

Business Scope

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023 FPS2)



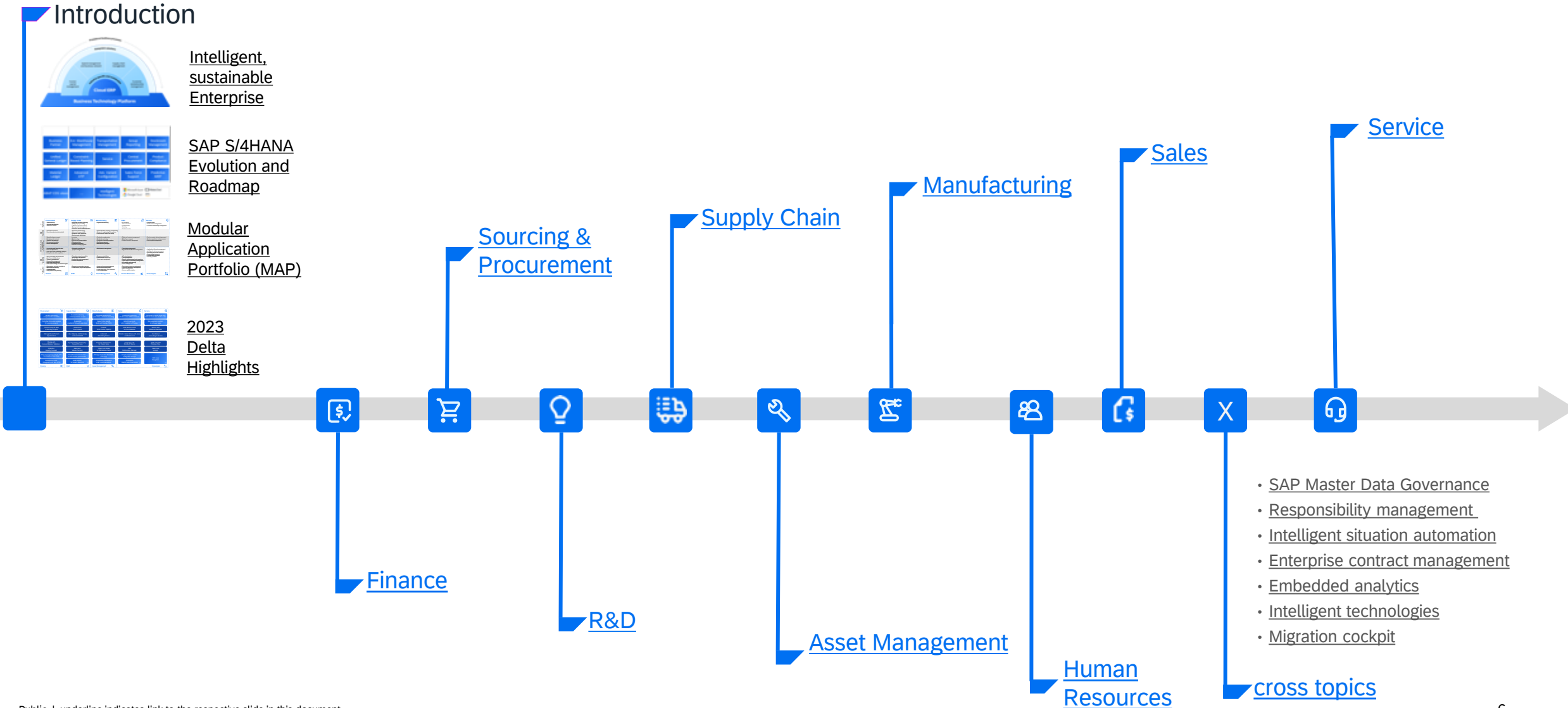
Introduction

SAP S/4HANA Cloud Private Edition

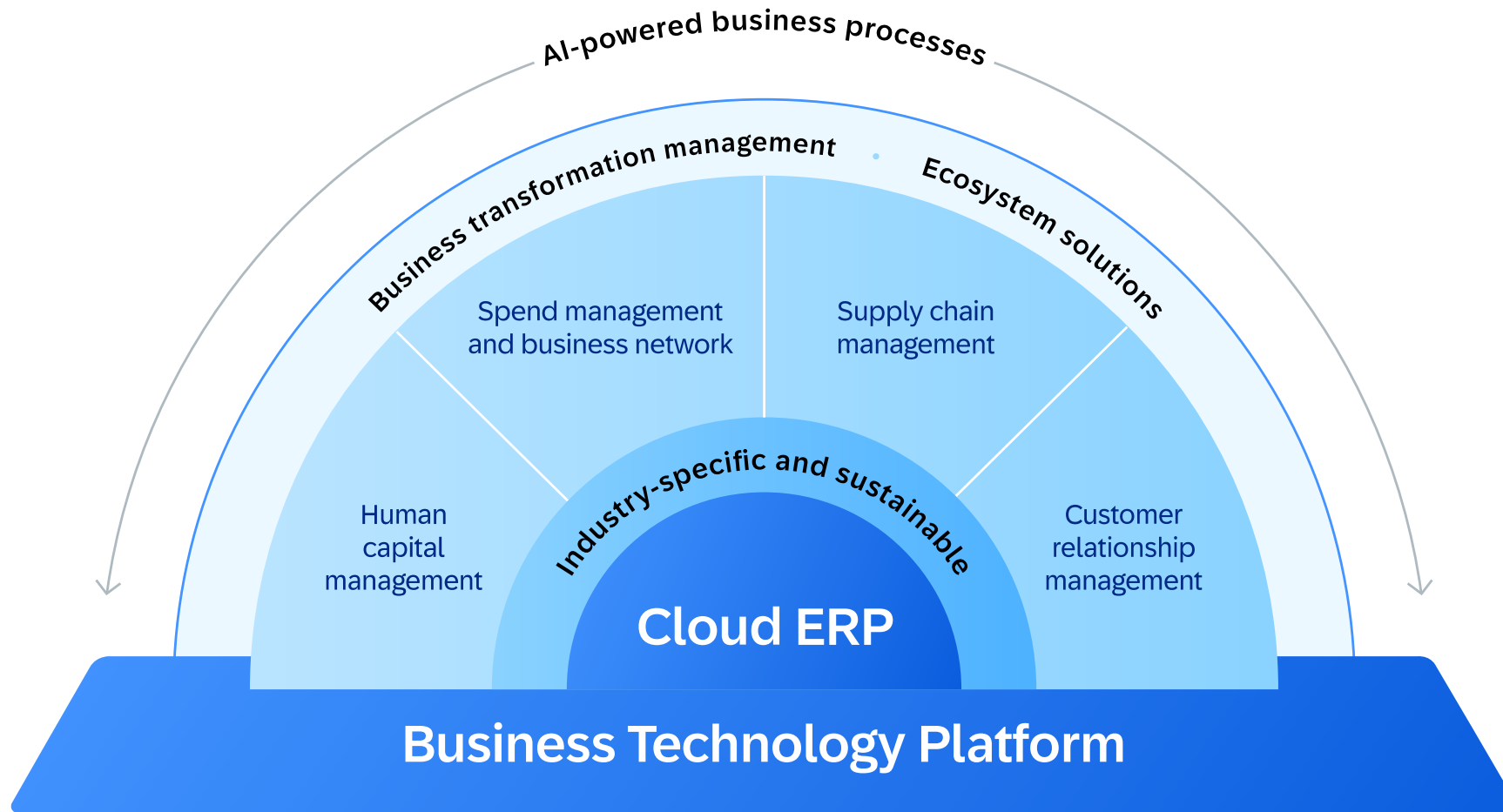
(based on SAP S/4HANA 2023)



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



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

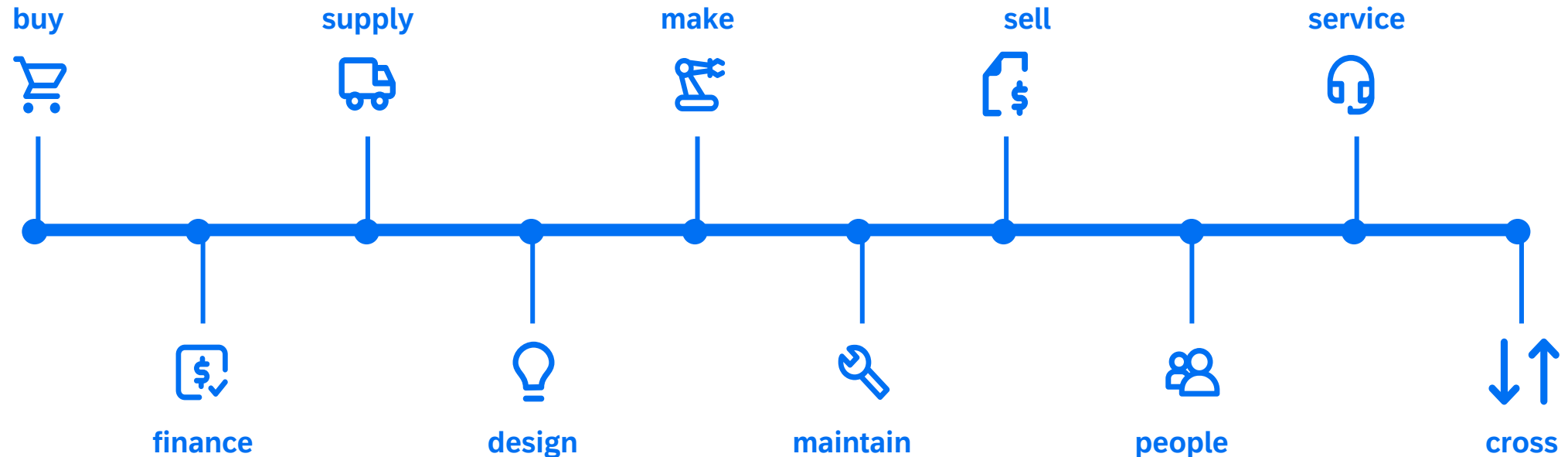
Data and Analytics

- 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

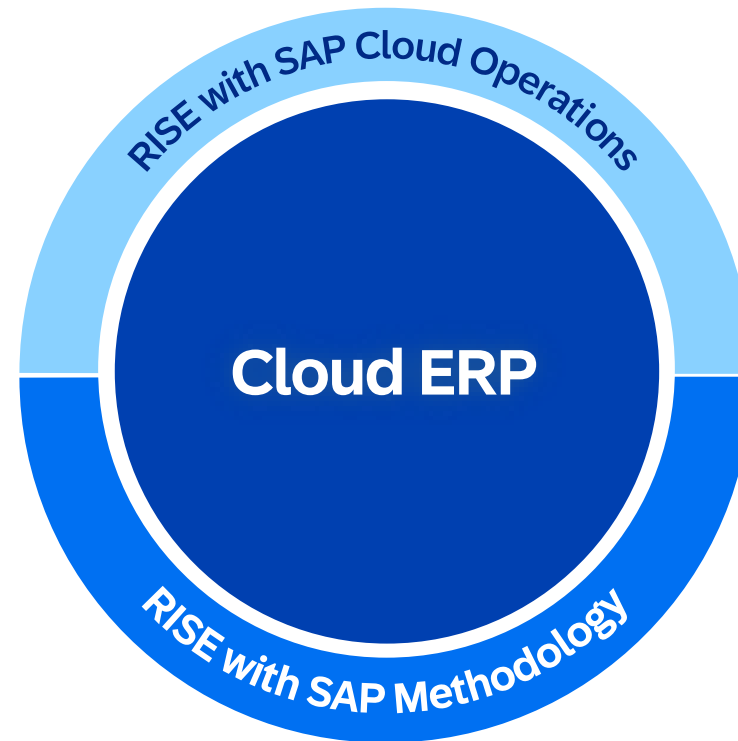
Future-proof your business with a Cloud ERP enhanced with Business AI

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

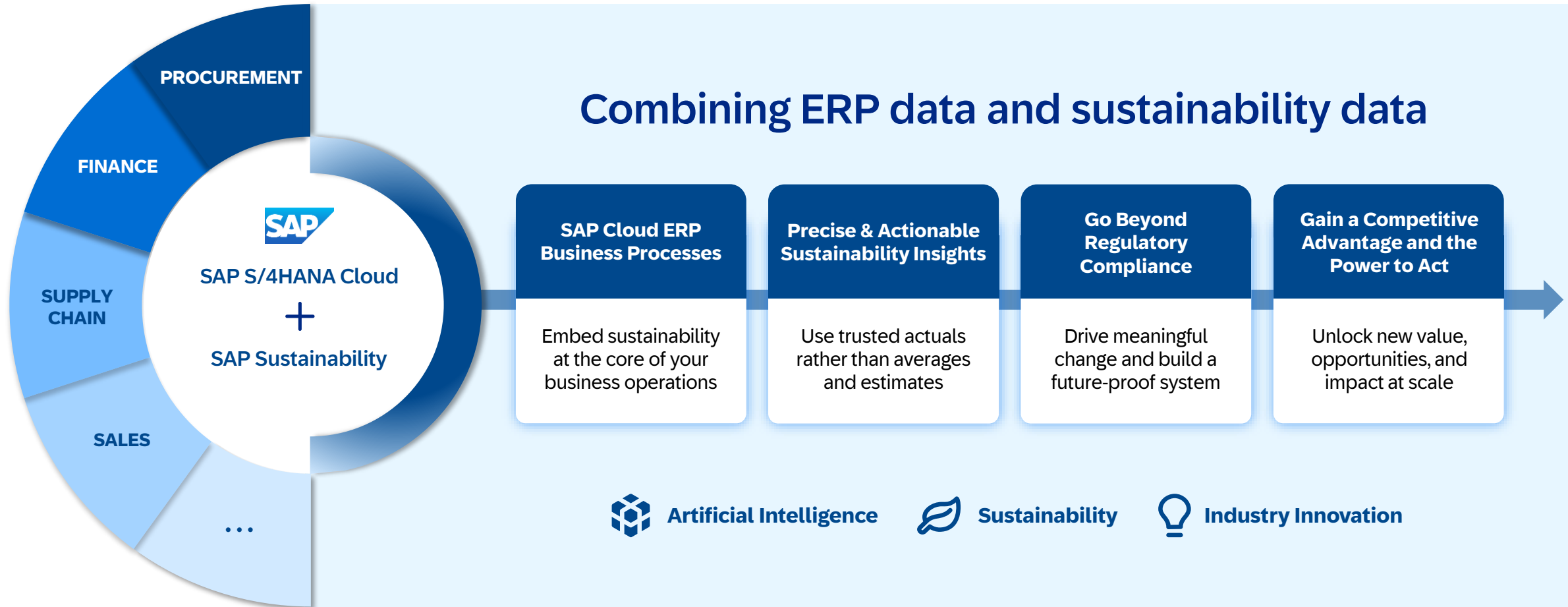
from Professional Services

- Commercial Project Management

from Media

- Product Master Hierarchy

SAP Portfolio: Sustainability



SAP Portfolio: Business Processes

Gain the visibility needed to automate and innovate effectively

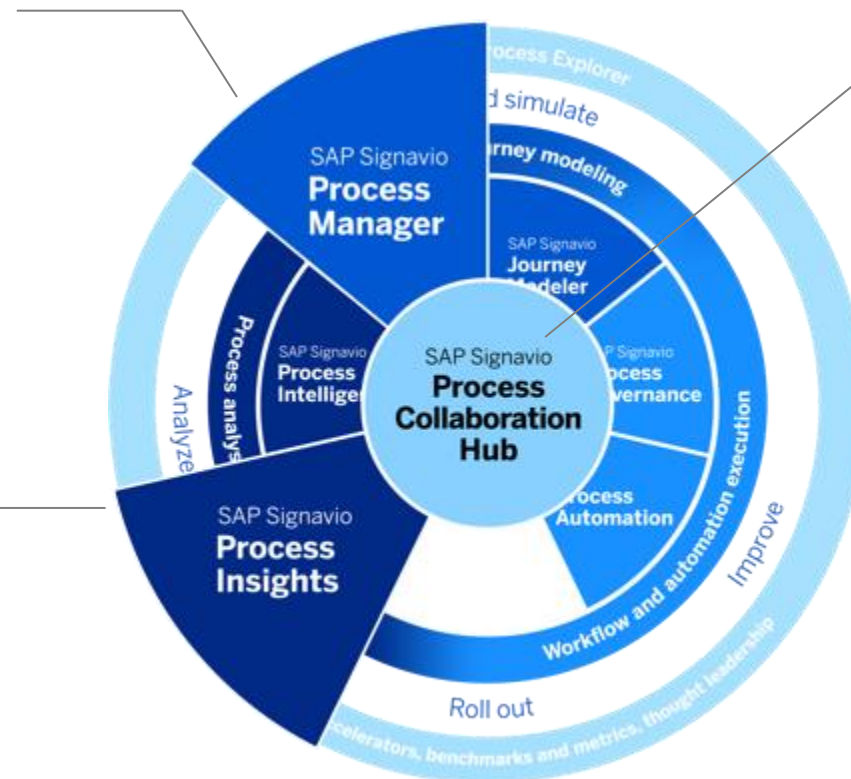


Co-create your future processes

- 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

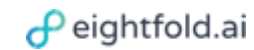
- Gain instant insights into your current process performance to understand where to transform.
- Leverage recommendations to understand how to transform.



Improve your business continuously

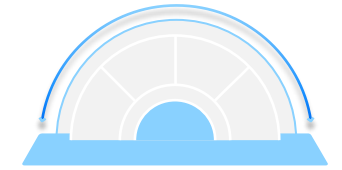
- Provide full transparency over your processes and who is responsible for which task.
- Engage all stakeholders and create a culture of constant optimization.

SAP Portfolio: 20000+ Partner Ecosystem



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



ANTHROPIC



cohere

databricks

Google Cloud



Meta

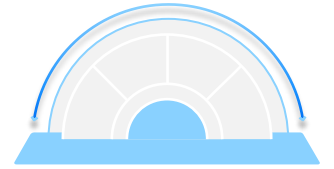
Microsoft



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)



	Procurement 	Supply Chain 	Manufacturing 	Sales 	Service 
Modular Cloud LoB Solutions	<ul style="list-style-type: none"> Guided buying Supplier management Business network 	<ul style="list-style-type: none"> Integrated business planning Global batch traceability Logistics business network Transportation management Extended warehouse management 	<ul style="list-style-type: none"> Digital manufacturing 	<ul style="list-style-type: none"> E-Commerce Sales automation Customer data Marketing Customer service 	<ul style="list-style-type: none"> Service cloud Field service management Customer relationship management
SAP S/4HANA LoB Solutions	<ul style="list-style-type: none"> Central procurement Sourcing and contract (extended) 	<ul style="list-style-type: none"> Advanced warehousing Advanced transportation Advanced order promising Service parts distribution 	<ul style="list-style-type: none"> Ext. Production planning & scheduling Ext. prod. engineering & operations Environment, health, and safety 		
SAP S/4HANA Cloud Private Edition Enterprise Management	<ul style="list-style-type: none"> Operational procurement Sourcing and contract Supplier management Procurement analytics Invoice management 	<ul style="list-style-type: none"> Inventory Warehousing Delivery and transportation Order promising Logistics cross topics Circular economy logistics 	<ul style="list-style-type: none"> Production engineering Production planning Production operations/options Quality management Manufacturing insights 	<ul style="list-style-type: none"> Order and contract management Sales force support Solution Business Management 	<ul style="list-style-type: none"> Service master data and agreement Service operations and processes Service parts management
SAP S/4HANA LoB Solutions	<ul style="list-style-type: none"> Accounting and financial close Financial operations Cost mgmt. and profitability analysis Enterprise risk and compliance 	<ul style="list-style-type: none"> Enterprise portfolio and project management 	<ul style="list-style-type: none"> Maintenance management 	<ul style="list-style-type: none"> Time sheet management Organizational structure management 	<ul style="list-style-type: none"> Application lifecycle management Intelligent business processes Business technology platform Extensibility framework Sustainability solutions Industry specifics
Modular Cloud LoB Solutions	<ul style="list-style-type: none"> Adv. accounting, financial close Adv. financial operations Treasury management Commodity management Real estate management Subscription billing and revenue mgmt. 	<ul style="list-style-type: none"> Extended enterprise portfolio and project management Product lifecycle management Product compliance 	<ul style="list-style-type: none"> Resource scheduling Spatial asset management (linear asset management) 	<ul style="list-style-type: none"> HR administration Time management Payroll, reimbursement and rewarding Talent mgmt. and learning management HR strategy and planning Travel management 	
	<ul style="list-style-type: none"> Governance, risk, and compliance Multi-Bank connectivity Cash application Analytics cloud for planning 	<ul style="list-style-type: none"> Enterprise product development Collaborative project management 	<ul style="list-style-type: none"> Asset performance management Mobile asset management Spatial asset mgmt. (geo framework) Asset collaboration 	<ul style="list-style-type: none"> Core human resources and payroll Time and attendance management Talent management Human capital analytics 	
	Finance 	R&D 	Asset Management 	Human Resources 	Cross Topics 

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

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

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

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

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

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

buy

supply

make

sell

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



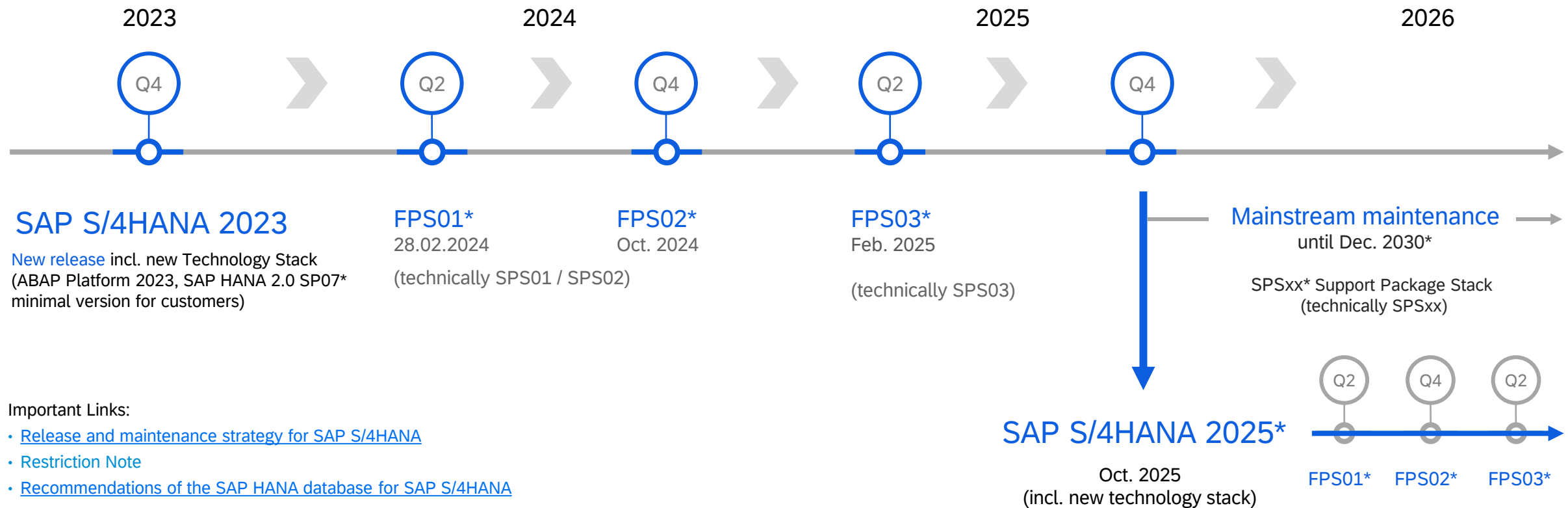
SAP S/4HANA Cloud Private Edition, and SAP S/4HANA

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](#)



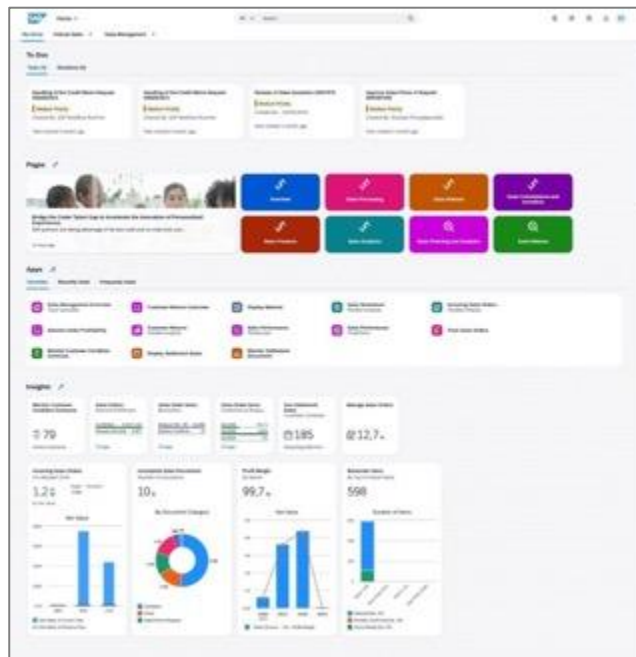
Important Links:

- [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)

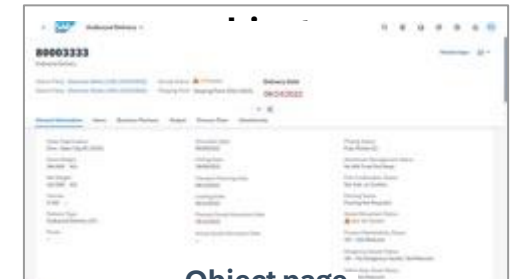
Enter details and explore in depth

Work on a list of business objects



List report page

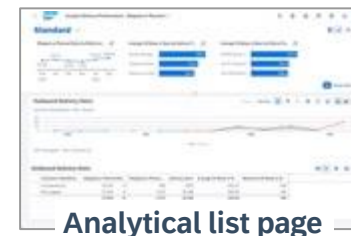
Manage individual business



Object page

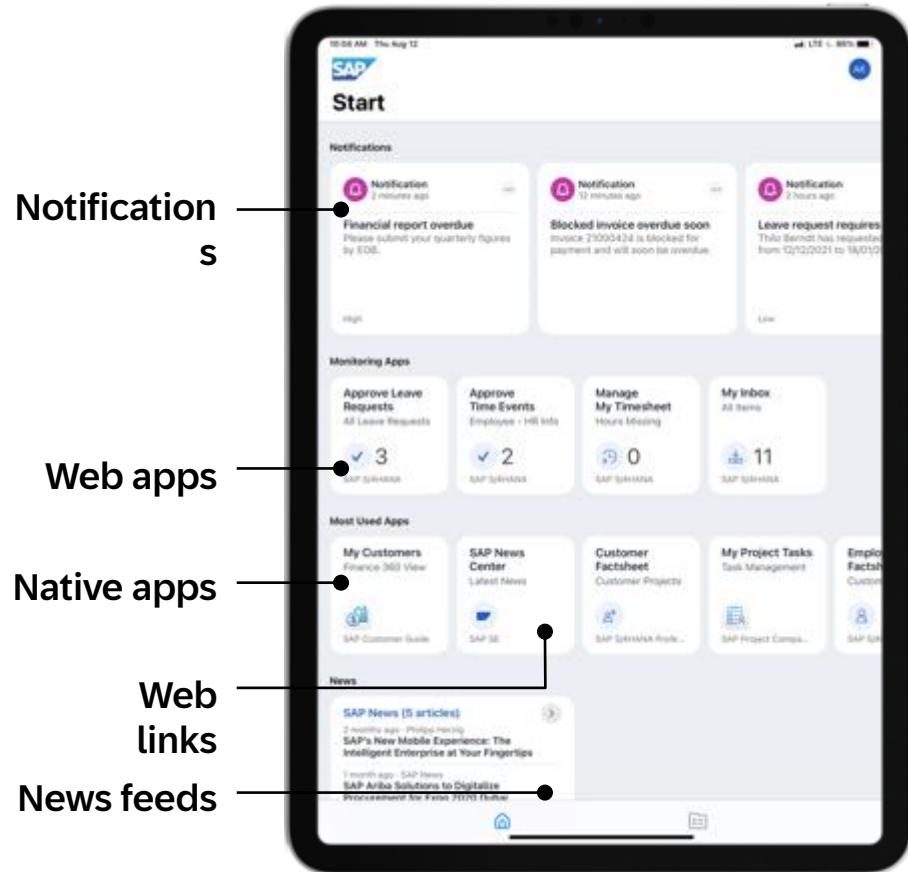
Carry out transactions:

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



Analytical list page

SAP Mobile Start



Notification
S

Web apps

Native apps

Web
links

News feeds



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



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



20% faster execution of back-order processing.

20000 tree-equivalent savings in carbon emissions

23% increase in developer efficiency

[Watch the video](#)



>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



160% reduction in data compression costs.

180% increase in data load speed.

[More info](#)



15% Reduction in total cost of ownership

16% IT operating expense savings

100% Availability of applications and services

[More info](#)



3,500 processes redesigned

55 country operations transformed

18 months to complete the project



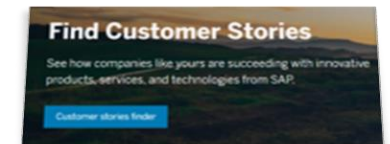
275,000 Employees worldwide have a single point-of-entry to all SAP applications

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)



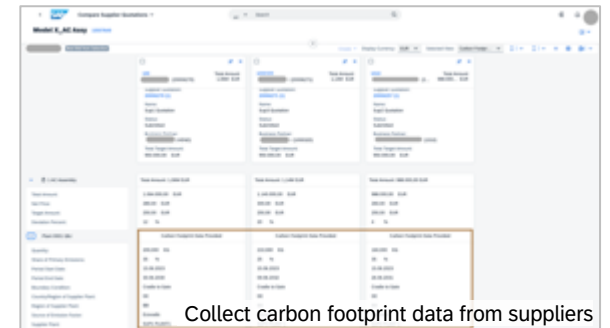
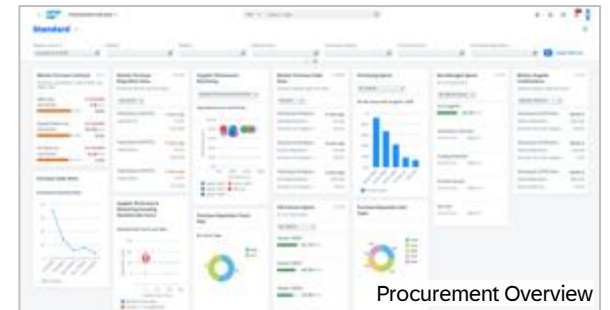
Sourcing and Procurement: Business area overview

Modular Cloud LoB Solutions

💰 additional license

🔧 additional installation

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



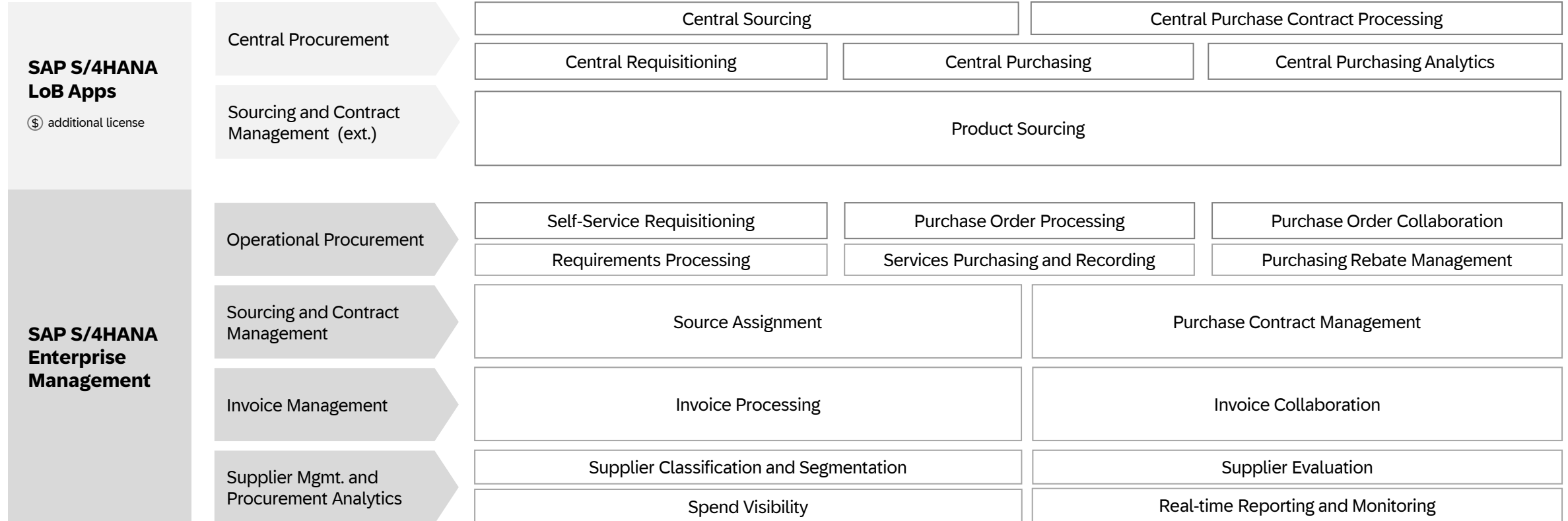
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Sourcing and Procurement: Operational Procurement

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

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.

Purchase Order Collaboration

Requirements Processing

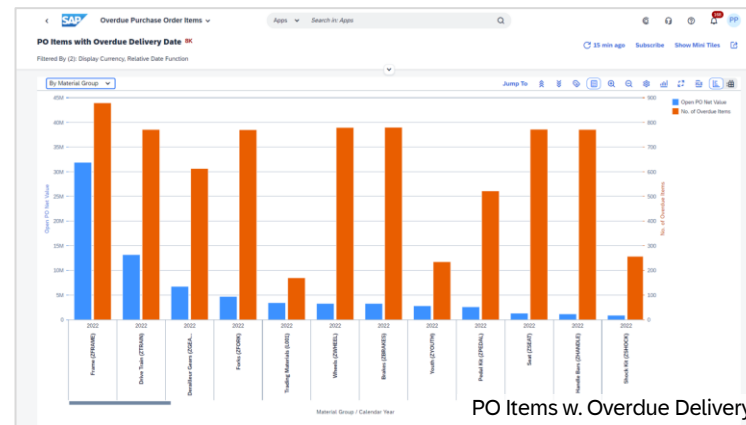
Control over automation and manual intervention where appropriate. Human decision making supported by **analytical visualization** embedded within transactional applications.

Purchasing Rebate Mgmt.

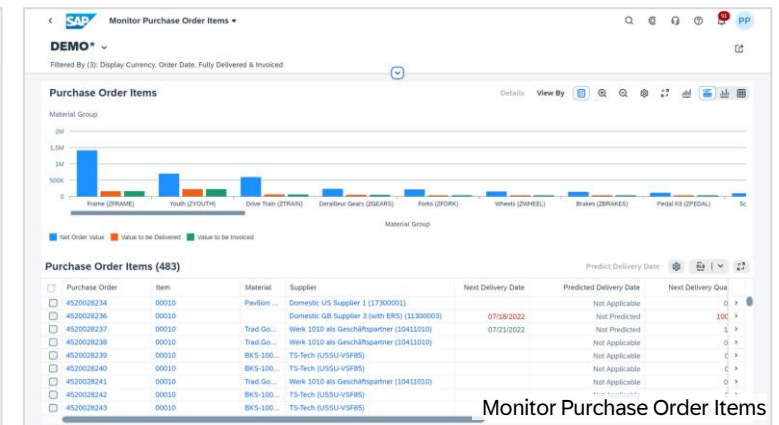
Harmonized UX for both **goods & service purchasing** processes. **Simplified limit (value-only) PO items** to control over “unplanned” services and record details via **Fiori service entry sheet application.**

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

Purchase Contract Mgmt.

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.

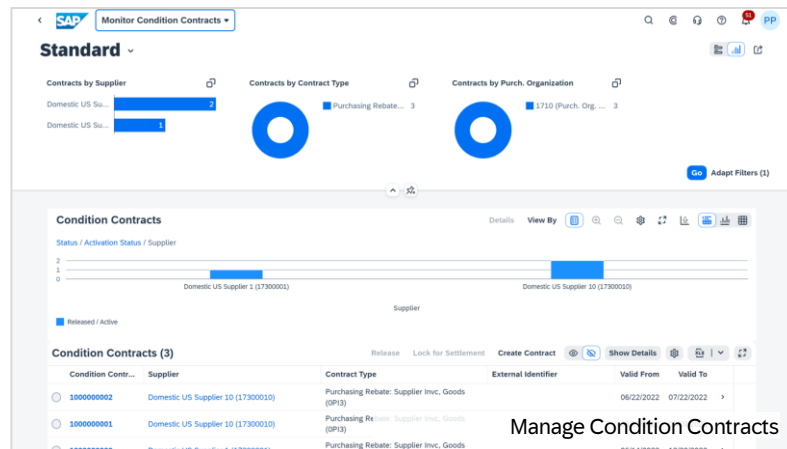
Analytic apps manage the status of contracts and agreements. **Predictive algorithm** to monitor contracts to help plan contract negotiations. **Templates and mass changes** to increase efficiency in managing a large number of contracts. **Unplanned Services** with reference to purchasing contract.

Invoice Mgmt.

Invoice Processing

Invoice Collaboration

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**



Sourcing and Procurement: Supplier Management and Procurement Analytics

Supplier Mgmt. and Procurement Analytics

Supplier Classification and Segmentation

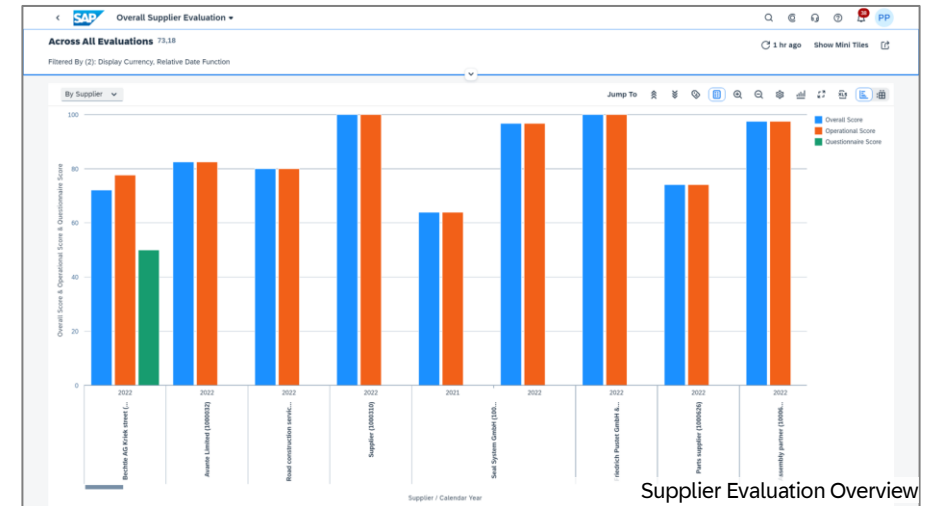
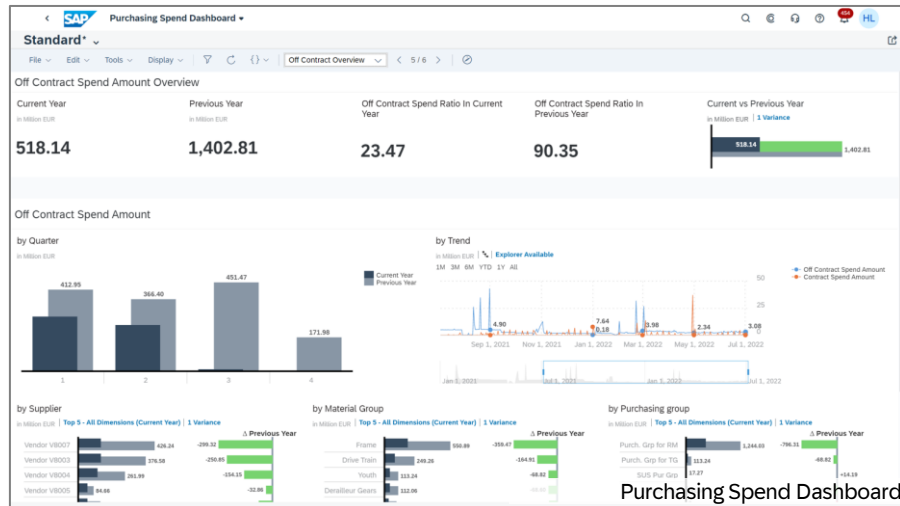
Supplier Evaluation

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.



