** and **analyzed** on SAP BTP for business insights and solution automations.

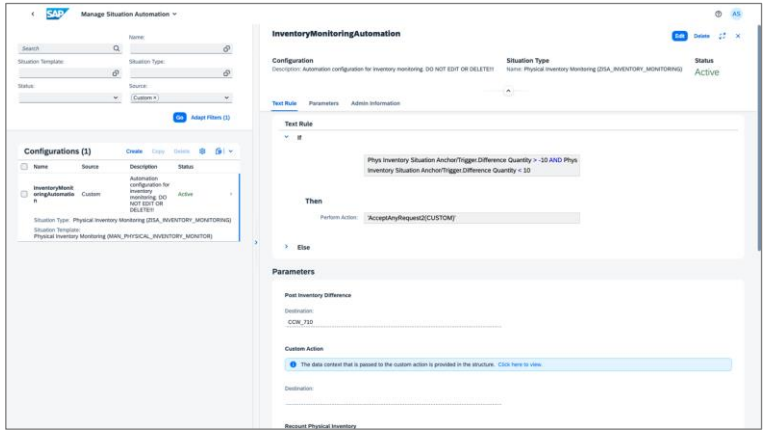
Dashboard - analyze content



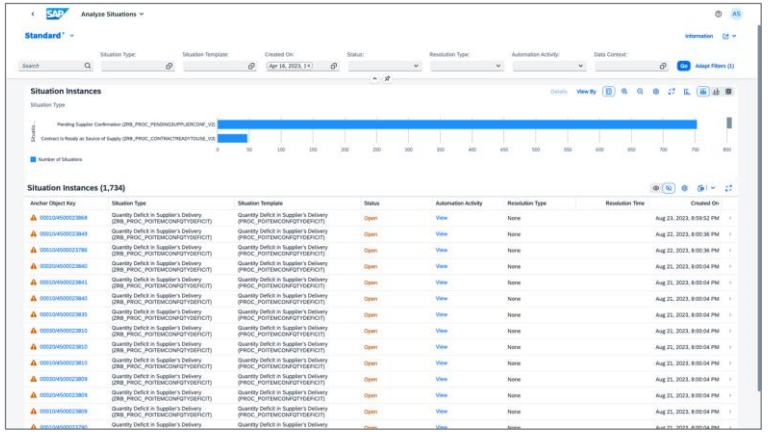
Related Situations Explorer -
Find related issues across use cases



Rule Builder - build rules to automate



Analyze Situations - identify patterns, analyze details



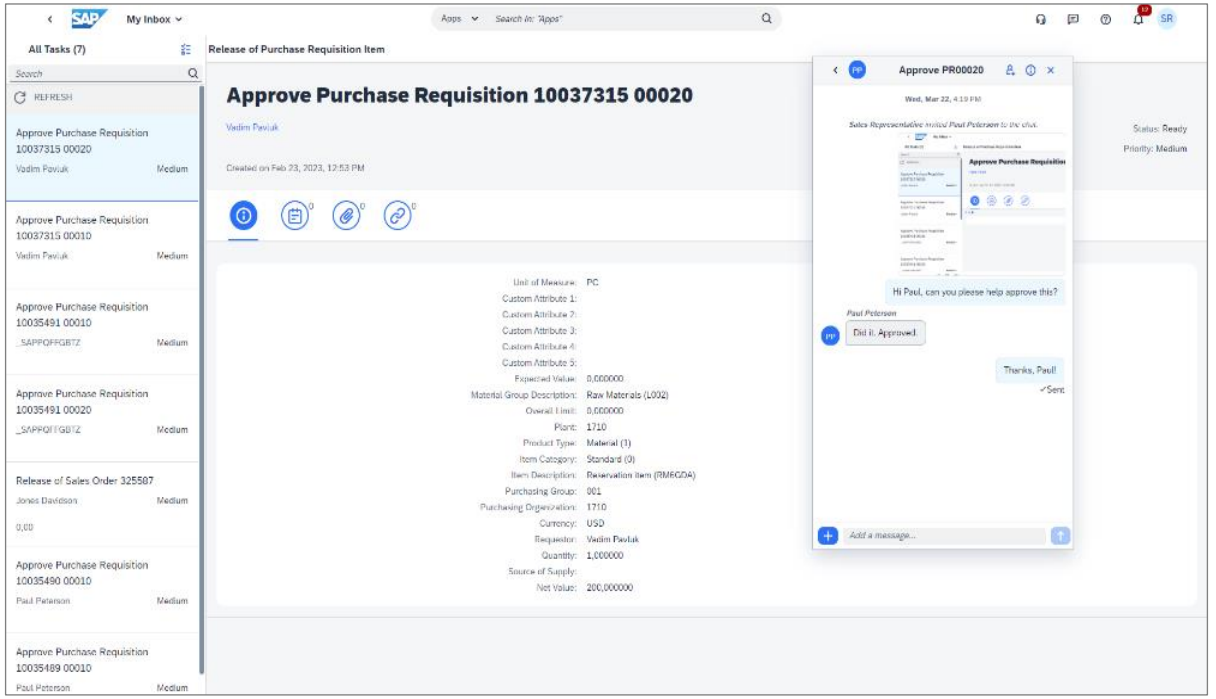
Cross-topics: SAP User Experience in SAP S/4HANA Cloud

SAP Collaboration Manager (Releases 2023, and beyond)

2023
FPS0+1

SAP
Collaboration Manager

Seamlessly integrated collaboration experience directly inside the SAP Fiori launchpad. It increases overall user efficiency through in-place collaboration features such as creating chats with and sending documents supporting various image types and video links to your peers. Your co-workers receive the notification instantly and can begin to work on your request without any delay and system switchover. Additionally, the SAP Collaboration Manager helps you keep up with your daily tasks by letting you store notes in your own private thread that is only visible to you–all you need to do is create a chat with yourself.



Value Proposition

- Increase user productivity
- No media breaks while work & collaborate in one place
- Full access to the origin of the conversation by link to the SAP Fiori screen
- Intuitive user experience with the seamless integration

Capabilities

- Link your chat to any screen in your apps for reference
- Take screenshots to add directly to your chat without having to close SAP Collaboration Manager
- Annotate, highlight, and conceal areas of your screenshot
- Find out which screen your screenshot was created on
- Receive notifications on the SAP Fiori launchpad regarding chat notifications through the notification area.

For more information, see: Integrating SAP Collaboration Manager, or SAP Collaboration Manager Will Replace SAP CoPilot in SAP S/4HANA Cloud and SAP S/4HANA

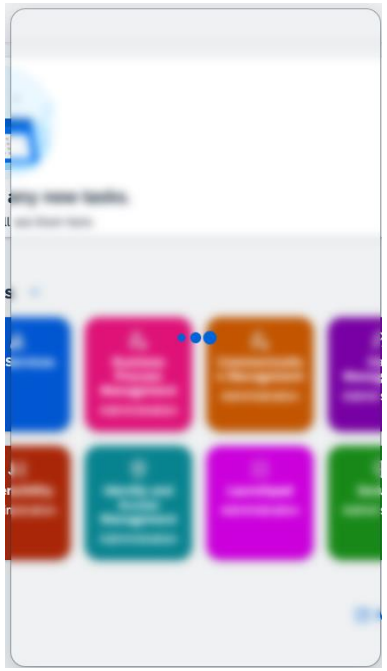
Cross-topics: SAP Collaboration Manager

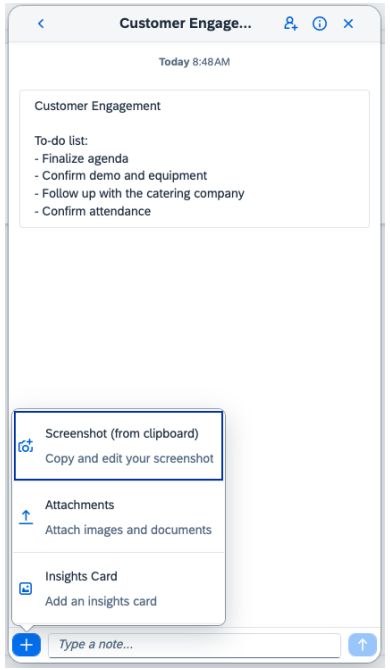
Provide a modern interface which is more intuitive, user-friendly, and engaging

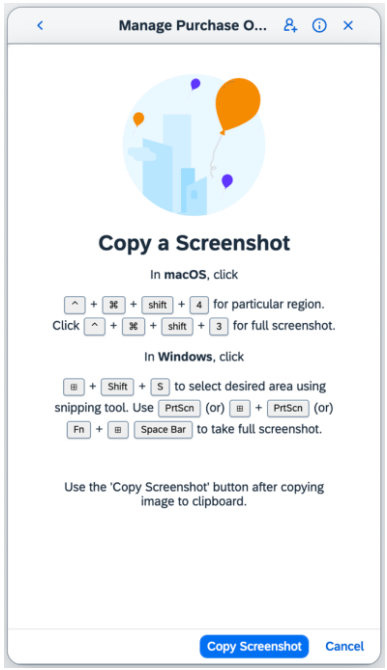
2023
FPS2

- The SAP Collaboration Manager chat interface will have a **modern visual look and feel** and thus be **more intuitive and engaging** for end users

- This will **intrinsically motivate** users to adopt it, further improving efficiency of their daily work through **in-place collaboration** directly where critical business processes are taking place