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

4700000778/Hydraulic Motor

Target Quantity: 15 EA
Consumption Percentage: 66.700%
GR Consumption Percentage: 0.000%

Company	Plant	Purchasing Document	Purchasing Do...	Purchase Order...	Order Quantity	Net Order Value	Purchasing ...	Principal Agreement Item
0001	0001	Purchase Order	10	05.03.2022	10	2,500.00 EUR	0001	10

Conditions

Valid On: 15.03.2022

Validity Periods

Condition Type: Plant Independent

Default Gross Price (PPRO)

Condition Amounts

Valid From	Condition Type	Valid To	Pricing Unit	Condition Amount or Rate	Reason	Scale
05.03.2022	Default Gross Price (PPRO)	31.03.2022	1 EA	250.00 EUR		

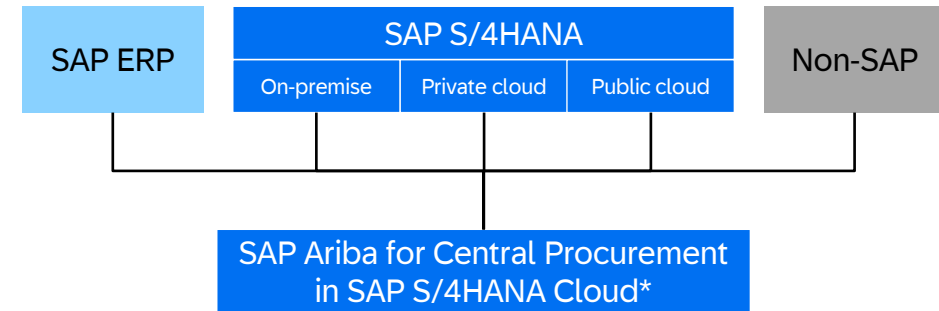
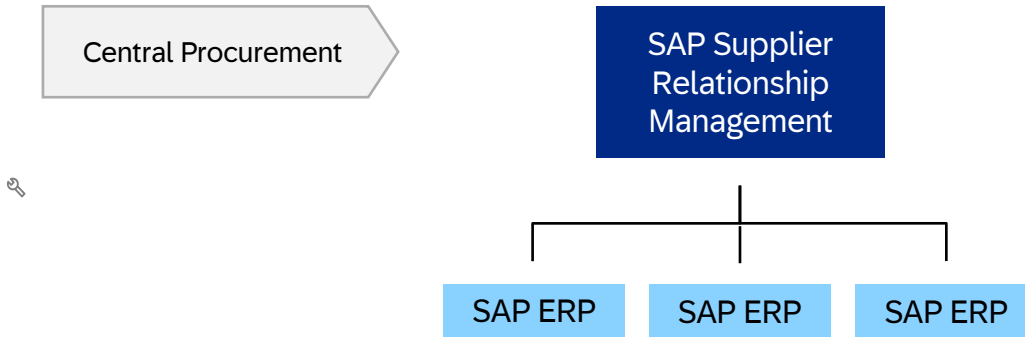
Process Purchase Reqs Centrally

Standard

Purchase Requisition Item	Material	Assigned Supplier 1*	Process Centrally	Valuation Price	Open Quantity	Processing Status
0015077907 / 00020	ABC test	Assign SoS	☑	0.00 EUR	1 EA	Not edited (N)
0015077907 / 00030	ABC test	Assign SoS	☑	0.00 EUR	4 EA	Not edited (N)
0015077253 / 00010	Hydraulic Piston (TG-D010)	Assign SoS	☑	12.00 EUR	100 EA	Not edited (N)
0015077254 / 00010	Hydraulic Piston (TG-D010)	Assign SoS	☑	12.00 EUR	100 EA	Not edited (N)
0015077255 / 00010	Hydraulic Piston (TG-D010)	Assign SoS	☑	12.00 EUR	100 EA	Not edited (N)
0015077349 / 00010	Hydraulic Piston (TG-D010)	12_10_John Suppliers_AAA (S10300001) Change SoS Remove SoS	☑	0.00 EUR	100 EA	Not edited (N)
0015077350 / 00010	Hydraulic Piston (TG-D010)	12_10_John Suppliers_AAA (S10300001) Change SoS Remove SoS	☑	0.00 EUR	100 EA	Not edited (N)
0015077351 / 00010	Hydraulic Piston (TG-D010)	12_10_John Suppliers_AAA (S10300001) Change SoS Remove SoS	☑	0.00 EUR	100 EA	Not edited (N)
0015077354 / 00010	Hydraulic Piston (TG-D010)	Assign SoS	☑	12.00 EUR	100 EA	Not edited (N)
0015077413 / 00010	Hydraulic piston (HYDRAULICPSTON)	Assign SoS	☑	716.13 EUR	1 EA	Not edited (N)

Sourcing and Procurement

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



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)

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.

Sourcing Project	Version	Restrictions	Sourcing Project Type	Name	Status	Number of Participants	Purchasing Organization
1000000136	1		Strategic Sourcing (ST)	E-Track Sourcing Project 2023	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000136	1		Strategic Sourcing (ST)	Copy of E-Track Sourcing Project 20230124	In Preparation	Not Applicable	Purch. Org: 1710 (1710)
1000000134	1		Strategic Sourcing (ST)	Sourcing Project Ingrid - 20230124 NEW	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000132	1		Strategic Sourcing (ST)	UP 2022-01-24	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000130	1		Strategic Sourcing (ST)	E-Track Sourcing Project 20230124 RW	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000128	1		Strategic Sourcing (ST)	UP 2022-01-23	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000126	1		Strategic Sourcing (ST)	E-Track Sourcing Project with prod spec	Published	Participants: 0 Declined: 0 No Response: 0	Purch. Org: 1710 (1710)
1000000124	1		Strategic Sourcing (ST)	NS Sourcing Project 2301015	In Preparation	Not Applicable	Purch. Org: 1710 (1710)

Supplier	Total Amount
Cabelfix (2000000221)	69M EUR
Domestic US Supplier 1 (2000000222)	69M EUR

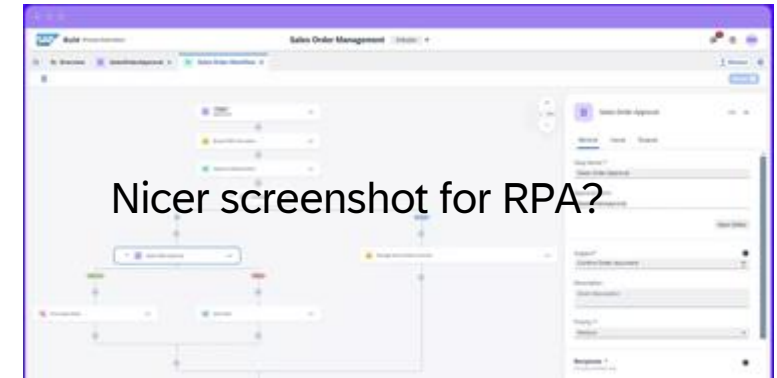
Cost Break Down Project Item	Total Amount
1 Cost Break Down Project Item 1	37M EUR
2 Cost Break Down Project Item 2	32M EUR

Quotations Comparison

Sourcing and Procurement

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

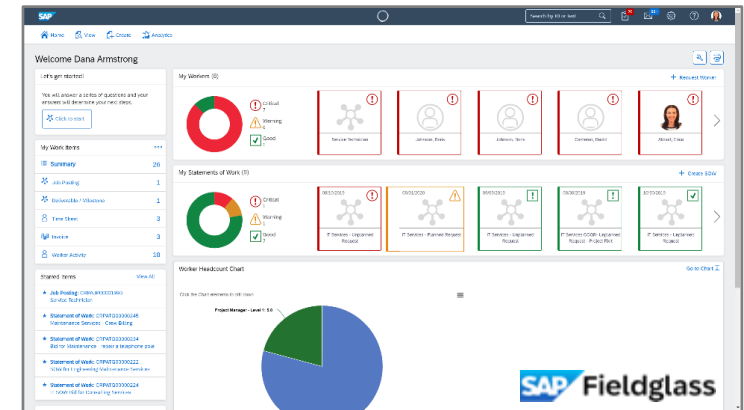
- Mass Confirmation of Purchase Orders (48K)
- Manage Catalog Items from Excel (529)
- Create Purchase Requisitions from Excel (48M)
- Mass Creation of Business Partner (4MZ)
- Business Partner Master Data Check (4FB)
- Mass Maintenance of Quality Info Records (6NX)
- Manage Source Lists from Excel (4TK)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



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



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

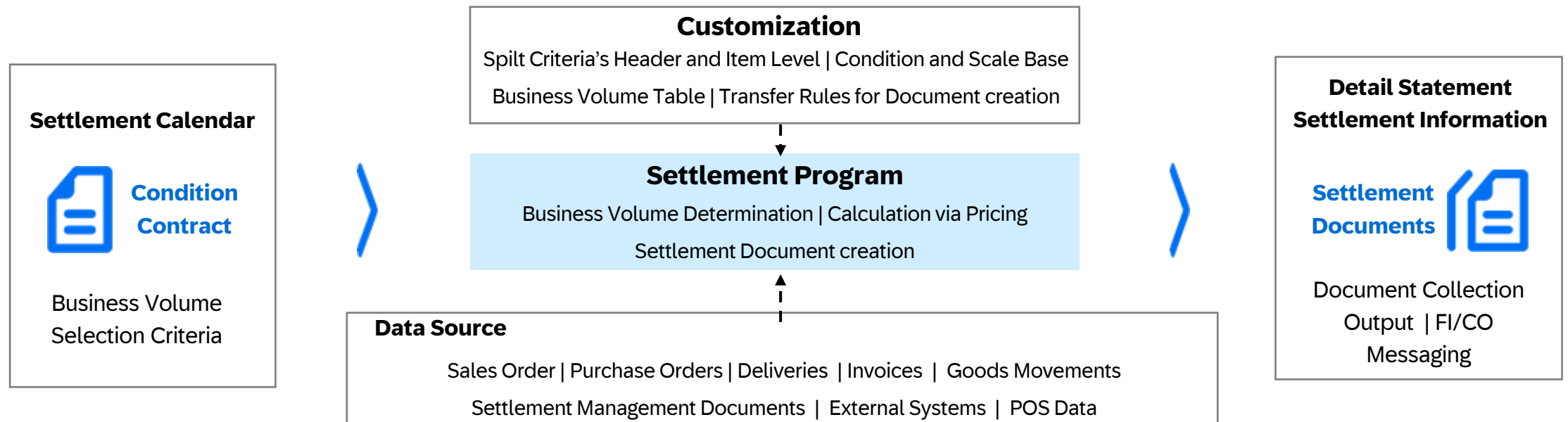


Condition Contract Settlement via Settlement Management

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

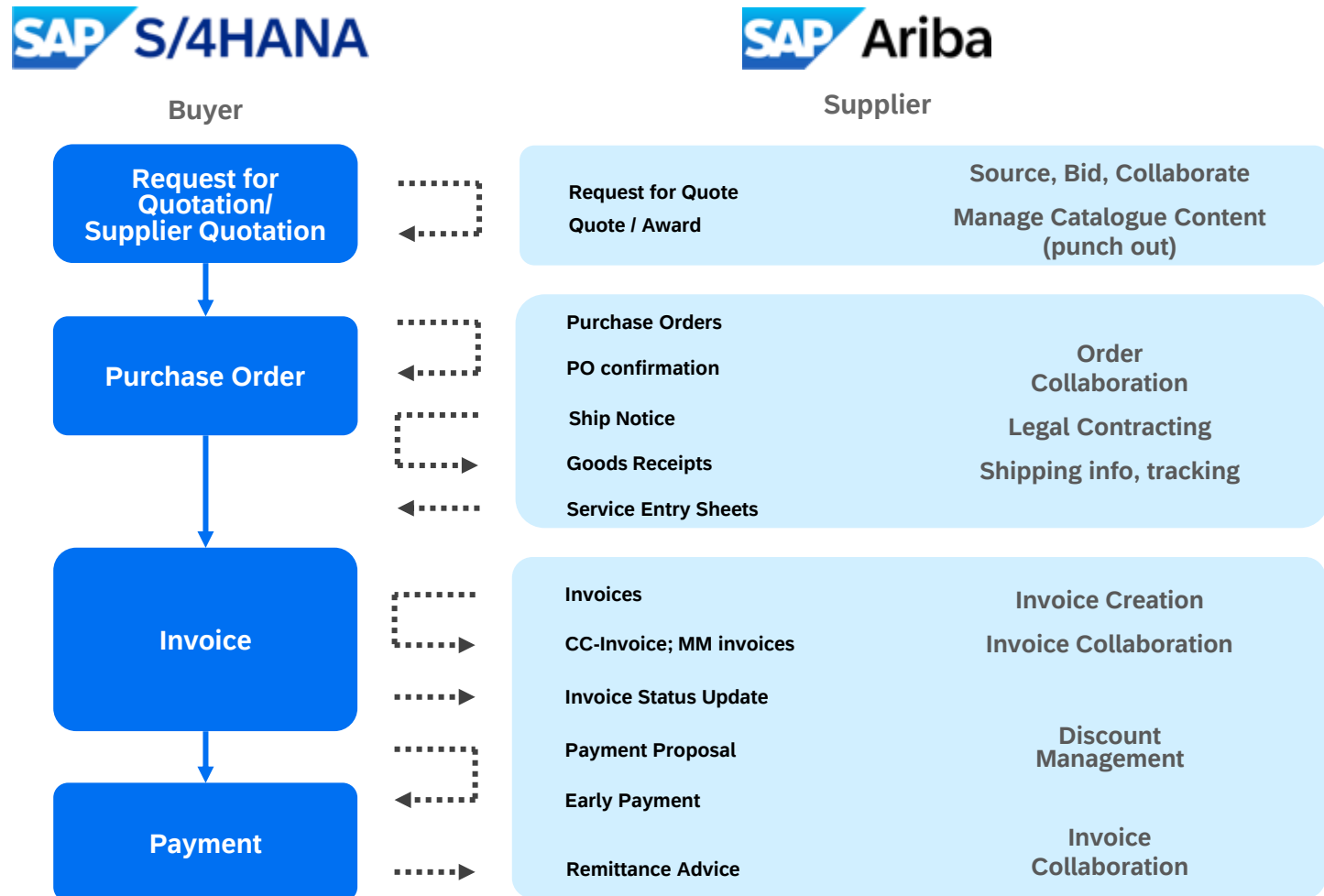
- Full support of business volume related scenarios
- Calendar based settlement
- Accrual conditions can be defined independent from settlement conditions
- Intuitive data entry of settlement information with full transparency of involved documents



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

The screenshot shows the SAP Model Product Specification interface for a 'Single Family House Construction Project'. The interface includes a search bar, a search icon, and a user profile icon (AH). Below the title, there are buttons for 'Deactivate' and 'Create Purchase Contract'. The 'Activation Status' is 'Active'. The 'General Information' tab is selected, showing 'Basic Data' and 'Administration' sections. The 'Basic Data' section includes fields for ID, Name, Search Term, Language, and Internal Number Assignment. The 'Administration' section includes fields for Created On, Changed On, Created By, and Changed By. Below the 'Items' section, there is a table titled 'Model Product Specification Items' with columns for Hierarchy Number, Plant, Item Set, Description, Product, Product Type Group, Material Group, and Quantity. The table contains four rows of data, with the first three rows expanded to show their sub-items.

Item Set	Description	Product	Product Type Group	Material Group	Quantity	EA
Yes	Foundation					
Yes	Super Structure					
Yes	Finishing					
Yes	Maintenance					
No	Maintenance Plumbing	Material (1)		Services (P001)	100	EA
No	Maintenance Electricals Services	Service (2)		Services (P001)	100	EA
No	Maintenance Electricals Materials	Material (1)		Service: (P001)		

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

The screenshot displays the SAP 'Compare Supplier Quotations' interface for 'Model X_AC Assy' (10007649). It compares three suppliers: 20006270, 20006271, and 20006257. The interface shows total amounts, net prices, target amounts, and deviation percentages for each supplier. A table at the bottom provides detailed carbon footprint data for each supplier, including quantity, share of primary emissions, period start/end dates, boundary conditions, and supplier plant information.

Supplier	Total Amount	Net Price	Target Amount	Deviation Percent	Quantity	Share of Primary Emissions	Period Start Date	Period End Date	Boundary Condition	Country/Region of Supplier Plant	Region of Supplier Plant	Source of Emission Factor	Supplier Plant
20006270 (1)	1,06M EUR	280,00 EUR	250,00 EUR	12 %	200,000 KG	35 %	15.06.2023	30.06.2030	Cradle to Gate	DE	BB	Ecovadis	SUP1 PLANT1
20006271 (1)	1,14M EUR	300,00 EUR	250,00 EUR	20 %	210,000 KG	25 %	15.06.2023	09.06.2032	Cradle to Gate	DE	BB	Ecovadis	SUP3 PLANT 1
20006257 (1)	988.000,00 EUR	260,00 EUR	250,00 EUR	4 %	160,000 KG	35 %	15.06.2023	26.06.2031	Cradle to Gate	DE	BB	Ecovadis	SUP2 PLANT 1

Manage Sourcing Projects

Sourcing and Procurement: Delta scope summary

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)

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)

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)

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.

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

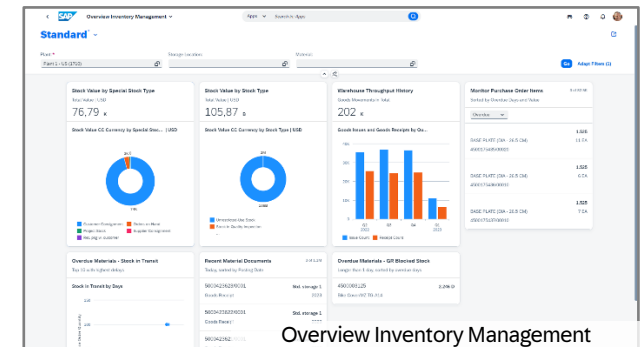
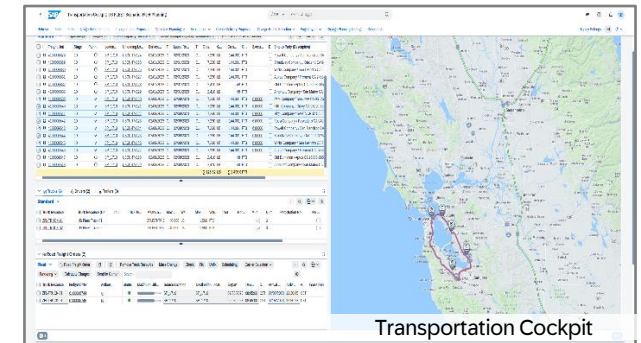
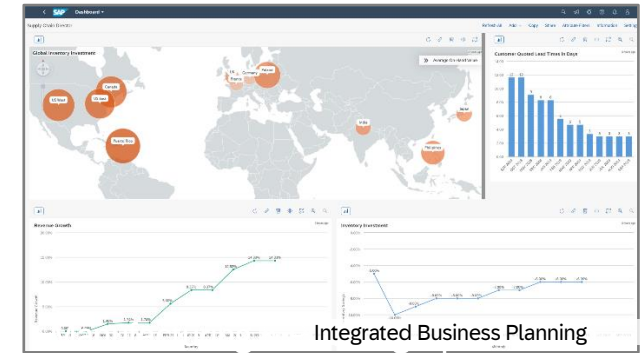
Determine accurate estimates of delivery dates during order creation & changes considering material availability based on actual stock information to enhance customer satisfaction.

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.



Supply Chain: Business area overview

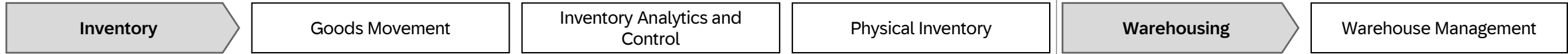
Suite LoB Solutions

- ③ additional license
- ⚙ additional installation

- SAP Integrated Business Planning
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- SAP S/4HANA Transportation Management (side by side for Hub Deployment)

SAP S/4HANA LoB Apps ③ additional license	Service Parts Distribution	Extended Service Parts Planning				
	Advanced Warehousing	Extended Warehouse Management				
	Advanced Transportation	Advanced Transportation Management		Transportation Execution Monitoring		
	Advanced Order Promising	Advanced Available-to-Promise				
SAP S/4HANA Enterprise Management	Inventory	Goods Movement	Inventory Analytics and Control		Physical Inventory	
	Warehousing	Warehouse Management				
	Delivery and Transportation	Delivery Management		Transportation Management		
	Order Promising	Available-to-Promise				
	Logistics Cross Topics	Serial Number Management	Handling Unit Management	Batch Management	Business Process Scheduling	
	Circular Economy Logistics	Returnable Packaging Logistics		Empties Management		

Supply Chain: Inventory and Warehousing



Inventory

Goods Movement

Inventory Analytics and Control

Physical Inventory

Warehousing

Warehouse Management

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

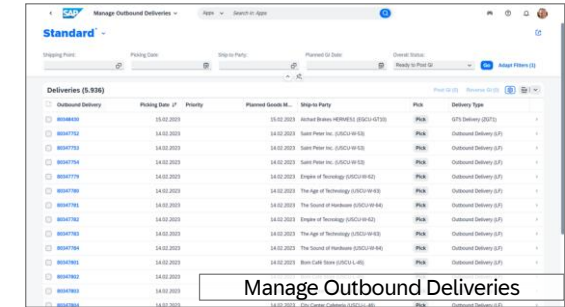
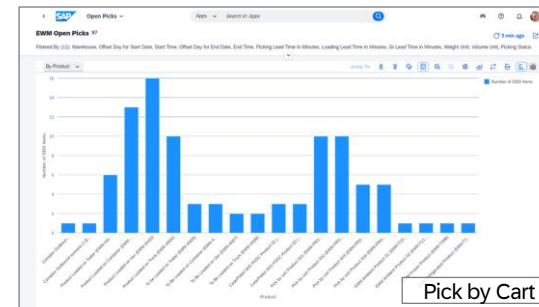
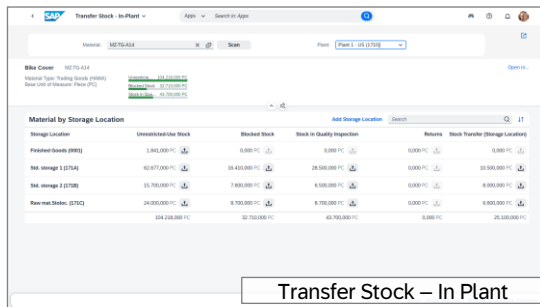
- Goods Receipt for PO
- Initial entry
- Goods Receipt without reference

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

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.

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.



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

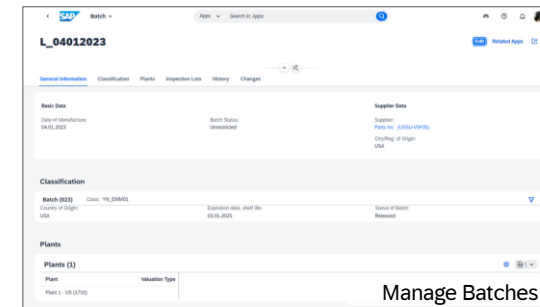
Identify and differentiate between individual items of material Integrated with diverse processes incl Plant Maintenance, Production Orders, Sales & Distribution, Quality Management, Inventory Management & Physical inventory, Repetitive manufacturing & Purchasing.

Handling Unit Management

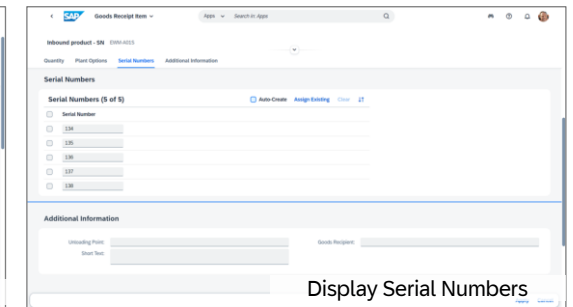
Leverage reflect packing-based logistics structures Optimize logistics processes and track the movements of entire handling units and the materials they contain rather than tracking each material individually.

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.

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.

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.**

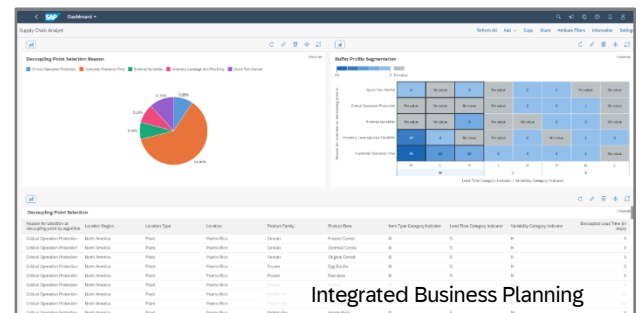
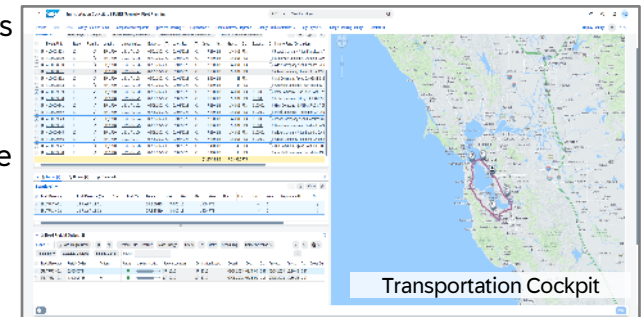
Service Parts Distribution

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.

Additional Suite Solutions in Supply Chain

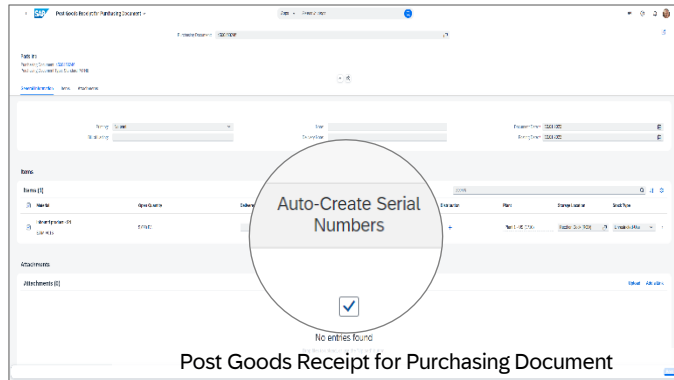
For Superior Planning and Extended Supply Chain Functions, you can also integrate into:

- 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

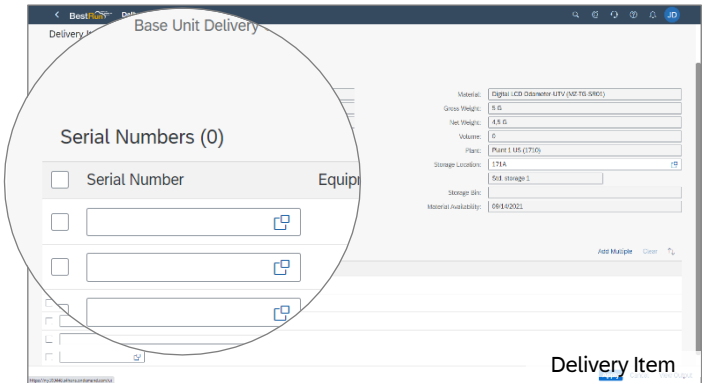
Inventory



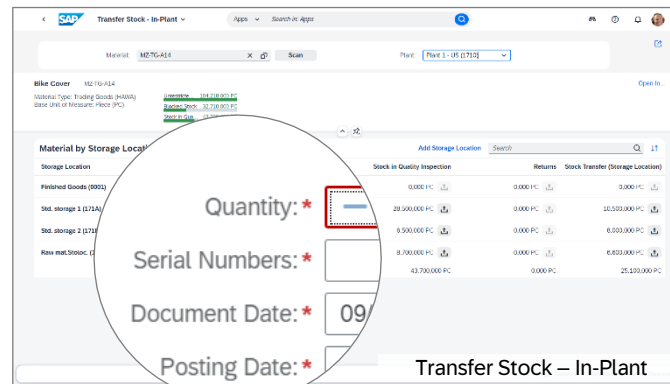
Assign (auto-created) serial number to a material during goods receipt.



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



Enter serial numbers of picked materials during goods issue process.

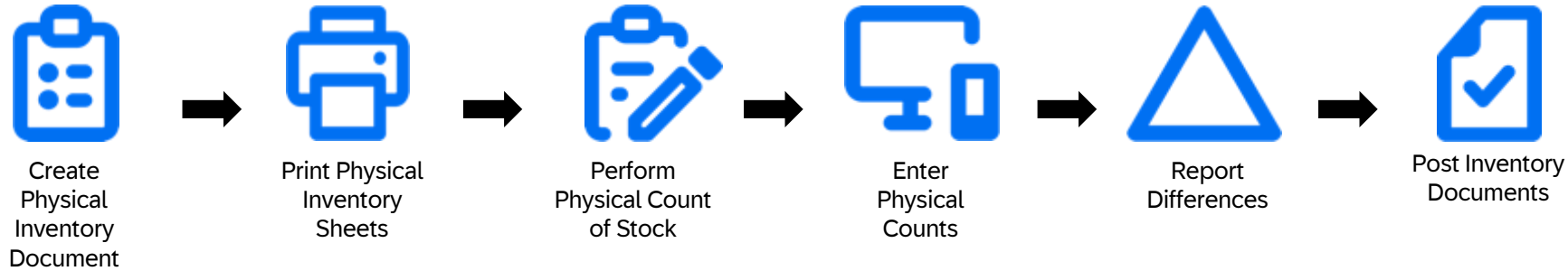


Indicate serial numbers during stock transfers within and across plants

- 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

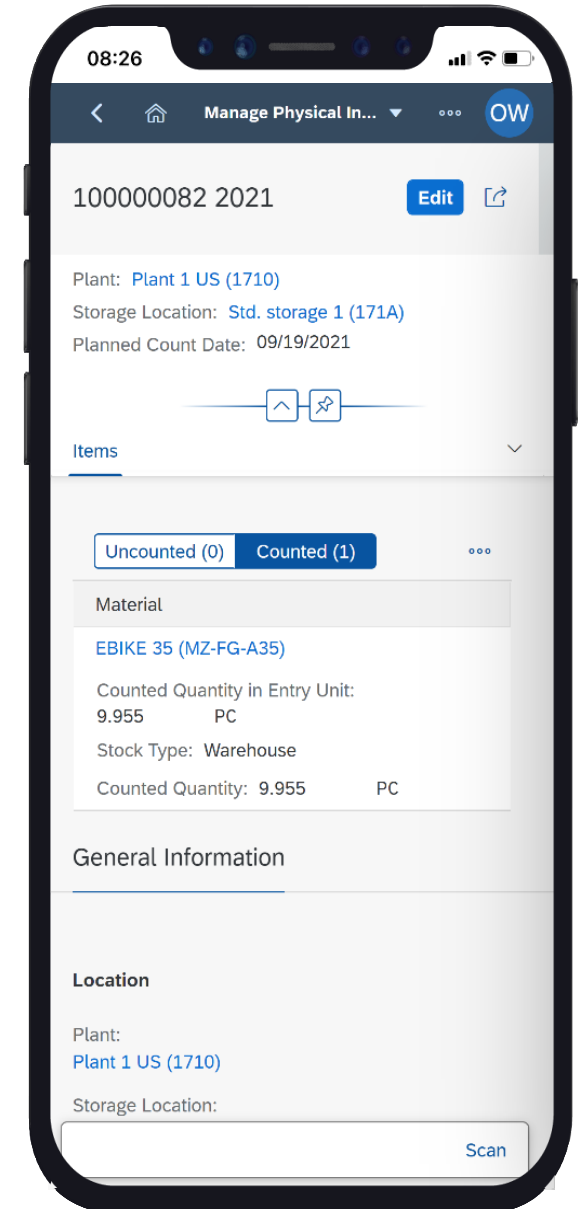
- Ensure that serial numbers are correctly maintained in **internal goods movements**
- Consider serial numbers **during picking** to track the material until the Goods Issue
- Track a material along the internal logistics process in a **transparent and intuitive way**

Supply Chain: Mobile counting app for physical inventory

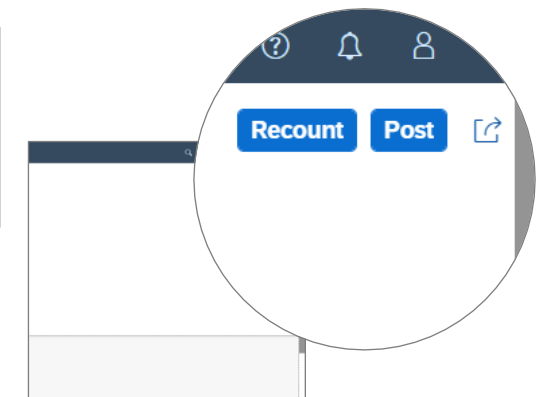
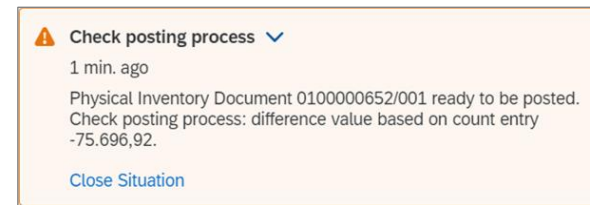
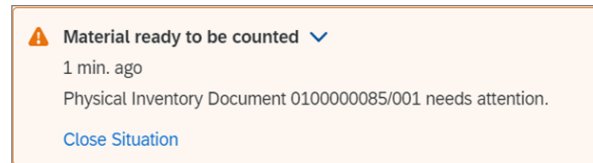
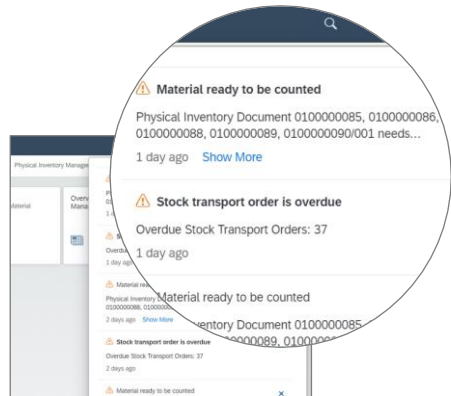
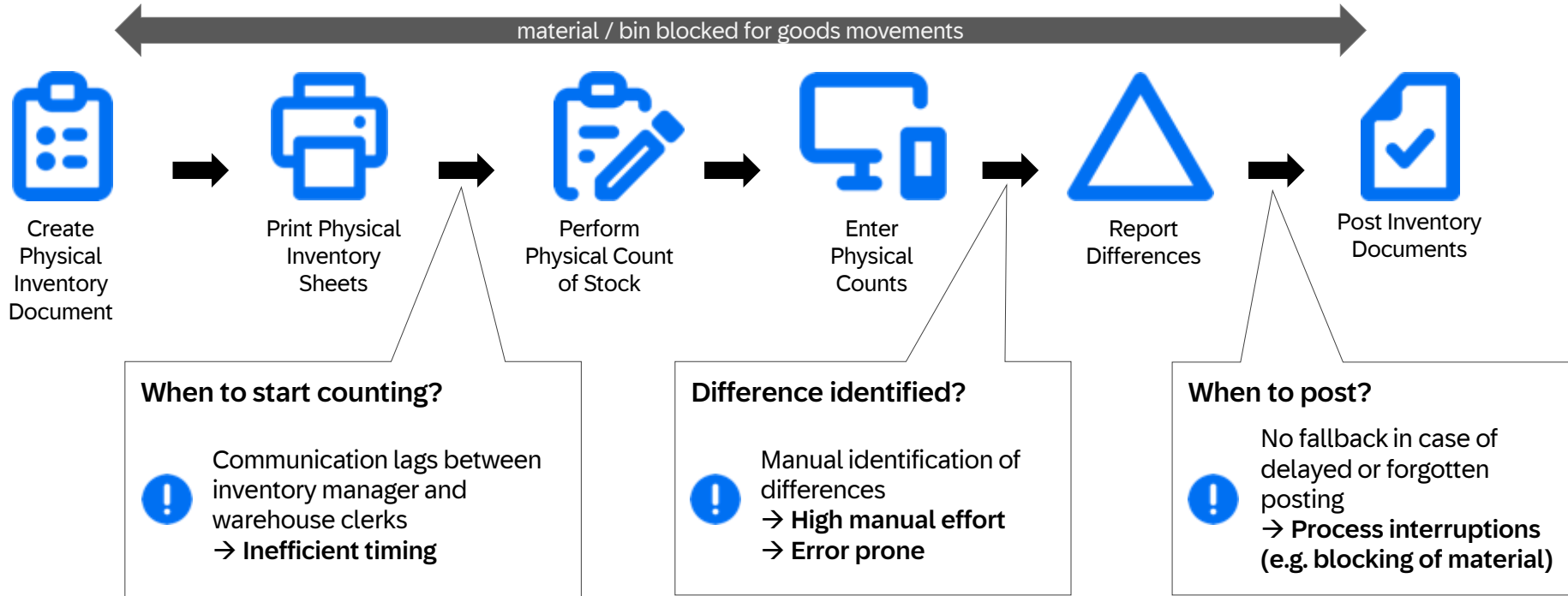


- (1) Open Physical Inventory document worklist
- (2) Scan material to open the correct PI document
- (3) Enter counting results and save
- (4) PI document item is marked as counted

- 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



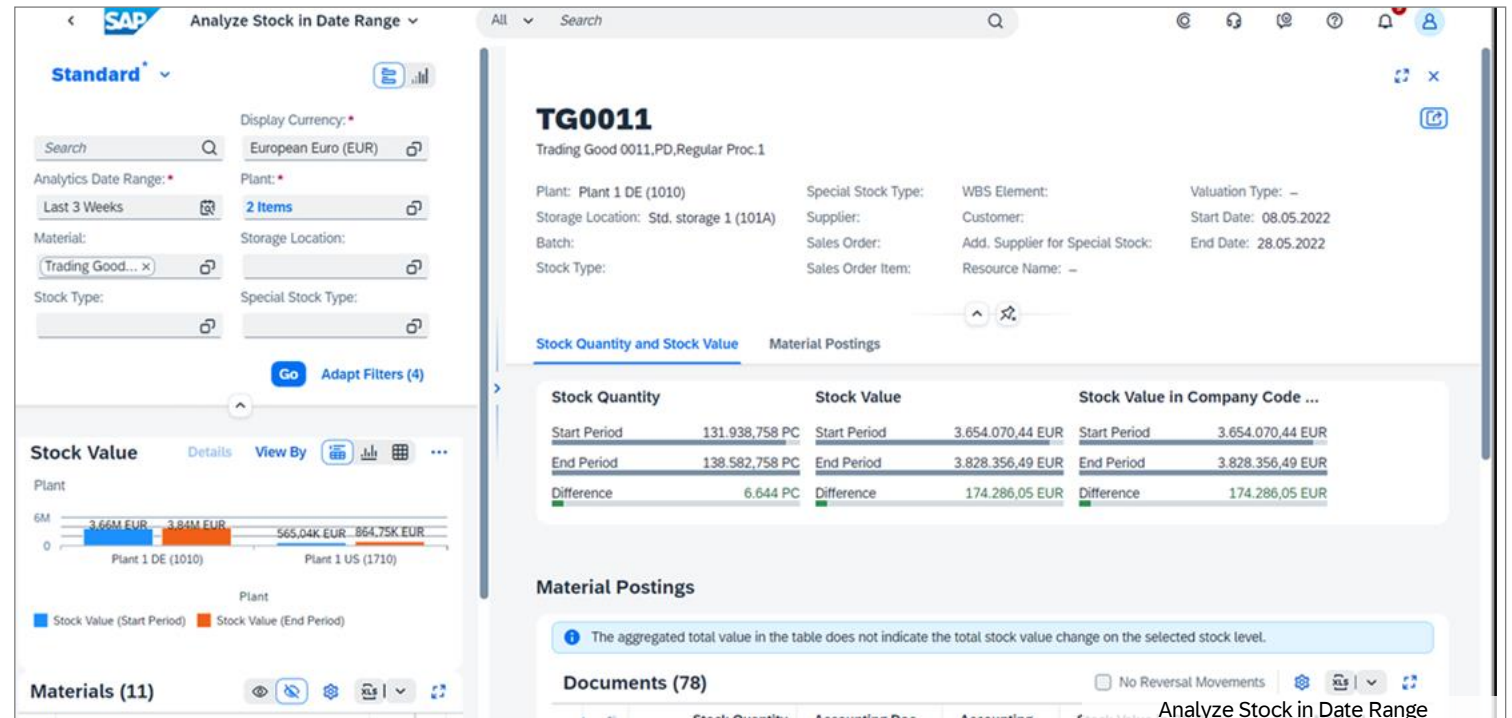
Situation Handling provides contextual information proactively and offers resolution proposals to optimize the critical steps of the physical inventory process.

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

- ③ 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**

- ③ 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

Internal comment: Proportion/prod.unit

Material: XX_PROD_BSUOM_PROD
 Descr.: * Small part, fast-moving 01

Units meas. use: B Product unit

SU Btch Default Val.: Single-Unit Batches not Allowed

Propose characteristics Part. GI Allwd Sng Un. Bch Rcp

Units of measure usage (2) 3 E...

Units of meas. usage	Short Description
Alternative unit of measure	
A	Proportion unit
B	Product unit

3 Entries found

Product units

Characteristic	D...	...	Plan Value	Unit of ...	Un	L...	Pl...	V-R	SN	X
SAP_MILLCA_LENGTH_SUB	Ind. ...		100,000 lm	m / pc	ST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		1

Change UoM to Alternative UoM Entry: 1 of: 1

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

The screenshot displays the SAP Defect management interface. At the top, there is a navigation bar with 'SAP Defect' and a search bar. The main content area is titled '112 Demo' and includes tabs for 'Defect Info', 'Affected Objects', 'Warehouse Info', 'Tasks', 'Attachments', 'Output Overview', 'Administrative Data', and 'Changes'. The 'Defect Info' tab is active, showing fields for Defect Category (Warehouse Defect), Defect Status (Created), Defective Material (Small part, fast-moving 01 (PROD-S01)), and Defect Caused By (-). Other fields include Description (Demo), Defect Code (1), Batch, Cost Center, Defect Detailed Description (Warehouse Defect), Defect Code Group (QM-E), Plant (Plant Decentral EWM in QM7/133 (Q...)), Reference Number, and Storage Location (Prod. Supply EWM (PSWM)). Below this is the 'Affected Objects' section, which contains a table with columns for Material, Batch, Quantity, Is Defective, Latest Follow-Up Action, Follow-Up Action Status, and Simulation Result. The table shows one entry for material PROD-S01 with a quantity of 1 and a status of YES. The 'Warehouse Info' section includes fields for Warehouse Number (QM72), Production Supply Area (PSWM (PSA1-001)), Source Storage Type (-), and Source Storage Bin. At the bottom right, there is a 'Record Warehouse Defect' button with 'Create' and 'Discard Draft' options.

Supply Chain: Warehouse Management

Advanced shipping and receiving cockpit



- 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

Standard

Search

Freight Order: Warehouse Number: 1050 Loading/Unloading Point: Warehouse Door: Warehouse Door Status: Transportation Planned On/At:

Execution Status: Logistical Execution Status: Lifecycle Status: Goods Movement Status: Ship-to Party: Carrier: Go Adapt Filters (1)

Stops (84)

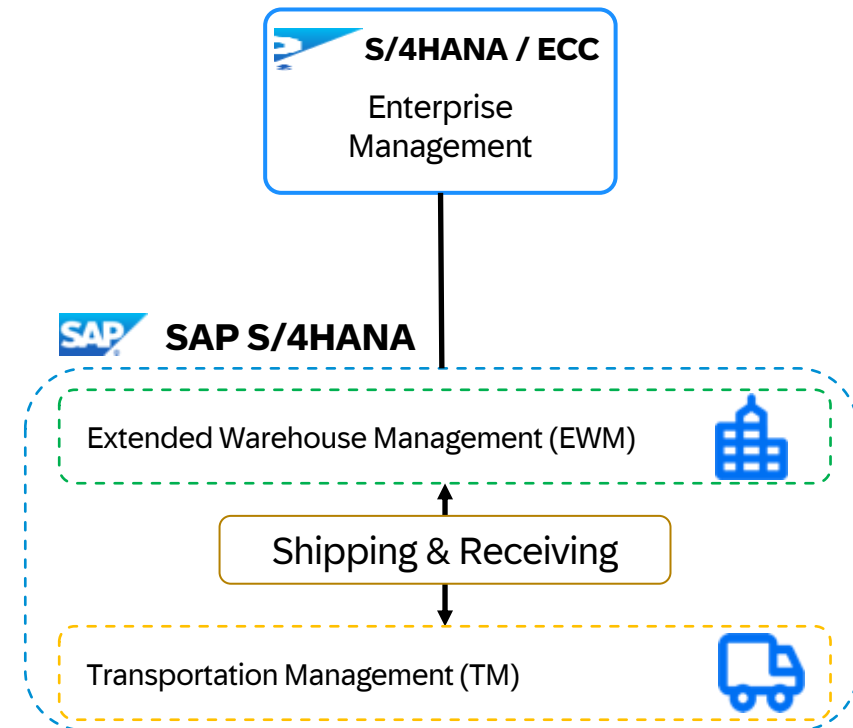
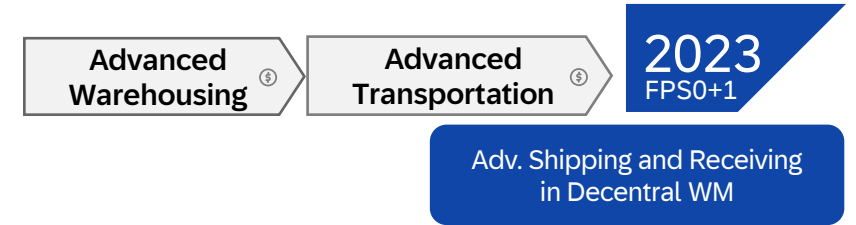
Freight Order	Warehouse Number	Loading/Unloading Point	Warehouse Door	Warehouse Door Status	Direction
6600002165	Warehouse (1050)	Loading Point for ASR 02 (ASR_LP_02)	DR02		Outbound
Loading/Unloading Completed: ✔ Yes Staging Area: Z002 Staging Area Group: S920 Transportation Planned On/At: 13.02.2023, 12:00:00 AM Europe, Berlin					
6600004623	Warehouse (1050)	ASR_LP_01 (ASR_LP_01)	DO01		Outbound
Loading/Unloading Completed: ✘ No Staging Area: Staging Area Group: Transportation Planned On/At: 16.03.2023, 12:00:00 AM Europe, Berlin					
6600006561	Warehouse (1050)				Outbound
Loading/Unloading Completed: ✘ No Staging Area: Staging Area Group: S920 Transportation Planned On/At: 03.04.2023, 11:30:00 PM Europe, Berlin					
6600006751	Warehouse (1050)	ASR_LP_01 (ASR_LP_01)	DO01		Outbound

Advanced Shipping and Receiving Cockpit

Supply Chain: Advanced Warehousing

Decentral advanced shipping & receiving

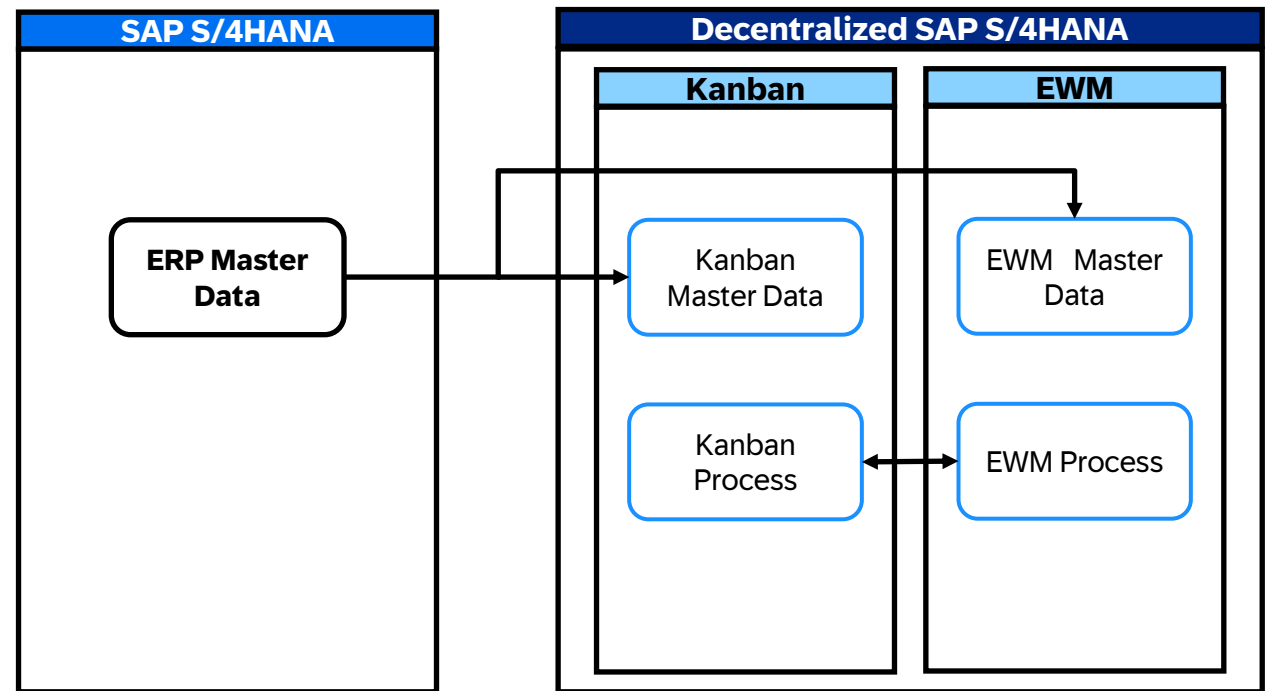
- Enable Advanced Shipping and Returns process in the Decentralized SAP Extended Warehouse Management (SAP EWM) with local Transportation management capabilities
- Execute transportation logistics independently in the decentralized EWM and TM system once the deliveries have been transferred from the 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

- 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

Warehousing

2023
FPS2

- 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

The screenshot displays the SAP 'Change Inbound Deliveries' interface for delivery 410000115708. The table below shows the details of the delivery items.

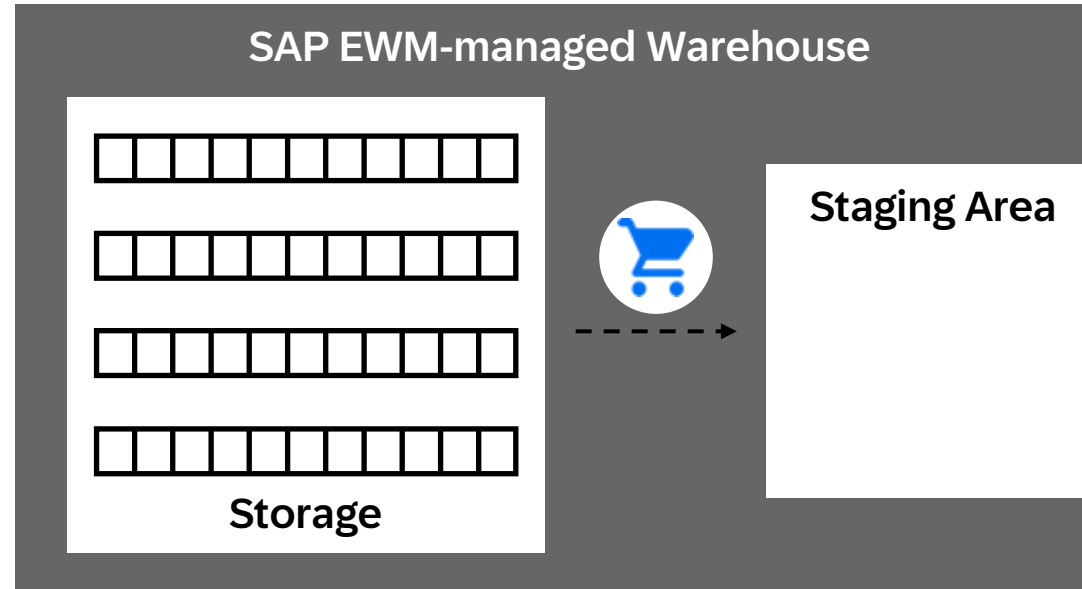
Item Number	Product	Delivery Quantity	Number of HUs	Warehouse Tasks	Goods Receipt Status	FL Process Status	Plant Maint. Order
<input type="checkbox"/> 10	MEK-FLOG-SP14-QM	2	EA	Warehouse Tasks	Completed	Cross-Docking	1931652
<input type="checkbox"/> 20	MEK-FLOG-SP14-QM	3	EA	Warehouse Tasks	Completed	Cross-Docking	1931652
<input type="checkbox"/> 30	MEK-FLOG-SP14-QM	2	EA	Warehouse Tasks	Completed	Consolidation of Goods in Hold	1931652
<input type="checkbox"/> 40	MEK-FLOG-SP14-QM	3	EA HUs: 1	Warehouse Tasks	Completed	Consolidation of Goods in Hold	1931652

Supply Chain: Warehousing

Integration with Asset Management (Plant Maintenance)

Warehousing

Maintenance Order /
Manual Reservation



Maintenance operations
using staged spare parts



Reservation Item

Reservation 3762947

Material: Mikasa Volleyball (BALL)

Plant: Werk EW01 (EW01)

Storage Location: User's EWM WH (UP01)

Recipient: Mr. Brown

Recipient Location: RL03

Requirement Date: 07.06.2021

Reservation Items

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

Purchase Order

Manufacturing Order:

Plant Maintenance Order:

Reservation Number:

LE Delivery:

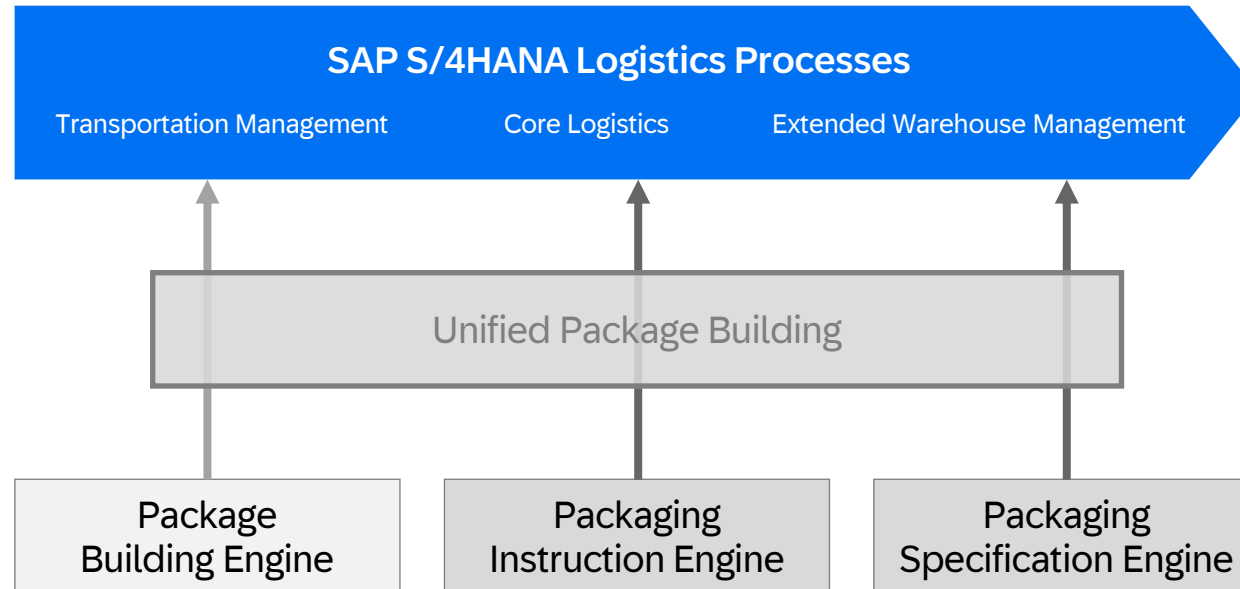
Orig. ERP Document

Warehouse Management Monitor

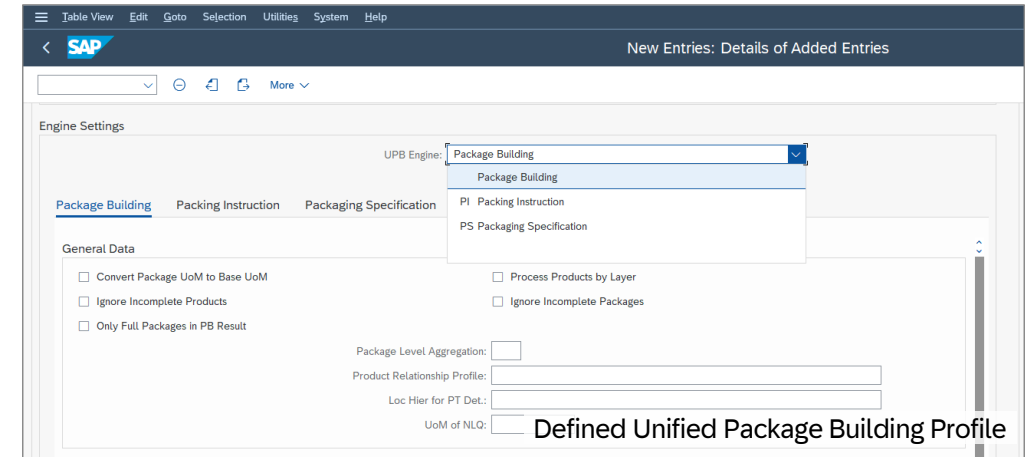
Supply Chain: Warehousing

Unified Package Builder

- 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



Warehousing



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

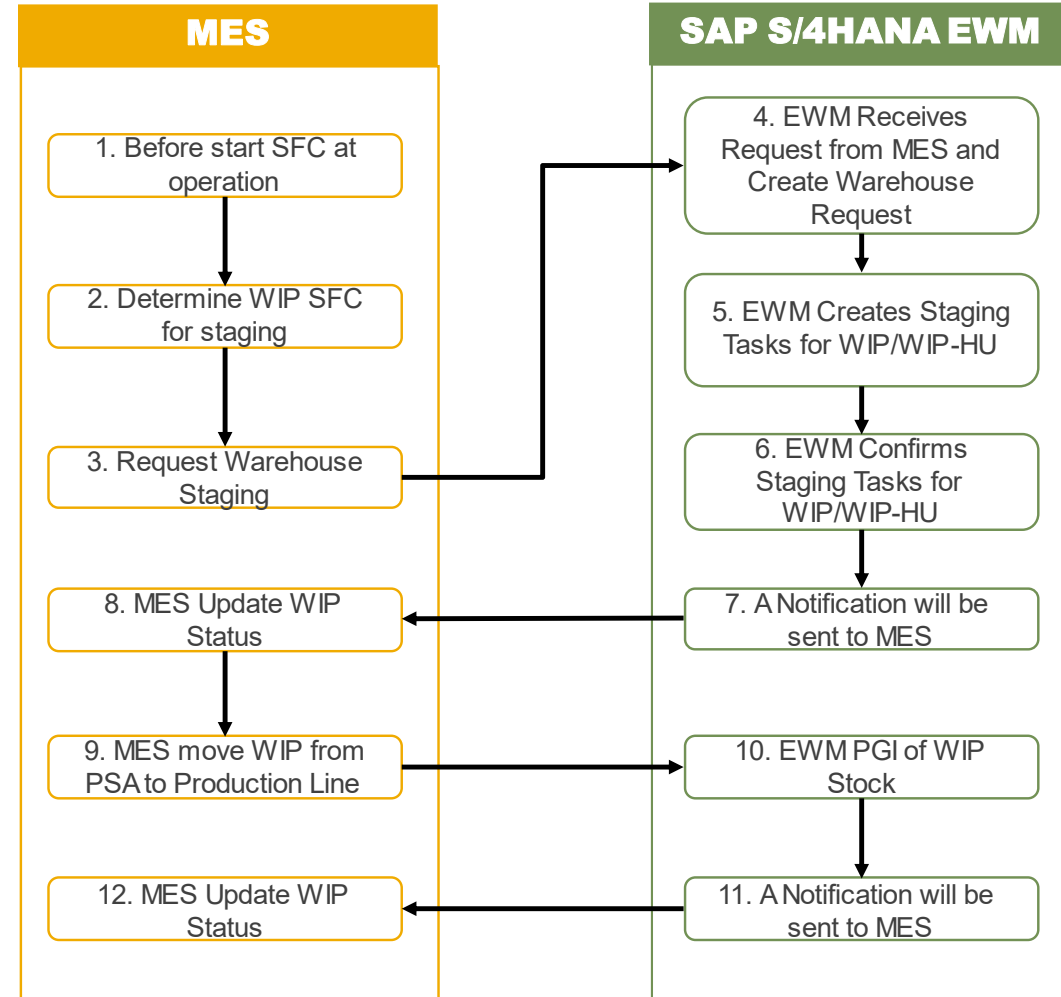
Supply Chain: Advanced Warehousing

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

Warehousing

Warehouse Management

- 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 5000423235 - Michael Clarkson

Document Date: 01.02.2023
Posting Date: 01.02.2023

Delivery Note: 1000001604
Supplier: Parts Inc.

Line	Mat. Short Text	Wa...	Qty in Unit	Elin	SLoc	Profit Center	WIP Batch	Stock Segment	Sea...	Sea...	C...	The...	Batch	Valuation Type	M...	D...	Stock Type	Plnt	JIT Call Num...	Item	Sp...	Customer	Vendor @
1	Inbound Quality Management Product 1		30	PC	Racd on Dock	Z_LOQ_PC7									101		Quality Inspect...	Plant 1 - US		0			Parts In

Qty in Unit of Entry: 30
Qty in SELL: 30

Qty in Delivery Note: 0,000

Quantity Ordered: 30
GR Quantity: 30

Art in Loc. Clr.: 300,00

Status GR Doc: 8 ImplLot

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

The screenshot displays the SAP Intelligent Scenario Management interface. At the top, there are filters for Intelligent Scenario (EWM), Package (All), Line of Business (All), Status (All), Scenario Type (All), and Created At (dd.MM.yyyy - dd.MM.yyyy). Below the filters is a table titled 'Intelligent Scenarios (3)' with columns: Package, Intelligent Scenario, Line of Business, Status, Intelligent Scenario Description, Scenario Type, and Created At. The table lists three scenarios, all with a 'Published' status.

Package	Intelligent Scenario	Line of Business	Status	Intelligent Scenario Description	Scenario Type	Created At
EWM_MACHINE_LEARNING	EWM_PTWCYCTRL_IND_00	Supply Chain	Published	Putaway Control Indicator	Classification	07.11.2022, 10:45:12
	EWM_STKRMVL_IND_00	Supply Chain	Published	Stock Removal Indicator	Classification	04.11.2022, 15:27:12
	EWM_STORSCCTN_IND_00	Supply Chain	Published	Storage Section Indicator	Classification	10.11.2022, 07:45:12

Below the table is a detailed view of a 'Train Model' for a 'Putaway Control Indicator' scenario. The model name is 'CL_EWM_ISLM_PAC' and its type is 'Classification'. The training filters and parameters are shown below. The 'Training Parameters' section includes a table with 6 items:

Name	Context	Value
PERCENTAGE		1
PARTITION_TRAINING_PERCENT		0.7
N_ESTIMATORS		100
MIN_SAMPLES_LEAF		1
SPLIT_THRESHOLD		1.00E-05
MAX_DEPTH		-1

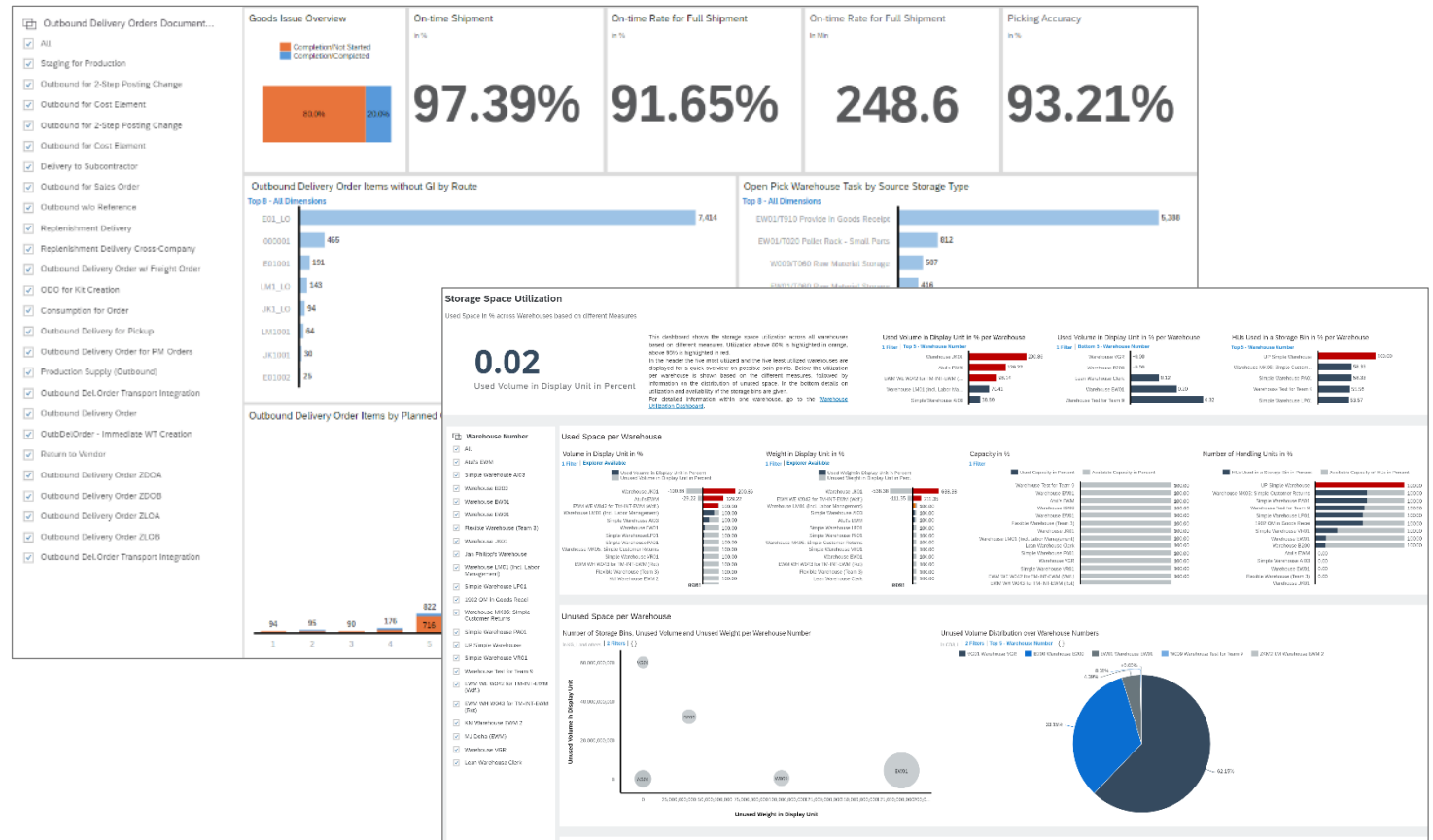
The 'PARTITION_TRAINING_PERCENT' value is highlighted with a pink box. At the bottom right of the detailed view, there are 'Train' and 'Cancel' buttons.

Supply Chain: Warehousing

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

- ③ 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

- ③ 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

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 embedded EWM

Optimize Transportation Processes



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

The screenshot displays the SAP S/4HANA interface for editing an inbound consignment order. The 'Attachments' tab is active, showing a table with the following data:

Name	Description	Visibility Type	Attachment Type	URL	Component Size	Created By	Created On	Document Type
<input checked="" type="checkbox"/>	Inbound delivery document	Internal	Inbound ...		88.2 KB	V71	13.09.202...	application/pdf

A success message is displayed at the bottom of the screen:

All 1 2
Data saved successfully
Business document with temporary number \$1 saved as business doc.
4500053850

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

In...	Items	Freight Unit	Stage	Plan...	Loading Location Desc...	Unloading Location Description	Conversational Planning Response	Gross We...	Gros...	Earliest Pl...	Earliest...	Tim...	Latest De...	Late
<input type="checkbox"/>	8	4100310282	10	<input type="radio"/>	Warehouse Walldorf	Carrefour Supermarket Scheibe...	10 units of 5 kg Asparagus	50	KG		00:00:00	CET		00:
<input type="checkbox"/>	9	4100310283	10	<input type="radio"/>	Warehouse Walldorf	Carrefour Supermarket Scheibe...	10 units of 5 kg Asparagus	50	KG		00:00:00	CET		00:
<input type="checkbox"/>	10	4100310284	10	<input type="radio"/>	Warehouse Walldorf	Farmshop Stuttgart	10 units of 5 kg Asparagus	50	KG	12.06.2024	08:00:00	CET	16.06.2024	12:
<input type="checkbox"/>	11	4100310285	10	<input type="radio"/>	Warehouse Walldorf	Farmshop Stuttgart	10 units of 12.5 kg Potatoes	125	KG	12.06.2024	08:00:00	CET	16.06.2024	12:
<input type="checkbox"/>	12	4100310286	10	<input type="radio"/>	Warehouse Walldorf	Supermarket Karlsruhe	10 units of Box with 12 Salads	50	KG		00:00:00	CET		00:
<input type="checkbox"/>	13	4100310287	10	<input type="radio"/>	Warehouse Walldorf	Supermarket Karlsruhe	10 units of 12.5 kg Potatoes	125	KG		00:00:00	CET		00:
<input type="checkbox"/>	14	4100310288	10	<input type="radio"/>	Warehouse Walldorf	Supermarket Karlsruhe	10 units of 5 kg Asparagus	50	KG		00:00:00	CET		00:

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

SAP Edit Freight Order with Subcontracting 6100160750

[Edit](#) [Refresh](#) [Copy](#) [Other Copy Options](#) [Check](#) [Follow Up](#) [Scheduling](#) [Subcontracting](#) [Create Service Order](#) [Schedule](#) [Set Status](#) [Load/Unload Plan Status \(Stop\)](#) [Execution Status](#) [Fixing](#) [Customs](#) [Charges/Settlement](#)

Emission

Calculated Emission

Calculated Emission: 371.265 KG
Emission Allocation Method: Distance Weight based Calculation

Reported Emission

Reported Emission: 535.5 KG [Report Emission](#)

Emission per Stage

Stages

Standard * [Insert](#) [Merge](#) [Execution Status \(Source\)](#) [Execution Status \(Destination\)](#) [Determine Distance and Duration](#)

Stage	Source Location	Source Location Address	Destination Location	Destination Address	Handl. A. Execut. V. Status	Distance	Distance Unit of Measure	Net Duration	Depart. Fixed	Planned Departure Date	Planned Departure Time	Planned Departure Time Z...	Actual Departure Date	Actual Departure Time	Actual Departure Time Z...	Planned Arrival Date	Planned Arrival Time	Planned Arrival Time Z...	Actual Arrival Date	Actual Arrival Time	Actual Arrival Time Z...	Maximum Utilizati...
<input type="checkbox"/>	PW_A		PW_B		◆	21.999	KM	0:16	N...		00:00...	CET		00:00...	CET		00:00...	CET		00:00...	CET	
<input type="checkbox"/>	PW_B		PW_C		◆	8.486	KM	0:06	N...		00:00...	CET		00:00...	CET		00:00...	CET		00:00...	CET	
<input type="checkbox"/>	PW_C		PW_D		◆	7.186	KM	0:05	N...		00:00...	CET		00:00...	CET		00:00...	CET		00:00...	CET	

[General Data](#) [Business Partner](#) [Items](#) [Utilization](#) [Subcontracting](#) [Document Flow](#) [Charges](#) [Notes](#) [Attachments](#) [Statuses](#) [Blocking Information](#) [Administrative Data](#) [Terms and Conditions](#) [Output Management](#)

[Execution](#)
[Overview](#)
[Document References](#)

[Save](#) [Cancel](#)

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

The screenshot displays the SAP 'Edit Ocean Freight Booking' interface for document 6700001855. The 'Items' section shows a table of freight booking items with columns for Item Hierarchy, Item Type, Item Description, Quantity, Unit of Measure, Gross Weight, Gross Volume, Net Weight, Net Volume, Product, Dangerous Goods Status, Freight Order for Pick-Up, and Freight Order for Delivery. The 'Stages' section shows a table of transportation stages with columns for Stage, Stage Category, Transport Mode, Transportation Mode, Source Location, UN/LOCODE (Source), Source Location Address, Destination Location, UN/LOCODE (Destination), Destination Location Address, Executing Carrier, Executing Carrier Description, SCAC of Executing Carrier, Invoicing Carrier, and Invoicing Carrier Description.

Item Hierarchy	Item Type	Item Desc...	Qna...	Qna... UoM	Gross Wel...	Gross Wel... UoM	Gross Volu...	Gross Volu... UoM	Net Wel...	Net Wel... UoM	Product	Dangerous Goods Status (Description)	Freight Order for Pick-Up	Freight Order for Delivery
▼ Sales Order 21225			***		443 KG		0.442 M3		419 KG					
▼ Freight Unit 4200014565			***		443 KG		0.442 M3		419 KG					
Product 10 Firmis Löser Zitrone (20L Fass)	PRD	Product	20	DR	420 KG		0.42 M3		400 KG		P69-VARREM_PP1	OK - Transport Allowed		
Product 20 WHO bys Handreiniger (2x500ml)	PRD	Product	10	CAR	16 KG		0.016 M3		14 KG		P69-HANDR_PP1	OK - Transport Allowed		
Product 30 Linalool (1L Flasche)	PRD	Product	5	BT	7 KG		0.006 M3		5 KG		P69-LINALOOL-PP	OK - No Dangerous Goods		

Stage	Stage Category (Description)	Transp... Mode	Transportation Mode (Description)	Source Location	UN/LO... (Source)	Source Location Address	Destination Location	UN/LO... (Desti...)	Destination Location Address	Executing Carrier	Executing Carrier Description	SCAC of Execut... Carrier	Invoicing Carrier	Invoicing Carrier (Description)
1	Pre-Carriage	01	Road	SP_1710		Shipping Point 1710 - ...	PORT_USLAX	USLAX	USLAX / 425 South Pa...					
2	Main Carriage	03	Sea	PORT_USLAX	USLAX	USLAX / 425 South Pa...	PORT_DEHAM	DEHAM	DEHAM / Kurt-Eckelm...					
3	On-Carriage	01	Road	PORT_DEHAM	DEHAM	DEHAM / Kurt-Eckelm...	0017100050		Foreign Customer 50 (...)					

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)

The screenshot displays the SAP Transportation Cockpit interface. The main view is divided into several sections:

- Freight Unit Stages (10):** A table listing stages with columns for Stage, F, Loadin..., Unloading..., Normalized Du..., U., Additional Normalized Qu..., and Unit. The first five rows are selected and highlighted in blue. A yellow box highlights the 'Normalized Du...' and 'Additional Normalized Qu...' columns for the first five rows.
- Trucks (1):** A table listing trucks with columns for Truck Type, Equipment Gr..., Normalized Qu..., U., Additional Normalized Qu..., U..., and Max. Weight. The first row is selected and highlighted in blue. A yellow box highlights the 'Normalized Qu...' and 'Additional Normalized Qu...' columns.
- Road Freight Orders (3):** A table listing orders with columns for Acti..., Freight Order, S, M..., Source Location, and Destination Location. The first three rows are selected and highlighted in blue.
- Road Freight Order Hierarchy:** A section showing the hierarchy of the selected orders, with a message 'No data available'.

At the bottom of the interface, a notification bar shows a green checkmark and the text '5 of 5 freight units can be planned'.