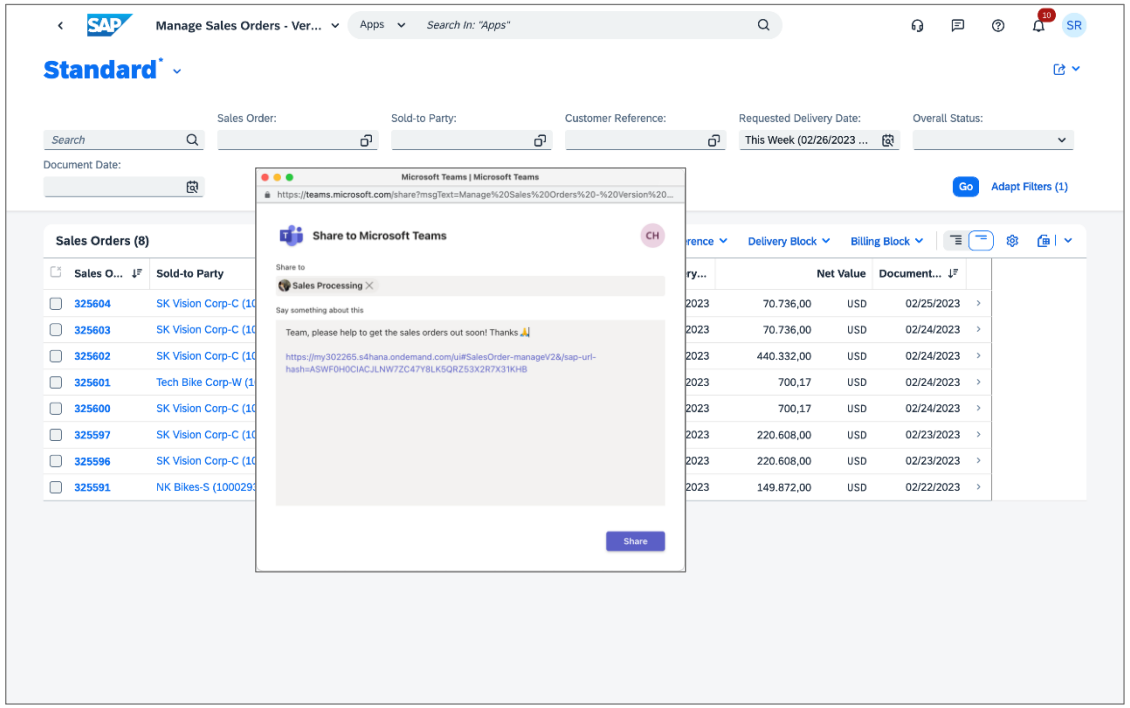


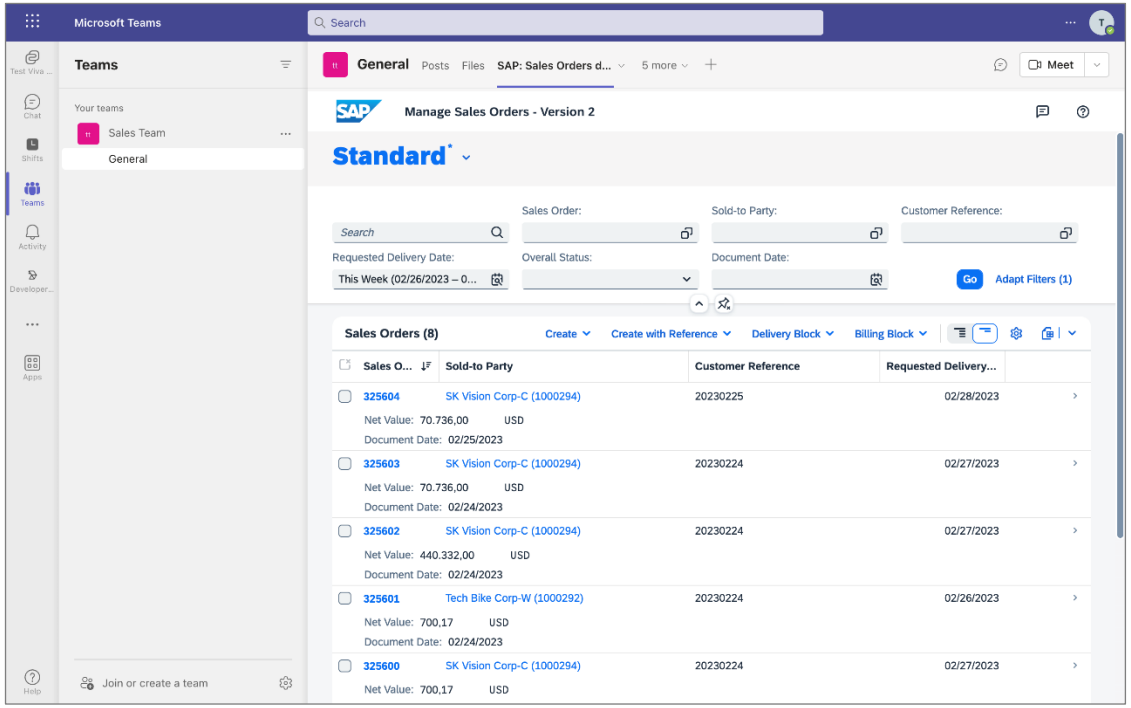


Cross-topics: Collaborate with your co-workers in Microsoft Teams

2023
FPS0+1

Integration with
Microsoft Teams





Share **access to criticial business**

issues with your co-workers **in chats***

Make critical business issues

part of your Teams channels*

Cross-topics: Positioning SAP Collaboration Manager and Joule

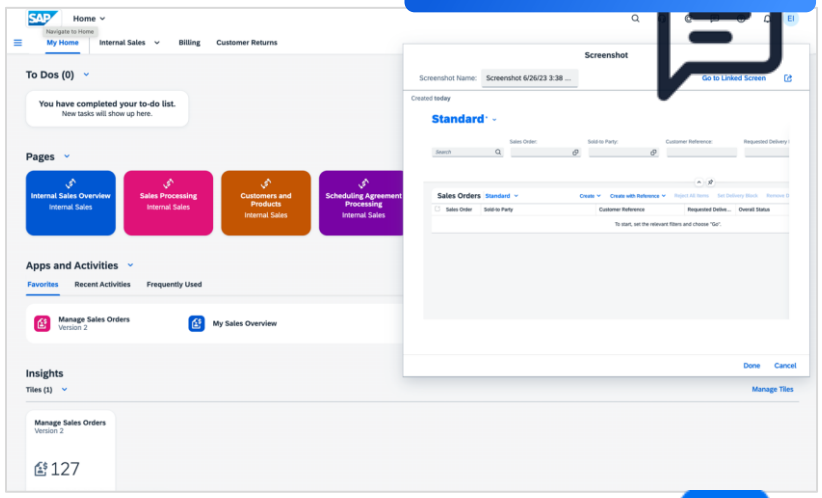
2023
FPS0+1

SAP Collaboration Manager

Human-to-Human (H2H) collaboration

Available from S/4HANA Cloud Private Edition 2023 FPS01

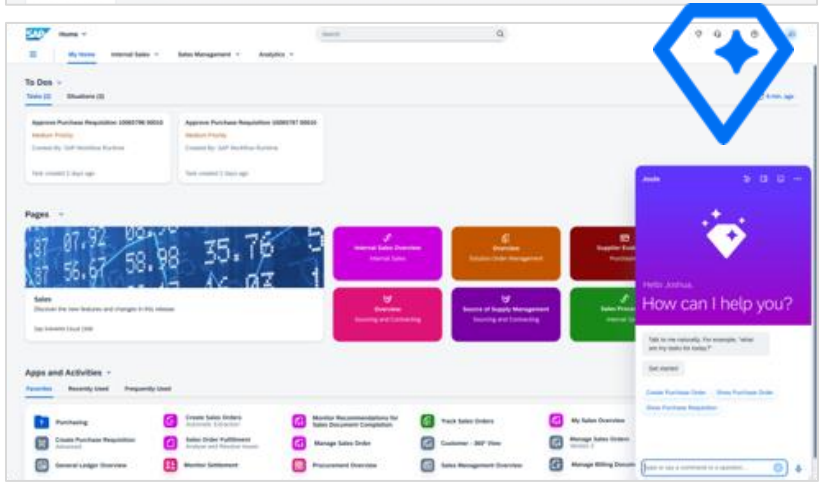
SAP Joule Navigation



Joule

Human-to-Machine (H2M) communication

Available from S/4HANA Cloud Private Edition 2023 FPS02



Joule for SAP S/4HANA Cloud generates and navigates SAP S/4HANA users through new and improved pathways between functional applications as well as information tailored to individual prompts.

The solution empowers end users to save significant time and manual effort in searching for an answer to her or an internal customer's questions.

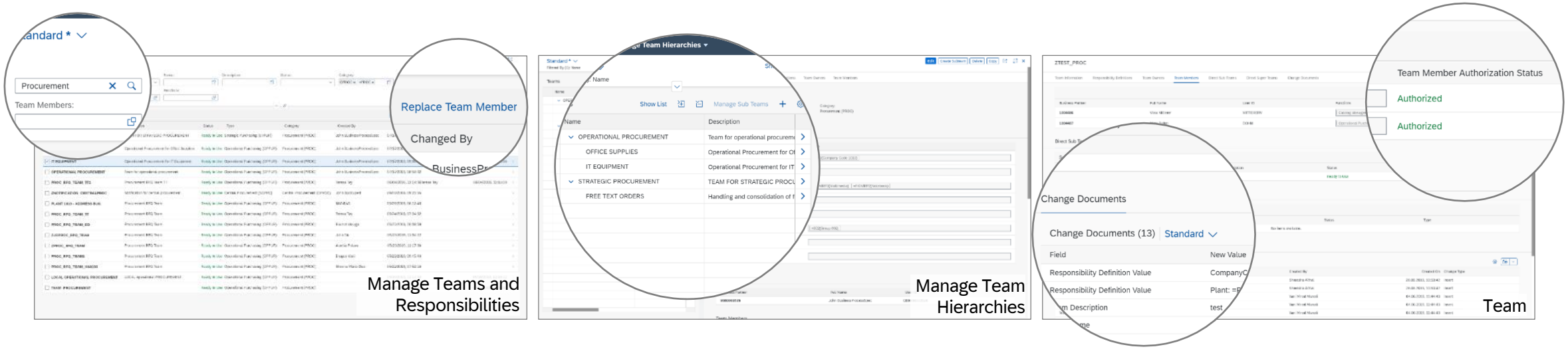
Cross-topics: Responsibility Management Overview

Responsibility Mgmt.

2023
FPS0+1

A functionality which helps determine the **responsible contacts within the organization** for various contexts in order to address tasks and activities, along the working structure and, dimensions of the respective lines of business.
Define responsibilities in terms of either **teams consisting of team members with assigned functions or responsibility mgmt. agent rules** and refer to these in frameworks like **workflows and situation handling.**

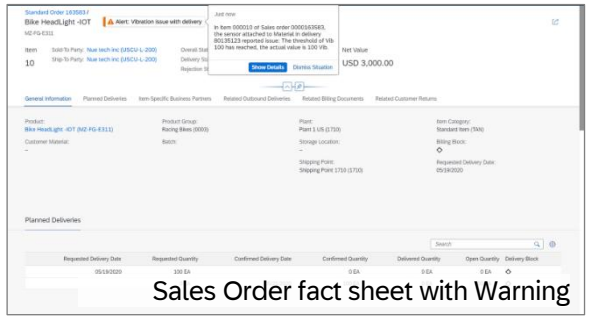
Responsibility Determination by Teams:

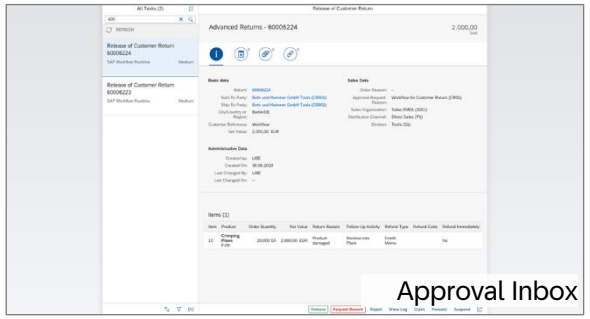


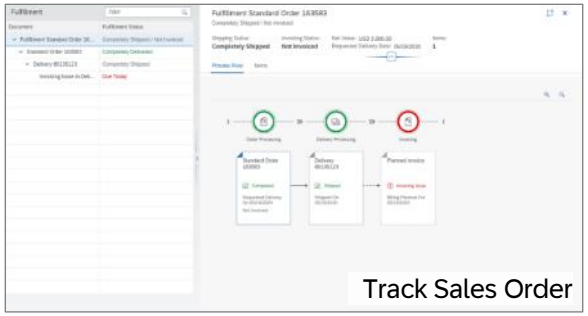
In 2023, Responsibility Management has delivered Write APIs that enable customers to create, update, delete teams and their details in Responsibility Management. For more information, see https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE/a156fdaa471548bba5cd0bbaaec9b6bd/b211414de1eb41a69b4a477dc4009083.html?locale=en-US

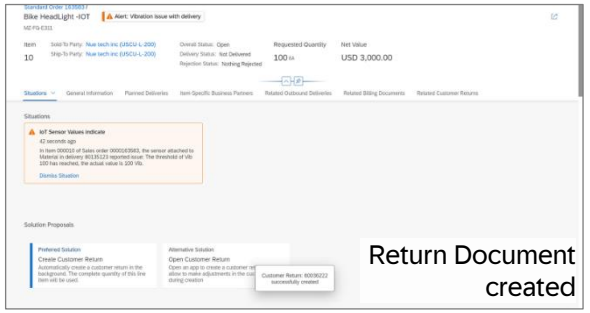
Cross-topics: Responsibility Management in Business Processes

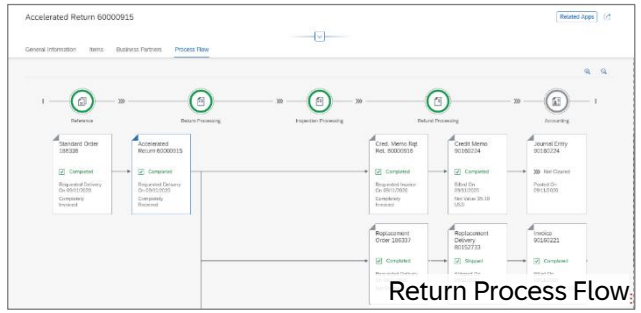
Ship the delivery ---▸ Receive abnormal situation warning ---▸ Trigger customer return process ---▸ Approve return request ---▸ Compensate customer (credit memo/repl. material)


Sales Order fact sheet with Warning


Approval Inbox


Track Sales Order


Return Document created


Return Process Flow

Responsibility Management

- Flexibly maintains responsibilities for team members
- Integrates with workflow and situation handling
- Supports complex scenarios (hierarchies) to determine the responsible recipients
- Dynamically determine agents using customers logic defined via Responsibility rules.