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 cylindrical 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

Item Hierarchy	Load Status	Load P. (Capacity)	L. S.	Gross Wt. (LB)	Gross Wt. (MM)	Gross Vol. (FT3)	P. X	P. Y	P. Z	U. P.	D. P.	Orientation	Row	Stack
Active Vehicle ZFL TRUCK-01 1000000	✓	0	36,919	LB	576.00	FT3	0	305	0	MM	Lo...	Bottom Straight (L...	0	0
Package 220 TM Pallet	✓	1	2,400	LB	48.000	FT3	0	305	1,219	MM	Lo...	Bottom Straight (L...	0	0
Package 230 TM Pallet	✓	2	2,400	LB	48.000	FT3	0	305	1,219	MM	Lo...	Bottom Straight (L...	0	0
Package 240 TM Pallet	✓	3	2,400	LB	48.000	FT3	0	1,219	0	MM	Lo...	Bottom Straight (L...	0	0
Package 150 TM Pallet	✓	4	2,400	LB	48.000	FT3	1,219	305	0	MM	Lo...	Bottom Straight (L...	1	1
Package 200 TM Pallet	✓	5	2,400	LB	48.000	FT3	1,219	305	1,219	MM	Lo...	Bottom Straight (L...	1	1
Package 210 TM Pallet	✓	6	2,400	LB	48.000	FT3	1,219	1,219	0	MM	Lo...	Bottom Straight (L...	1	1
Package 160 TM Pallet	✓	7	2,400	LB	48.000	FT3	2,438	0	0	MM	Lo...	Bottom Turned (R...	2	2
Package 170 TM Pallet	✓	8	2,400	LB	48.000	FT3	2,438	0	1,219	MM	Lo...	Bottom Turned (R...	2	2
Package 180 TM Pallet	✓	9	2,400	LB	48.000	FT3	2,438	1,219	0	MM	Lo...	Bottom Turned (R...	2	2
Package 130 TM Pallet	✓	10	2,400	LB	48.000	FT3	3,352	0	0	MM	Lo...	Bottom Turned (R...	3	3
Package 140 TM Pallet	✓	11	2,400	LB	48.000	FT3	3,352	0	1,219	MM	Lo...	Bottom Turned (R...	3	3
Package 150 TM Pallet	✓	12	2,400	LB	48.000	FT3	3,352	1,219	0	MM	Lo...	Bottom Turned (R...	3	3

Supply Chain: Transportation Management

SAP Direct Delivery

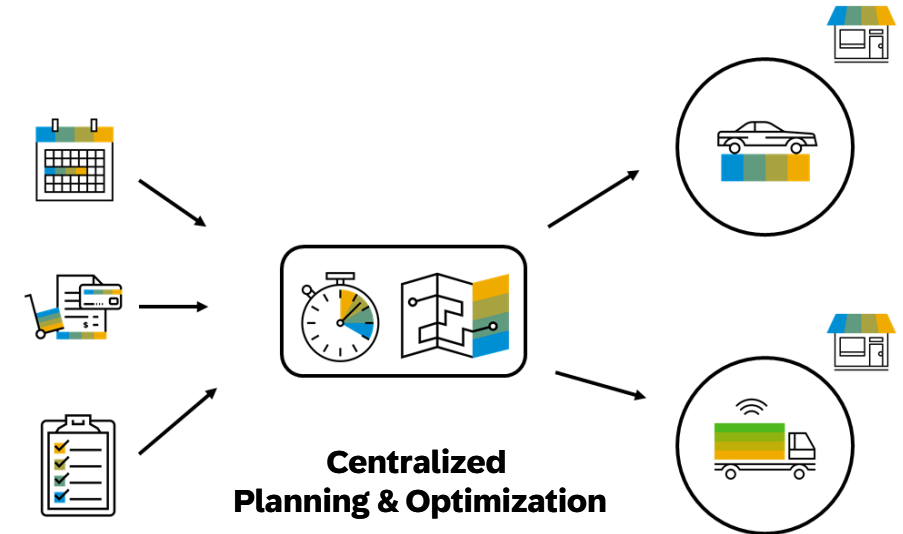
Last mile delivery

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:

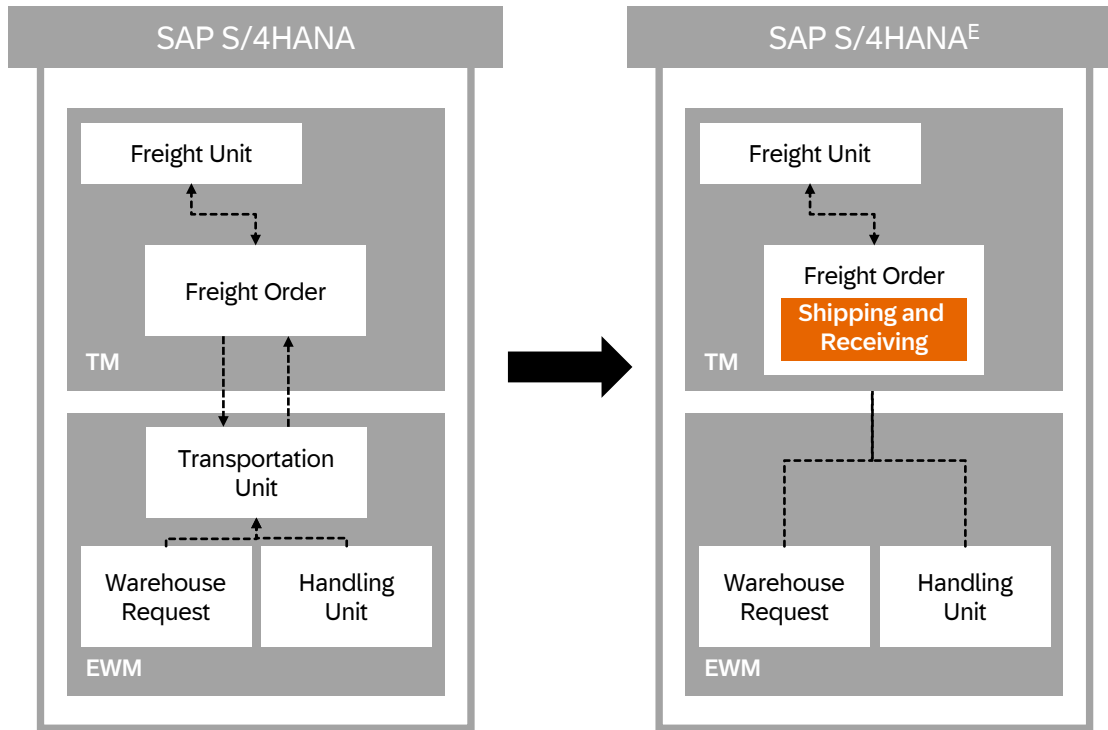
- Delivery driver scenario in which a personal truck fleet is used to deliver pre-ordered goods to stores, vending machines, and other points of sale
- Supports combination resources, specific loading patterns as well as vehicle/combination incompatibility for e.g., side- versus backloading locations



Supply Chain: Advanced Transportation Management Advanced Shipping and Receiving (ASR)

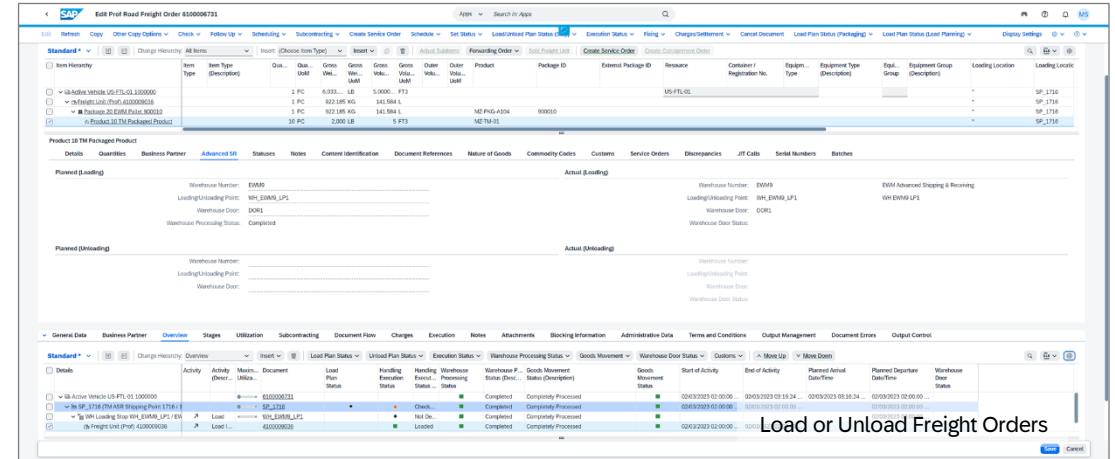


Integration between SAP S/4HANA EWM & SAP S/4HANA TM



Integration based on Transportation Unit

Integration based on Freight Order



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 💰

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

Supply Chain: Advanced Transportation Management

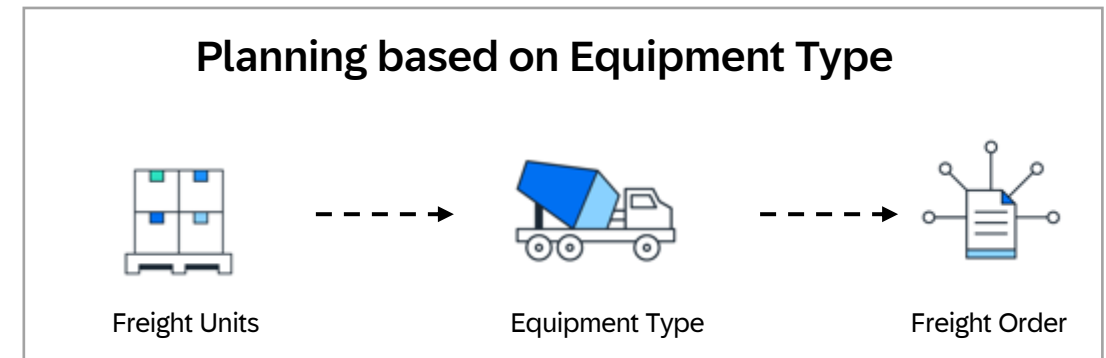
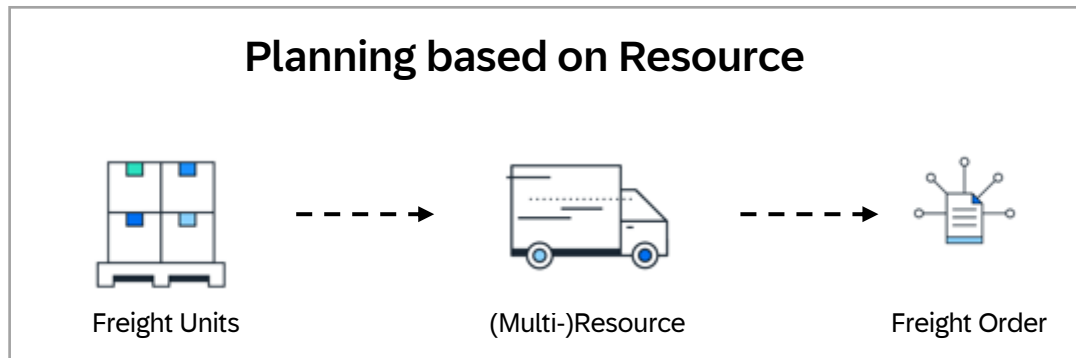
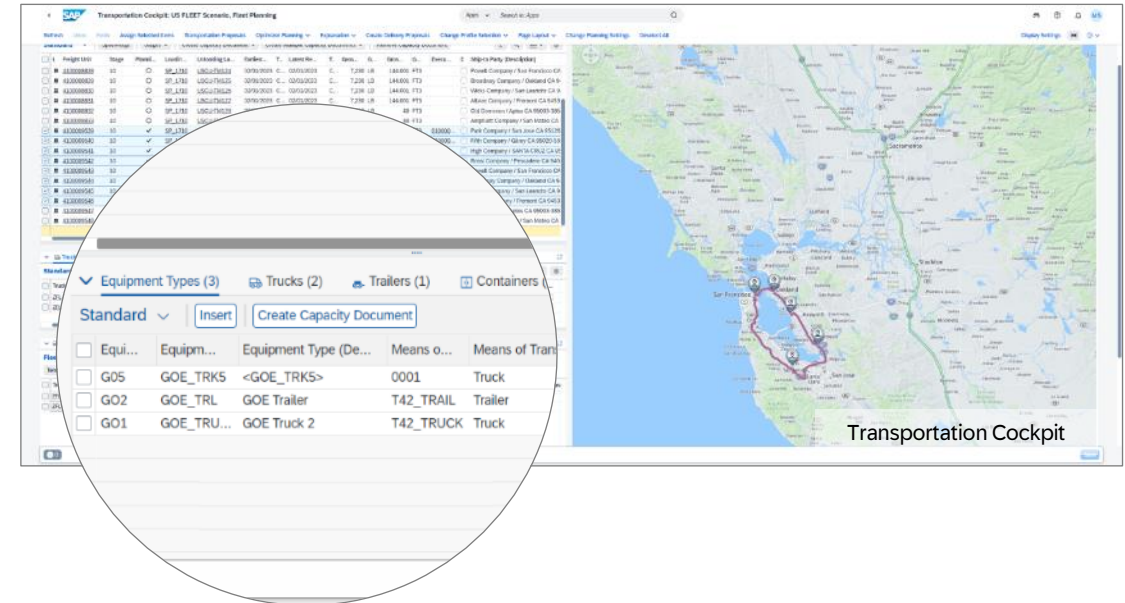
Transportation planning based on equipment type

Advanced Transportation

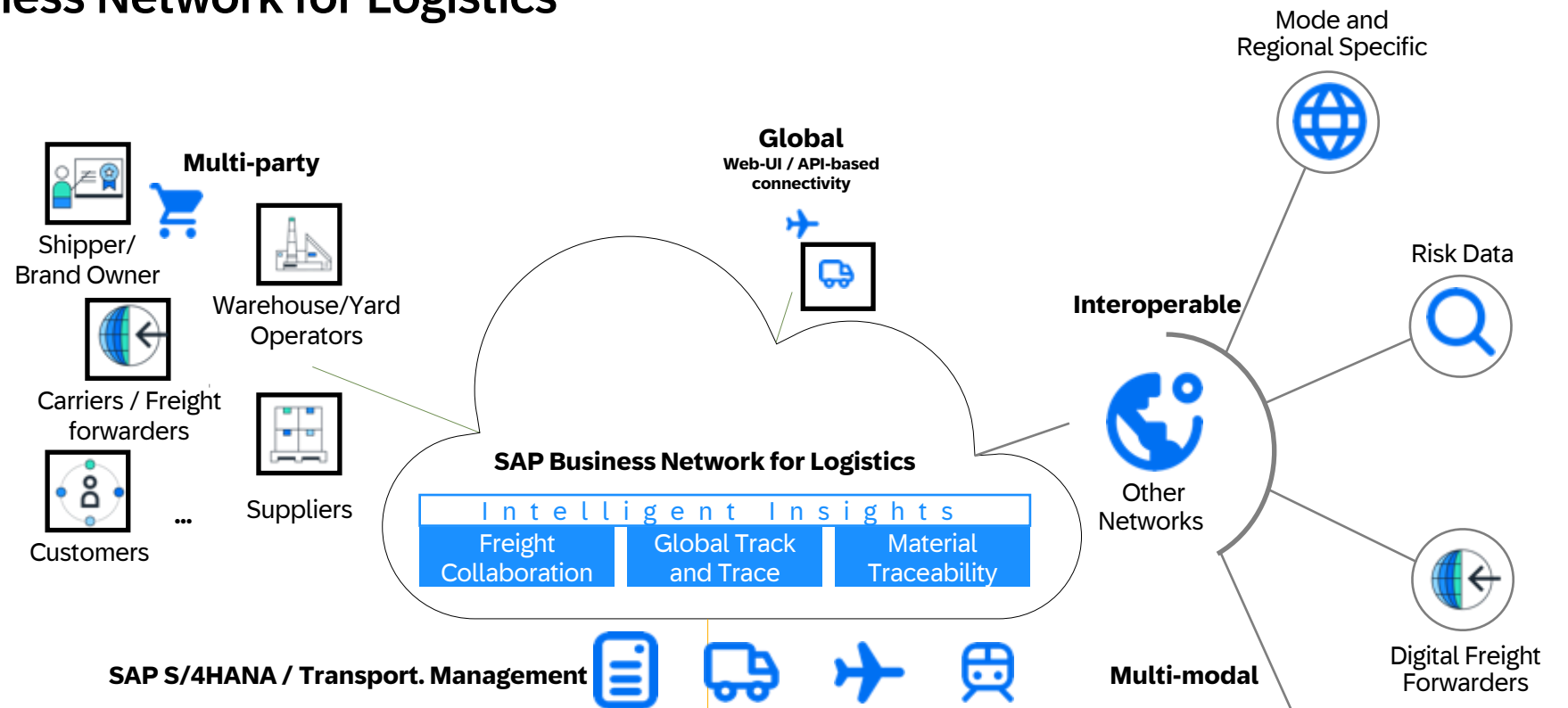
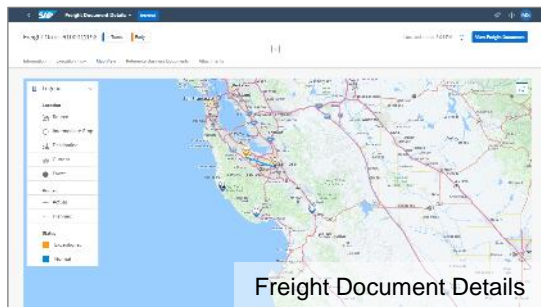
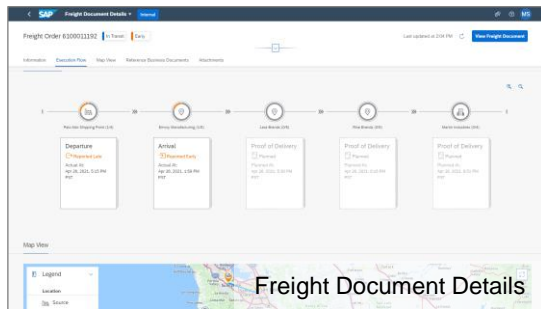
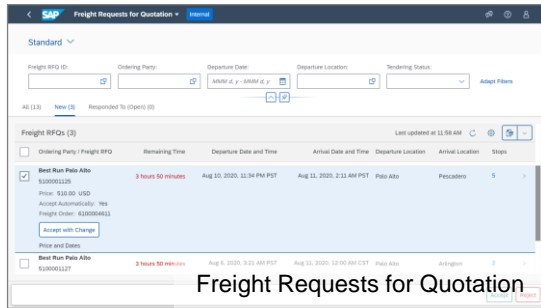
Adv. Transportation Management

- 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.



Transportation Management Integration into SAP Business Network for Logistics



- **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

- ③ additional license
- ⚙️ additional installation

**SAP S/4HANA
LoB Apps**

- ③ additional license

Advanced
Available to
Promise


Integrate with Global ATP (SAP SCM)

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


Available to
Promise

**SAP S/4HANA
Enterprise
Management**

**Order Promising
Optimization**



Basic Order Promising



^RThis is the current state of planning and may be changed by SAP at any time without notice.

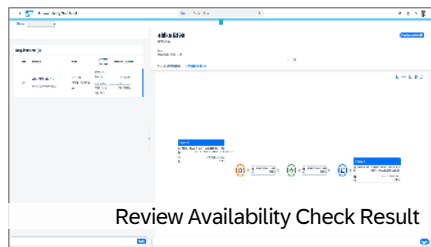
Supply Chain: Advanced Available-to-Promise overview (1/2)



Product Availability Check (PAC)

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

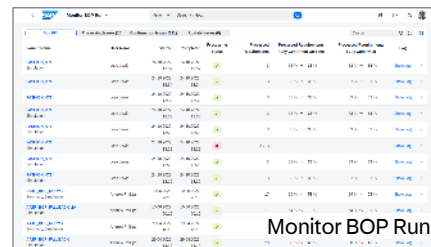
- Time phased mass enabled check (parallelization)
- Supply consideration: current and future supply elements
- Demand consideration: sales orders (SO) & stock transport orders (STO)
- Checks on plants, distribution centers, sub-locations and batch level
- Supports Product Allocations (PAL) and Alternative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



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)



Product Allocations (PAL)

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

Confirm orders against capacity constraints.

- 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

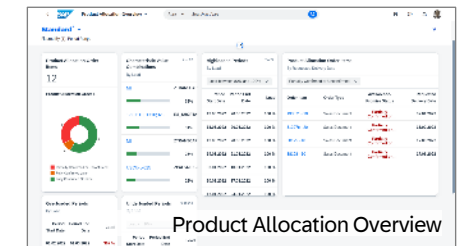
ATP Analytics

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



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

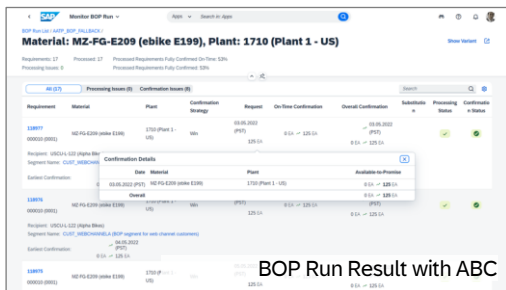
Supply Chain: Advanced Available-to-Promise Overview (2/2)



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



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

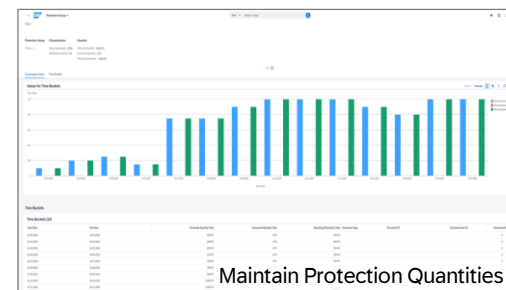
Supply Protection

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



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

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.

The screenshot shows the SAP Supply Protection configuration interface for an "Unnamed Object". The interface is divided into several sections:

- General Information:** Includes fields for Name, Plant, Material, and Pool Segment, each with a search icon. It also has checkboxes for Sales Document and Stock Transport Order.
- Planning Context:** Features a dropdown menu for Planning Level with options: Plant / Pool Segment (selected), Plant, Plant / Storage Location, and No Restriction by Own Protection. There is also an "Automatic Activation" checkbox.
- Planning Horizon:** Contains fields for Planning Period Type, Planning Start Date (e.g., 31.12.2024), and Planning End Date (e.g., 31.12.2024).
- Core Protection:** Includes fields for Core Characteristic, Value 1, Characteristic 2, and Value 2, each with a search icon.

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

The screenshot displays the SAP Supply Protection configuration interface for object SUP_ACC_2302. The interface is organized into several sections:

- Planning Object:** Includes fields for Name (SUP_ACC_2302), Plant (1010), and Material (ATP Test Material, Hands of...).
- Planning Context:** Includes Sales Document (checked), Stock Transport Order (unchecked), and Planning Level (Plant).
- Automatic Activation:** Includes Consumption Based On (Requested Delivery Date), Activate Automatically (unchecked), and Activate On (dd.MM.yyyy).
- Restriction by Own Protection:** A dropdown menu is open, showing options: No Restriction by Own Protection, Restriction Outside Planned Protection (selected), Restriction Outside Planning Horizon, and Restriction Outside Time Bucket.
- Planning Horizon:** Includes Planning Period Type (One Period), Planning Start Date (01.03.2021), and Planning End Date (31.03.2121).
- Core Protection:** Includes Core Characteristic, Characteristic 1, Value 1, Characteristic 2, and Value 2.
- Prioritized Characteristics:** A section at the bottom with a Create button.

At the bottom right, there are buttons for Draft updated, Save, and Discard Draft.

Supply Chain: Available-to-Promise

Business process scheduling – enhanced support for business processes

Logistics Cross Topics

Business Process Scheduling

2023
FPS2

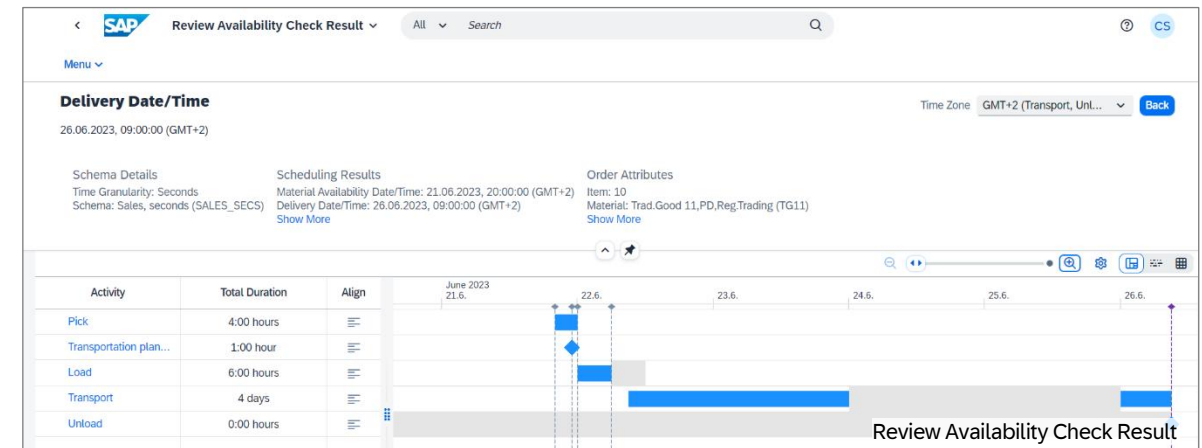
- Business process scheduling (BPS), flexible configurable scheduling solution in SAP S/4HANA
- BPS provides a framework to define, schedule logistical activities of different business processes
- Decouple business documents (for example, a sales order in the sales order scheduling process) from a concrete 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)

Change View "Scheduling Schema": Overview

Menu New Entries Copy As... Delete Undo Change Select All Select Block Deselect All Configuration Help

Dialog Structure	Scheduling Schema		
	Schema	Description	* Time Granularity
▼ Scheduling_Schema			
▼ Activities			
Attribute Determination	<input type="checkbox"/> SALES_DAYS	es schema, granularity days	Days
Activity Sequence	<input type="checkbox"/> SALES_DAYS_ADV_ATTRIB	Sales schema, granularity days, advanced attri...	Days
Date Types	<input type="checkbox"/> SALES_DAYS_W_PACK	Sales schema, granularity days	Days
Business Process Assignment	<input type="checkbox"/> SALES_SECS	Sales schema, granularity seconds	Seconds
	<input type="checkbox"/> SALES_SECS_ADV_ATTRIB	Sales schema, granularity seconds, advanced ...	Seconds
	<input type="checkbox"/> STOCK_TRANSP_DAYS	Stock Transport schema, granularity days, sop...	Days
	<input type="checkbox"/> STOCK_TRANSP_SECS	Stock Transport schema, granularity seconds, ...	Seconds
	<input type="checkbox"/> STOCK_TRANSP_SECS_ORIG_UN...	Stock Transport, granularity seconds, original ...	Seconds

Define Scheduling Schemas for BPS



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

The screenshot displays the SAP Fiori 'Review Availability Check Result' interface for material 'ebike E199'. The main view shows a network graph with nodes for 'Requested' and 'Confirmed' quantities. A 'Sales Product Allocation Check' dialog is open, showing requested and confirmed details. A 'Supply Demand-Based Capability Check' dialog is also visible, showing requested and confirmed quantities.

Item	Material	Plant	Confirmed Del. Date	Confirmed Quantity
1000	ebike E199ebike E199	17101710 -- Plant 1 - US	08.02.2023	150 EA

Sales Product Allocation Check

Requested

Req. Delivery Date: 08.02.2023
Requested Quantity: 200 EA
Material: MZ-FG-E199MZ-FG-E199 -- ebike E199ebike E199
Plant: 17101710 -- Plant 1 - USPlant 1 - US

Confirmed

Confirmed Del. Date	Confirmed Quantity
08.02.2023	150 EA

[Show Details](#)



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 is 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

The screenshot displays the SAP 'Review Availability Check Result' interface. On the left, a table lists four requirements for 'eBike City - power 180 (Kreuels TEC) - EN' (Material: EBIKE CITY C15, Plant: 1010 - Plant 1 DE). The requirements are summarized as follows:

Item	Material	Plant	Confirmed Del. Date	Confirmed Quantity
10	eBike City - power 180 (Kreuels TEC) - EN	1010 - Plant 1 DE	05.07.2022	15 / 15 PC
10	eBike City - power 180 (Kreuels TEC) - EN	1010 - Plant 1 DE	12.07.2022	12 / 12 PC
10	eBike City - power 180 (Kreuels TEC) - EN	1010 - Plant 1 DE	25.07.2022	10 / 10 PC
10	eBike City - power 180 (Kreuels TEC) - EN	1010 - Plant 1 DE	08.08.2022	50 / 50 PC

The main area shows 'Intermediate Results' for the selected requirement. A 'Capacity Product Allocation Check' dialog is open, displaying the following details:

Requested	Confirmed
Req. Delivery Date: 05.07.2022	Confirmed Del. Date: 05.07.2022
Requested Quantity: 15 PC	Confirmed Quantity: 15 PC
Material: EBIKE CITY C15 - eBike City - power 180 (Kreuels TEC) - EN	
Plant: 1010 - Plant 1 DE	

The interface also features a process flow diagram at the bottom with icons representing different stages of the availability check process.

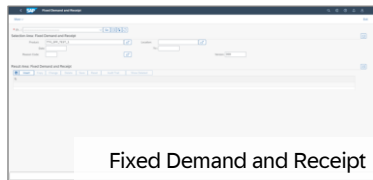
Supply Chain: Service parts distribution

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.

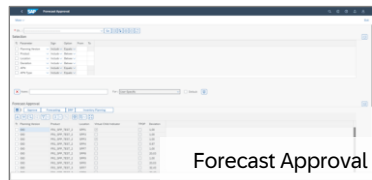


Fixed Demand and Receipt



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.

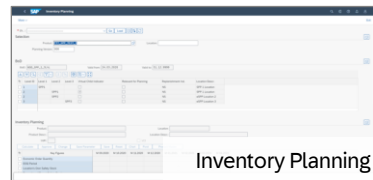


Forecast Approval



Inventory Planning

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



Inventory Planning



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**.



DRP Matrix



Deployment

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

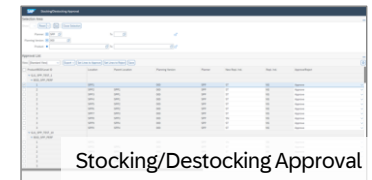


Deployment Logs



Inventory Balancing

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



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

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

SAP S/4HANA LoB Apps

- additional license

ext. Production Planning

ext. Engineering & Ops (PEO)

Env. Health & Safety (EHS)

Production Engineering

Production Planning

Production Operations

Manufacturing Options

Quality Management

Manufacturing Insights

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

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.

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

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

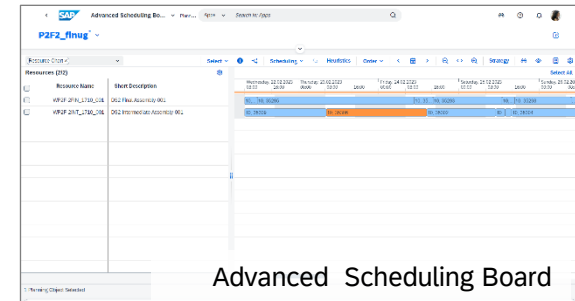
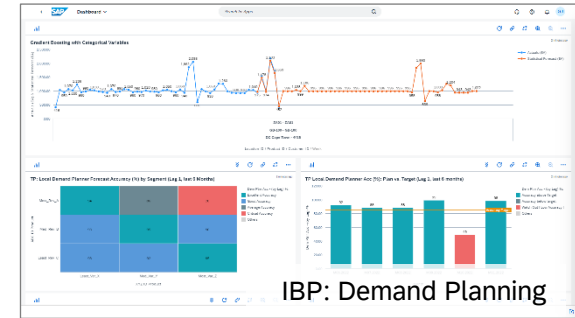
Plan products and components for internal and external procurement. Improve planning results through memory processing with MRP live, Predictive MRP and Demand Driven Replenishment

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

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

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

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



Manage Production Orders

Order ID	Material	Plant	Status	Start Date	End Date
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01
E1 100000	100000	1000	CONFIRM	2023-08-01	2023-08-01

Manufacturing: Business Area Overview

Modular Cloud LoB Solutions

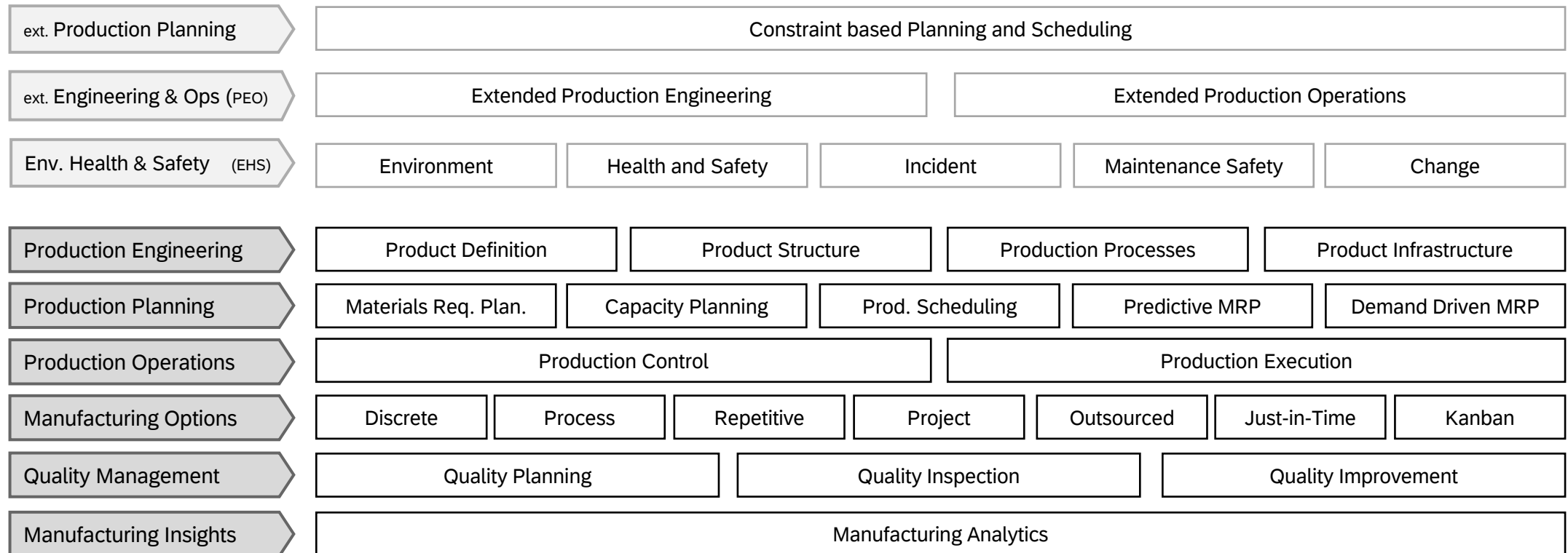
- additional license
- additional installation

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

SAP S/4HANA LoB Apps

- additional license

SAP S/4HANA Enterprise Management



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.

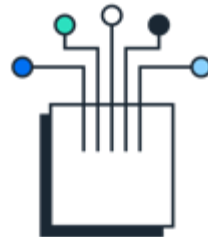


Product Structure

Structure products to manage components and assemblies.

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

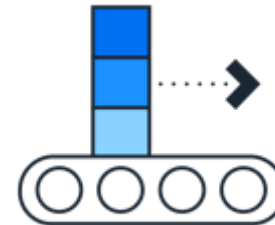
Engineering Change Management determines the valid BoM version for the respective date, production version, and purpose.



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.

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

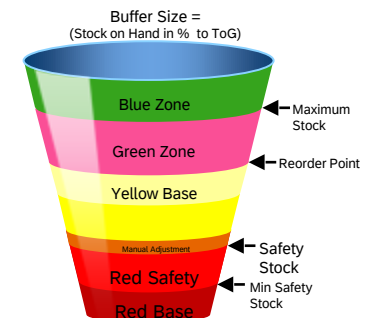
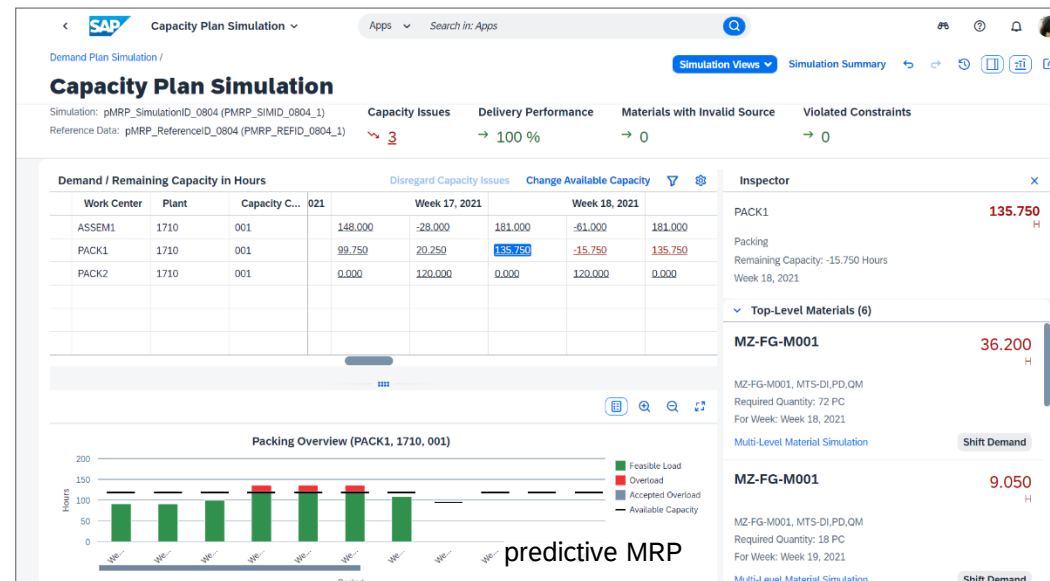
New mid-term planning solution to influence capacity planning through MRP prediction.

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



Manufacturing: Production Operations

Production Operations

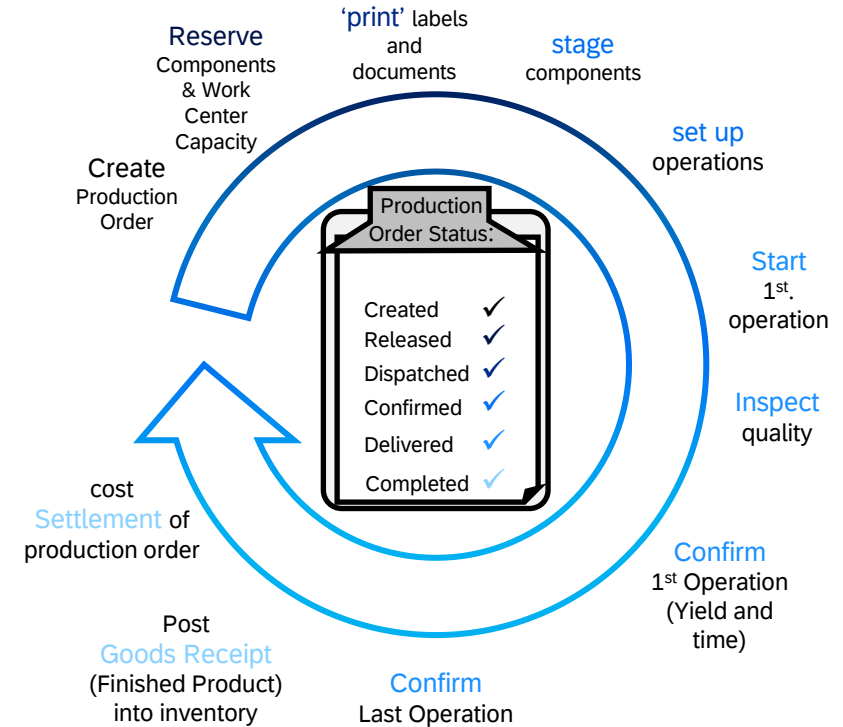
Production Control

Production Execution

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.

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.

Order	Material	Open Quantity	Status	Start	End	Progress of Operation	Issues
1023455	FG129 Extreme 50	1 PC	Confirmed	Tue, May 12, 2020 07:00	Tue, May 12, 2020 07:00	Posting GR (with optional Serialno assign (0040)) 1 of 1	
1023456	FG129 FH129.MTS-DI.PD.QM	1 PC	Confirmed	Tue, May 12, 2020 07:00	Tue, May 12, 2020 07:00	Packaging (0030) 1 of 1	
1052193	HTCM-RSC10 First Alert Fire Extinguisher-7268	1 EA	Confirmed	Thu, Aug 18, 2022 20:10	Thu, Aug 18, 2022 20:10	Packaging (0030) 1 of 1	
1054211	M2-FG-R300 Racing Bike R300	59 PC	Confirmed	Mon, Oct 17, 2022 04:18	Mon, Oct 17, 2022 04:18	Final Acceptance (0020) 59 of 59	
1054213	M2-FG-26XR1 26" In-Home Exercise Bike	67 PC	Confirmed	Mon, Oct 17, 2022 04:18	Mon, Oct 17, 2022 04:18	Final Acceptance (0020) 67 of 67	
1054222	M2-FG-R300 Racing Bike R300	94 PC	Confirmed	Mon, Oct 17, 2022 04:21	Mon, Oct 17, 2022 04:21	Final Acceptance (0020) 94 of 94	
1054224	M2-FG-26XR1 26" In-Home Exercise Bike	119 PC	Confirmed	Mon, Oct 17, 2022 04:21	Mon, Oct 17, 2022 04:21	Final Acceptance (0020) 119 of 119	
1019157	M2-FG-R200 Racing Bike R200	84 PC	Created	Mon, Feb 24, 2020 07:00	Thu, Mar 12, 2020 09:37	Assembly (0010) 0 of 84	
1019200	M2-FG-R200 Racing Bike R200	54 PC	Created	Mon, Feb 24, 2020 07:00	Mon, Feb 24, 2020 07:00		



Manufacturing Options

Manufacturing Options

Discrete

Production order-based manufacturing with reference to routings for manufacturing processes and Bill of Materials for components and sub assemblies



Process

Manage process manufacturing with a continuous flow of fluids and bulk materials. Use recipes to control the production process.



Repetitive

Simplified processing in repetitive scenarios with mass processing and streamlined financial controls in periodic actions.



Project

Control production via projects and network orders. Keep inventory in project specific stock and collect costs via WBS elements.



Outsourced

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)



Just-in-Time

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.



Kanban

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)



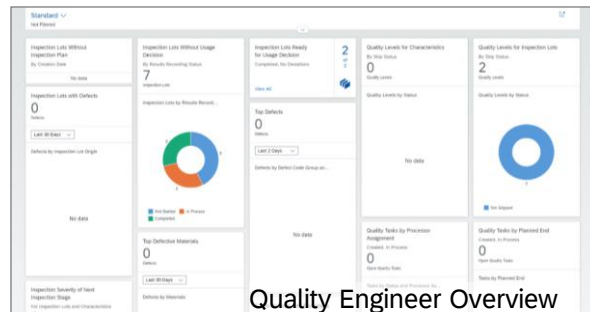
Manufacturing: Quality Management

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

The screenshot shows the 'Record Results (96)' interface in SAP. It features a table with columns for 'Inspector Lot', 'Material', 'Batch', 'Number of Samples', 'Number of Characteristics', and 'Recording Status'. The table lists several inspection lots with their respective materials and recording statuses. A sidebar on the right shows 'Progress of Characteristics' and 'Progress of Operations' for each lot.

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

The screenshot displays the 'Manage Defects and Follow-ups' interface in SAP. It shows a list of defects with columns for 'Defect Category', 'Defect Status', 'Defect Number', and 'Defect Date'. A red circle highlights the 'Follow-up Actions' button for a specific defect, indicating the next steps in the process.

Manage Defects and Follow-ups

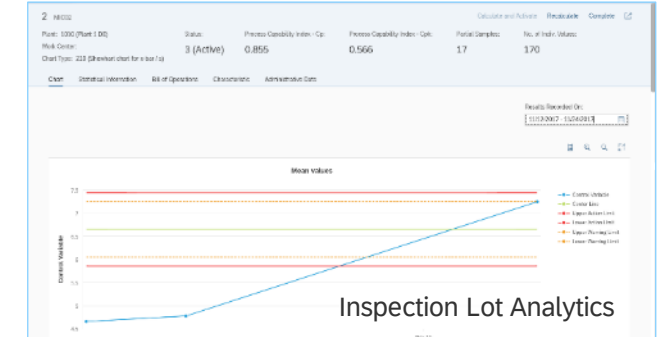
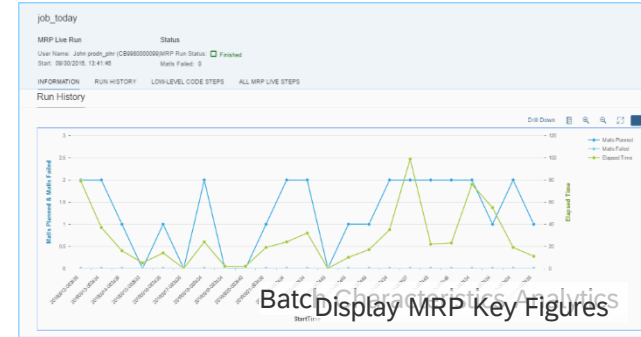
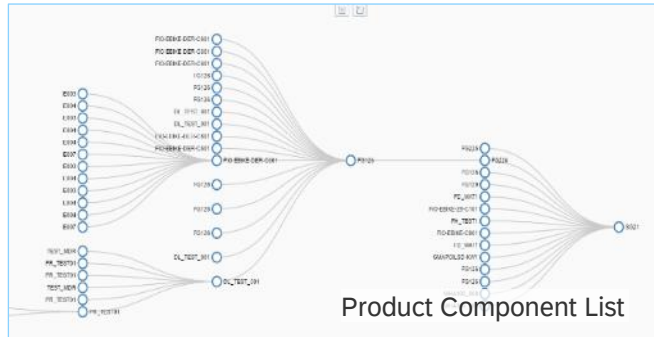
Manufacturing: Manufacturing Insights

Manufacturing Insights

Manufacturing Analytics

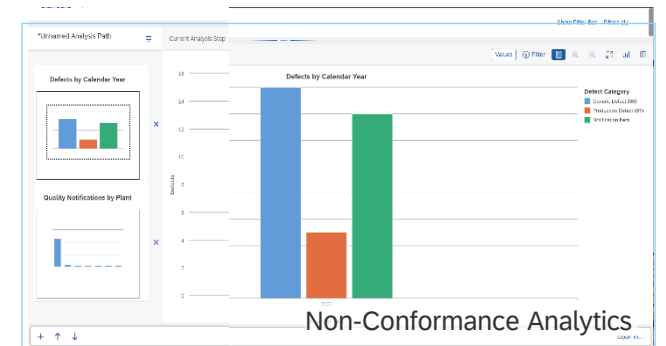
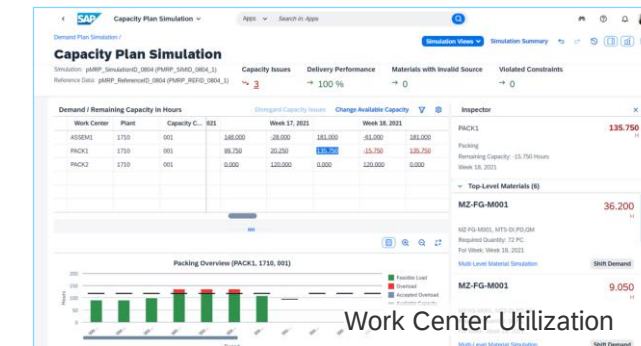
Although analytics and reporting are typically embedded within the manufacturing business processes, see examples of specific manufacturing analytics below.

- **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.



Material	Vendor	Need Order in Working Days	Quantity in Lager/Stock (PCS)	Conversion Factor	Quantity in Base Unit	Top Bill Item	Stock Availability (Next 21 Days)
FI0-TOP-M03	Electronics A	11 2 days	40				
FI0-TOP-M04	Electronics B	11 5 days	1	1 PAL = 100 EA	100 EA	2	
FI0-TOP-M05	Electronics C	11 7 days	3	1 PAL = 100 EA	300 EA	3	
FI0-TOP-M06	Electronics D	11 9 days	2	1 PAL = 100 EA	200 EA	5	
FI0-TOP-M07	Electronics E	11 6 days	1	1 PAL = 200 EA	200 EA	3	

Optimal Order and Material Coverage



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

Manufacturing: Extended Production Planning

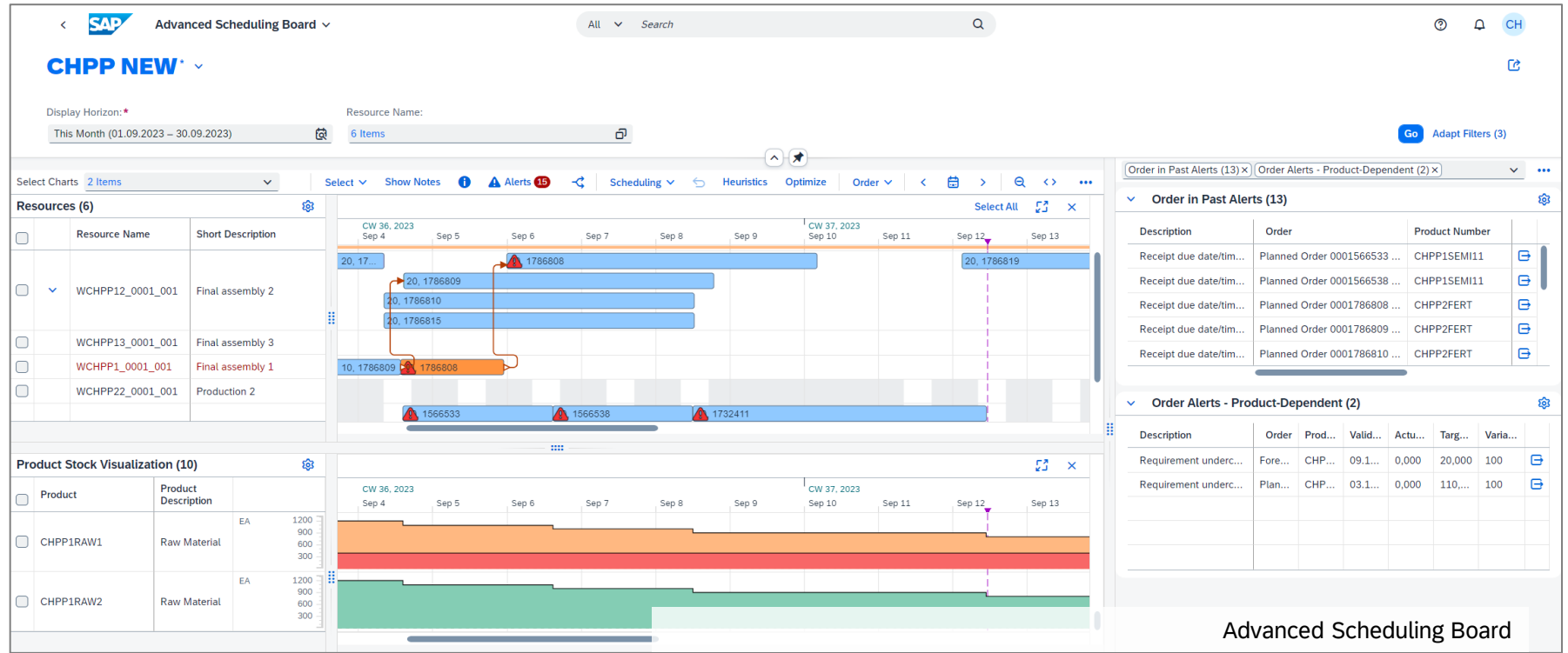
ext. Production Planning

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.



Advanced Scheduling Board

Manufacturing: Ext. Production Engineering & Operations (PEO)

ext. Production Engineering & Ops

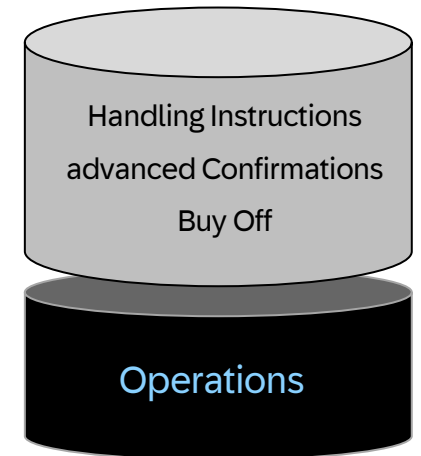
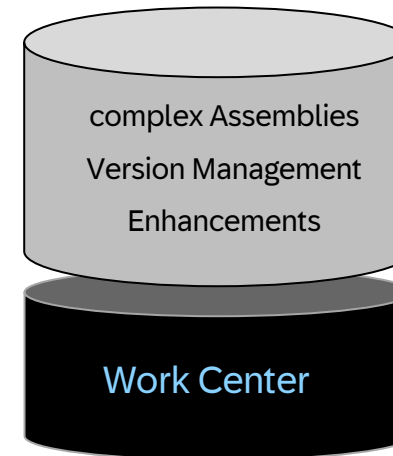
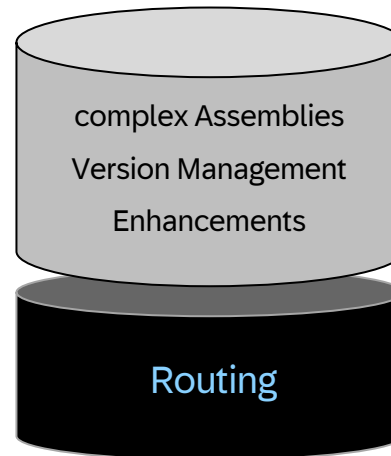
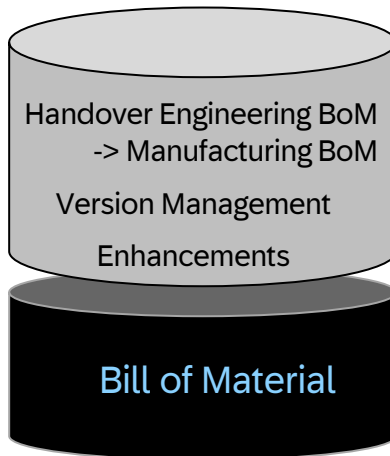


Extended Production Engineering

Extended Production Operations

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

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



Manufacturing: Ext. Production Engineering & Operations (PEO)

ext. Production Engineering & Ops

Extended Production Engineering

Extended Production Operations

Production Engineering

Manufacturing Change Management

Monitor Engineering/ Manufacturing Snapshots

Eng. Change Notice

Mfg. Change Record

Change Impact Analysis

BOM / Routing Version Management

BOM Management

Manage BOMs

Visual Enterprise Manufacturing Planner

Production Process Planning

Prod. Integration Portal (PIP)

Manage Shop Floor Routings

- Operation/Activities
- 3D Visuals
- Work Instructions
- Data Collection
- Qualification required
- PRTs
- Buyoffs
- ...

Planning Master Data

Templates and Favorites

Manage Standard Texts

Manage Buyoff Templates

Production Operations

Production Order Management & Control

Shop Floor Order

- Operation/Activities
- 3D Visuals
- Work Instructions
- Data Collection
- Qualifications required
- PRTs
- Buyoffs
- ...

Production Monitoring

Production Order Change Management

Complex Assembly Execution

Work Assignment & Work Queues

Nonconformance / Defect Handling

Perform Operations and Activities

Tool Usage Tracking

Action Log & Genealogy

Model-Unit-Effectivity
Major Assemblies/Installation Kits
Reference Designators

Manufacturing Reference Structure

Variant Configuration
Disassembly
Product Manufacturing Information (PMI)

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

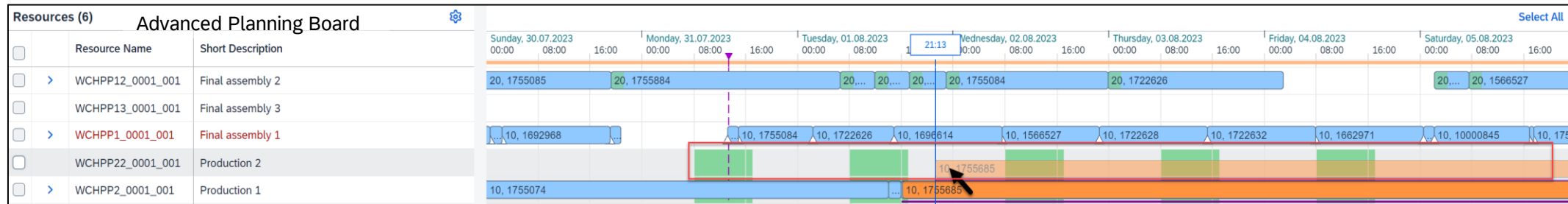
- Hand-over of planning information to shop floor
- Capturing of object specific free text information in PP/DS
- Structuring of notes by usage of multiple note types
- Exchange of planning relevant information with shop floor by integration with PP long texts
- Improve information flow within and across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

The screenshot displays the SAP S/4HANA interface for managing order notes. The main window shows the 'Product View: CHP110FERT, Planning Version 000' for a 'Planned Order Header' with ID '353774'. A modal dialog titled 'Create Inhouse Prod Order Note' is open, allowing the user to create a new note. The dialog fields are: 'Title: Inhouse Prod Order Note', 'Language: English', and 'Text: Test series order'. The background view shows a list of notes and long texts, including 'Inhouse Prod Order Note (1)' and 'Planned Order Long Text (Sync)'. The bottom of the screen shows a status bar with the text 'Creation and administration of order notes in PP/DS' and buttons for 'Draft updated', 'Save', and 'Cancel'.

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

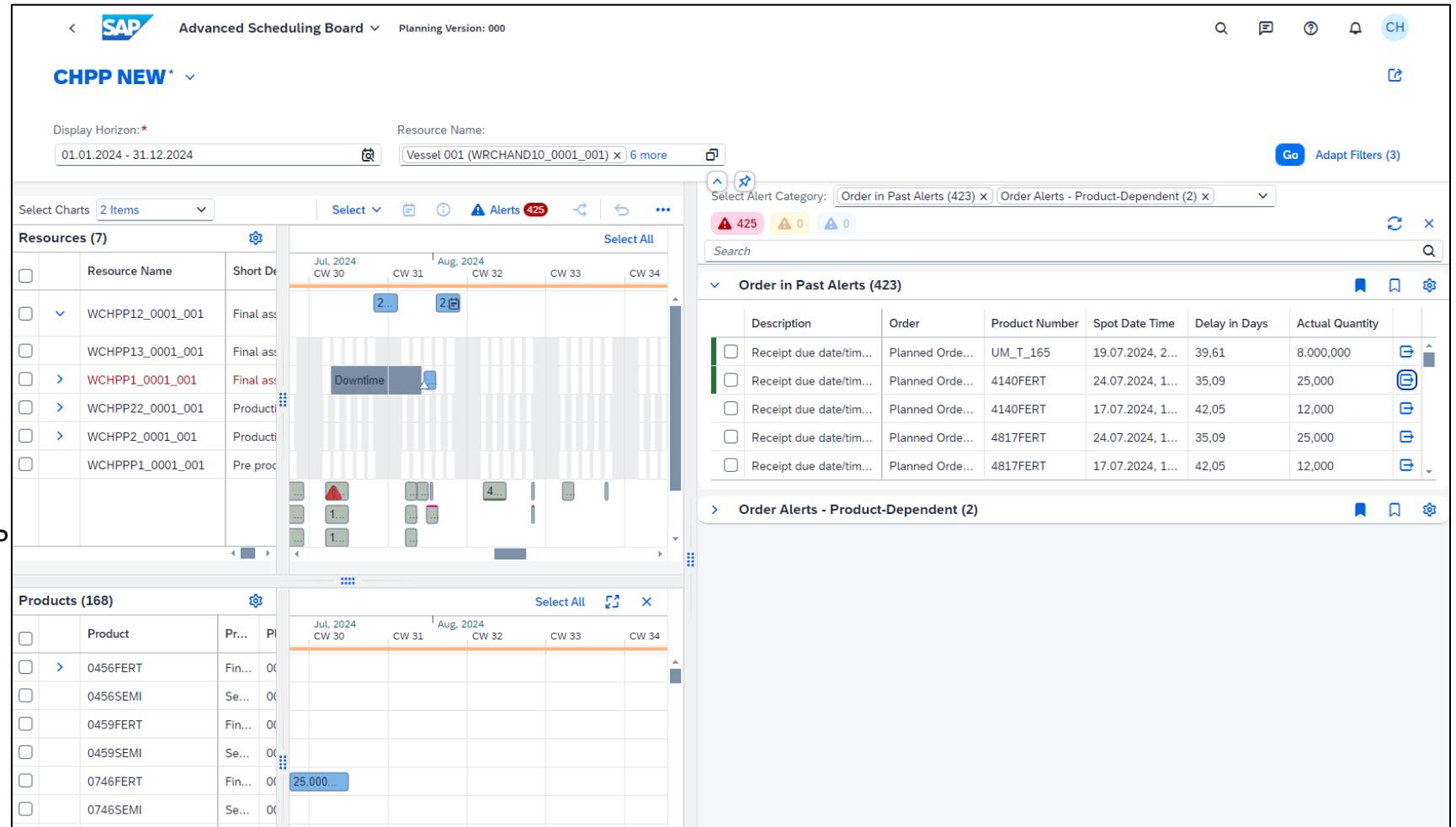
Advanced Analytics for
prod. Plan. / detailed scheduling

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

The screenshot shows a table with columns for utilization percentage, capacity, and work center details. An 'App Settings' dialog box is open, showing 'Area Of Responsibility' with options for 'Plant and MRP Controller' and 'Work Center Group'.

Utilization	Capacity	Work Center
97.310 %	195.550 %	CW39, 2023
49.800 %	113.33	
37.540 %	88.88	
15.320 %	42.22	
12.260 %	50.00	

- Manage Work Center Capacity:

Include Sales Order data for MTO in Operations Table

The screenshot shows the 'Operations' table in SAP. It lists various operations for 'STD_ELECTRIC_CAR' with columns for Order, Order Category, Operation, Action, Product, Operation Start, Operation End, Operation Status, Planning Status, Capacity Requirement, Operation Quantity, Sales Order, and Sales Order Item.

Order	Order Category	Operation	Action	Product	Operation Start	Operation End	Operation Status	Planning Status	Capacity Requirement	Operation Quantity	Sales Order	Sales Order Item
4000000213	Planned Order	0020	Reschedule	STD_ELECTRIC_CAR	27.09.2023, 08:00:00 Europe, London	27.09.2023, 16:00:00 Europe, London	Created	Not Dispatched	8,000 H	2	EA	
1000284	PP Production Order	0020	Reschedule	STD_ELECTRIC_CAR	27.09.2023, 08:00:00 Europe, London	04.10.2023, 12:00:00 Europe, London	Created	Not Dispatched	40,000 H	10	EA 5422	10
1000283	PP Production Order	0020	Reschedule	STD_ELECTRIC_CAR	26.09.2023, 09:00:00 Europe, London	02.10.2023, 11:00:00 Europe, London	Released	Not Dispatched	20,000 H	5	EA 5419	10
4000000214	Planned Order	0020	Reschedule	STD_ELECTRIC_CAR	04.10.2023, 10:00:00 Europe, London	04.10.2023, 14:00:00 Europe, London	Created	Not Dispatched	4,000 H	1	EA	
4000000215	Planned Order	0020	Reschedule	STD_ELECTRIC_CAR	11.10.2023, 10:00:00 Europe, London	11.10.2023, 14:00:00 Europe, London	Created	Not Dispatched	4,000 H	1	EA	

- Component availability date in Capacity Scheduling table

The screenshot shows the 'Capacity Scheduling Table' in SAP. It includes filters for Evaluation Horizon (01.09.2023 - 30.09.2023), Work Center, Product, and Status. Below the filters is a table of orders with columns for Order, Product, Quantity, Requirement Date, Receipt Date, Work Center, Operation Start, and Capacity Required.

Order	Product	Quantity	Requirement Date	Receipt Date	Work Center	Operation Start	Capacity Required
3319	SG1 CP		07.09.2023	04.09.2023	TURNING2	04.09.2023	

Manufacturing: Tank Planning

Filling, draining, cleaning tanks with on order

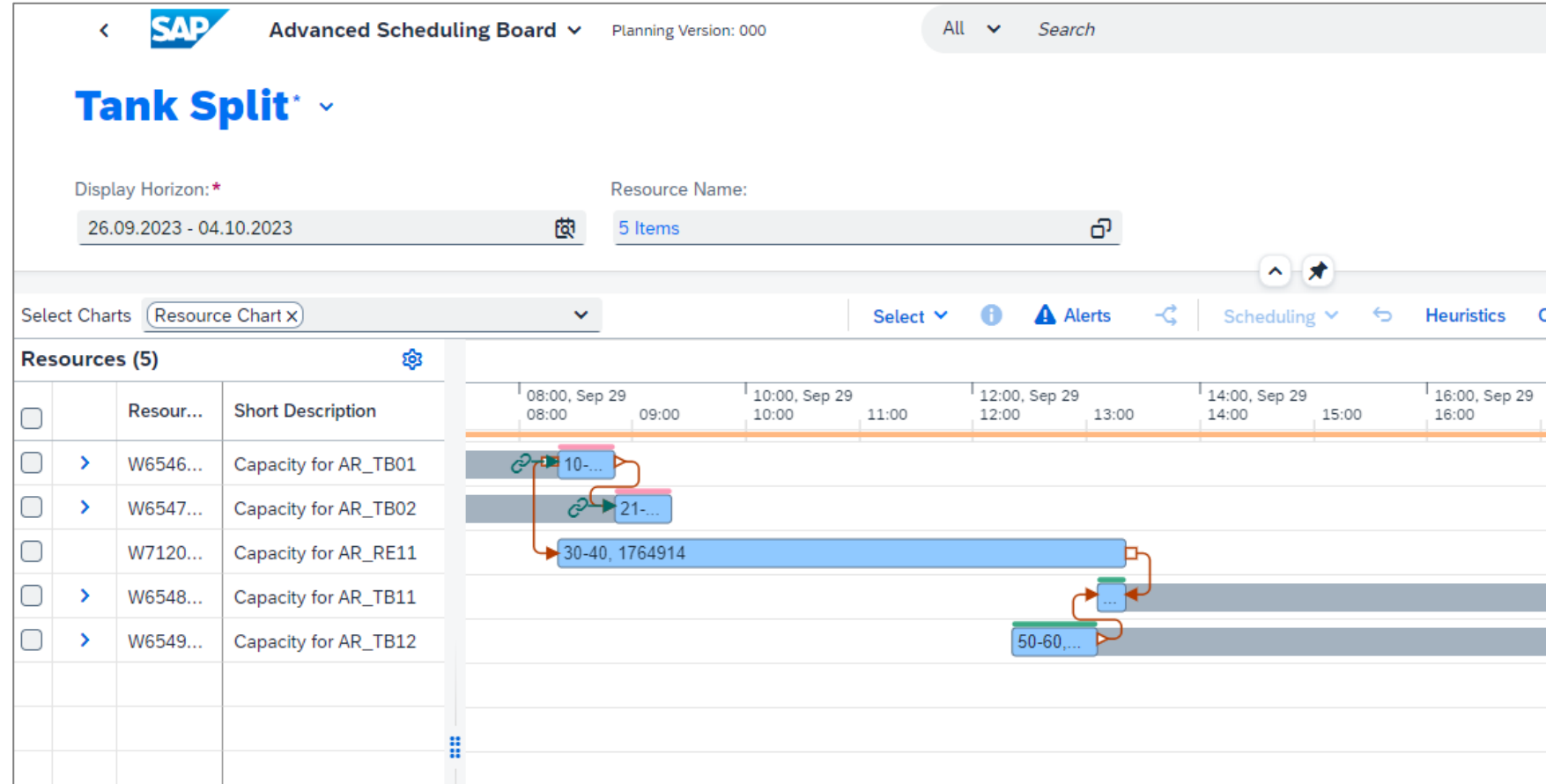
- Fill the output quantity of one order into multiple storage tanks
- Drain the input quantities of one raw material from multiple storage tanks
- Select the storage tanks
- Define the quantities per storage tank
- Define the sequence of storage tanks

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

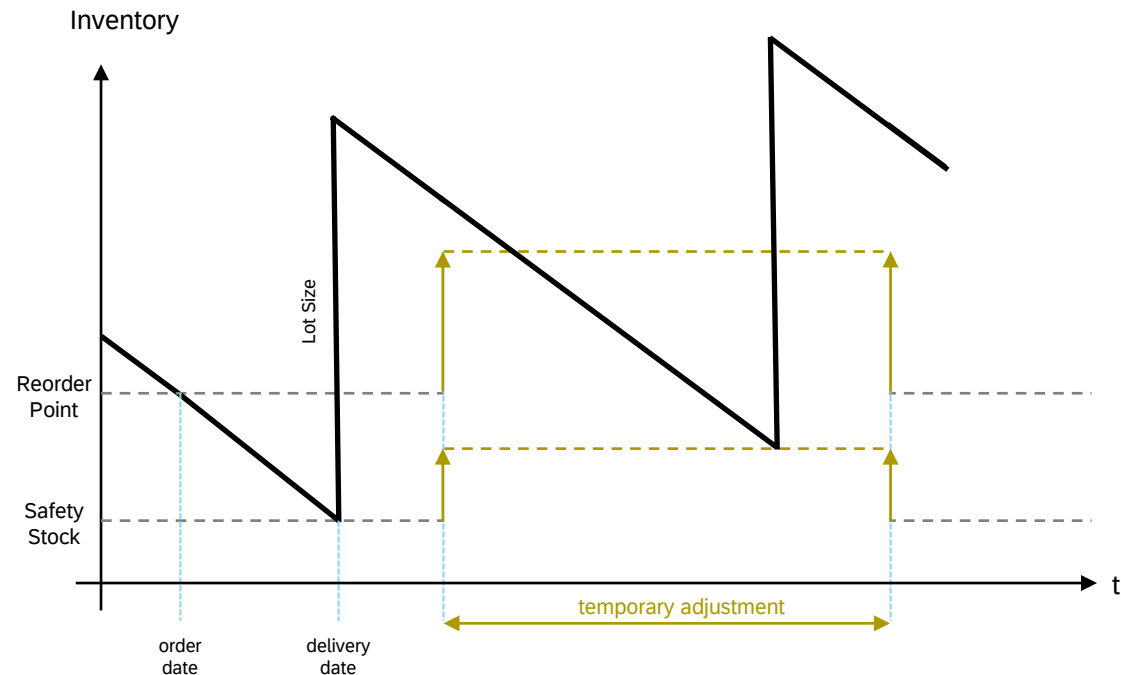


Manufacturing: Time dependent Safety Stock and Reorder Point

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)



SAP Maintain Time-Dependent Stock ...

Standard

Materials (49)

Material Number

MRP Area: 1710
MRP Type: PD (Forecast Consumption, No Planning Time Fence)
MRP Safety Stock Method: (Static Safety Stock)
MRP Controller: MZ3

MZ-FG-R13

Material Description: R13 Bike
MRP Plant: 1710
MRP Area: 1710
MRP Type: PD (Forecast Consumption, No Planning Time Fence)
MRP Safety Stock Method: (Static Safety Stock)
MRP Controller: MZ4

MZ-FG-WL03

Material Description: Material MZ-FG-WL03
MRP Plant: 1710
MRP Area: 1710
MRP Type: PD (Forecast Consumption, No Planning Time Fence)
MRP Safety Stock Method: (Static Safety Stock)
MRP Controller: MZ4

MZ-RM-C900-01

Material Description: Frame 900
MRP Plant: 1710
MRP Area: 1710
MRP Type: PD (Forecast Consumption, No Planning Time Fence)
MRP Safety Stock Method: (Static Safety Stock)

MZ-FG-R13
R13 Bike

MRP Plant: 1710
MRP Type: PD (Forecast Consumption, No Planning Time Fence)
MRP Safety Stock Method: (Static Safety Stock)

Validity Intervals

Validity Intervals (3)

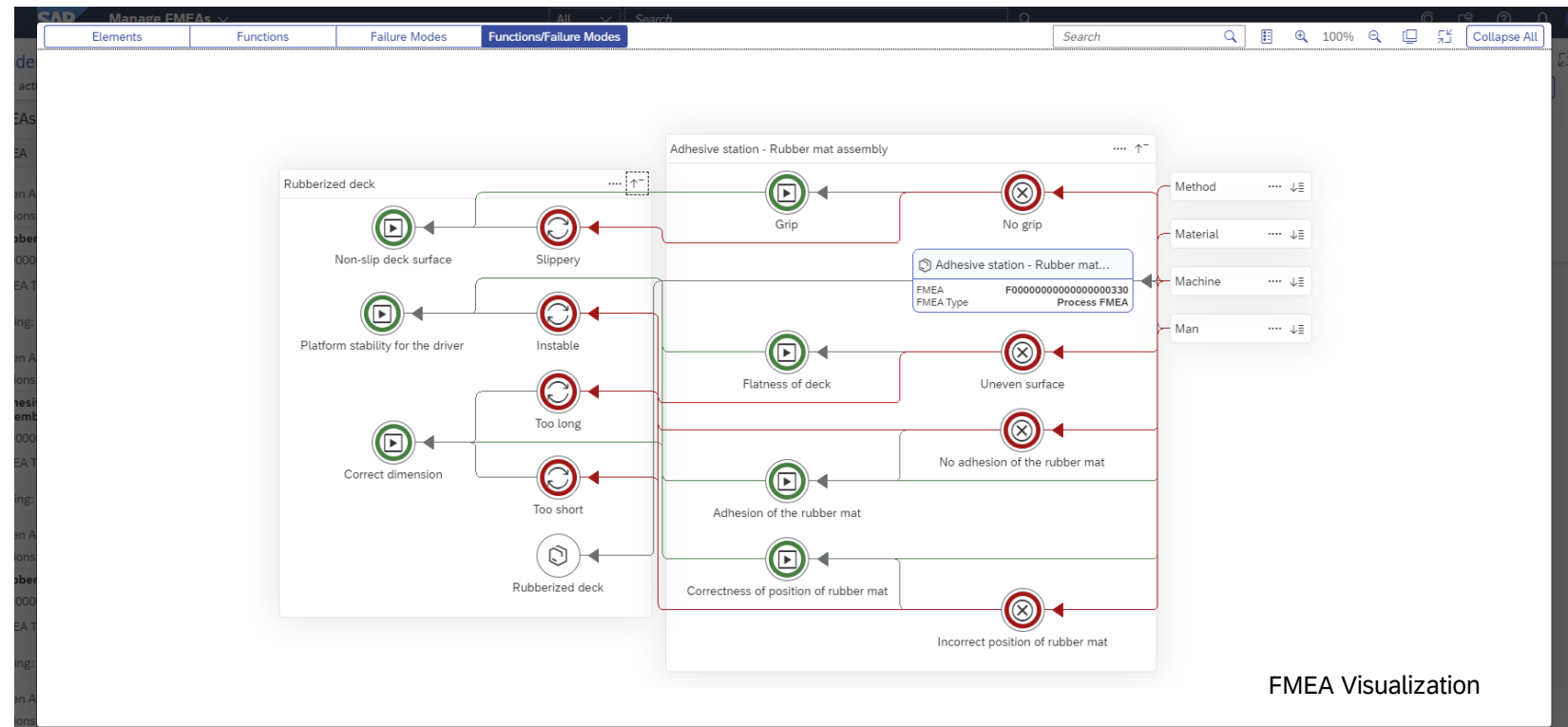
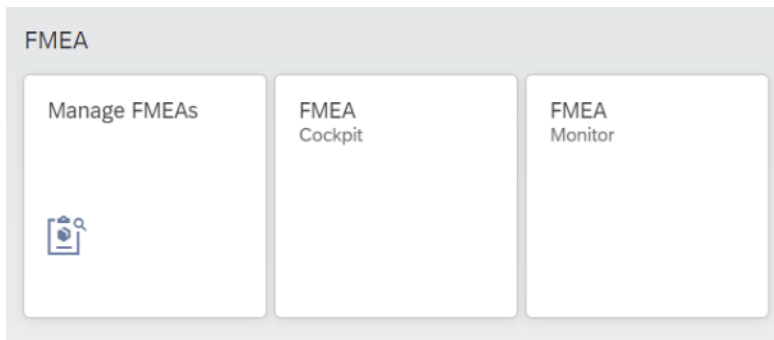
Date From	Date To	Safety Stock	Reorder Point	Target Stock	Max. Stock	Safety DOS
03/01/2023	03/31/2023	300 PC	600 PC	0 PC	0 PC	0.00 d
04/01/2023	04/30/2023	500 PC	800 PC	0 PC	0 PC	0.00 d
05/01/2023	12/31/9999	300 PC	600 PC	0 PC	0 PC	0.00 d

Time-Dependent Stock Levels

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

The screenshot displays the SAP Advanced Scheduling Board (PPDS) interface. At the top, there's a navigation bar with the SAP logo, 'Advanced Scheduling Board', and a search bar. Below this, the main area is titled 'CHPP NEW'. It includes a 'Display Horizon' set to 'This Month (01.09.2023 – 30.09.2023)' and a 'Resource Name' field with '6 Items'. The interface is divided into several sections:

- Resources (6):** A table listing resources with columns for Resource Name and Short Description.

Resource Name	Short Description
WCHPP12_0001_001	Final assembly 2
WCHPP13_0001_001	Final assembly 3
WCHPP1_0001_001	Final assembly 1
WCHPP22_0001_001	Production 2
- Product Stock Visualization (10):** A Gantt chart showing stock levels for products CHPP1RAW1 and CHPP1RAW2. The chart has a vertical axis for stock quantity (0 to 1200) and a horizontal axis for time (Sep 4 to Sep 13). CHPP1RAW1 is shown in orange and red, while CHPP1RAW2 is shown in green.
- Order Alerts:** Two panels on the right side. The top panel, 'Order in Past Alerts (13)', shows a table of alerts with columns for Description, Order, and Product Number. The bottom panel, 'Order Alerts - Product-Dependent (2)', shows a table with columns for Description, Order, Prod..., Valid..., Actu..., Targ..., and Varia....

At the bottom right of the interface, the text 'Advanced Scheduling Board' is displayed.