Situation Handling

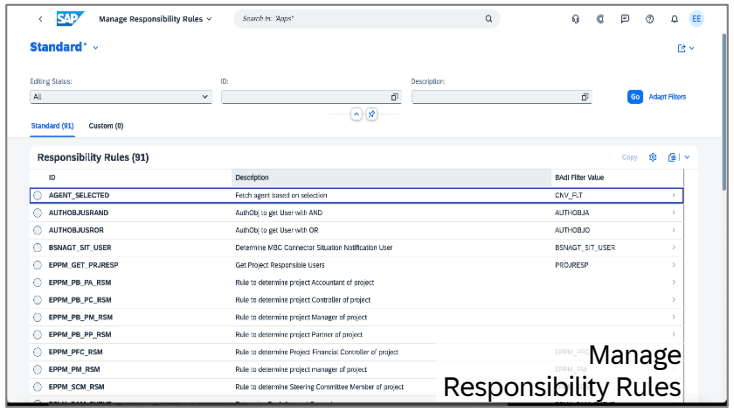
- Brings urgent issues to the attention of business users, who can react to notifications immediately received
- Optimize business processes by enabling automation and machine learning

Business Workflow

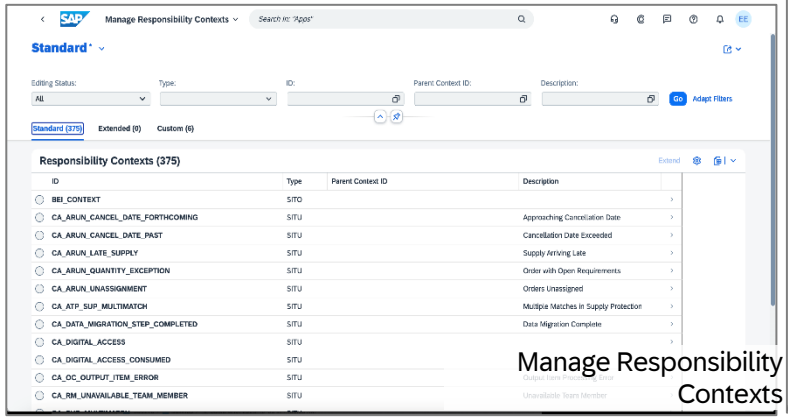
- Synchronize and proactively deliver work in the right sequence at the right time to the right people
- Business departments can model, configure and administrate the workflows
- The difference to Suite Workflow blog

Cross-topics: Responsibility Management:
Responsibility determination by agent rules

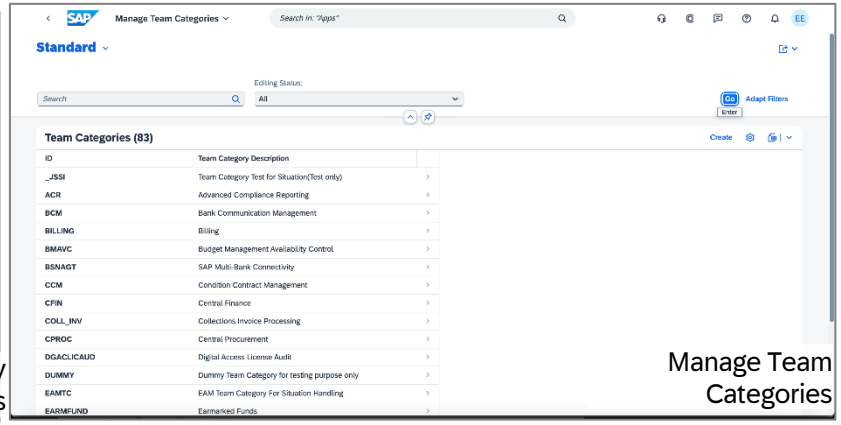
Responsibility Mgmt.



Manage Responsibility Rules



Manage Responsibility Contexts



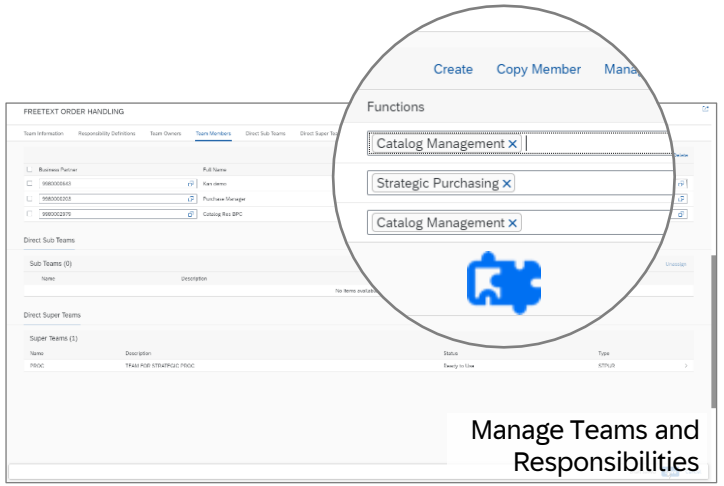
Manage Team Categories

Agility through flexible adaption of responsibilities and hierarchies allowing to alignment with business processes.

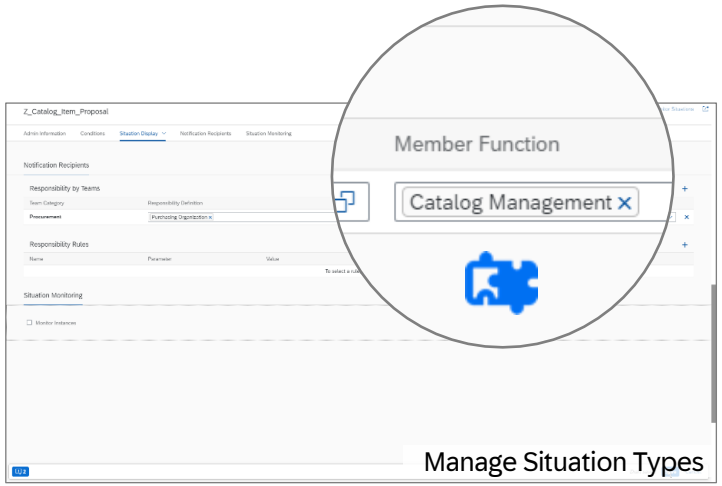
Centralized monitoring of responsibilities to directly react to organizational changes without disrupting processes.

Reduced implementation efforts and more flexibility with intuitive user interface allowing key users to do edits.

Cross-topics: Responsibility Management: Using Teams for situation handling

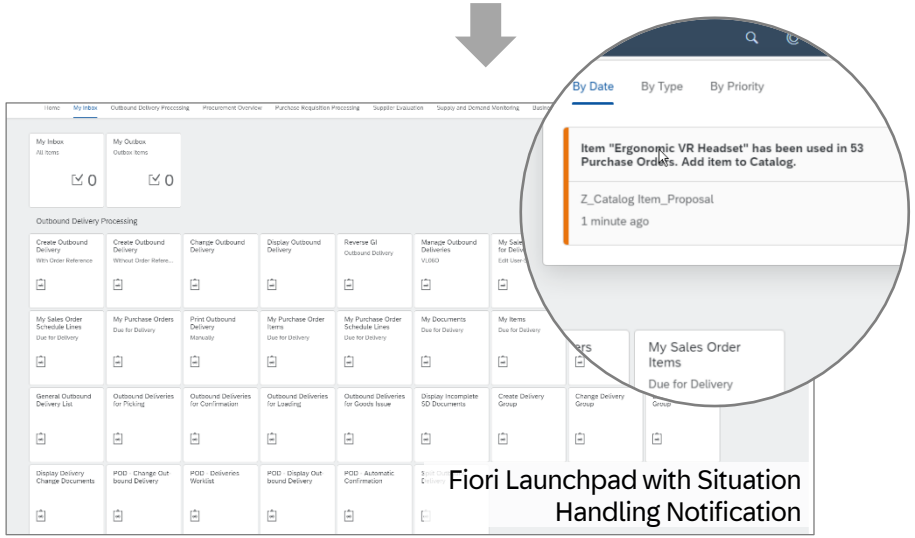


Manage Teams and Responsibilities



Manage Situation Types

- Add users (Business Partners) to logical teams serving dedicated functions
- Define the recipients of Situation Handling Notifications via defined teams and functions



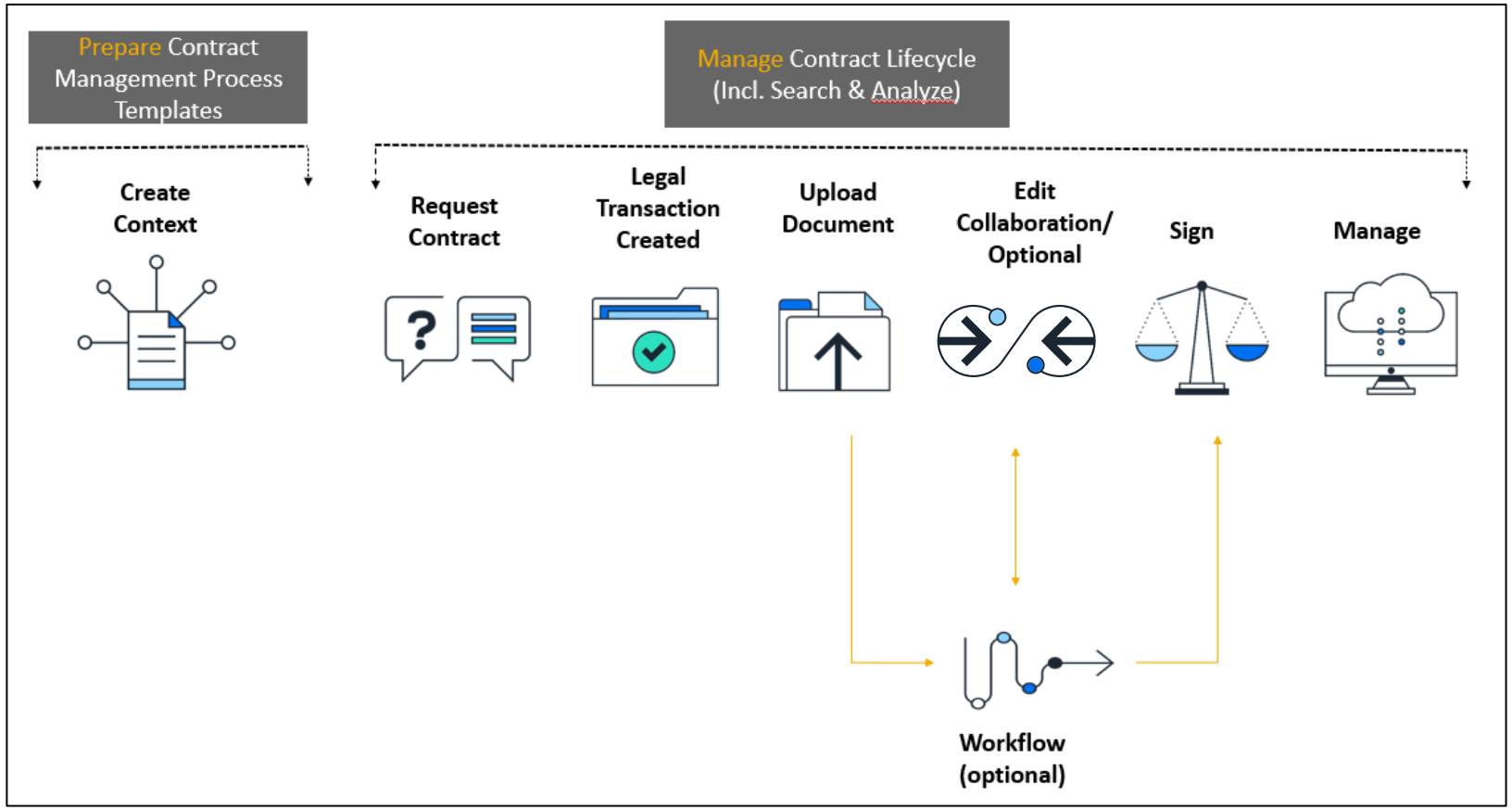
Fiori Launchpad with Situation Handling Notification

User (Business Partner)

- Flexible management of teams, hierarchies, and responsibilities
- Monitoring and changes to team structure in one central place
- Decoupling of business partners from ultimate function for more resilient business processes

Cross-topics: SAP S/4HANA for Enterprise Contract Management - 1

SAP S/4HANA for Enterprise Contract Management is an application in S/4HANA for the management of legal documents in enterprises. It supports all types of contract documents (sales, procurement, legal, HR, real-estate, financial, etc.) can be easily integrated into all core business processes, and stores all legal documents in one central online repository. (Available as Cloud, Private Cloud and On Premise deployment option)

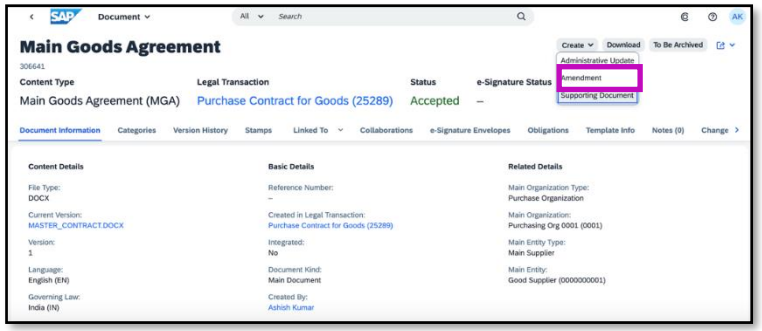


Cross-topics: SAP S/4HANA for Enterprise Contract Management - 2

2023
FPS0+1

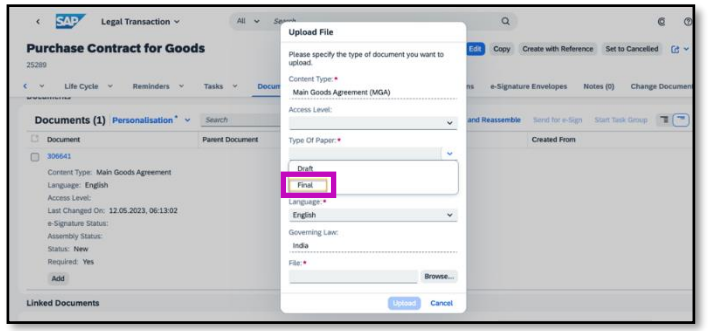
Create amendment for main contract

- Users can now correct, change, add or delete content in the existing contracts that have already been signed.



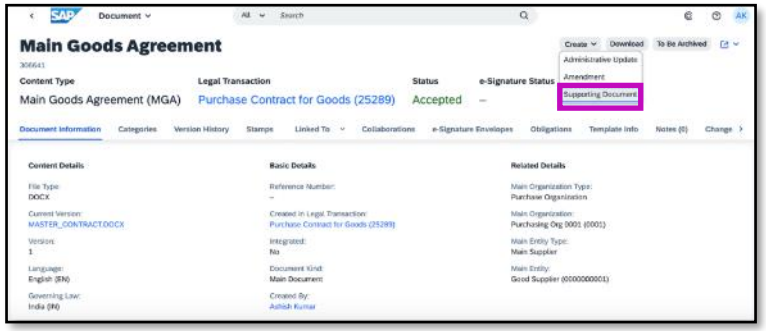
Upload signed copy of contract to legal transaction

- Users can now upload the signed (final) copy of the contract directly to the legal transaction. This helps to move the legal document to the ‘Accepted’ status without any manual effort.



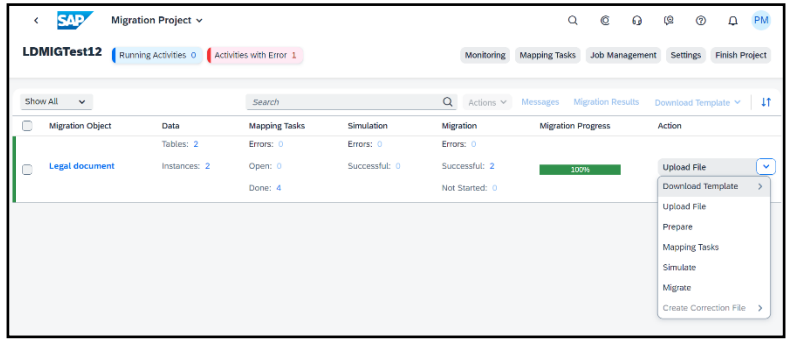
Upload supporting documents for main contract

- Users can create supporting documents for a main contract. This feature helps to manage and organize supporting documents from one place.



Migrate legal documents in enterprise contract management

- With this feature you can create mass legal documents using the data migration option and migrate business data from any legacy system.

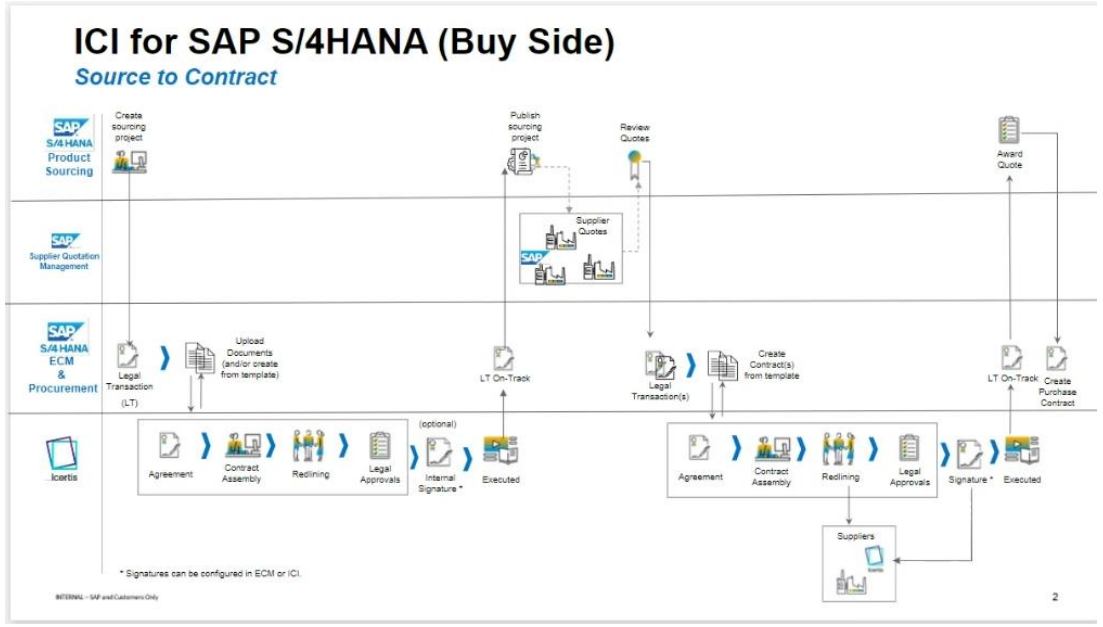


Cross-topics: SAP S/4HANA for Enterprise Contract Management - 3

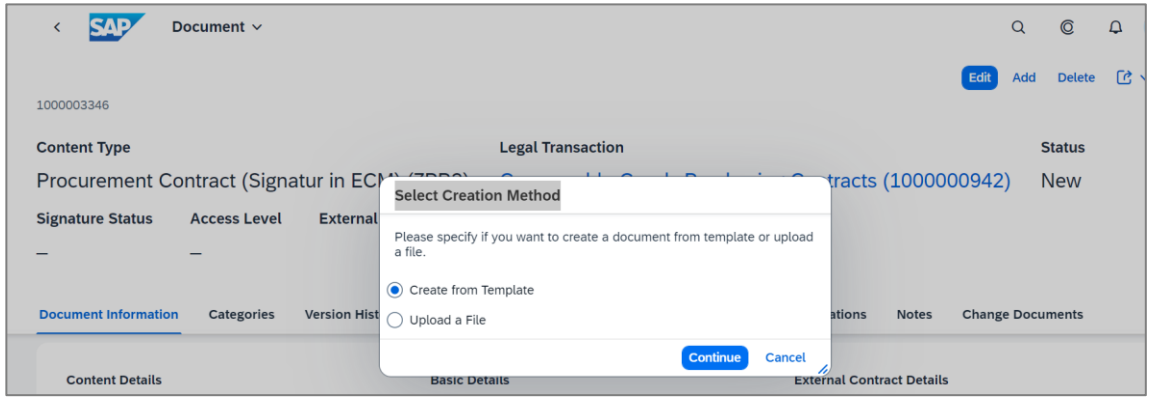
2023
FPS2

Integration of Enterprise Contract Management with Icertis Contract Intelligence

Users can now perform intelligent buy-side, sell-side, and organization-wide contracting tasks with ease. The integration enables users to perform tasks such as authoring, and assembly of clauses and documents and efficiently collaborate with internal and external stakeholders. The integration supports capabilities such as better traceability of signatures and responsibilities.



- Users can now create a document with the help of a template or by uploading content, using the integration scenario.

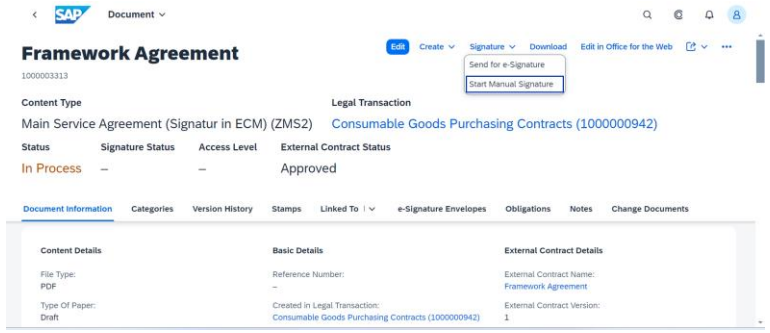


Cross-topics: SAP S/4HANA for Enterprise Contract Management - 4

2023 FPS2

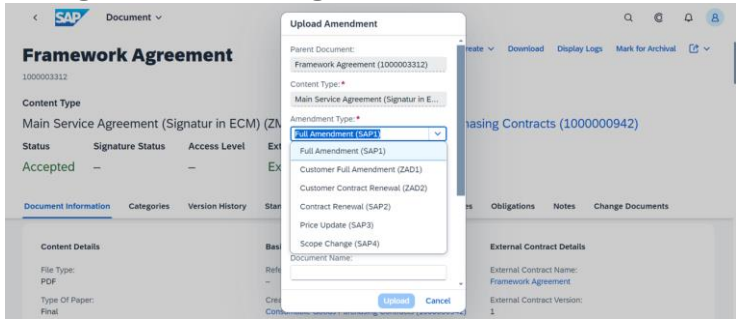
New signature options for legal contracts

- **Users can now select whether signature is required for contract and choose between manual signature or e-signature for legal contracts.**



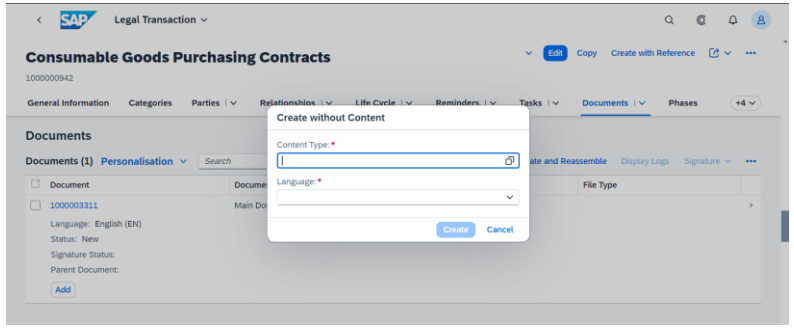
Choose the amendment type for a main document

- Users can now choose the amendment type while creating an amendment for a main document. This helps to define and track the type of changes made to a legal contract.



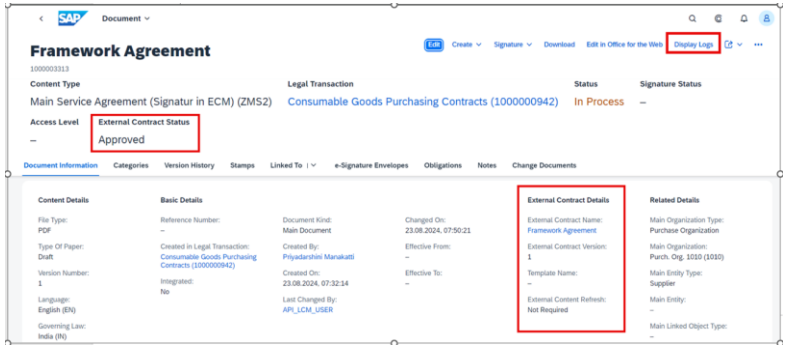
Creation of optional document without content

- **Users can now create an optional legal document without content. Users can maintain all the important data before triggering the creation of content in the legal document.**



Check status of external contracts

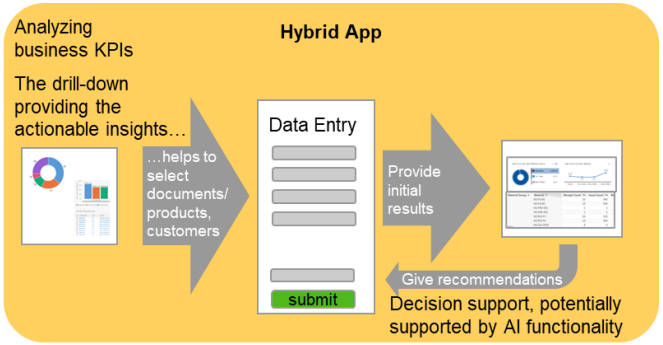
- Users can now view the status details of external contracts and check the logs to trace the latest operations performed with respect to the Icertis Contract Intelligence system.