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

2023
FPS2

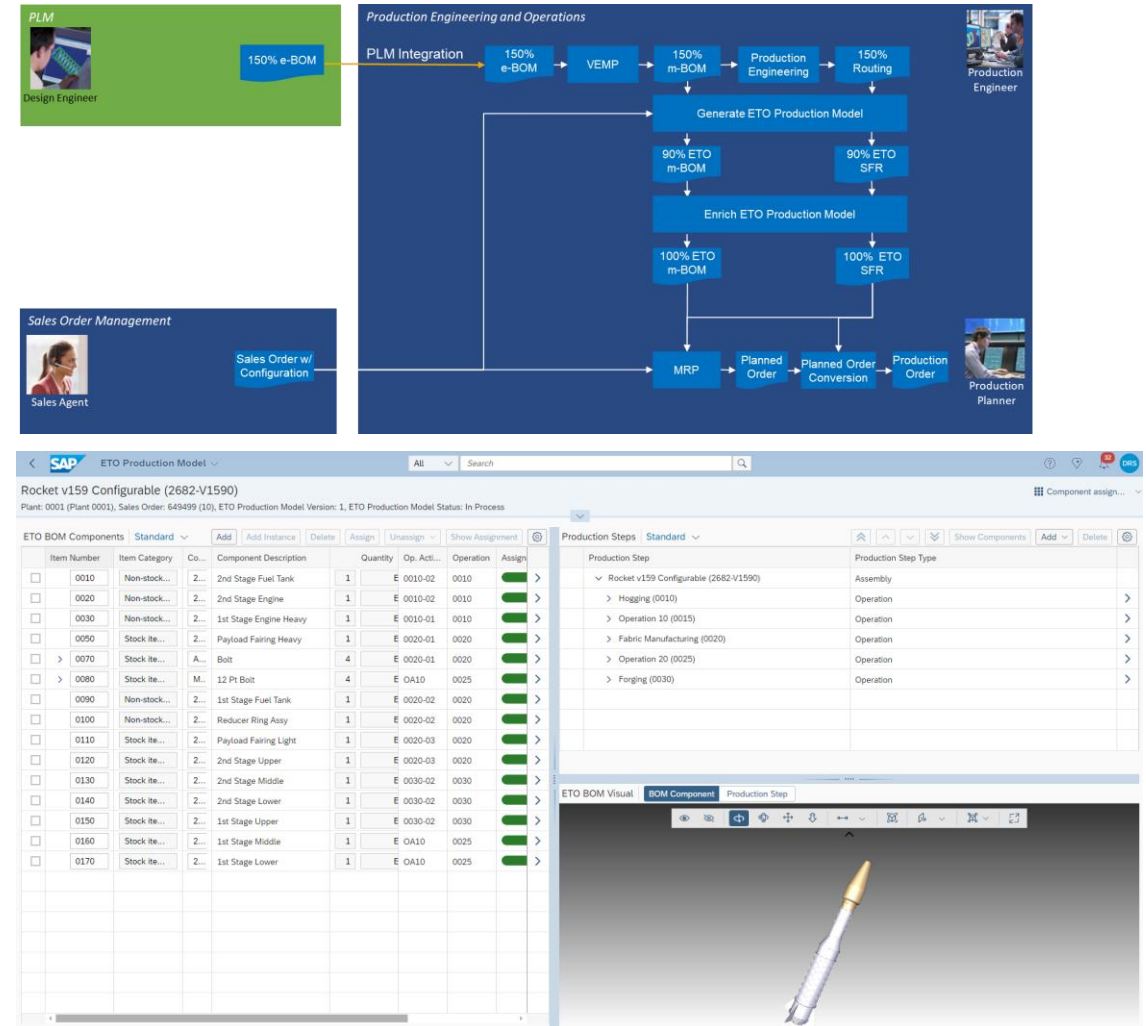
Sales Order specific
BoM and Routing (PEO)

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)

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

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

Digital Manufacturing
Digital Supply Chain



Manufacturing & Planning Optimization



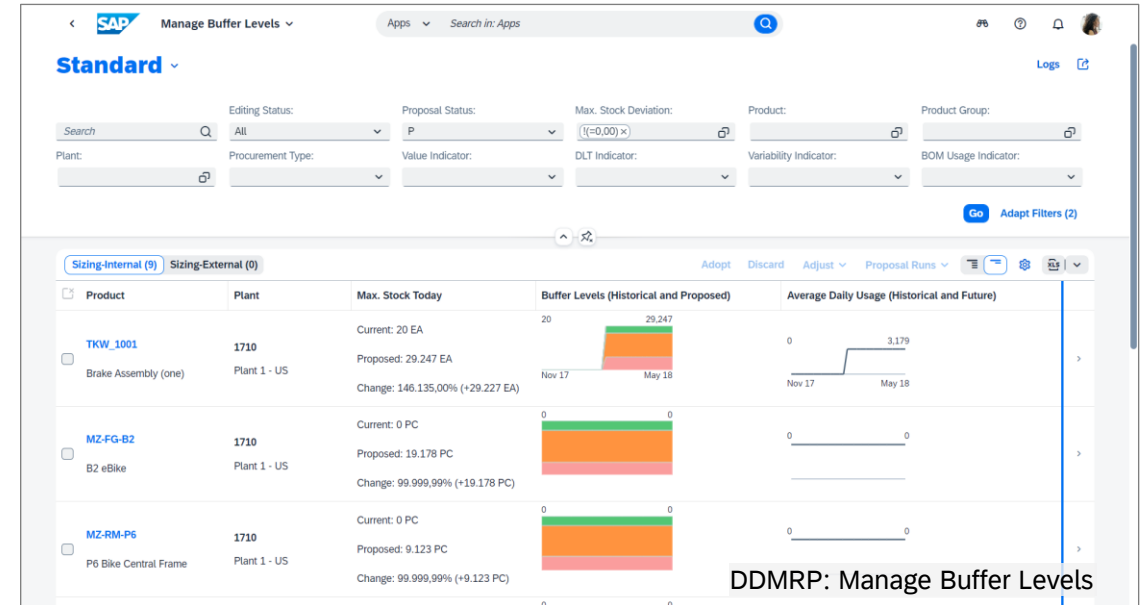
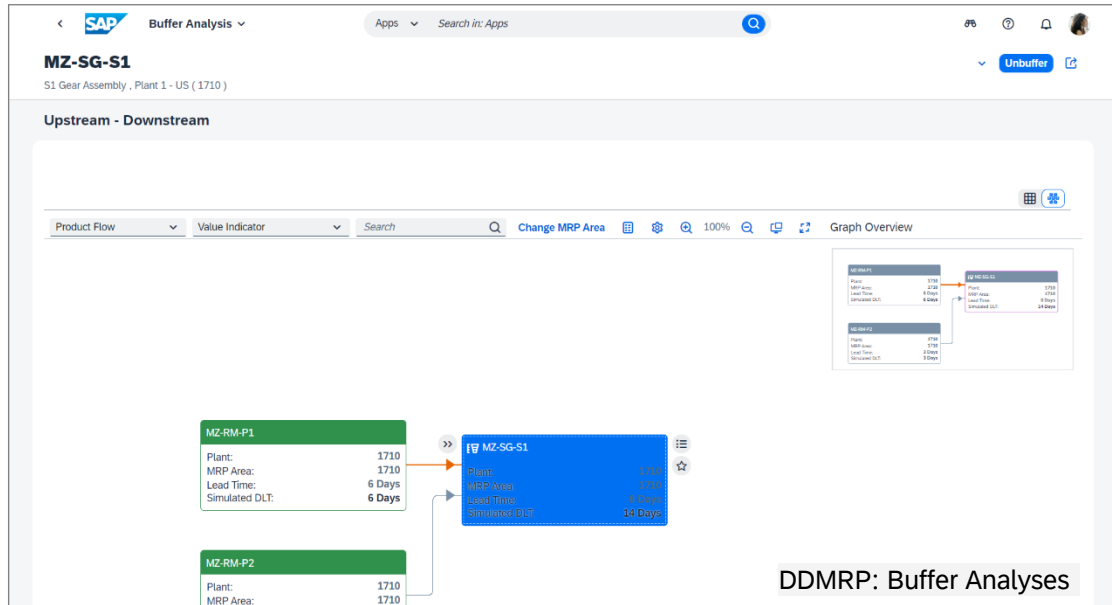
Core Manufacturing, Integration, Transparency & control



Manufacturing: Demand-driven MRP

Production Planning

Demand Driven Replenishment



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?**



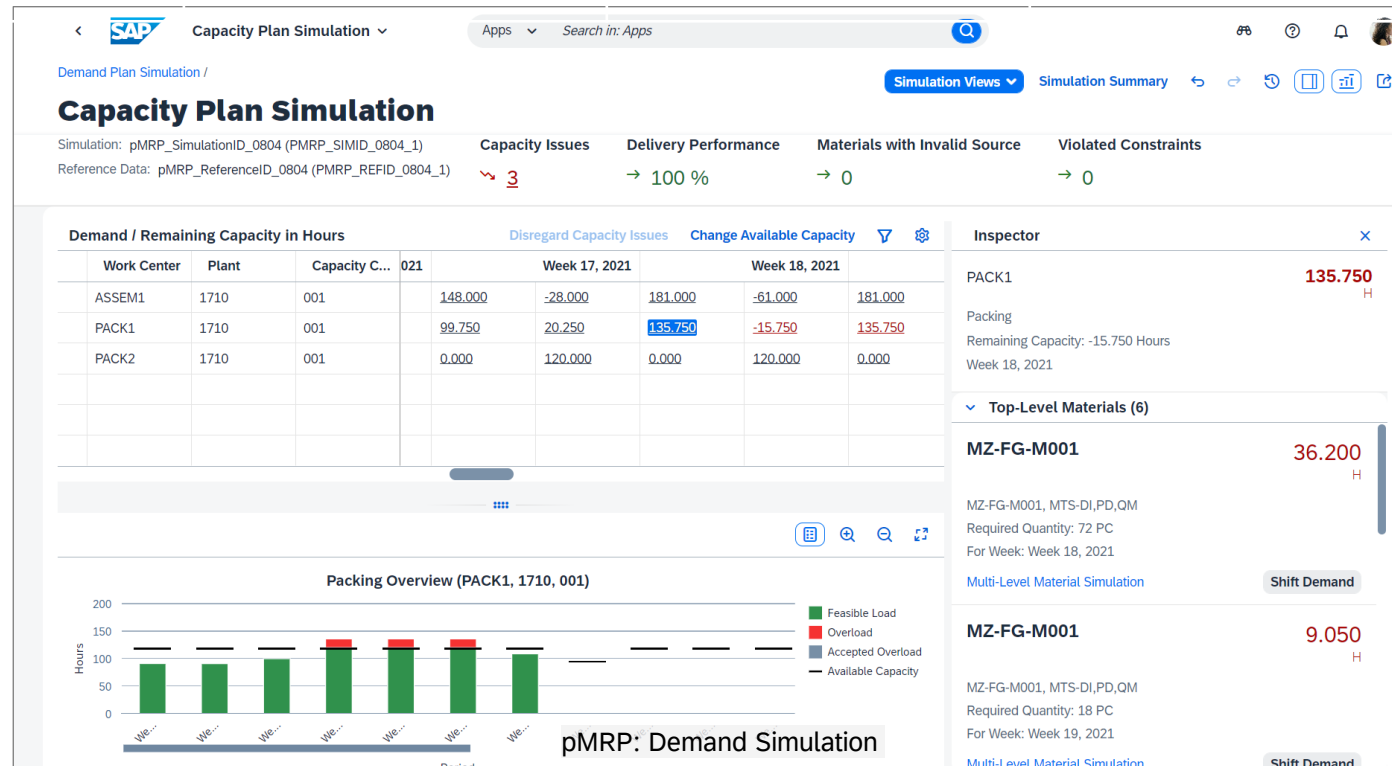
Simulate

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



Manufacturing: Production Planning Optimizer

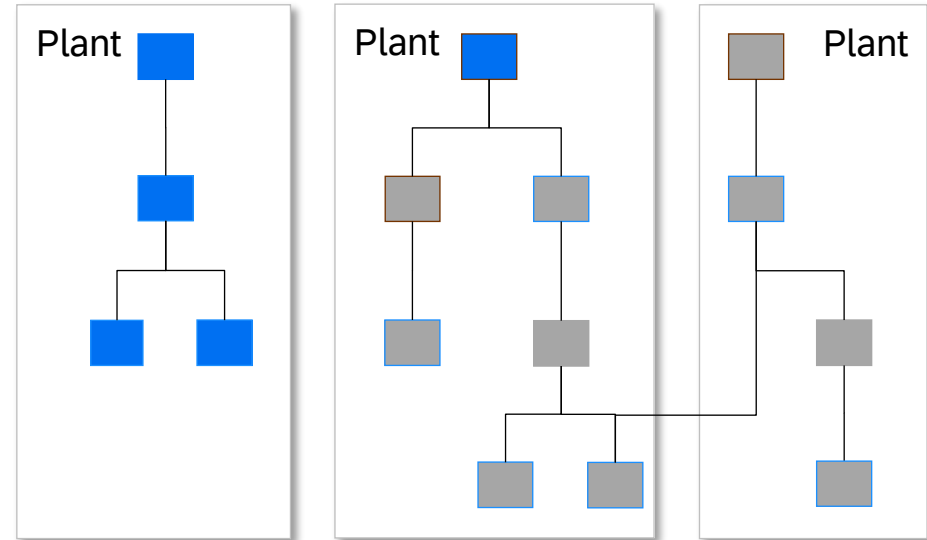
Production Planning (to cover net demand by creating receipts)

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

*MRP /
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

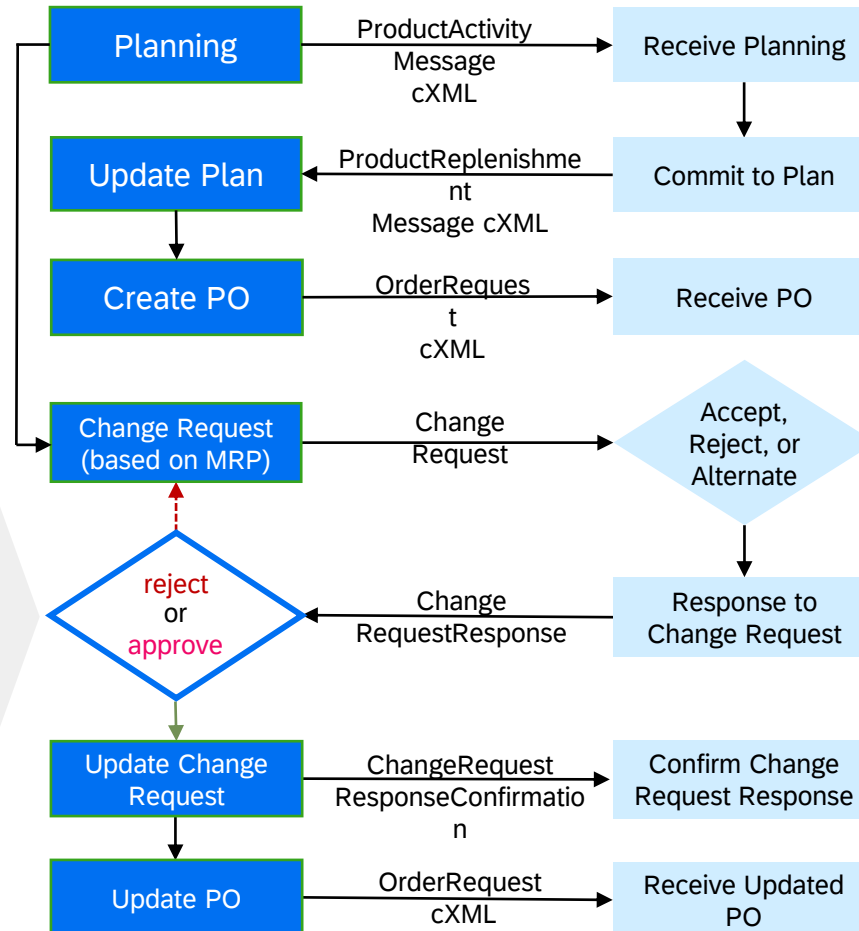
penalty on delay	inventory carrying costs
safety stock violations	
non delivery costs	
transportation costs	
set up costs	
etc.	

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



SAP Business Network - Enterprise Account TEST MICE

Workbench

3 Orders | 259 Order change requests | 22 Changed orders | 104 Order change requests | 2 Items to confirm | 2 Items to ship

Order change requests (104)

Customer	Location	Order No.	Item No.	Part No.	Original Delivery Date	Customer Proposed Delivery Date	Supplier Proposed Delivery Date
S4Lean-TEST	1010	4500042466	180	2451	Oct 15, 2021	Oct 4, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	150	2451	Oct 20, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	150	2451	Oct 15, 2021	Oct 4, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	130	2451	Oct 15, 2021	Oct 4, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	130	2451	Oct 20, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	90	2451	Oct 20, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	30	2451	Oct 15, 2021	Oct 4, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	140	2451	Oct 18, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	80	2451	Oct 18, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	210	2451	Oct 15, 2021	Oct 4, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	210	2451	Oct 20, 2021	Nov 2, 2021	mm/dd/yyyy
S4Lean-TEST	1010	4500042466	90	2451	Oct 20, 2021	Nov 2, 2021	mm/dd/yyyy

SAP Ariba Business Network: Order change request

SAP S/4HANA: Create MRP 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

SAP Quality Issue Resolution

SAP S/4HANA Quality Management

Quality Notification

Other Sources

SAP Business Technology Platform

Manufacturing: Delta Scope Summary 2023

2023
FPS2

Ext. Production Engineering

③

- **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

③

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 analyze 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

- ③ additional license
- ⚙️ additional installation

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

Sales Force Support

Manage customer engagement cycles with embedded presales capabilities for lead, opportunities, and relevant tasks.

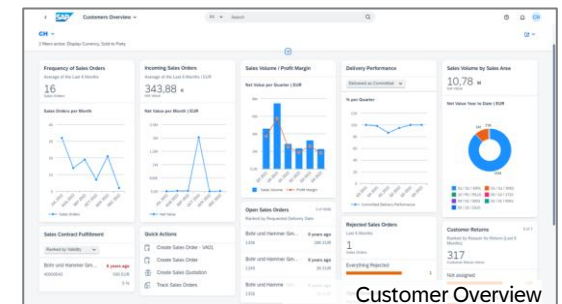
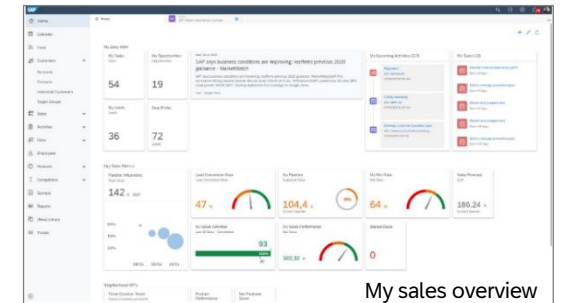
Order and Contract Management

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.



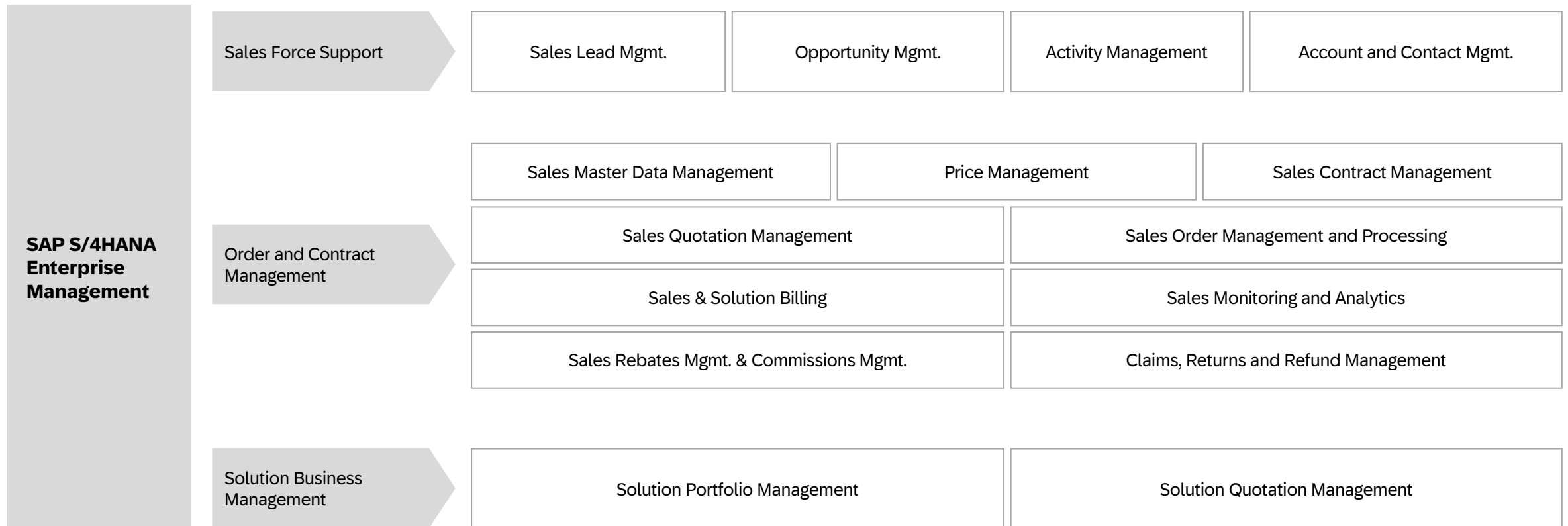
Sales: Business area overview

Modular Cloud LoB Solutions

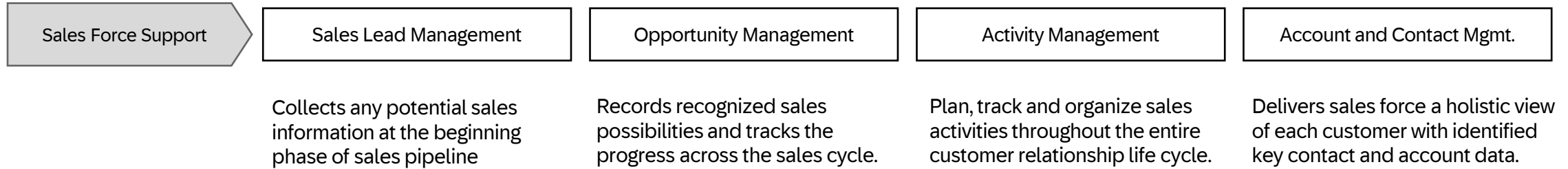
③ additional license

⚙️ additional installation

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



Sales: Sales Force Support



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](#))

Lead: 557, srv04, Andersons and Sons

Lead Details	Parties Involved	Notes	Assessments	Products	Attachments	Transaction History
	Contact Person	332037	Mr. Bowen Zhang	45 45 Lispenard Street 7E / New York NY 1...		
	Contact Person	9980004970	Ms. Barbara Lee			
	Contact Person	WDF1_CTC_1	WDF1 Tester 1	TC Road 12 / Los Angeles CA 12345		
	Contact Person	WDF1_CTC_2	WDF1 Tester 2	TC Road 12 / Los Angeles CA 12345		
	Employee Responsible	9980011144	Ms. Barbara Lee			
	Sales Prospect	C0016	Andersons and Sons	TC Road 12 / Los Angeles CA 12345		

Notes

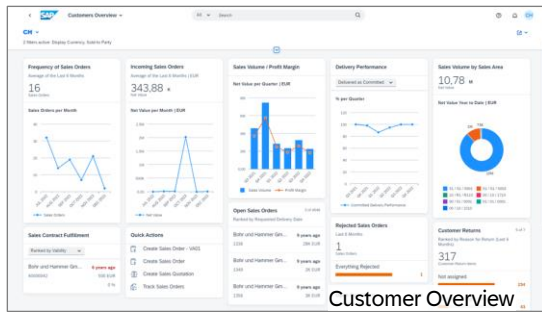
Assessments

Actions	ID	Description	Version
	LEAD QUESTIONNAIRE	Testing	

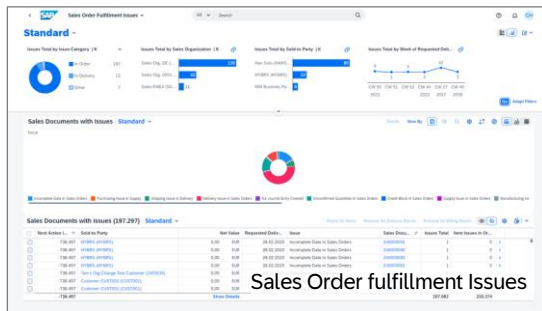
Create Lead

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

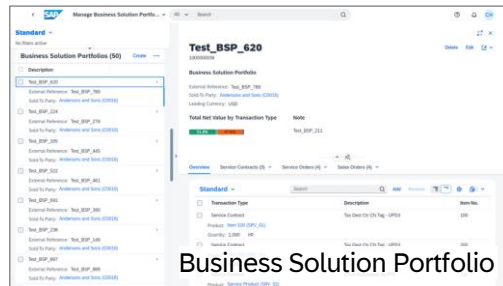
Monitor and analyze core sales business processes, from quotations and contracts, to sales orders, including their fulfillment up to invoices. Sales KPIs integrated in SAP Analytics Cloud.

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



Solution Portfolio Management

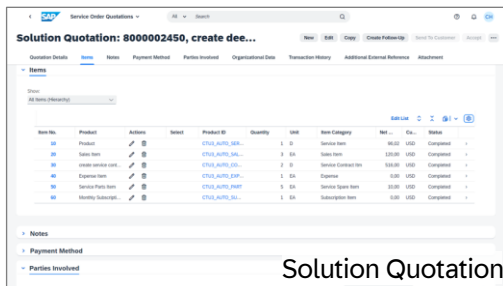
Business solution portfolios bundle service contract items, service order items, sales order items, and subscription contract items that are related to a solution and its customer.

- 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

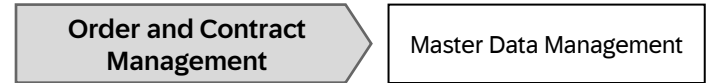
Solution Quotation Management

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



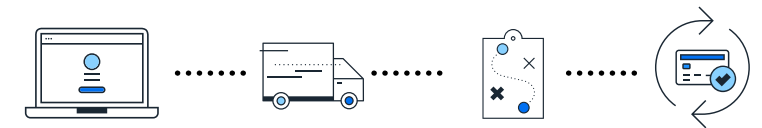
Business Partner Multiple Addresses Adoption in Order-to-Invoice Process

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

Order and Contract Management

Price Management

- 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](#)

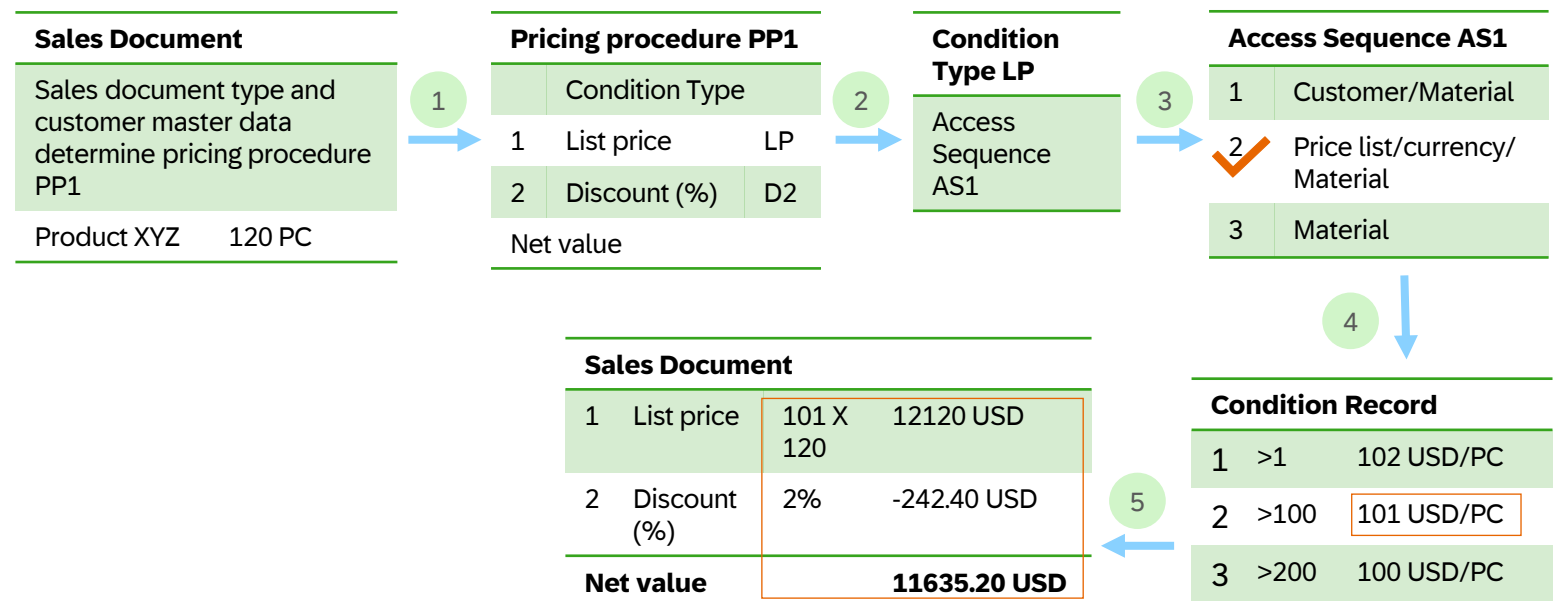
SAP Manage Prices - Sales

Standard

Editing Status: All Filter Method: Filter with Applicable Crit... Condition Type: Customer Discou... Key Combination: Valid On: dd.MM.yyyy Condition Record No.: Approval Request ID:

Release Status: Customer: Sales Organization: Distribution Channel: Adapt Filters (3)

Condition Type	Condition ...	Customer	Sales Organization	Distribution Channel	Valid From	Valid To	Condition Amount or Ratio	Pricing Unit
Customer Disc...	307	Flexible Pricing 04 (FLEXPRC_04)	Dom. Sales Org DE (1010)	Direct Sales (10)	24.06.2022	31.12.9999	-2,00 EUR	0
Customer Disc...	307	Company OC02 IC (1008836)	Sales Org. OC30 (OC30)	Distribtn Channel 01 (01)	13.06.2022	31.12.9999	-10,00 EUR	0
Customer Disc...	307	RD Electric Motors (11775)	Sales Org. 0001 (0001)	Distribtn Channel 01 (01)	01.11.2021	15.11.2021	-99,00 EUR	0
Customer Disc...	307	SAP Pvt Ltd (SAC_C_SD)	Sales Org. 0001 (0001)	Distribtn Channel 01 (01)	18.08.2020	31.12.9999	-11,00 EUR	0



Sales: Price Management 2/2

Order and Contract Management

Price Management

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

The screenshot displays the SAP My Inbox interface. On the left, a list of tasks is shown under the heading 'All Tasks (3)'. The first task is 'Approve Sales Prices in Request 0000122967' with a priority of 'Medium'. The main panel on the right shows the details for this task, titled 'Approve Sales Prices in Request 0000122967'. The task is assigned to 'SAP_WFRT' and has a status of 'Ready' and a priority of 'Medium'. It was created on Nov 8, 2022, at 3:18 PM. Below the task title, there are four icons representing different actions: information, calendar, document, and link. The 'Basic Data' section includes a description 'Approve for Blog' and 'Administrative Data' showing the creator. At the bottom, there are buttons for 'Approve', 'Reject', 'Show Log', 'Claim', 'Forward', 'Suspend', and 'Open Task'. The user's name 'JD' is visible in the top right corner.

Sales: Sales Quotation Management 1/2

Order and Contract Management

Sales Quotation Management

- 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

SAP Manage Sales Quotations - Version 2

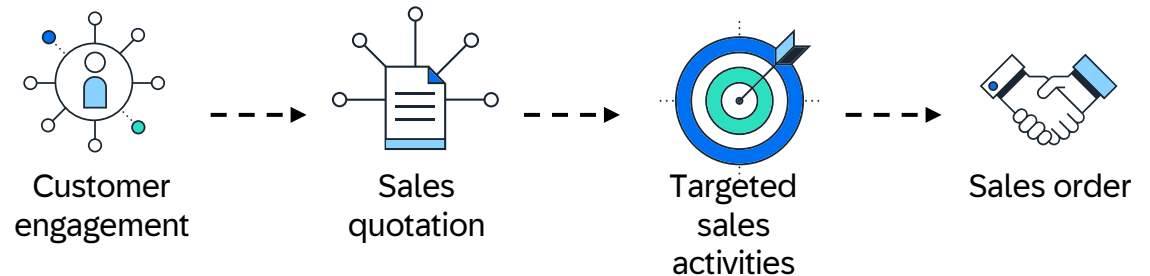
Standard

Search Sales Quotation: Sold-to Party: Customer Reference: Overall Status: Valid To: Document Date: Adapt Filters

Sales Quotations (1,668)

Sales Quot...	Sold-to Party	Customer Reference	Valid From	Valid To	Overall Status	Net Value	Document...
20001712	HyperCom Inc. (MY) (S54100252)	PUT20220810095833	08/10/2022	09/15/2022	Open	100,00 MYR	08/10/2022
20001711	HyperCom Inc. (MY) (S54100252)	PUT20220810095819	08/10/2022		Open	789,80 MYR	08/10/2022
20001710	HyperCom Inc. (MY) (S54100252)	PUT20220810095740	08/10/2022	09/17/2022	Open	100,00 MYR	08/10/2022
20001709	HyperCom Inc. (MY) (S54100252)	PUT20220810095653	08/10/2022	09/15/2022	Completed	100,00 MYR	08/10/2022
20001708	HyperCom Inc. (MY) (S54100252)	PUT20220810095425	08/10/2022	09/15/2022	Completed	100,00 MYR	08/10/2022
20001707	HyperCom Inc. (MY) (S54100252)	PUT	08/10/2022	09/15/2022	Completed	0,00 MYR	08/10/2022
20001706	HyperCom Inc. (MY) (S54100252)	PUT20220810094534	08/10/2022	09/20/2022	Open	150,00 MYR	08/10/2022
20001705	Domestic Customer US 3 (17100003)		08/08/2022	09/08/2022	Open	17,55 USD	08/08/2022
20001704	Inlandskunde DE 3 (10100003)		08/08/2022	09/08/2022	Open	17,55 EUR	08/08/2022
20001703	Domestic Customer US 3 (17100003)		08/08/2022	09/08/2022	Open	17,55 USD	08/08/2022
20001702	Inlandskunde DE 3 (10100003)		08/08/2022	09/08/2022	Open	17,55 EUR	08/08/2022
20001701	Domestic Customer US 3 (17100003)		08/07/2022	09/07/2022	Open	17,55 USD	08/07/2022
20001700	Inlandskunde DE 3 (10100003)		08/07/2022	09/07/2022	Open	17,55 EUR	08/07/2022
20001699	Domestic Customer US 3 (17100003)		08/07/2022	09/07/2022	Open	17,55 USD	08/07/2022
20001698	Inlandskunde DE 3 (10100003)		08/07/2022	09/07/2022	Open	17,55 EUR	08/07/2022
20001697	Domestic Customer US 3 (17100003)		08/06/2022	09/06/2022	Open	17,55 USD	08/06/2022
20001696	Inlandskunde DE 3 (10100003)		08/06/2022	09/06/2022	Open	17,55 EUR	08/06/2022
20001695	Domestic Customer US 3 (17100003)		08/06/2022	09/06/2022	Open	17,55 USD	08/06/2022
20001694	Inlandskunde DE 3 (10100003)		08/06/2022	09/06/2022	Open	17,55 EUR	08/06/2022
20001693	BP Multi Addresses DE 01 (510103280)	PUT	08/05/2022	09/10/2022	Open	10,00 EUR	08/05/2022
20001692	HyperCom Inc. (MY) (S54100252)	PUT20220805091316	08/05/2022	09/10/2022	Completed	0,00 MYR	08/05/2022
20001691	HyperCom Inc. (MY) (S54100252)	PUT20220805091227	08/05/2022	09/12/2022	Open	100,00 MYR	08/05/2022

Manage Sales Quotations



Sales: Sales Quotation Management 2/2

Order and Contract Management

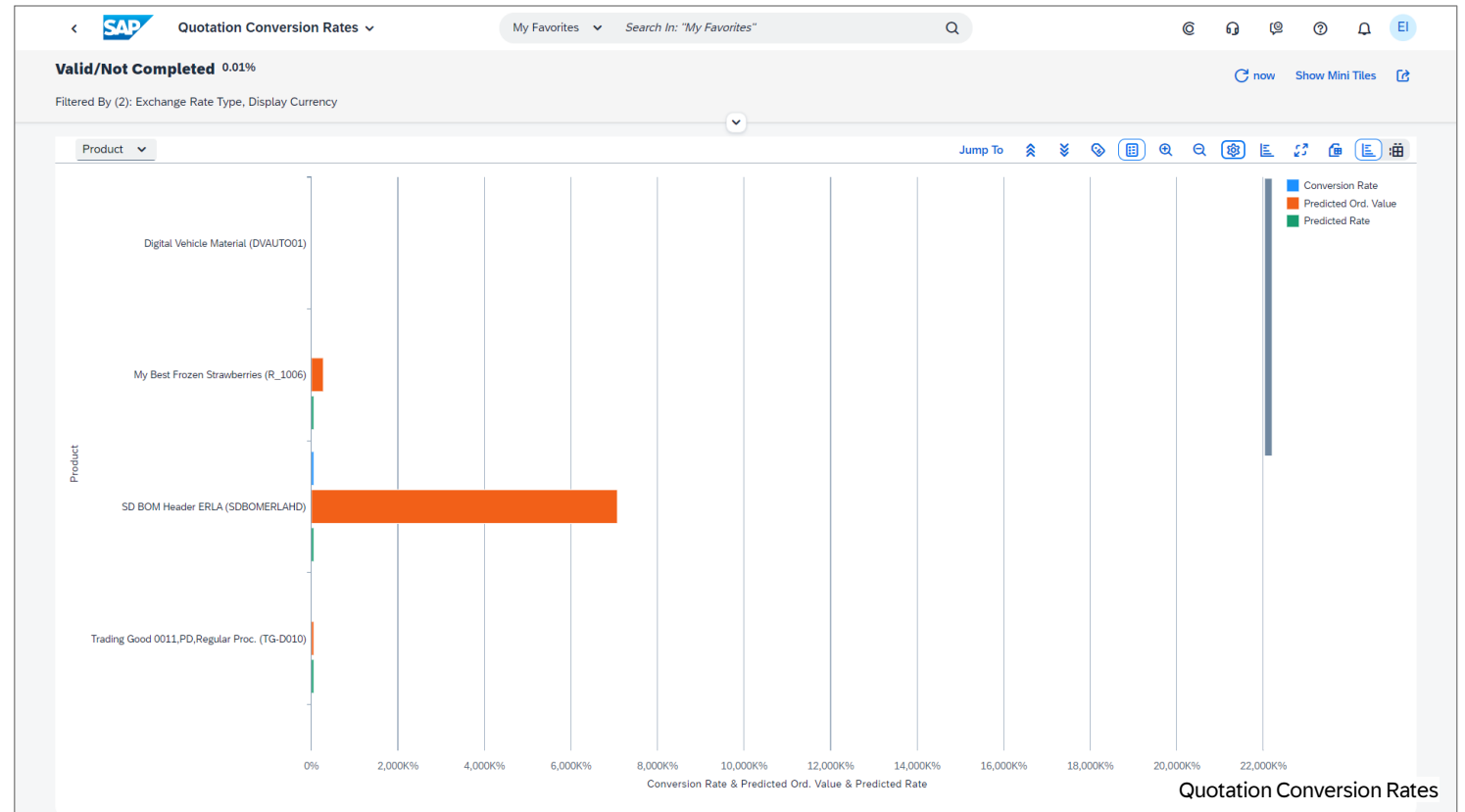
Sales Quotation Management

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

Order and Contract Management

Sales Contract Management

- 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

The image displays two SAP screenshots. The top screenshot is titled 'Manage Sales Contracts - Version 2'. It shows a search bar, filter options for 'Sales Contract', 'Sold-to Party', 'Overall Status', 'Customer Reference', 'Valid To', and 'Document Date'. A dropdown menu for 'Down Payment Status' is open, showing options: 'Not Relevant', 'Not Paid (A)', 'Partially Paid (Missing Payment) (B)', 'Partially Paid (Missing Amount) (C)', and 'Fully Paid (D)'. Below the menu is a table of sales contracts with columns for 'Sales Co...', 'Sold-to Party', 'Down Payment Status', 'Valid From', 'Valid To', 'Overall Status', and 'Approval Status'. The bottom screenshot is titled 'Sales Scheduling Agreements - Product Demand'. It shows a chart for 'Product Demand' with a blue bar for 'Order Quantity (Newest Release)' and a table below it with columns for 'Product', 'Peri...', 'Order Quantity (Newest Release)', 'Order Quantity (Previous Release)', and 'Sales Scheduling Agree...'. The table data is as follows:

Product	Peri...	Order Quantity (Newest Release)	Order Quantity (Previous Release)	Sales Scheduling Agree...
Sold-to Party: 10100011				
TG11 (Trad Good 11_PD_Reg.Trading)	202227	20	20	30000000
TG12 (Trad Good 12_Reorder Point_Reg.Trad.)	202227	20	20	30000000
TG11 (Trad Good 11_PD_Reg.Trading)	202228	10	10	30000000
TG12 (Trad Good 12_Reorder Point_Reg.Trad.)	202228	10	10	30000000
		60	60	PC
		60	60	PC

Manage Sales Contracts

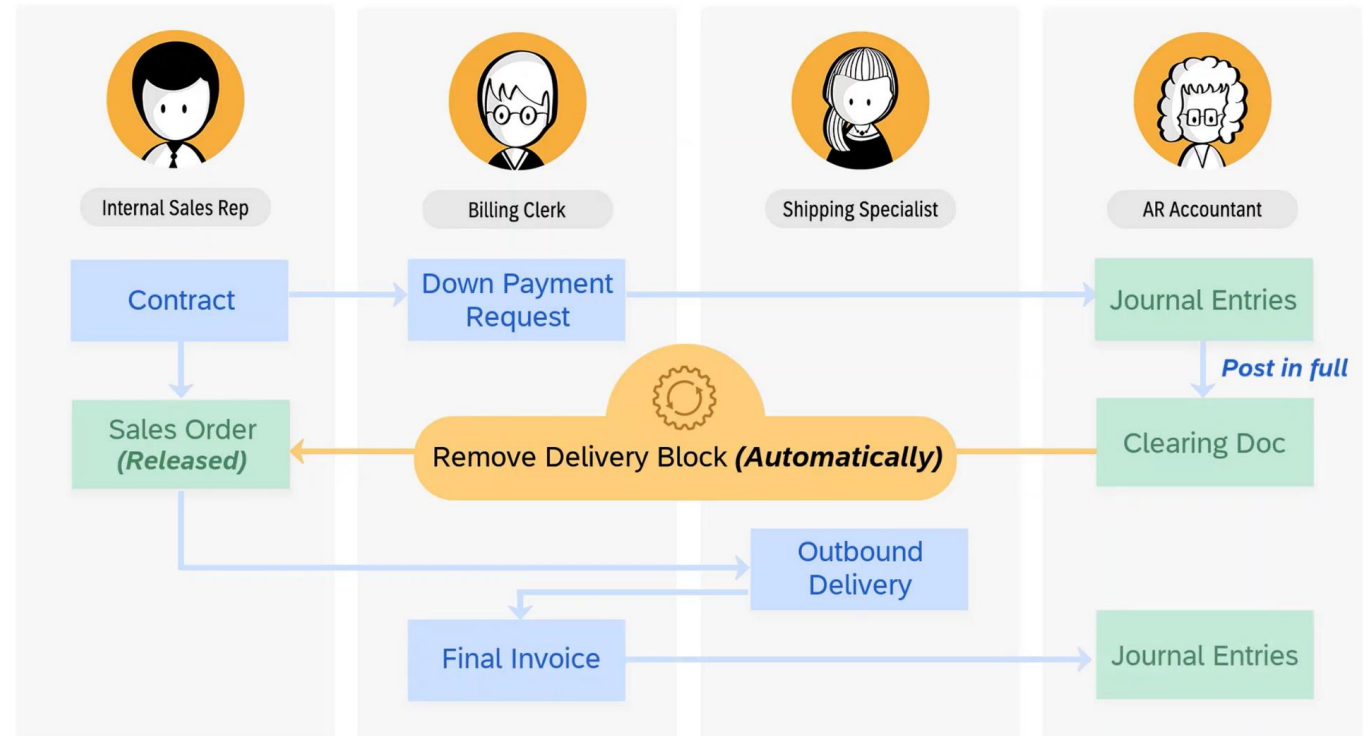
Sales: Sales Contract Management 2/2

Order and Contract Management

Sales Contract Management

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

Order and Contract Management

Sales Order Management and Processing

- 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.