Cross-topics: Embedded Analytics: The basics you need to know

Concepts

Enhanced ERP process example:



Embedded Analytics includes technical embedding of analytical functionality and visualizations for seamless interoperability between transactional and analytical aspects of an **optimized business process**

Note: SAP Analytics Cloud is included commercially only in SAP S/4HANA Cloud Public Edition (GROW) as OEM version

Principles

Key Principles (technical setup unique to SAP S/4HANA Cloud*):

"Insight-to-action"
Use analytics findings to navigate to the transaction to initiate the necessary changes

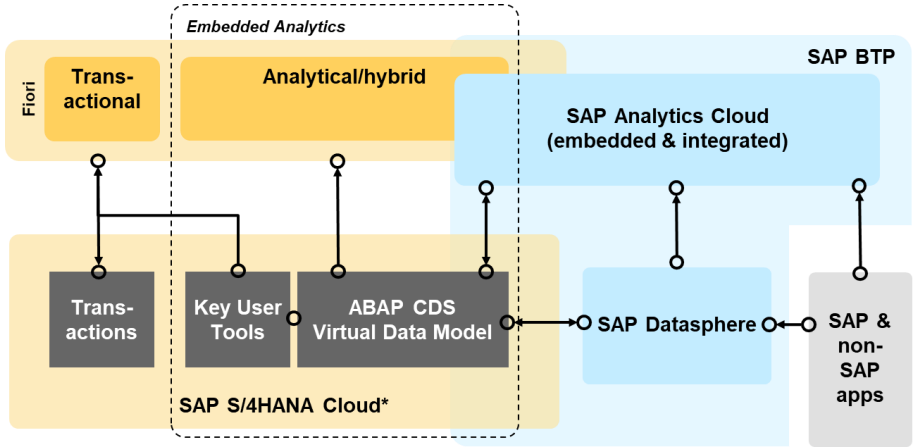
"fact-based process handling"
Use analytical visualizations to prioritize the order of work

Recommendation:

"To assure the optimization of ERP processes, the close alignment and integration of transactional and analytical components is essential.

Therefore, the usage of embedded analytics should be maximized wherever possible."

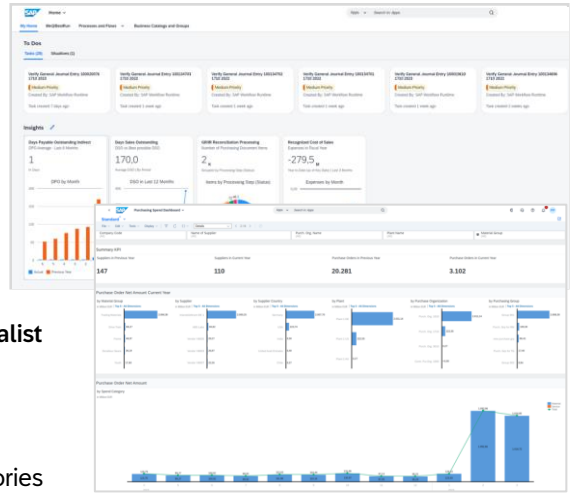
Architecture



Functionality

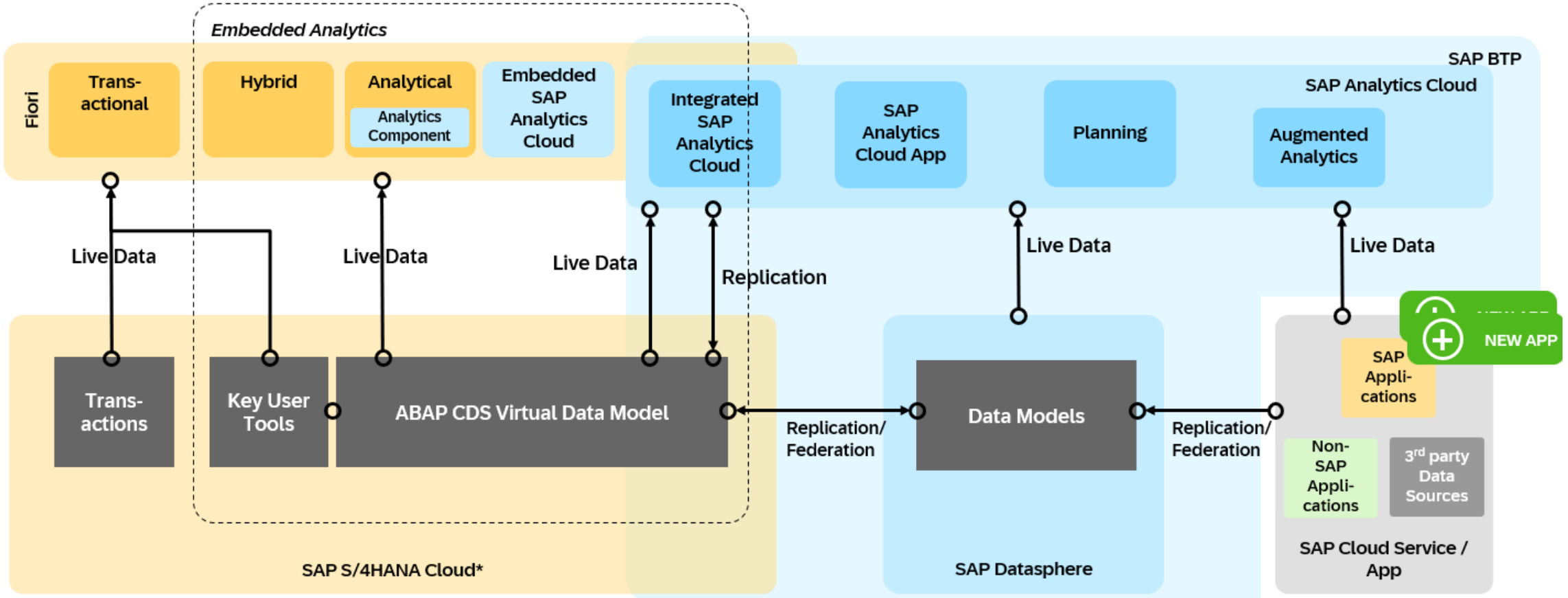
Fiori business user visualizations
- Smart Business KPIs
- Overview Pages
- Analytical List Page
- Multidimensional Reports
- Dashboards (powered by SAP Analytics Cloud)
- Hybrid Applications (In-app Analytics and Machine Learning)
- Supplier filter added to Product Sourcing Overview App

Key user tools for the Analytics Specialist
- Manage KPIs and Reports
- View Browser
- Custom CDS Views
- Custom Analytical Queries
- Embedded SAP Analytics Cloud Stories



Cross-topics: SAP Data and Analytics Solutions

Building the business data fabric



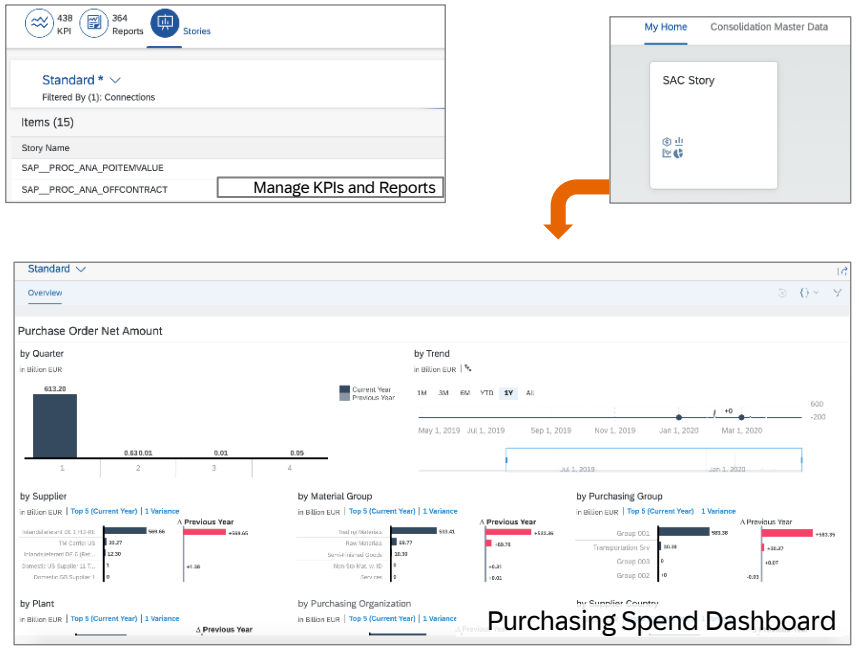
*including SAP S/4HANA Cloud Public Edition, SAP S/4HANA Cloud Private Edition, and on-premise deployments of SAP S/4HANA

Cross-topics: Embedded Analytics

Embedded Analytics | SAP Analytics Cloud

SAP Analytics Cloud Stories are now fully embedded in SAP S/4HANA

- Provide embedded insights in the solution, optimally support business users in defined business processes with decision support and information at the users' fingertips.
- Integrate seamlessly into the enterprise intelligence offerings such as SAP Analytics Cloud and
  SAP BW/4HANA
- Provide real-time access to solution data, as well as replication of data and blending with multiple other sources for end2end enterprise intelligence - direct access to SAP S/4HANA data based on live connectivity
- Integrated into SAP Fiori Launchpad, integrated in SAP S/4HANA role and screen variant management
- SAP Analytics Cloud content can be found in the
  Best Practices Package
  "SAP Best Practices for analytics with SAP S/4HANA"
  (for SAP S/4HANA Cloud)
- Intent-based navigation
- SAP Fiori variant management



Scope items for SAP S/4HANA Cloud Private Edition

*SAP S/4HANA Cloud Treasury Management Content with SAP Analytics Cloud	49P_S4CLD2208_BPD_EN_XX.docx
*SAP S/4HANA Cloud Receivable management content with SAP Analytics Cloud	4A6_S4CLD2208_BPD_EN_XX.docx
*SAP S/4HANA Cloud Procurement content with SAP Analytics Cloud	29D_S4CLD2208_BPD_EN_XX.docx
*SAP S/4HANA Cloud Sales content with SAP Analytics Cloud	3N0_S4CLD2208_BPD_EN_XX.docx

* in this table means, the SAP Analytics Cloud content inside the Scope item also support SAP S/4HANA Cloud Private Edition, in it's latest release. There may be minor manual effort before consuming the SAP Analytics Cloud content, such as changing predefined prompt value, etc.

Cross-topics: Intelligent Technologies

Delta scope summary

Act

Process Automation

Multiple bot workflows for action (attended + unattended) with SAP Process Automation, based on SAP intelligent RPA and SAP Workflow Management

No new scenarios

Anticipate

Situation Handling

Detect exceptions, notify, and **provide insight-to-action** options

Service:

- Subscription Contract Item Distribution (2023)
- Trade Compliance Check Blocked/Pending (2023)

Optimize

Machine Learning (AI/ML)

Self-learning bots and applications with dynamic adaptability

IT and Cross Function:

- Joule in SAP S/4HANA Cloud Private Edition
  - Navigation to Apps from Sales, Finance, Procurement and Professional Services
  - Conversational Search
- SAP Signavio - Process Recommender for SAP S/4HANA*
- Master Data Governance- Assisted Changes and Summarization of Change Requests
- Joule: Intelligent Project Assistant - Selected Navigational/Transactional Capabilities

Finance:

- Shared Services Automation for Finance Content* (SAP Enterprise Service Management)
- Enhancing Intelligent Collections (SAP Behavioral Insights for BRIM)
- Intelligent Dispute Management (SAP Enterprise Service Management)
- SAP Advanced Financial Closing-Automated error explanation and guided resolution*

Sales:

- Joule: Sales - Track Sales Orders: Faster insight into Sales Order fulfillment process
- Joule: Simplified Business Partner maintenance using SAP Joule

Asset Management:

- Enterprise Asset Management – Intelligent Maintenance Order Recommendation

Transportation Management:

- Transportation Cockpit Planning
- SAP S/4HANA Transportation Management: Goods Receipt Analysis

Interact

Digital Assistants

SAP Collaboration Manager

Chat capabilities for Peer-to-Peer communication and collaboration, enriched with Business Context

- Conversation: Notes and Chats
- In-place Screenshots and Annotations
- Notifications

The functionality is now available for SAP S/4HANA Cloud, public and private editions only, and will be deployed commercially embedded as part of the base subscription price.

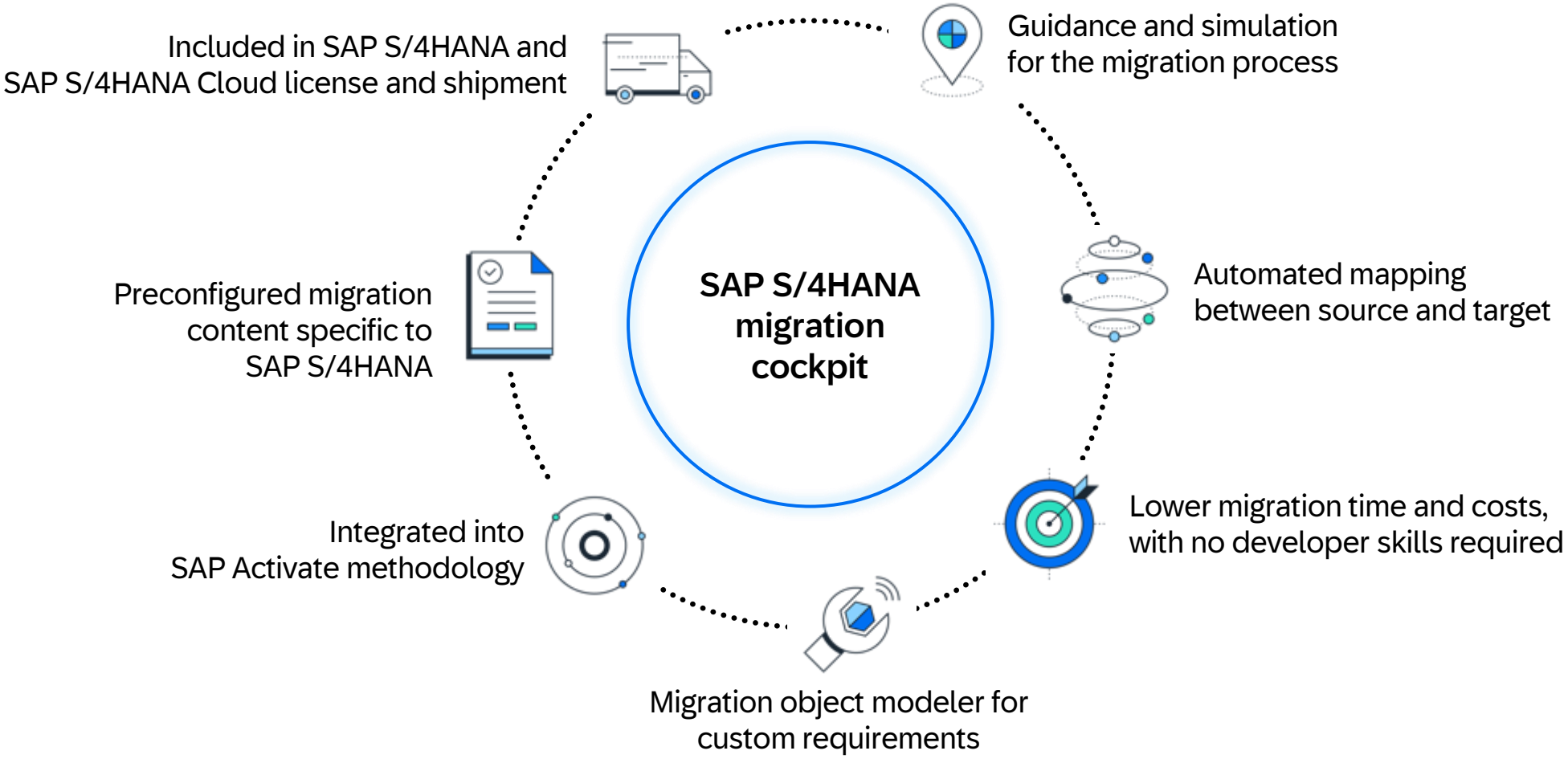
Latest functionality added for this release:

- PDF Document Attachment
- Share data as Insights Cards
- Improved UX and Performance

*Stand-alone solution, which is not delivered with SAP S/4HANA

Cross-topics: Facilitate Migration Projects with SAP S/4HANA Migration Cockpit

Transition scenario: new implementation



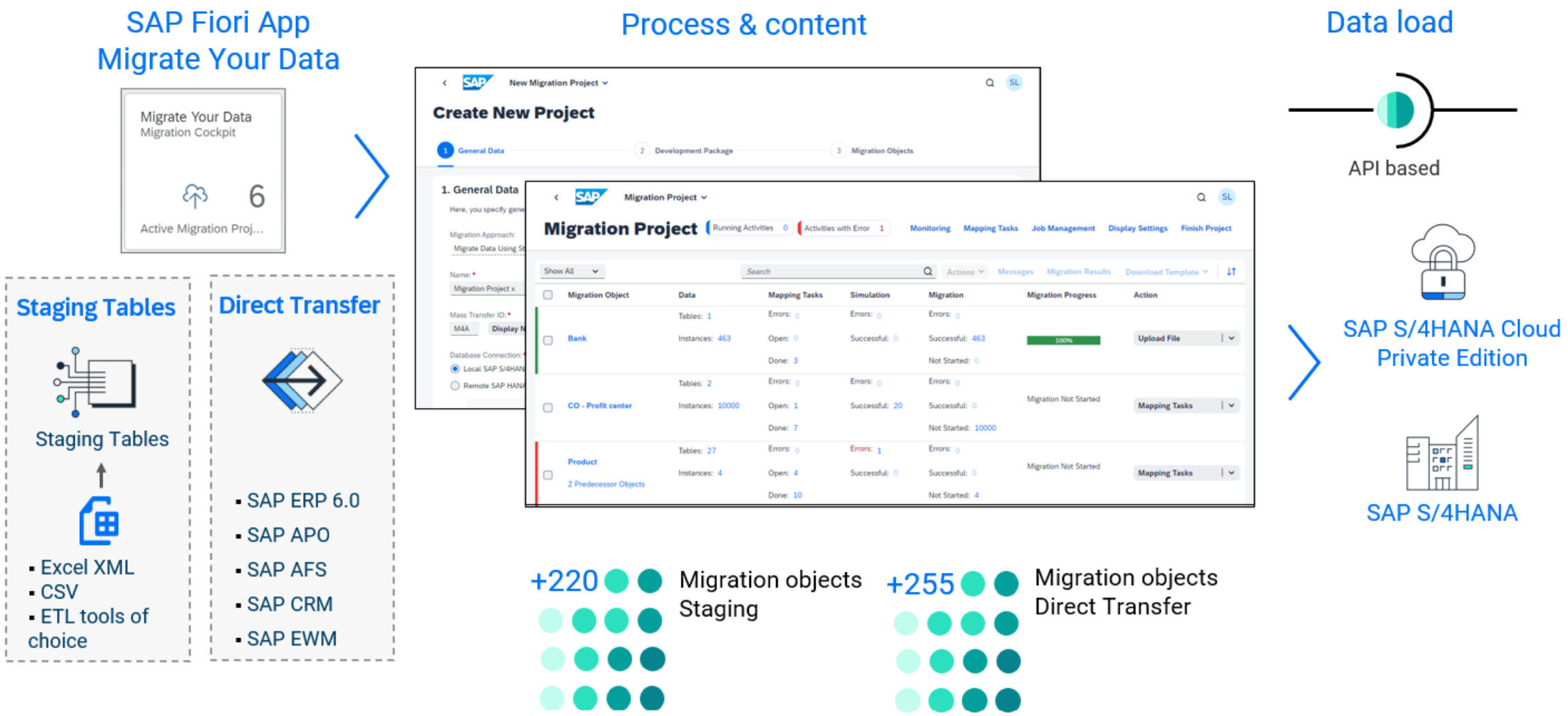
Cross-topics: Migration Cockpit
Migration approaches

Two different migration approaches, depending on the source system:

Migrate Data Using Staging Tables	Migrate Data Directly from SAP System (Direct Transfer)

▪ Staging tables are created automatically in SAP HANA DB (either locally or in a remote system)
▪ Populate these staging tables with business data using:
  ▪ XML template files
  ▪ CSV template files
  ▪ SAP or third-party ETL tools
	▪ Connect source system (ABAP-based SAP source systems) via RFC connection
	▪ Selection
	  - Based on predefined selection criteria (for example company code for ERP source system) and selected migration objects
	  - Can be adapted with the SAP S/4HANA migration object modeler
	▪ Supports data migration scenarios from SAP ERP, SAP AFS, SAP APO SPP, SAP CRM, SAP EWM

Cross-topics: Migration Cockpit
Architecture

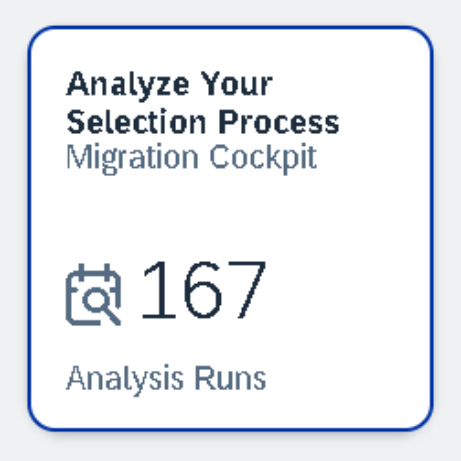


Cross-topics: Migration Cockpit, Direct transfer

Analyze Your Selection Process App

2023
FPS2

Analyze project transfers in Migration Cockpit



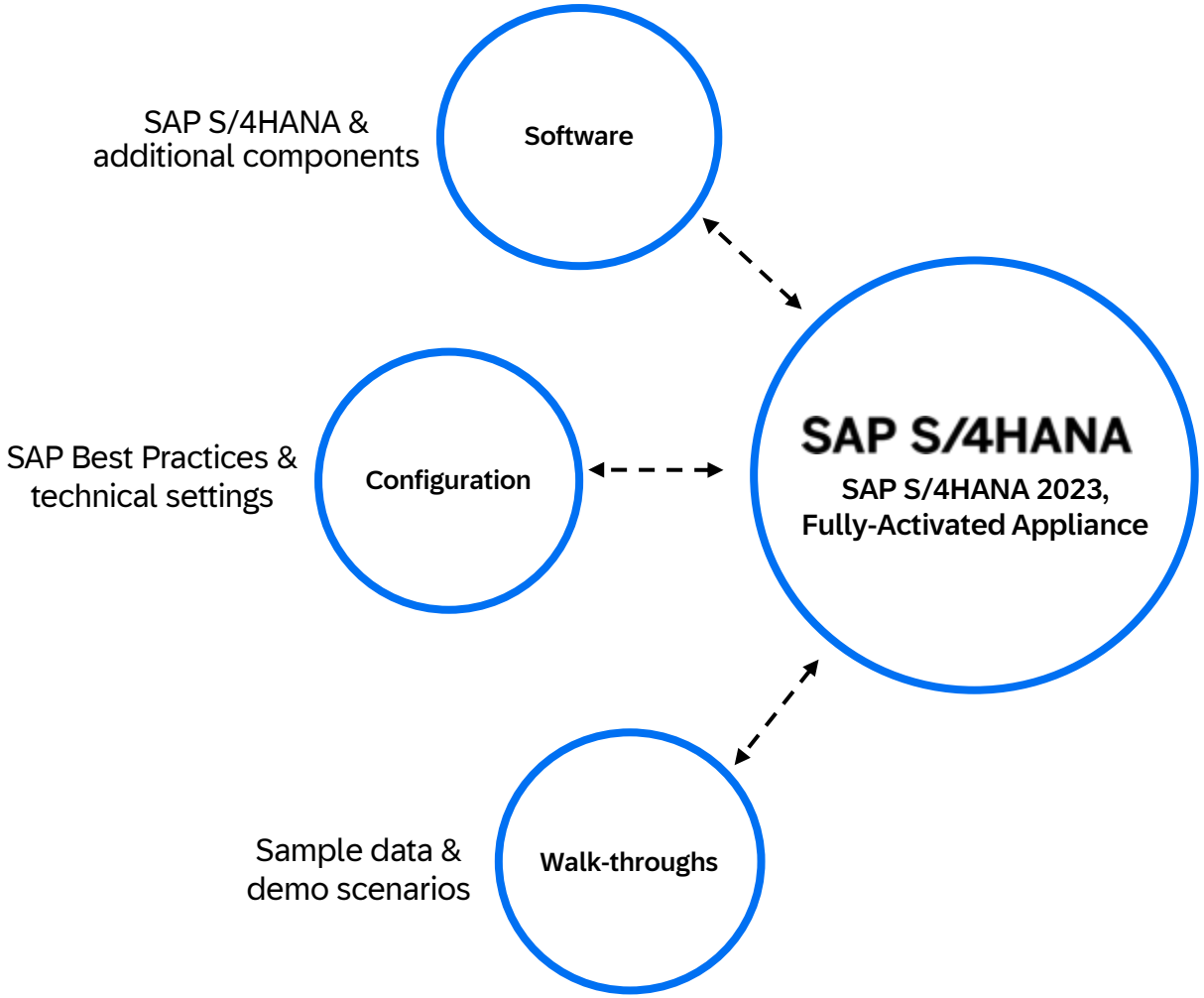
New

SAP Fiori App Analyze Your Selection Process

- Available for direct transfer projects only
- Get detailed analysis results for specific migration object instances
- Get transparency about the selected data
- Get recommendations about how to account for unexpected selection results