The screenshot shows the SAP 'Manage Sales Orders' interface. At the top, there are search and filter options for Sales Order, Sold-to Party, Customer Reference, Requested Delivery Date, and Overall Status. Below this is a table titled 'Sales Orders (2)' with columns for Sales Order, Sold-to Party, Customer Reference, Requested Delivery Date, Overall Status, Net Value, and Document Date. Two orders are listed: 129147 and 99482. The 99482 order is expanded to show details like Billing Block, Delivery Block, and Delivery Status.

The screenshot shows the detailed view of Sales Order 99482. It displays the 'Price Elements' table, which lists various conditions and their associated values. The table includes columns for Condition, Description, Condition Amount or Ratio, Pricing Unit, Condition Value, Statistical, and Changed Manually.

Condition	Description	Condition Amount or Ratio	Pricing Unit	Condition Value	Statistical	Changed Manually
PRDD	Price	1,000.00 EUR	1	57,000.00 EUR	Yes	
K020	Price Group	-10.00 EUR	1,000 TO	-130.00 EUR		
RA01	% Disc. from Gross			0.00 EUR	Yes	
	Discount Amount			-130.00 EUR		
	Rebate Basis			56,870.00 EUR		
	Net Value for Item			56,870.00 EUR		
	Net Value 2			56,870.00 EUR		
	Net Value 3			56,870.00 EUR		
AZWR	Down Pay./Settlement			0.00 EUR	Yes	
MWST	Output Tax	0.00000000 %		0.00 EUR		
MWST	Output Tax	19.00000000 %		9,864.80 EUR		
DIFF	Rounding Off			0.20 EUR		
	Total			66,735.00 EUR		
SKTO	Cash Discount			0.00 EUR	Yes	
VPRS	Internal price			1,222.00 EUR	Yes	
	Profit Margin			55,648.20 EUR		

Sales: Sales Order Management and Processing 2/8

Order and Contract Management

Sales Order Management and Processing

Mass Order Creation

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

Configurable Template

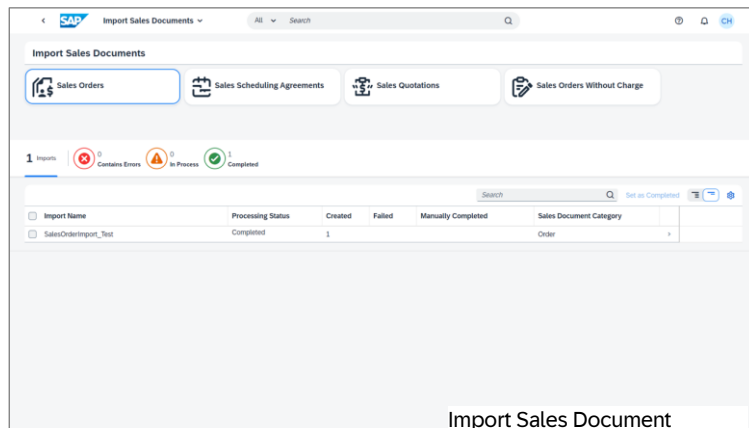
- Over 160 Fields for Sales Order Headers, Sales Order Items, Pricing and Text
- Embedded how-to explanation
- Easy and flexible maintenance



Sales Order Upload Template

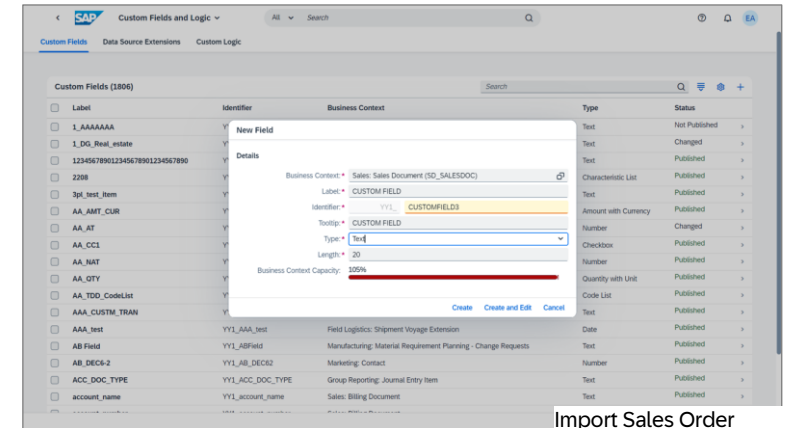
Adaptation and Extensibility

- **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 Order

Field Name (Technical)	Field Description	Property	Mat.	Length	Remarks
HEADER_SALESORDER	*Sales Order (Temporary ID)	Required		10	
HEADER_SALESORIENTYPE	*Sales Order Type	Required	*	4	Supports order types in sales document category C (Order).
HEADER_SALESORGANIZATION	*Sales Organization	Required		4	
HEADER_DISTRIBUTIONCHANNEL	*Distribution Channel	Required	*	2	
HEADER_SALESOFFICE	*Sales Office	Required	*	2	
HEADER_SALESOFFICE	Sales Office	Optional		6	
HEADER_SALESGROUP	Sales Group	Optional		3	
HEADER_SOLDTOPARTY	*Sold to Party	Required	*	10	
HEADER_SHIPTOPARTY	Ship to Party	Optional		10	
HEADER_BILLTOPARTY	Bill to Party	Optional		10	
HEADER_PAYEE	Payee	Optional		10	
HEADER_SALESEMPLOYEE	Sales Employee	Optional	*	8	Requires a numeric key.
HEADER_RESPONSIBLEEMPLOYEE	Employee Responsible	Optional	*	8	Requires a numeric key.
HEADER_CUSTOMERREFERENCE	Customer Reference	Optional		35	
HEADER_SUPPLIERREFERENCE	Supplier Reference	Optional		35	
HEADER_CUSTOMERREFDATE	Customer Ref. Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_PURCHASEORDERDATE	Purchase Order Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_REQUESTEDDELIVERYDATE	Requested Delivery Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_PRICINGDATE	Pricing Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_DOCUMENTDATE	Document Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_FIXEDVALUEDATE	Fixed Value Date	Optional	*	10	Supports YYYY-MM-DD and YYYYMMDD.
HEADER_SHIPPINGCONDITION	Shipping Conditions	Optional		2	
HEADER_SHIPPINGTYPE	Shipping Type	Optional		2	



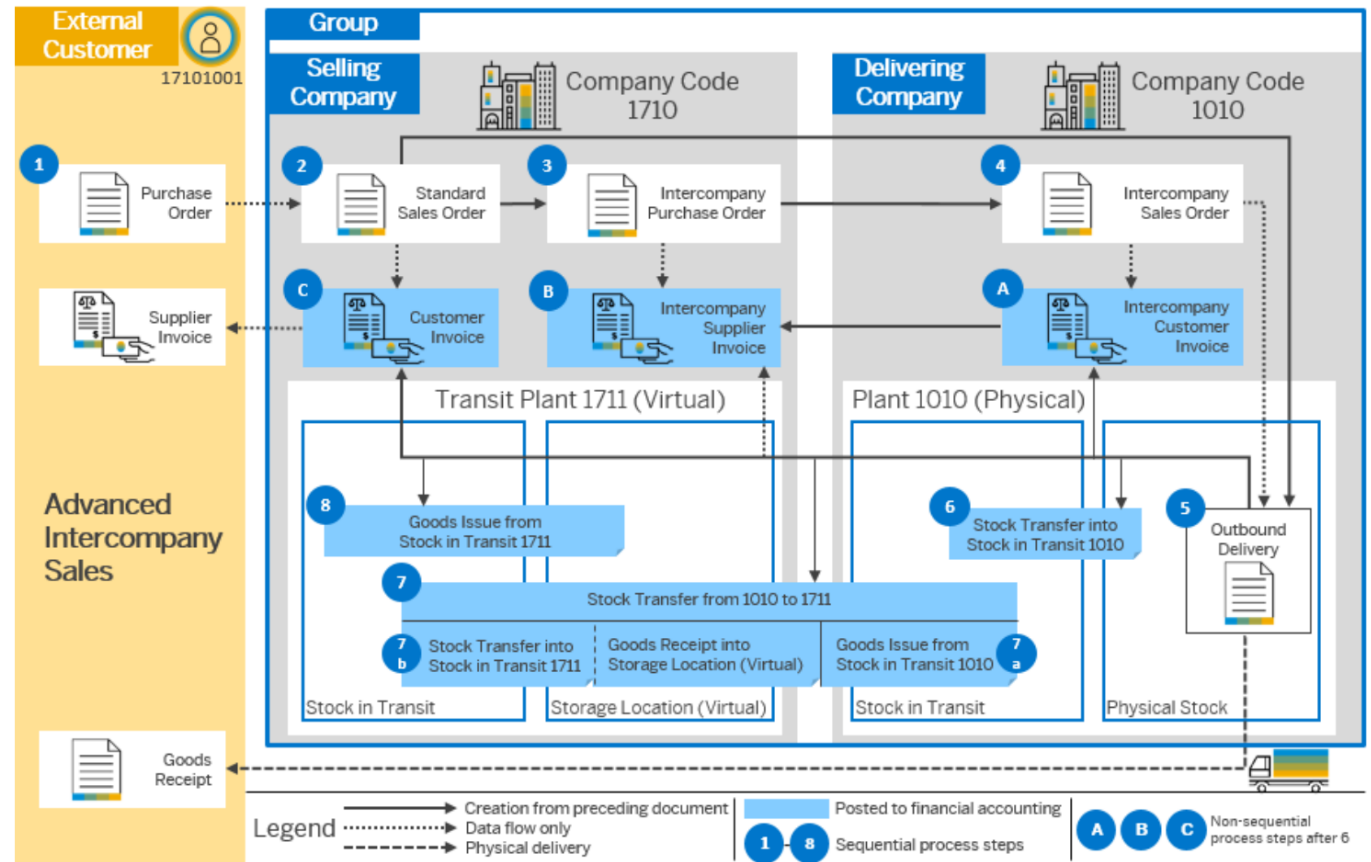
Sales: Sales Order Management and Processing 3/8

Order and Contract Management

Sales Order Management and Processing

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

Order and Contract Management

Sales Order Management and Processing

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

The screenshot displays the SAP Monitor Value Chains interface. On the left, a sidebar shows details for Sales Order 133528, including its processing stage (Processed with Errors) and a list of documents. The main area shows a 'Pending Document' for a Purchase Order with an error message. Below this is a 'Messages (5)' table with the following data:

Type	Text	Date/Time
Error	An exception was raised	21.11.2022, 05:30:14
Warning	Can delivery date be met?	21.11.2022, 05:30:14
Error	Intercompany Sales requires condition for	21.11.2022, 05:30:14

At the bottom, a 'Monitor Value Chains' diagram illustrates the flow between various business objects and their processing stages:

- Sales Order (SOSC)**: Sales Order (1151) - Completed
- IC Purchase Order (POIC)**: Purchase Order (4500001915) - Completed
- Outbound Delivery (ODDC)**: Outbound Delivery (80001174) - Completed
- IC Sales Order (SOIC)**: Sales Order (60001607) - Completed
- Intercompany Customer Invoice (CIIC)**: Pending Billing Document - Pending
- Customer Invoice (CISC)**: Billing Document - Pending

Sales: Sales Order Management and Processing 5/8

Create sales order from PDF file automatically

Order and Contract
Management

Sales Order Management
and Processing

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:

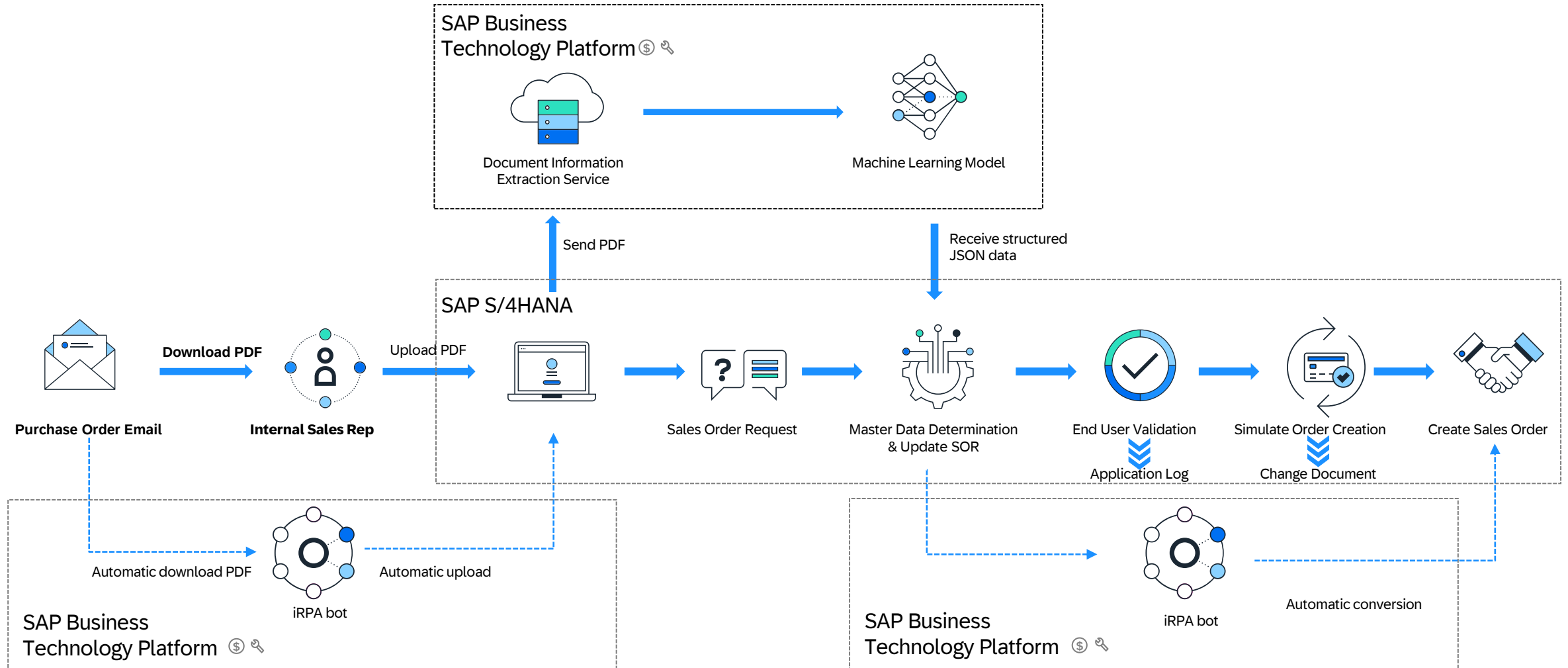
- SAP RPA bot regularly checks the dedicated Email inbox and uploads unread PDF (customer order) automatically into SAP S/4HANA.
- SAP machine learning Document Information Extraction service extracts the sales order relevant data for SAP S/4HANA.
- Within SAP S/4HANA a sales order request is automatically created.
- In case of incompleteness 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

Order and Contract Management

Sales Order Management and Processing



Sales: Sales Order Management and Processing 7/8

Order and Contract Management

Sales Order Management and Processing

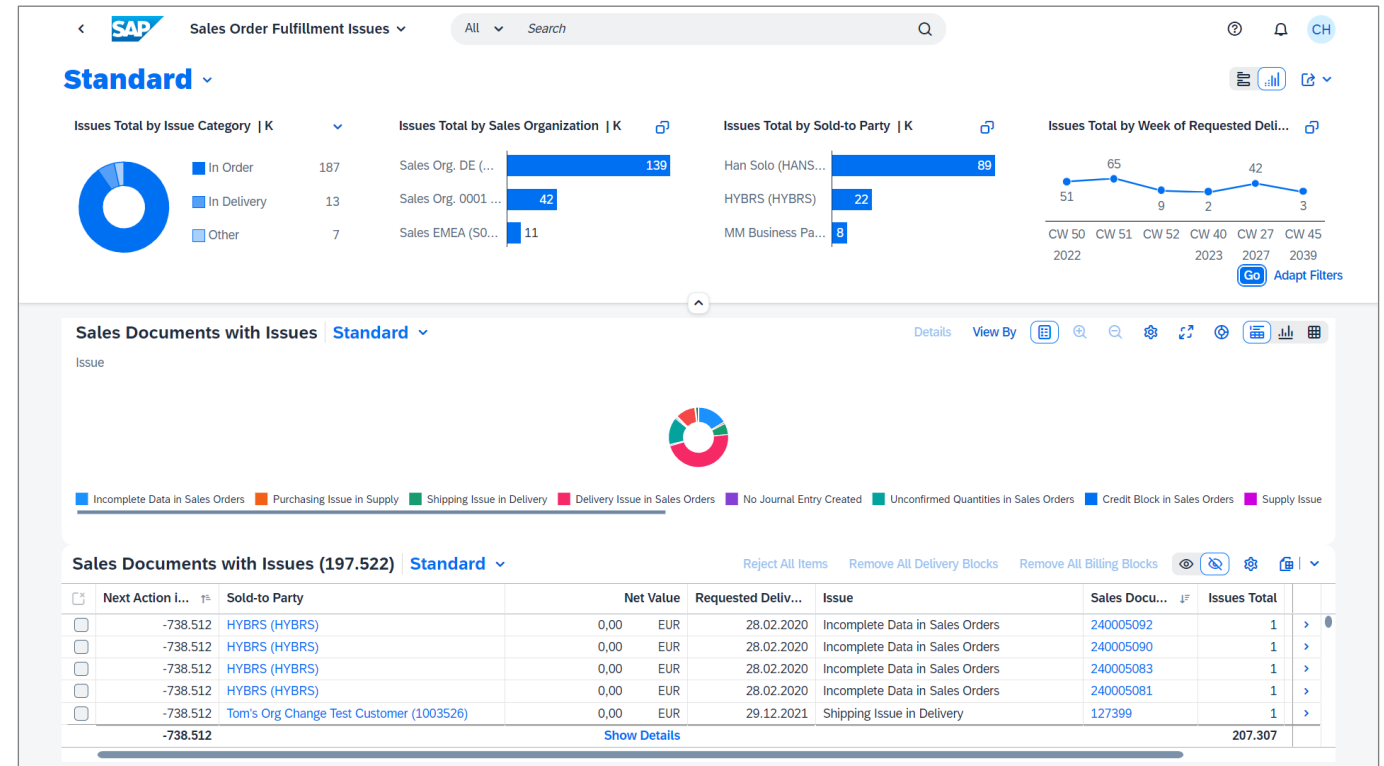
Exception-based Sales Order Handling – Sales Order fulfillment Cockpit

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

Order and Contract Management

Sales Order Management and Processing

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

SAP Create Standard Order: Overview

Standard Order: Net Value: 0.00 EUR

Sold-to Party: 10100001 Company Inlandskunde DE 1, street, 12345 Walldorf, Germany

Ship-to Party: 10100001 Company Inlandskunde DE 1, street, 12345 Walldorf, Germany

Cust. Reference: Cust. Ref. Date:

Sales Item Overview Item Detail Ordering Party Procurement Shipping Configuration Reason for Rejection

* Req. Deliv.Date: D 15.02.2023 Deliver.Plant:

Complete Dlv.: Total Weight: 0.000

Delivery Block: Volume: 0.000

Billing Block: Pricing Date: 02.03.2023

Pyt Terms: 0004 As of End of Month

Inco. Version:

Incoterms: EXW

Inco. Location1: Walldorf

Copy Product Proposal Quantity

All Items (Active product proposal)

Item	Material	Order Quantity	Un	S	Item Description	Customer Material Number	ItCa	HL Itm
<input type="checkbox"/>	TG11	<input type="text"/>	PC	<input type="checkbox"/>	Handelsware 11, PD, normaler Ha...			0
<input type="checkbox"/>	TG12	<input type="text"/>	KG	<input type="checkbox"/>	HAWA 12, Bestellpunkt, normaler ...			0
<input type="checkbox"/>	TG13	<input type="text"/>	PC	<input type="checkbox"/>	Handelsware 13, Bestellpunkt, Str...	ROUNDING		0

Create Sales Order Cancel

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

The screenshot displays the SAP 'Manage Billing Documents' interface. At the top, the SAP logo and 'Manage Billing Documents' are visible. The main header shows 'Invoice 90072544' with a search bar and user 'CH'. Below this, a table provides key details: Payer (1010 Supplying Plant Intercompany (16759)), Sold-to Party (1010 Supplying Plant Intercompany (16759)), Billing Document Status (Completed), Net Value (4,20 EUR), Tax Amount (0,00 EUR), and Total Amount (4,20 EUR). A navigation bar includes 'Edit', 'Preview', 'Cancel Billing Document', and 'Post Billing Document'. The 'Process Flow' section is highlighted, showing a sequence of three steps: 'Order Processing' (with a red 'X' icon), 'Invoicing' (with a green checkmark icon), and 'Accounting' (with a grey icon). Below each step is a detailed box: 'Standard Order 133793' (Trade Compliance... Requested Delivery On 05.12.2022 Partially Invoiced), 'Invoice 90072544' (Completed Billed On 01.01.2023 Net Value 4.20 EUR), and 'Journal Entry 100000532' (Not Cleared Posted On 01.01.2023). The 'Pricing Data' section is partially visible at the bottom.

Sales: Sales and Solution Billing 2/3

Order and Contract Management

Sales and Solution Billing

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

The screenshot displays the SAP 'Manage Preliminary Billing Documents' interface. At the top, there are search and filter options. Below, a table lists 123 preliminary billing documents. The table columns include: Preliminary Billing Document, Billing Type, Sold-to Party, Status, Billing Date, and Net Value. A detailed view of document PBD0000129 is shown below the table, including general information such as Bill-to Party, Sold-to Party, Billing Date, and Net Value. The 'Items' section shows a single item: Service Product (SRV_01) with a quantity of 1,000 HR, a net value of 1,680.00 USD, and a tax amount of 0.00 USD.

Preliminary Billing Document	Billing Type	Sold-to Party	Status	Billing Date	Net Value
PBD0000129	Invoice (F2)	Andersons and Sons (C0016)	Completed	17.12.2023	1,680.00 USD
PBD0000128	Invoice (F2)	Andersons and Sons (C0016)	In Progress	01.08.2023	0,67 USD
PBD0000150	Invoice (F2)	Test Credit Management 1 (1011712)	In Progress	06.12.2022	11,000.00 EUR
PBD0000099	Invoice (F2)	Andersons and Sons (C0016)	Completed	13.05.2022	199.00 USD
PBD0000098	Invoice (F2)	Andersons and Sons (C0016)	Completed	12.05.2022	199.00 USD
PBD0000090	Invoice (F2)	Andersons and Sons (C0016)	Completed	12.05.2022	199.00 USD
PBD0000097	Invoice (F2)	Andersons and Sons (C0016)	Completed	11.05.2022	199.00 USD
PBD0000094	Invoice (F2)	Andersons and Sons (C0016)	Completed	11.05.2022	199.00 USD
PBD0000093	Invoice (F2)	Andersons and Sons (C0016)	Completed	11.05.2022	199.00 USD
PBD0000096	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000092	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000091	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000088	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000087	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000086	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	199.00 USD
PBD0000082	Invoice (F2)	Andersons and Sons (C0016)	Completed	10.05.2022	398.00 USD

Invoice Details for PBD0000129:

- Bill-to Party: Andersons and Sons (C0016)
- Sold-to Party: Andersons and Sons (C0016)
- Company Code: SAP SE (0001)
- Sales Organization: Sales America (5002)
- Billing Date: 17.12.2023
- Terms of Payment: 14 days 3%, 20/2%, 30 net
- Incoterms: Costs, insurance & freight (CIF)
- Incoterms Location 1: CIF
- Incoterms Location 2: -
- Issue Type: -
- Reference: PBD0000129
- Tax Amount: 0,00 USD
- Net Value: 1,680,00 USD

Items Table:

Prelim. Billing ...	Product	Billing Quantity	Net Value	Tax Amount
1	Service Product (SRV_01)	1,000 HR	1,680,00 USD	0,00 USD

Sales: Sales and Solution Billing 3/3

Order and Contract Management

Sales and Solution Billing

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

SAP Manage Billing Documents

Invoice 90072544

Payer: 1010 Supplying Plant Intercompany (16759) | Sold-to Party: 1010 Supplying Plant Intercompany (16759) | Billing Document Status: Completed | Net Value: 4,20 EUR | Tax Amount: 0,00 EUR | Total Amount: 4,20 EUR

Process Flow:

```

    graph LR
      A[Order Processing] --> B[Invoicing]
      B --> C[Accounting]
      A --- A1[Standard Order 133793]
      A1 --- A2[Trade Compliance... Requested Delivery On 05.12.2022 Partially Invoiced]
      B --- B1[Invoice 90072544]
      B1 --- B2[Completed Billed On 01.01.2023 Net Value 4.20 EUR]
      C --- C1[Journal Entry 100000532]
      C1 --- C2[Not Cleared Posted On 01.01.2023]
  
```

Pricing Data

One single Invoice

Invoice: 90001919

Computer Systems (DE)
PO Box 10 50
69191 Heidelberg

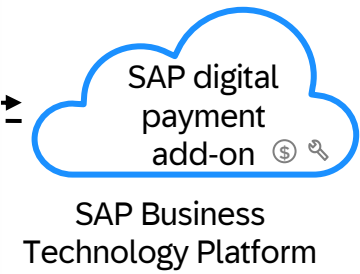
Billing Date: Jul 20, 2017
Fulfillment Date: Jul 20, 2017
Customer Number: 310 100167

Category	Description	Amount
1	Power Seminars IT Forum	649,00 EUR
2	Software License New External Invoice	1,00 EUR
3	Consulting Services	34,90 EUR
4	Special In-Trade MP 300 Club	300,00 EUR
4	Special Recognition MP 300 Club	300,00 EUR
4	Landscape Promoter MP 300 Club	300,00 EUR

Payment Terms: Pay immediately with Deduction | Total Net Amount: 122,70 EUR | Output Tax: 19,00 % | Total: 141,70 EUR

Thank you for your business.

Best Copy



Sales:

Sales Rebates & Incentive and Commissions Management 1/2

Order and Contract Management

Sales Rebates & Incentive and Commissions Management

- 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.

The screenshot displays the SAP 'Manage Condition Contracts - Sales Rebates' interface. The top section shows a search bar and filter options for 'Condition Contract', 'Contract Type', 'Customer', 'External Identifier', 'Valid From', and 'Valid To'. Below this is a table of 'Condition Contracts (28)'. One contract is highlighted: '233 Sales Rebate - Multiple Customers (0502)' with a valid period from 23.05.2023 to 25.05.2023 and an 'Inactive' status.

The bottom section shows a detailed view of a 'Condition Contract' (ID 166). It includes a table with the following data:

Customer	Current Contract Value	Open Accruals Amount	Activation Status	Settlement Lock Status	Status
CCM Customer Multiple Addresses 3 (CCMCUSTMA3)	40,00 EUR	0,00 EUR	Active	Not Locked	Released

Below the table, there is a 'Document Flow' section showing a '08.10.2021 Partial Settlement' document. The flow includes a 'Condition Contract' (Document 166, Condition 05G1, Contract Type CCMCUSTMA3, Customer CCMCUSTMA3, Valid From 08.10.2021, Valid To 31.10.2021) and a 'Sales Rebate Goods...' document (Document 1051, Actual 08.10.2021, Settlement Date 08.10.2021, Settlement Doc. 05A2, Type A - Accounting Documents Exist).

Manage Condition Contract

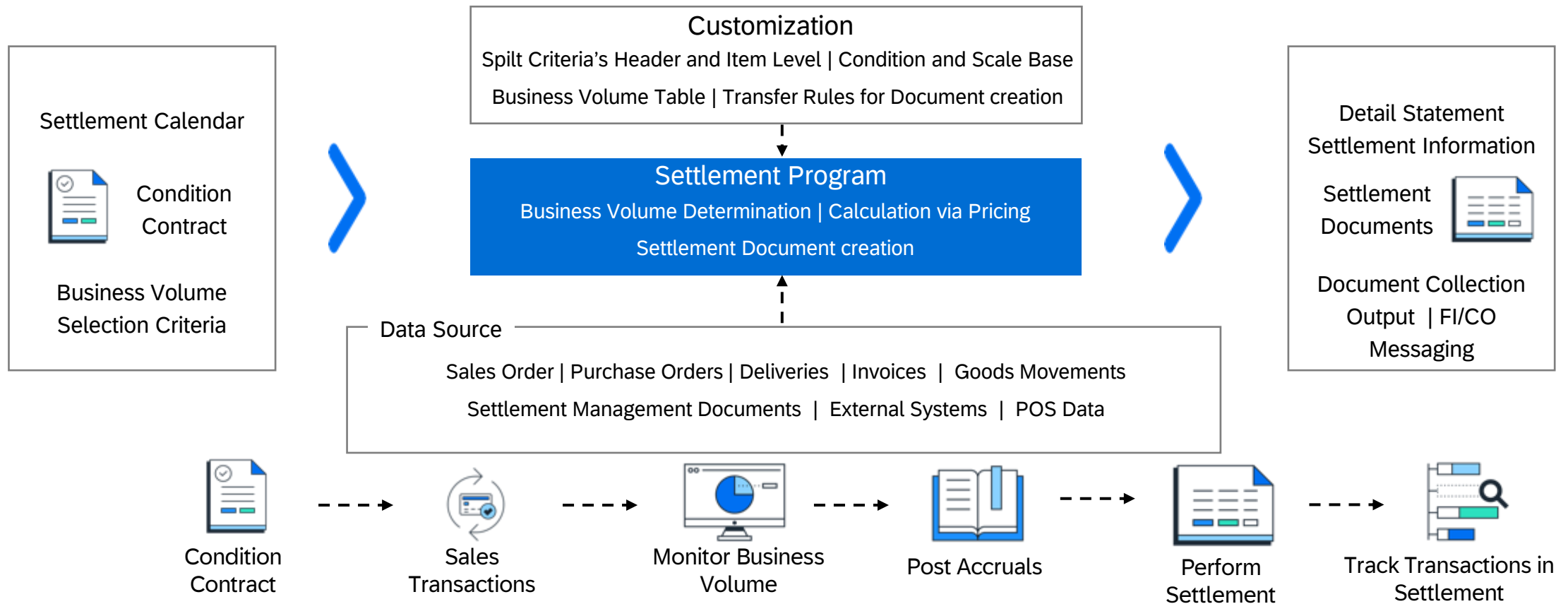
Sales:

Sales Rebates & Incentive and Commissions Management 2/2

Order and Contract Management

Sales Rebates & Incentive and Commissions Management

Condition Contract Settlement by Settlement Management



Sales: Claims, Returns and Refund Management 1/2

Order and Contract Management

Claims, Returns and Refund Management

- 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

The screenshot displays the SAP Returns Order Item interface. At the top, the title is "Returns Order Item" with a search bar and navigation icons. Below the title, the specific return is identified as "Trad.Good 20, Reorder Point, SerialNo" with a sub-code "TG20". A table provides a summary of the return item:

Item	Processing Status	Logistical Status	Refunding Status	Return Quantity	Net Value
10	Open	Complete	Open	1 PC	16.50 USD

Below the table, there are tabs for "General Information", "Follow-Up Activity", "Refund", "Partners", "Prices", and "Texts". The "General Information" tab is active, showing details for "Product" and "Shipping".

Product: Trad.Good 20, Reorder Point, SerialNo (TG20)
Batch: -

Shipping: Returned Quantity: 1 PC, Return Reason: -
Receiving Plant: Plant 1 US (1710), Receiving Point: Shipping Point 171R (171R), Storage Location: -

Follow-Up Activity: Follow-Up Activity: Receive into Plant (0001), Product Received: Yes, Inspection Code: -, Comment: -, Supplier: -, Return-to Address: -
Inspected at Customer Site: No

Refund: Refund Type: Credit Memo, Refund Code: 100% Refund (100), Refund Control: Decide Later (R), Suspend Valuation: No

Customer Returns

Sales: Claims, Returns and Refund Management 2/2

Order and Contract Management

Claims, Returns and Refund Management

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

The screenshot displays the SAP 'Advanced Returns Order 60011358' interface. At the top, it shows the SAP logo, 'Display Returns Order', and a search bar. Below the title, key data points are listed: Sold-to Party (ARM Testing (TEST2)), Processing Status (Complete), Logistical Status (Complete), Refunding Status (Complete), Approval Status (Not Relevant), and Net Value (0,00 EUR). A navigation bar includes 'General Information', 'Items', 'Contacts', 'Business Partners', 'Attachments', and 'Process Flow'. The main content is divided into three sections: 'Return Data', 'Organizational Data', and 'Shipping'. 'Return Data' includes Document Date (09.01.2023), Pricing Date (09.01.2023), and Returns Order Reason (-). 'Organizational Data' includes Sales Area (Sales Org. 0001, Distribtn Channel 01, Engine - 1010) and Employee Responsible (-). 'Shipping' includes Ship-to Party (ARM Testing (TEST2)), Address (Walldorf 33, 69190 Walldorf, DE), and Shipping Condition (standard (01)). Below these is the 'Items' section, titled 'Returns Order Items (1)', which contains a table with columns for Item, Product, Quantity, Refund, Logistical Status, Refunding Status, and Follow-Up Activity. The table lists one item: Item 10, Product 'ARM Test Product 2 with Serial Numbers' (ARM-TEST2), Quantity '2 EA', Refund 'Credit Memo Decide Later - CM', Logistical Status 'Complete', Refunding Status 'Complete', and Follow-Up Activity 'Receive into Plant (0001)'. At the bottom right, there is a 'Customer Returns' link.

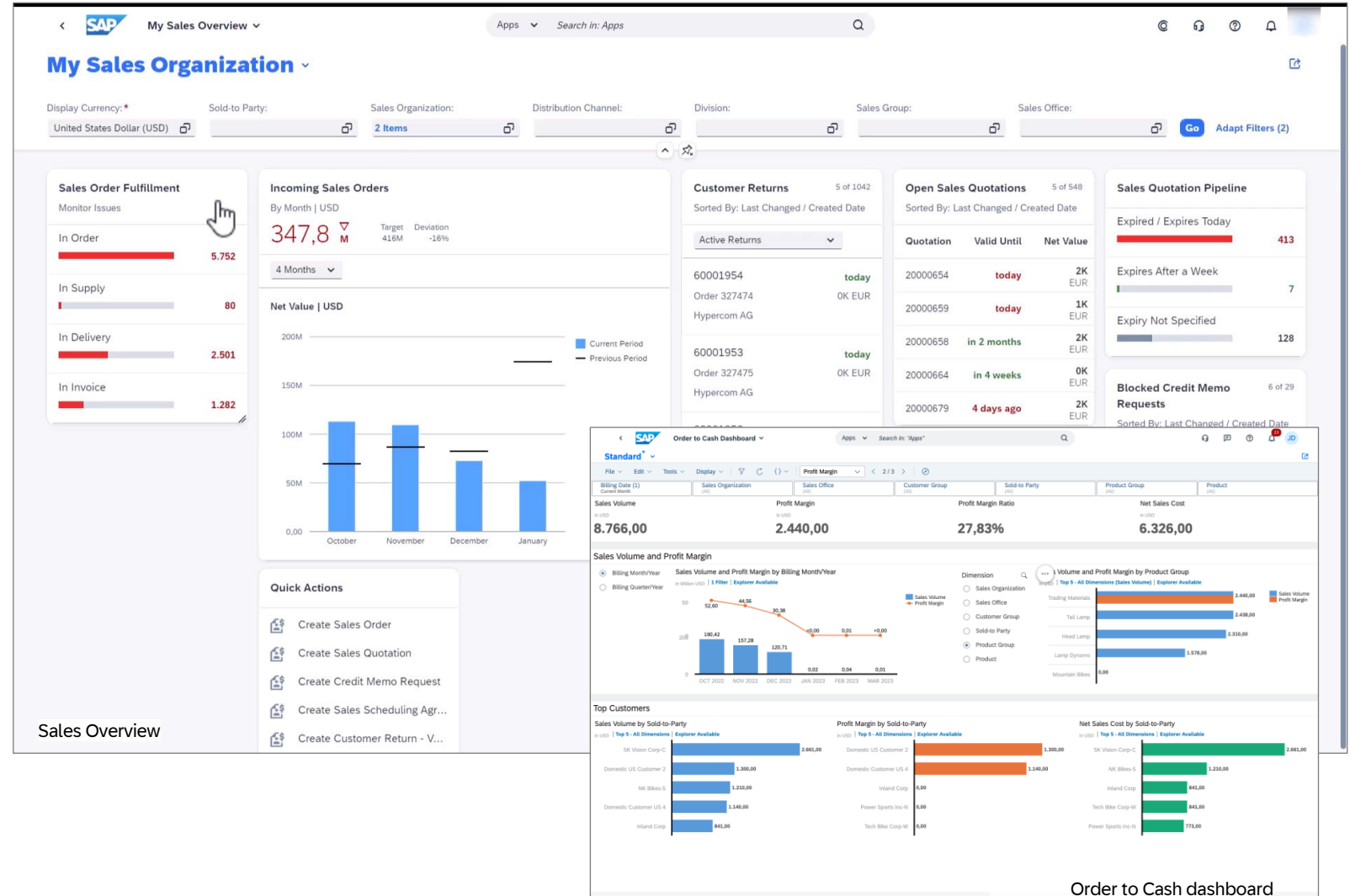
Item	Product	Quantity	Refund	Logistical Status	Refunding Status	Follow-Up Activity
10	ARM Test Product 2 with Serial Numbers ARM-TEST2	2 EA	Credit Memo Decide Later - CM	Complete	Complete	Receive into Plant (0001)

Sales: Sales Monitoring and Analytics 1/4

Order and Contract Management

Sales Monitoring and Analytics

- 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: Sales Monitoring and Analytics 2/4

Order and Contract Management

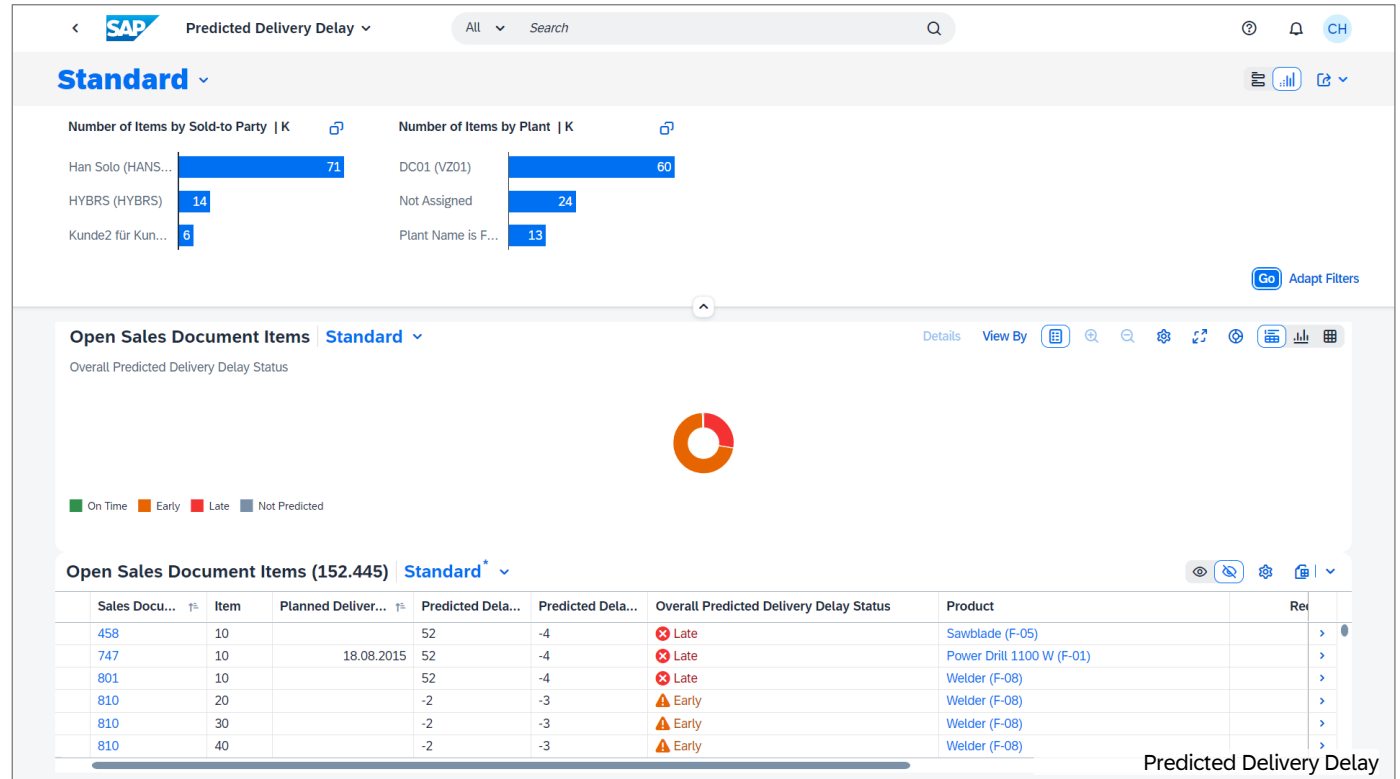
Sales Monitoring and Analytics

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



Sales: Sales Monitoring and Analytics 3/4

Order and Contract Management

Sales Monitoring and Analytics

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.