Cross-topics: SAP S/4HANA 2023 Fully-Activated Appliance

The Software Appliance Concept



Create your own pre-configured system in a fraction of the usual setup time

In 1-2 hours via SAP Cloud Appliance Library (SAP CAL), hosted in AWS / MS Azure / GCP

In 2-3 days when deploying on own physical hardware

Use cases:
Trial / Sandbox / PoC / Scoping

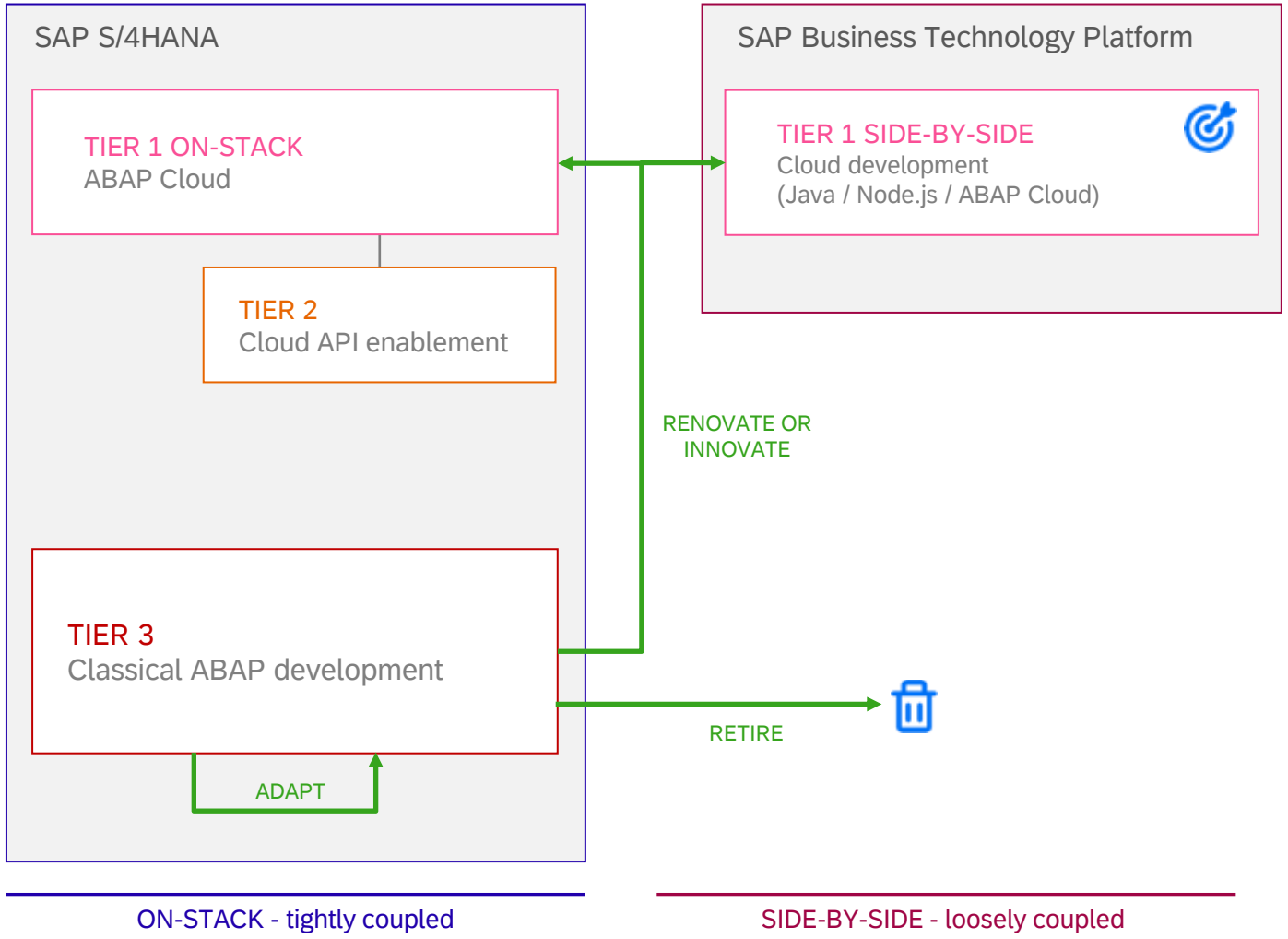
Open to customers, partners, public users, and SAP employees

More information:

- Overview blog
- Demo scenarios
- Try out as S/4HANA 30-day trial
- Detailed How-To videos

Cross-topics: SAP S/4HANA Cloud, ABAP environment

3-tier extensibility model for SAP S/4HANA private cloud and on-premise



TIER 1 – Cloud extensibility model

Cloud-ready and upgrade-stable development of new applications and extensions. ABAP Cloud is mandatory – no classic ABAP in tier 1.

Same extensibility model as used in SAP S/4HANA Cloud Public Edition

Default for new extensions and custom apps

TIER 2 – Cloud API enablement

Extends and enables tier 1 for private cloud and on-premise

Mitigates missing public SAP APIs or extension points:

- Develop custom wrapper objects for not released SAP objects to be used in tier 1
- Retire wrapper once a released SAP API is available

TIER 3 – Classic ABAP extensions

Legacy/existing custom ABAP code or new on-stack extensions code that cannot follow the rules of tier 1 and 2

Avoid and reduce the content in tier 3

This presentation and SAP's strategy and possible future developments are subject to change and may be changed by SAP at any time for any reason without notice.

Cross-topics: RISE with SAP Packaging

Provide compelling RISE with SAP offerings* that reflect the different customer

2023
FPS0+1

RISE with SAP
Premium Plus

July 15, 2024
Updates

Base Edition

Provides small organizations with SAP S/4HANA Cloud, private edition functionalities with a lean setup

Premium Edition

Enables organization's business transformation supported by built in AI capabilities into SAP applications, process automation, low-code business application development and access to supplier networks.

Premium Plus Edition

Extends premium by unlocking more AI scenarios, including sustainability solutions, and advanced finance capabilities.

		Base 60-135 FUE	Premium	Premium Plus
Enterprise Management	Core ERP	X	X	X
Cloud Services	Cloud Operational Services	X	X	X
	Embedded Launch Activities (Onboarding Advisor)	**X**	**X**	**X**
Sustainability	SAP Sustainability Footprint Management			X
	SAP Sustainability Control Tower			X
Extension, Integration, and Automation	SAP Build Apps		X	X
	SAP Build Process Automation		X	X
	SAP Build Work Zone	X	X	X
	CPEA		X	X
	SAP Datasphere		**X**	X
Artificial Intelligence	**Joule**	**X**	**X**	**X**
	Generative AI		**X** **(flat entitlement)**	X (dynamic entitlement)
Office of the CFO	Group Reporting	X	X	X
	Group Reporting Data Collection	X	X	X
	SAC planning		**X**	X
	Cash Management			X
	Receivables Management			X
Procurement Network	Supplier Portal		**X**	X
Process Optimization	SAP Signavio		—	—

**Please note that some features are not available in Mainland China, this is detailed on the following slides*

Cross-topics: Addressing a clean core is an ongoing strategic activity

2023
FPS0+1

Clean core concept

1. Extensibility
   Keep the extensions clean
2. Data
   Keep the data lean
3. Integrations
   Keep the landscape reliable
4. Processes
   Keep the processes flexible
5. Operations
   Keep the operations effective and efficient

A clean core is a system that is as close to standard as possible, while running cloud-compliant extensions and integrations.

It allows you to adapt your system to changing business requirements and to adopt new capabilities.

Thank you.

Contact information:

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Appendix

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

SAP S/4HANA: Country versions & Languages

64
country versions

via

39
Languages

- Arabic
- Bahasa Malay
- Bulgarian
- Catalan
- Chinese (simplified)
- Chinese (traditional)
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hebrew
- Hindi
- Hungarian
- Italian
- Japanese
- Kazakh
- Korean
- Latvian
- Lithuanian
- Norwegian
- Polish
- Portuguese
- Romanian
- Russian
- Serbian
- Slovak
- Slovene
- Spanish
- Swedish
- Thai
- Turkish
- Ukrainian
- Vietnamese

SAP S/4HANA Cloud Private Edition:
The right solution for each customer journey

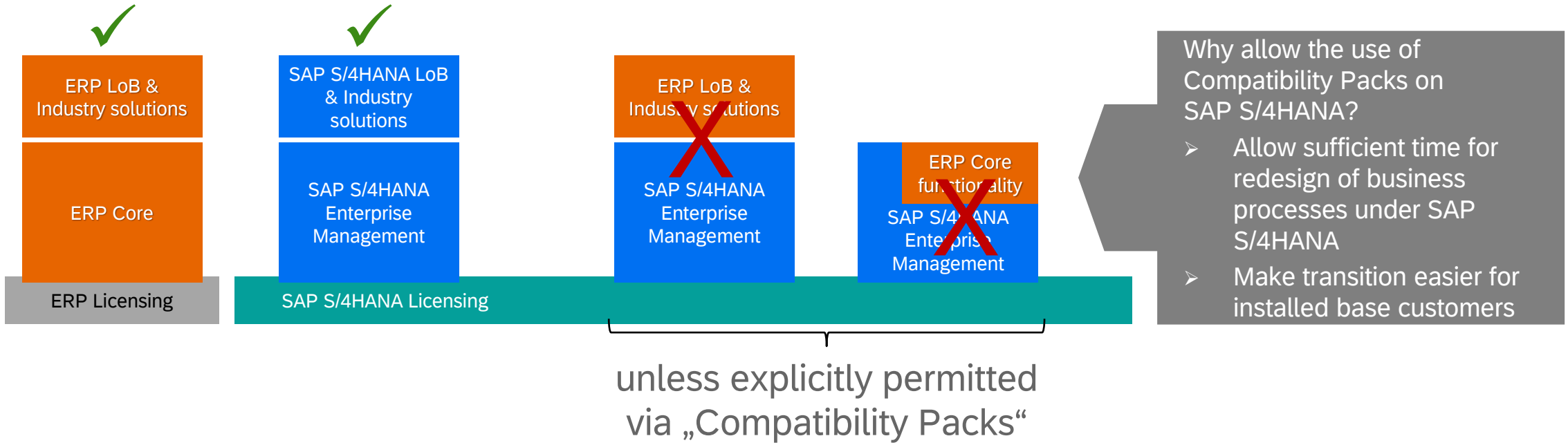
	SAP S/4HANA Cloud Public Edition	SAP S/4HANA Cloud Private Edition	SAP S/4HANA
		functional scope	
SAP Product	SAP S/4HANA Cloud Public Edition	SAP S/4HANA	
Release Cycles	quarterly (e.g. 2402)	By annually, plus 6 months Feature/Support Packs (e.g. 2023)*	
Minimum Upgrade Frequency	quarterly	7 years* (to stay in mainstream maintenance)	
UX	SAP Fiori	SAP Fiori and SAP GUI	
Deployment Types	new implementation	new Implementation, System Conversion, Selective Data Transition	
SAP Best Practices	yes	optional (for New Implementation)	
Configuration Options	Self-Service and Expert Configuration	Implementation Guide (IMG)	
Custom Code	no	optional	
Modification of SAP code	no	optional	
3rd Party Add-ons	certified Public Cloud add-ons allowed	allowed unless operating system access required	allowed
Infrastructure	SAP, Alibaba, AWS,. etc. (SAP decision)	SAP, AWS, Azure, GCP, (customer preference)	customer preferred infrastructure
Upgrades	included and mandatory	customer owned, installation on request	not included
Compatibility Scope	n/a	mostly allowed – see note 2269324	allowed
Licensing	subscription		perpetual
	business engagement		

* with 2023 Release and Maintenance Announcement changed to by yearly release + 4 years standard maintenance

SAP S/4HANA Compatibility Packs:
Commercial Separation from the Business Suite World

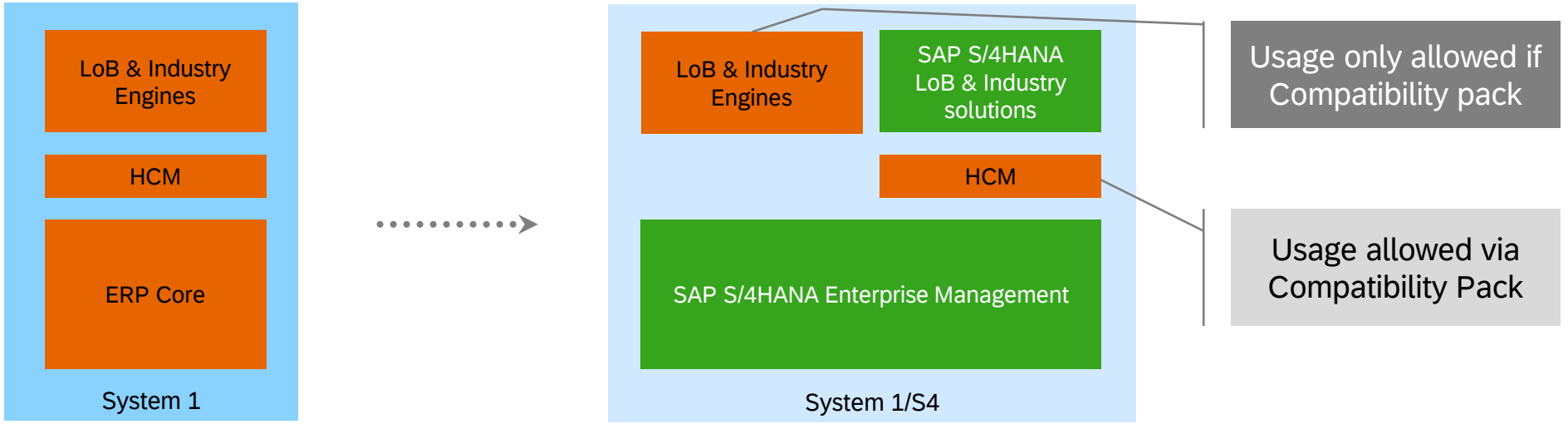
Only SAP S/4HANA solutions are allowed to run on an SAP S/4HANA installation

- SAP S/4HANA is a new product, not the legal successor of SAP ERP/SAP Business Suite products
- Limitation in our Software Use Rights (SUR) to separate the commercial worlds:

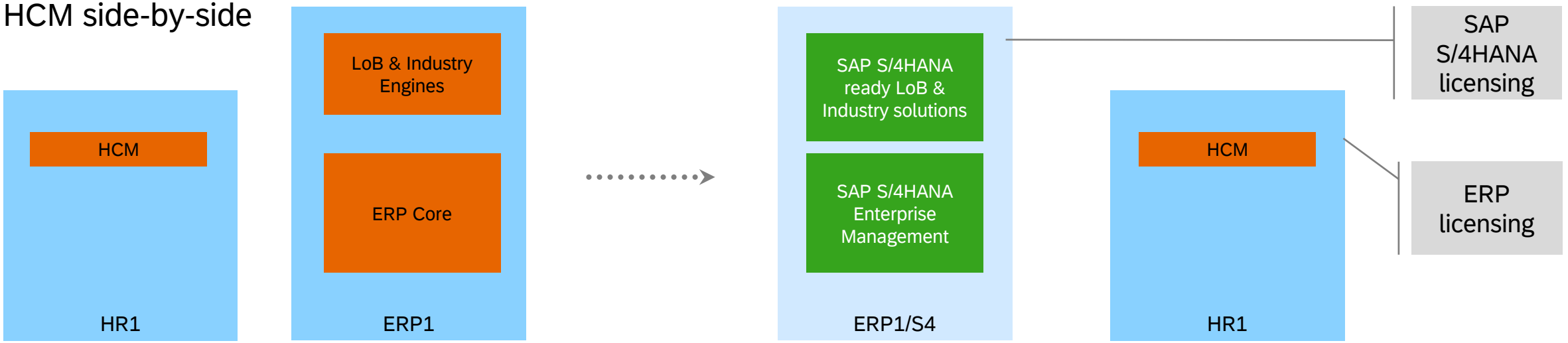


SAP S/4HANA On-premise: Compatibility Pack Example

HCM on-stack



HCM side-by-side



SAP S/4HANA Compatibility Packs:
Selective Extension of Compatibility Pack Usage Rights

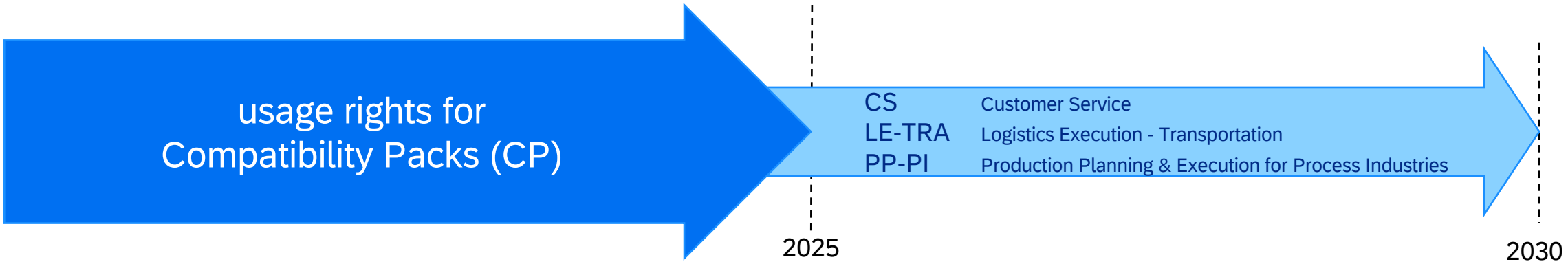
SAP grants a **timely restricted usage** right for specific classic solution functionalities in the context of SAP S/4HANA. These term licenses are limited to the end of **2025**, and are defined by the **compatibility scope**. SAP intends to provide new go-to functionalities for all compatibility scope items by 2023. Many compatibility scope items can already be phased out today. This transition from compatibility scope to the new go-to solutions is in most cases primarily a technical adoption and can be conducted with moderate effort.

More details in SAP Note 2269324:
- Customer Service (CS) IDs 402-413
- Transport (LE-TRA) ID 474
- Production Planning for Process Ind. (PP-PI) IDs 444, 446, 447, 453-457

For **three compatibility scope components (Customer Service, Transport, and Production Planning for Process Industries)** the new go-to solutions provide enhanced capabilities and will require a more extensive transformation project, especially for global organizations and customers who leverage individual extensions today.

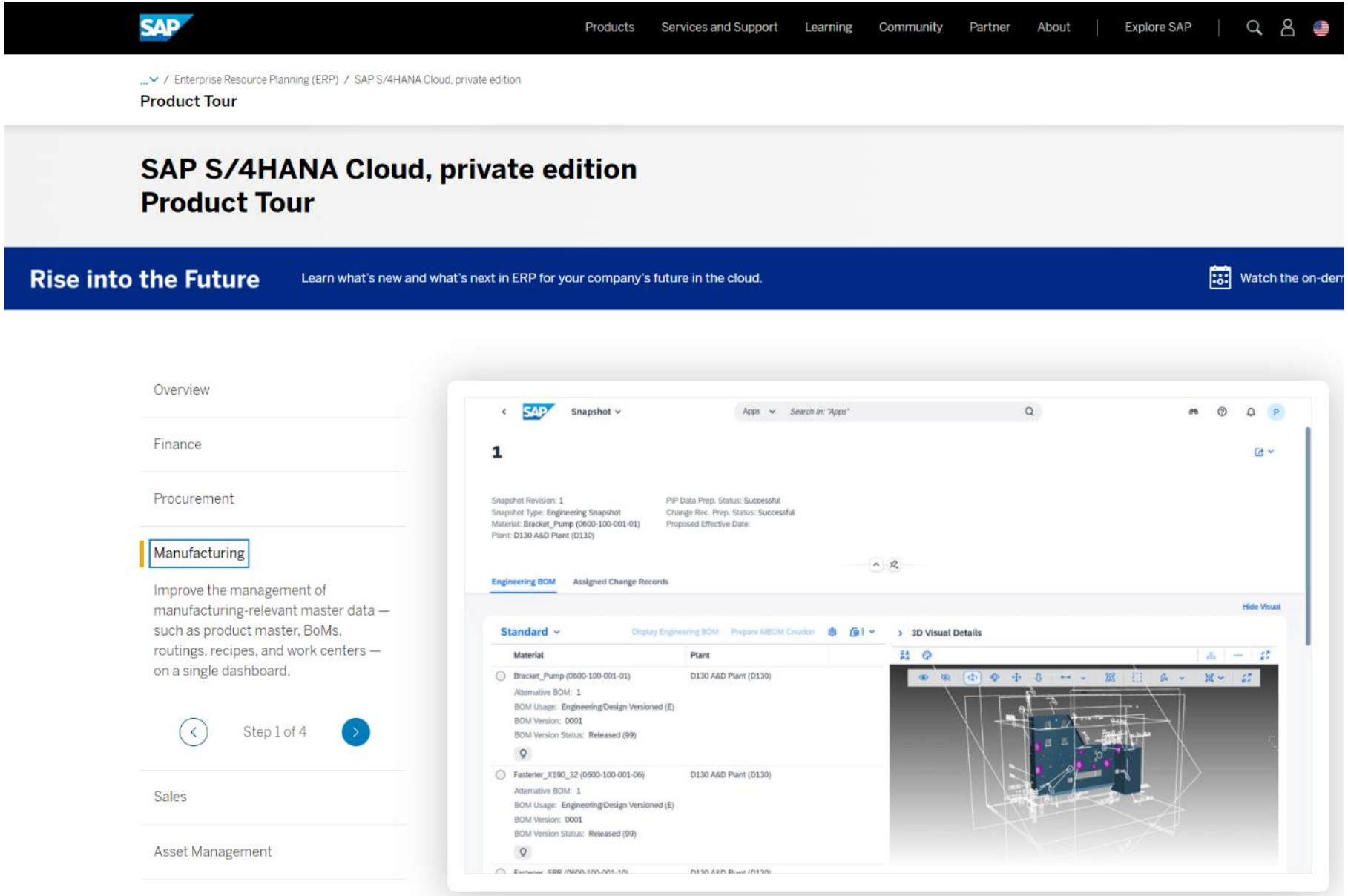
In order to help customers get the highest business value from their SAP S/4HANA systems, SAP has decided to align the usage rights for those three components with the SAP Business Suite maintenance timeline. **SAP is extending the usage rights exclusively for Customer Service, Transport, and Production Planning for Process Industries until the end of 2030.**

This extension will be **available to all SAP S/4HANA customers** in SAP S/4HANA Cloud Private Edition as well as those with an SAP S/4HANA on-premise deployment and is limited to the three components listed above. The extension comes at no additional cost and does not require any contractual changes or amendments for existing customers as the change is being implemented centrally.



Compatibility Packs in SAP S/4HANA
Webinar

Get more detailed information in our latest SAP community webinar

Recording and slides [available on youtube]

SAP SAP S/4HANA Cloud Private Edition: Product Tour (sap.com)