The screenshot displays the SAP Customer 360° View - Version 2 interface for customer Alba Flores (ID: 20270). The interface is divided into several sections:

- Header:** SAP logo, Customer - 360° View - Version 2, All, Search, and user profile (CH).
- Customer Information:** Communication icon, Carrer del Freser, 45 47, 08026 Barcelona, Spain.
- Navigation:** Overview, Business Documents, Fulfillment, Products, General Data.
- Recently Created Business Documents:** A list of four Standard Orders (134231, 134230, 134229, 134228) all dated 13.02.2023, each with an 'In Process' status and a value of 757,57 EUR, 785,39 EUR, 757,03 EUR, and 134228 EUR respectively.
- Quick Link:** Customers Overview and Business Documents for Approval (No items are currently available).
- Recent Deliveries:** A list of four Outbound Deliveries (80091159, 80092127, 80092128, 80092126) all dated 13.02.2023. The first is 'In Process' (0 EUR), the second is 'Not Relevant' (0 EUR), the third is 'Open' (0 EUR), and the fourth is 'In Process'.
- Contacts:** Internal and External tabs, with 'No data' displayed.
- Footer:** Customer 360 View.

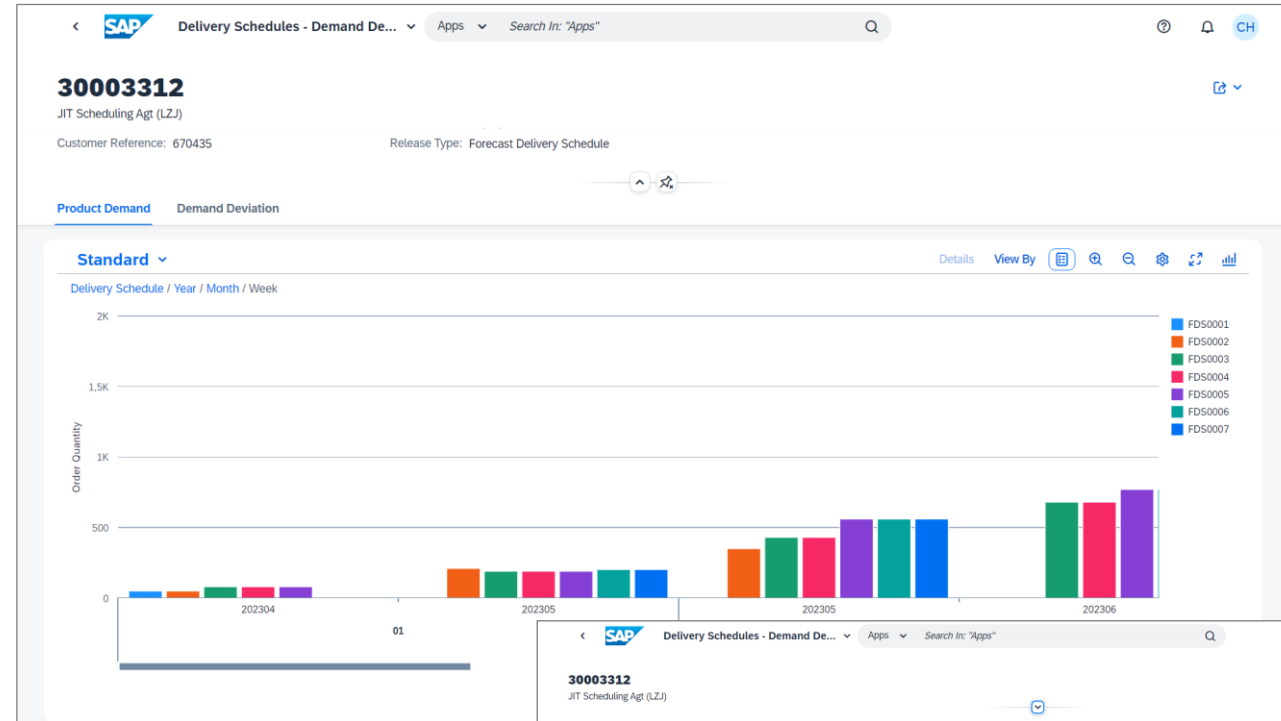
Sales: Sales Monitoring and Analytics 4/4

Order and Contract Management

Sales Monitoring and Analytics

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



The screenshot shows the 'Analysis Parameters' and 'Delivery Schedule Records' section of the SAP interface. The 'Analysis Parameters' section includes 'Time Scale: Week', 'Type of Quantity: Deviation in Order Quan...', and 'Deviation Profile:'. The 'Delivery Schedule Records' table is as follows:

Delivery Sched...	Delivery Schedule Date	Customer Fiscal Year	Quantity per Time Period											
			202304	202305	202306	202307	202308	202309	202310	202311	202312			
FDS0001	25.01.2023	2023												
FDS0002	27.01.2023	2023												
FDS0003	27.01.2023	2023	30	60										
FDS0004	27.01.2023	2023								-30				
FDS0005	30.01.2023	2023		130	90	50	-20	-720						
FDS0006	30.01.2023	2023		11										
FDS0007	30.01.2023	2023												

Delivery Schedules – Demand Deviation

Sales: Solution Quotation Management 1/2

Solution Business Management

Solution Quotation Management

- 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

SAP Service Order Quotations

Solution Quotation: 8000002450, create dee...

Quotation Details **Items** Notes Payment Method Parties Involved Organizational Data Transaction History Additional External Reference Attachment

Show: All Items (Hierarchy)

Item No.	Product	Actions	Select	Product ID	Quantity	Unit	Item Category	Net ...	Cu...	Status
10	Product			CTU3_AUTO_SER...	1	D	Service Item	96,02 USD		Completed
20	Sales Item			CTU3_AUTO_SAL...	3	EA	Sales Item	120,00 USD		Completed
30	create service cont...			CTU3_AUTO_CO...	2	D	Service Contract Itm	516,00 USD		Completed
40	Expense Item			CTU3_AUTO_EXP...	1	EA	Expense	0,00 USD		Completed
50	Service Parts Item			CTU3_AUTO_PART	5	EA	Service Spare Item	10,00 USD		Completed
60	Monthly Subscripti...			CTU3_AUTO_SU...	1	EA	Subscription Item	0,00 USD		Completed

Notes

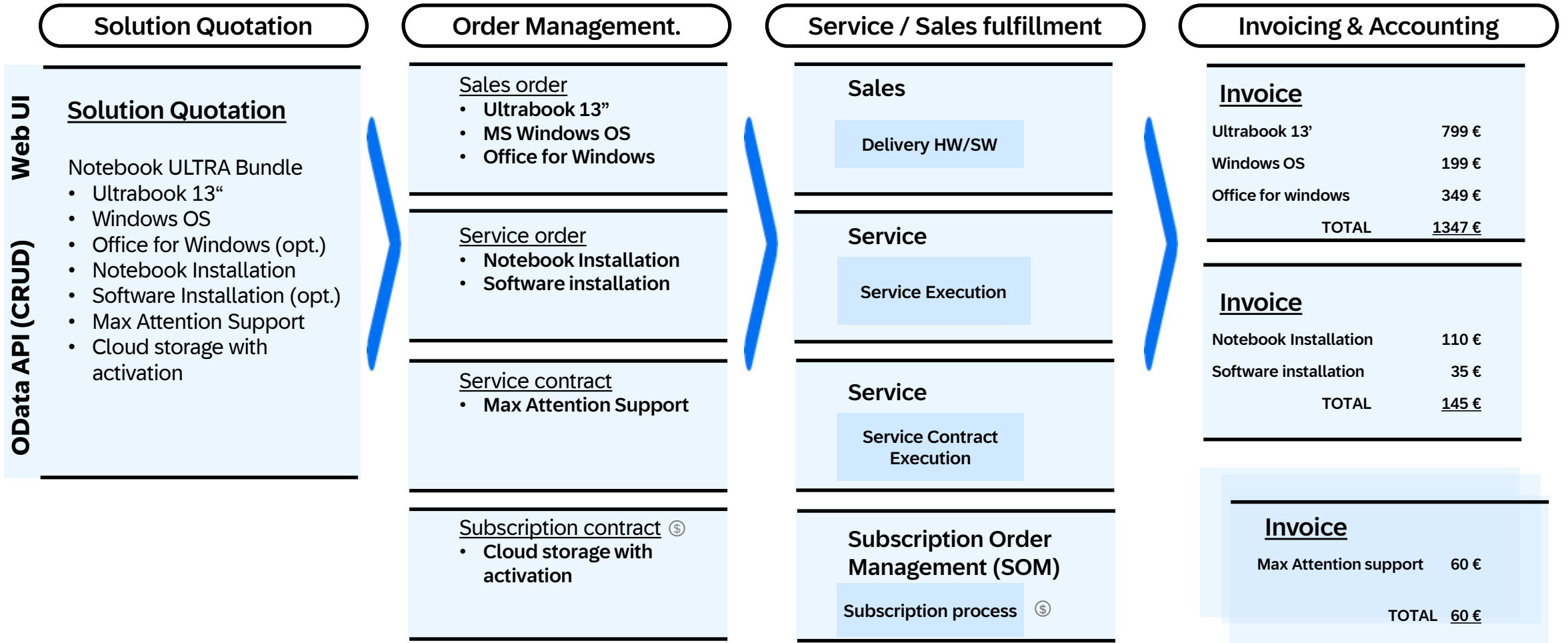
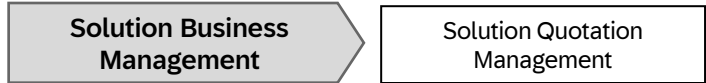
Payment Method

Transaction History

Actions	Transaction	Transaction Type	Date
	46751	Sales Order	21.10.2019
	create deep svcs part	Service Order	21.10.2019
	create deep svcs part	Subscription Contract Document	21.10.2019
	create deep svcs part	Service Contract	21.10.2019

Service Order Quotation

Sales: Solution Quotation Management 2/2



Sales: Solution Portfolio Management

Solution Business Management

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.

The screenshot displays the SAP Manage Business Solution Portfolio interface. On the left, a list of 50 Business Solution Portfolios is shown, with 'Test_BSP_620' selected. The right pane provides a detailed view of this portfolio, including its ID (1000000039), external reference (Test_BSP_789), and sold-to party (Andersons and Sons (C0016)). A bar chart shows the total net value by transaction type: 51.8% for Service Contracts and 47.6% for Service Orders. Below this, a table lists the associated transactions.

Transaction Type	Description	Item No.
Service Contract	Tax Dest Ctr CN Tag - UPD3	100
Service Contract	Tax Dest Ctr CN Tag - UPD3	200
Service Contract	CTU4 Automation By PTF	100

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

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
...		

Example: Role based access to price elements

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
...		

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
...		

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

Order and Contract Management

Price Management

2023
FPS0+1

Manage Tax Rates - Sales

Editing Status: All | Filter Method: Filter with Applicable Cri... | Condition Type: Output Tax (TTX1) x | Key Combination: Domestic Taxes... x | Valid On: | Condition Record No.: |

Tax Code: | W/Tax Code: | Departure Ctry/Reg.: | Tax Class.1 Customer: | Tax Class. Material: | Go Adapt Filters (4)

Condition Records (518) | Edit | Create | Copy | Delete | Import | Export | Download Template | View Import History

Condition Type	Condition Table	Departure Ctry/Reg.	Tax Class.1 Customer	Tax Class. Material
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	IE:2/3rd lower rate (B)	Reduced Tax(Service) (7)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	IE:2/3rd lower rate (B)	Full tax (1)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	IE:2/3rd higher rate (A)	Reduced Tax(Service) (7)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	IE:2/3rd higher rate (A)	Full tax (1)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	Liable for Taxes (1)	Reduced Tax(Service) (7)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	Tax Exempt (0)	Reduced Tax(Service) (7)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	Liable for Taxes (1)	Full Tax (Services) (6)
<input type="checkbox"/> Output Tax (TTX1)	Domestic Taxes (002)	Ireland (IE)	Liable for Taxes (1)	Ex

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

103474
Standard Order (OR)

Partners
Sold-to Party: TM Domestic US Customer 1
Ship-to Party: TM Domestic US Customer 1

Status
Overall Status: Open
Overall Block Status: -
Incompletion Status: Complete

Net Sales Volume (YTD)
5.415.572,61 USD

Net Value
263,25 USD

Sales Order Items (2) | Standard* | v

Item	Product	Requested Quantity	Confirmed
10	Trad.Good 12,Reorder Point,Reg.Trad. (TG12)	5 EA	
20	Trad.Good 12,Reorder Point,Reg.Trad. (TG12)	10 EA	

Availability

Item: 10
Plant: Plant 1 US (1710)
Product: Trad.Good 12,Reorder Point,Reg.Trad. (TG12)

Schedule Lines (2)

Requested Deliv...	Requested Quantity	Confirmed Delive...	Confirmed Quantity	Delivered Quantity
28.03.2023	5 EA		0 EA	0 EA
	0 EA	29.06.2023	5 EA	0 EA

Delivery Block:
Movement Type: GD goods issue:delv (601)
Open Quantity: 0 EA

Delivery Block:
Movement Type: GD goods issue:delv (601)
Open Quantity: 5 EA

Sales Order

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

Order and Contract Management

Sales Order Management and Processing

2023
FPS2

- 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

The screenshot shows the SAP Sales Order 79073 interface. The main table displays the following data:

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

Order and Contract Management

Sales Order Management and Processing

2023
FPS2

- 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.

The screenshot displays the SAP Fiori 'My Home' dashboard with three main sections: Pages, Insights, and Apps. The 'Pages' section includes 'My Business Role Assignment', 'Fiori Launchpad', and 'Overview'. The 'Insights' section shows 'Sales Order Items Backorders' (23,68K), 'List Incomplete Sales Documents' (5,36K), and 'Sales Order Fulfillment Issues Delivery Block' (277). The 'Apps' section includes 'Manage Sales Orders', 'Sales Order Fulfillment Issues', and 'Customers Overview'. Two chat windows are overlaid on the dashboard. The first chat window shows a user asking for a summary of sales order 27111, and the chatbot provides a detailed summary of the order's creation, status, and pricing. The second chat window shows a user asking for the document flow of sales order 27111, and the chatbot provides a numbered list of documents including Sales Order, Delivery, WMS Transfer Order, Goods Movement, Invoice, and Journal Entry, each with its creation date and time. A 'Display' button is visible at the bottom of the second chat window.

Sales:

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

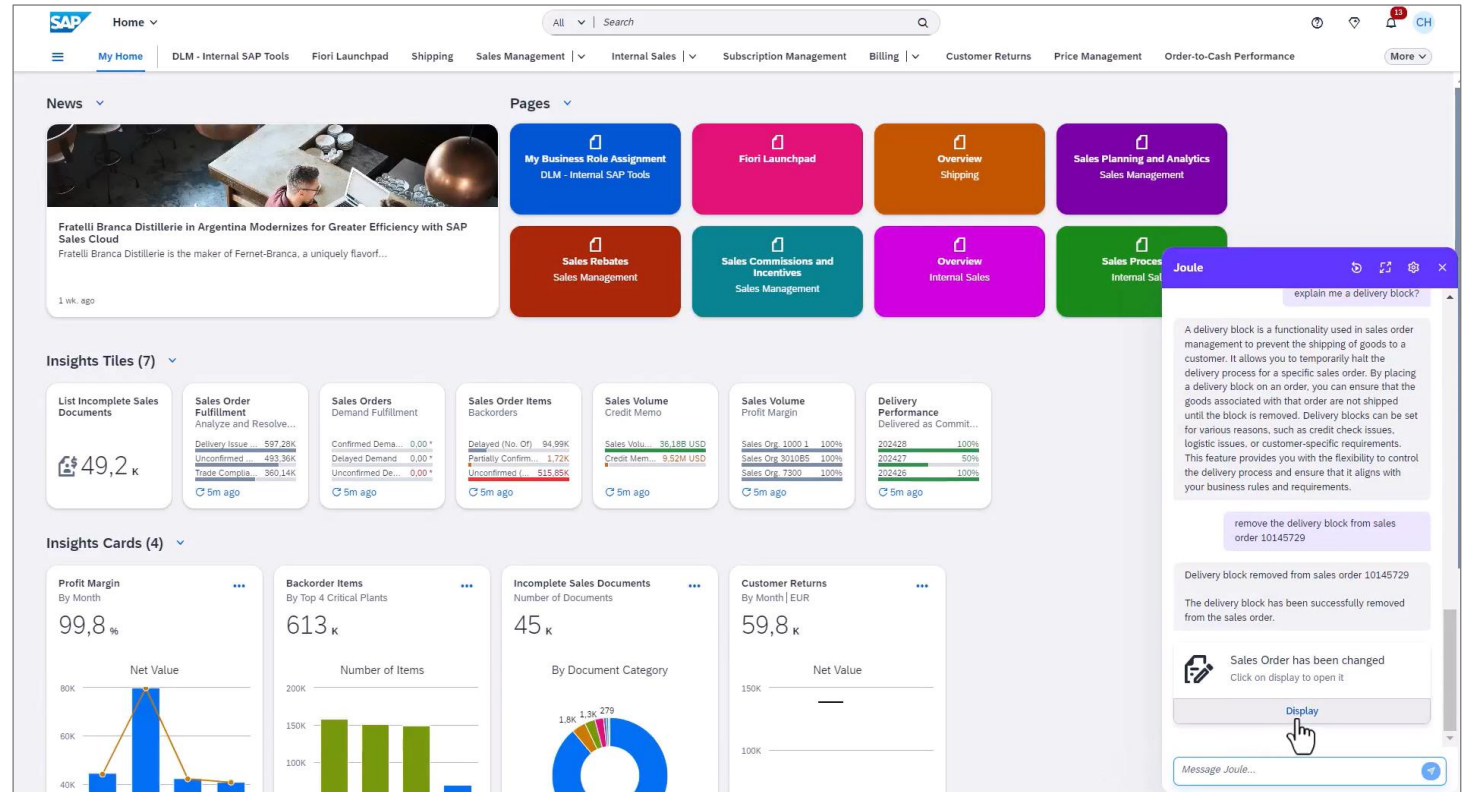
Order and Contract Management

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



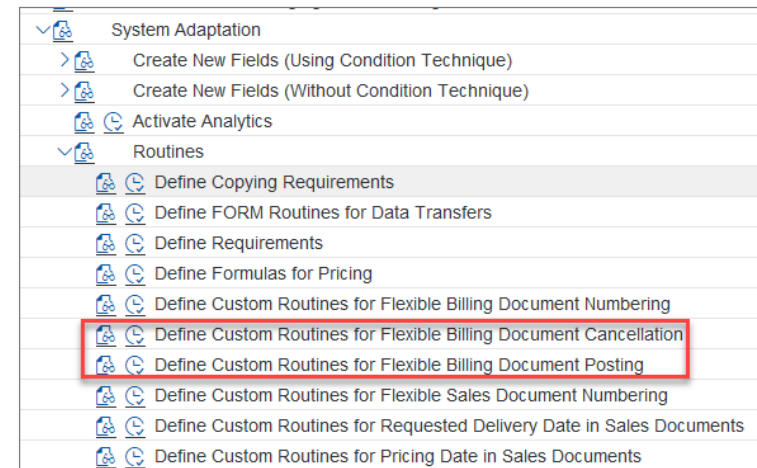
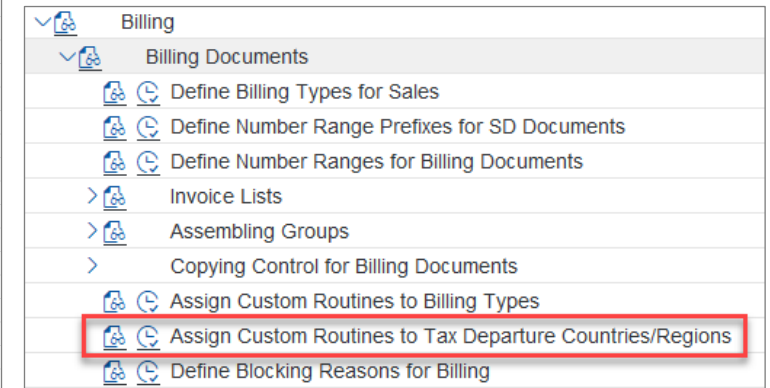
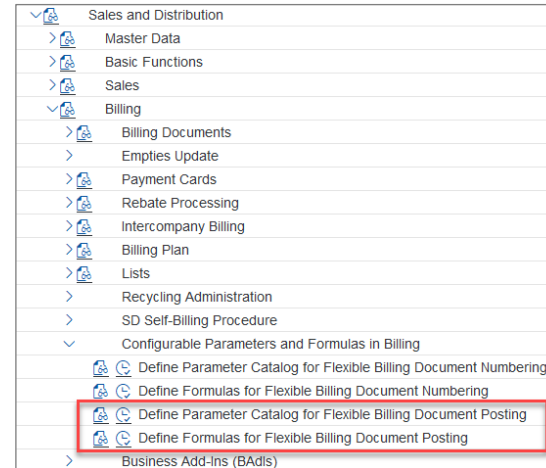
*Availability planned in December 2024 with the new Joule infrastructure

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

Order and Contract Management

Claims, Returns and Refund Management

2023
FPS0+1

Product Valuation Initiated by Refund

- 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.

The screenshot displays the SAP Returns Order Item interface for item 10. The main header shows 'Trad.Good 20,Reorder Point,SerialNo' with a net value of 16.50 USD. The interface is divided into several sections: Product, Shipping, Follow-Up Activity, and Refund. The 'Refund' section is currently active, showing 'Refund Type: Credit Memo' and 'Refund Code: 100% Refund (100)'. The 'Suspend Valuation' field is set to 'No' and is highlighted with a red box. Other fields include 'Refund Control: Decide Later (R)' and 'Customer Returns'.

Item	Processing Status	Logistical Status	Refunding Status	Return Quantity	Net Value
10	Open	Complete	Open	1 PC	16.50 USD

Product

Product: Trad.Good 20,Reorder Point,SerialNo (TG20)
Batch: -

Returned Quantity: 1 PC
Return Reason: -

Shipping

Receiving Plant: Plant 1 US (1710)
Receiving Point: Shipping Point 171R (171R)
Storage Location: -

Follow-Up Activity

Follow-Up Activity: Receive into Plant (0001)
Product Received: Yes
Inspection Code: -
Comment: -
Supplier: -
Return-to Address: -
Inspected at Customer Site: No

Refund

Refund Type: Credit Memo
Refund Code: 100% Refund (100)
Refund Control: Decide Later (R)
Suspend Valuation: No

Customer Returns

Sales:

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

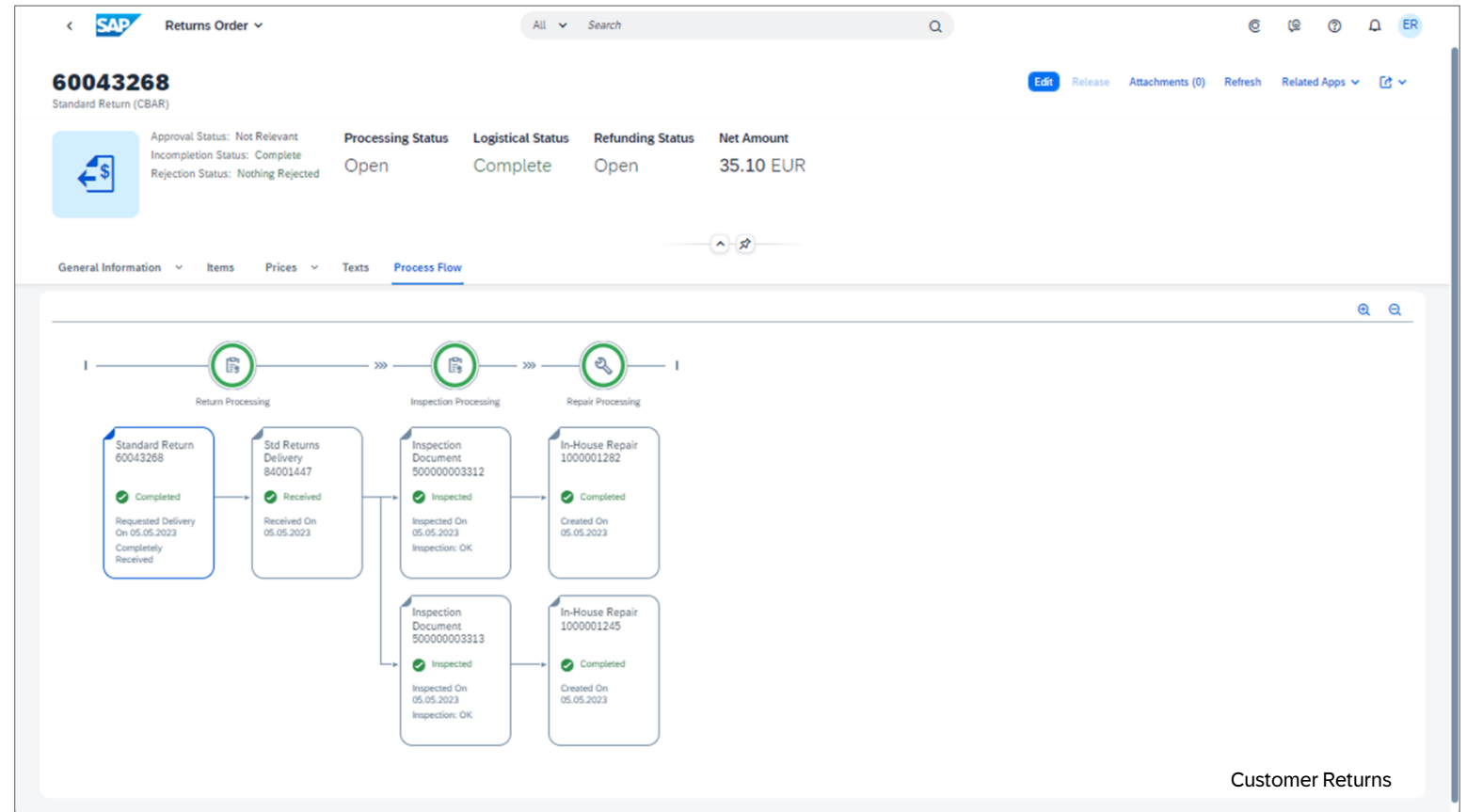
Order and Contract
Management

Claims, Returns and
Refund Management

2023
FPS0+1

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 Business
Management

Solution Quotation
Management

2023
FPS0+1

- 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

The screenshot displays the SAP Service Quotation interface for a quotation with ID 8000481338 and material key mkl. The main section shows a table of items with the following data:

Actions	Item No.	Higher-Level Item	Product ID	Bundle Structure	Quantity	Unit	Product	Item Category
...	10		SOM_MSU_PVT_CLOUD_INFRA	SOM_MSU_PVT_CLOUD_INFRA	1	EA	Multi level Cloud Infrastructure	Sub.It.Qt. multi AVC
...	20	10	SOM_1OF_ACTIVATION		1	AU	Subscription Activation Fee	Subscription One Off
...	30	10	SOM_SCR_WL_CONTAINER		1	EA	Workload - Container	SubstmOut multi AVC

Below the items table, there are sections for Notes, Payment Method, and Transaction History. The Transaction History section shows a single entry:

Actions	Transaction	Transaction Type	Date
	mkl	Subscription Contract Document	15.08.2023

The interface includes various navigation and action buttons such as 'Create', 'Edit', 'Copy', 'Create Follow-Up', 'Send To Customer', 'Accept', 'Actions', and 'Simulate Credit Check'. The date '15.08.2023' is visible in the bottom right corner of the interface.

Sales: Responsibility management and workflow

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

SAP Customer Return

My Favorites Search In: "My Favorites"

All Tasks (11)

Release of Customer Return

Standard Return 60004203

Customer Return: 60004203 Overall Status: Open Ovri Delivery Status: Not Delivered

Sold-to Party: Inlandskunde DE 1 (10100001) Rejection Status: Nothing Rejected Billing Status: Not Relev. for Billg

Ship-To Party: Inlandskunde DE 1 (10100001)

Approval Status: ⚠ In Approval Net Value: 4,000.00 EUR

Approval Request Reason: Approval Reason for Debit Memo Request (CR01)

General Information Items Business Partners Process Flow Approval Details

Sales Area: Dom. Sales Org DE, Direct Sales, Product Division 00 Document Date: 20.10.2022 Created By: _SAPI524954 (_SAPI524954)

Employee Responsible: Andreas Niemz (50000088) Customer Reference: CR01 Created On: 20.10.2022

Order Reason: Standard Return (009) Customer Ref. Date: - Last Changed By: _SAPI524954 (_SAPI524954)

Last Changed On: 20.10.2022, 04:35:56

Items

Product	Return Quantity	Return Reason	Overall Status	Reason for Rejection
TG11	2	PC	Open	

Net Value: 4,000.00 EUR

Release Request Rework Reject Show Log Show Details Release Forward My Inbox

By Date By Type By Priority

⚠ Errors occurred in output processing. ✕

Output item processing resulted in 52 errors

4 hours ago

⚠ Errors occurred in output processing. ✕

Output item processing resulted in 98 errors

1 day ago

⚠ Errors occurred in output processing. ✕

Output item processing resulted in 25 errors

2 days ago

⚠ Sales contract not fulfilled as expected ✕

The validity period of sales contract 0040002622 has elapsed by 81,15%, but 0,00% of its target value has bee...

2 days ago [Show More](#)

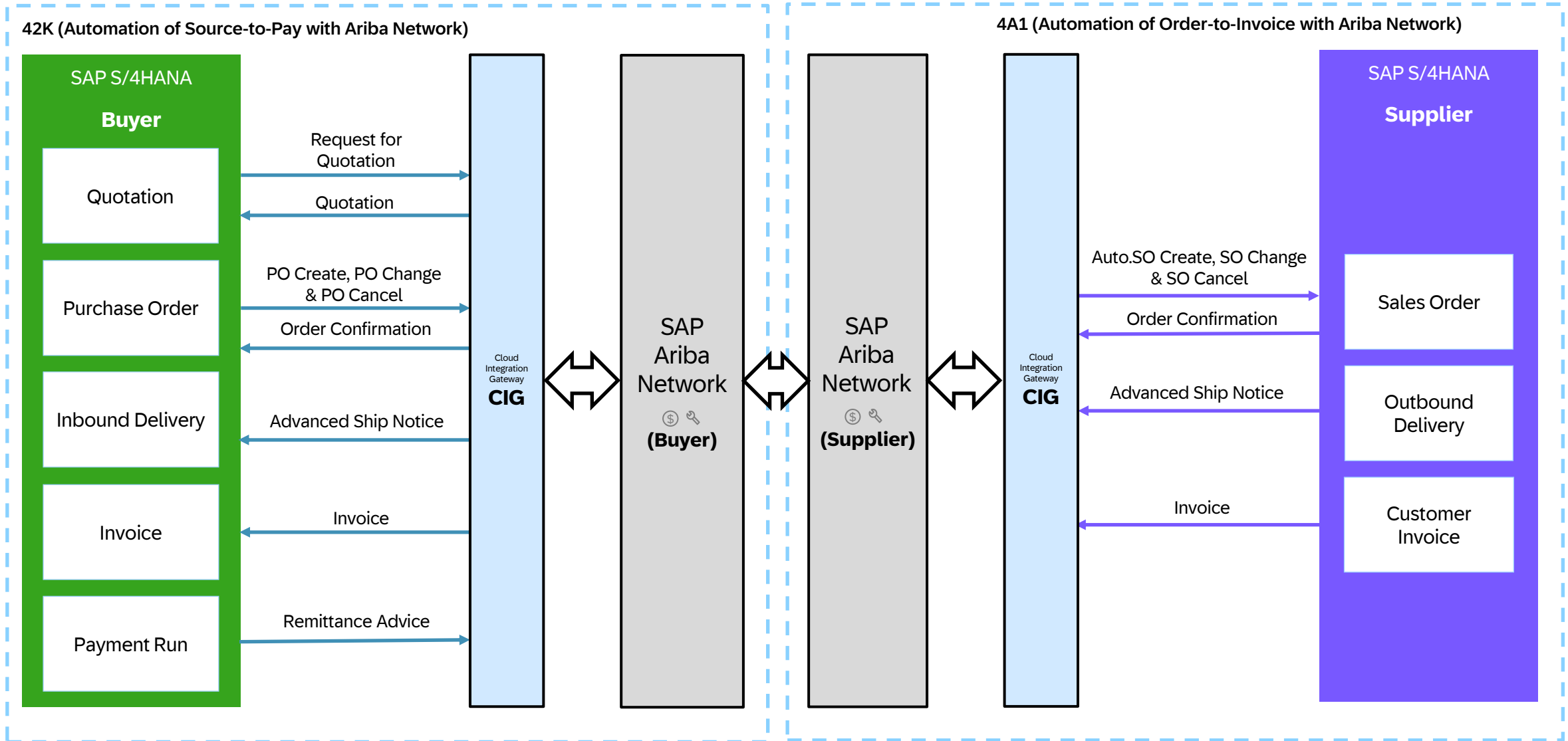
⚠ Sales contract not fulfilled as expected ✕

The validity period of sales contract 0040002621 has elapsed by 81,15%, but 0,00% of its target value has bee...

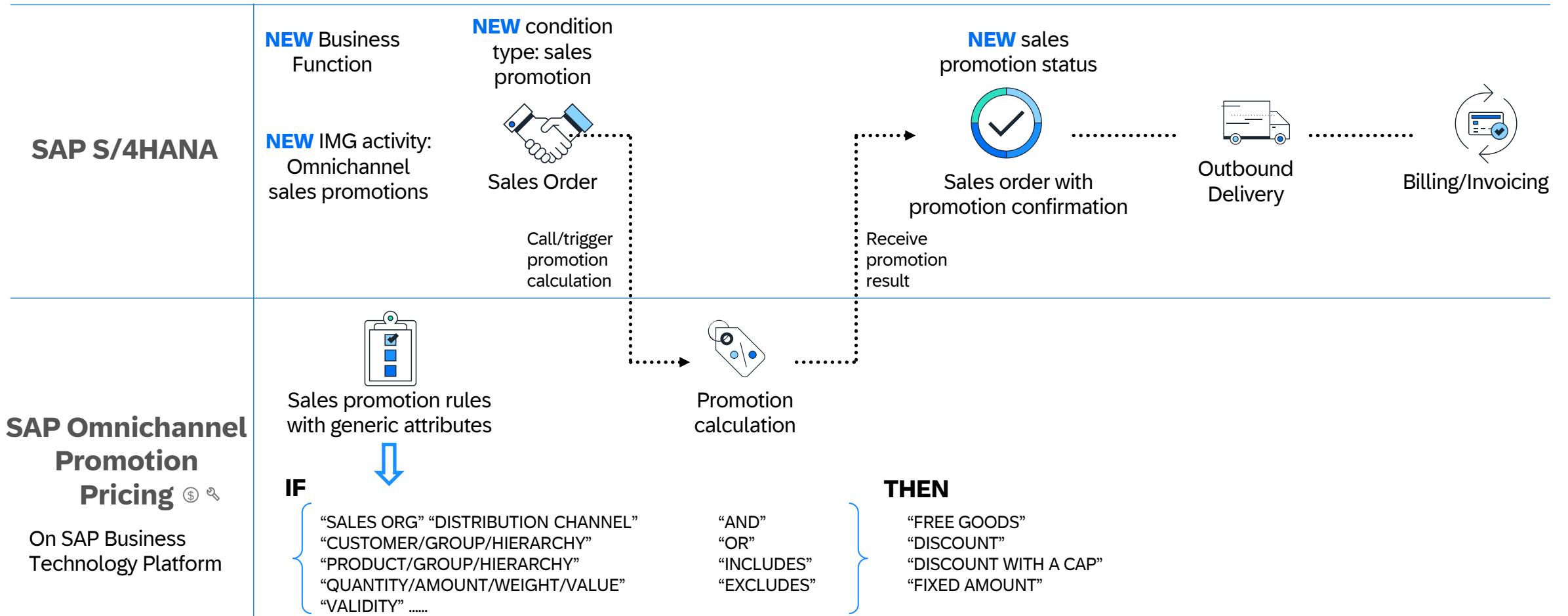
2 days ago [Show More](#)

Notification

Sales: Integration with Ariba Network

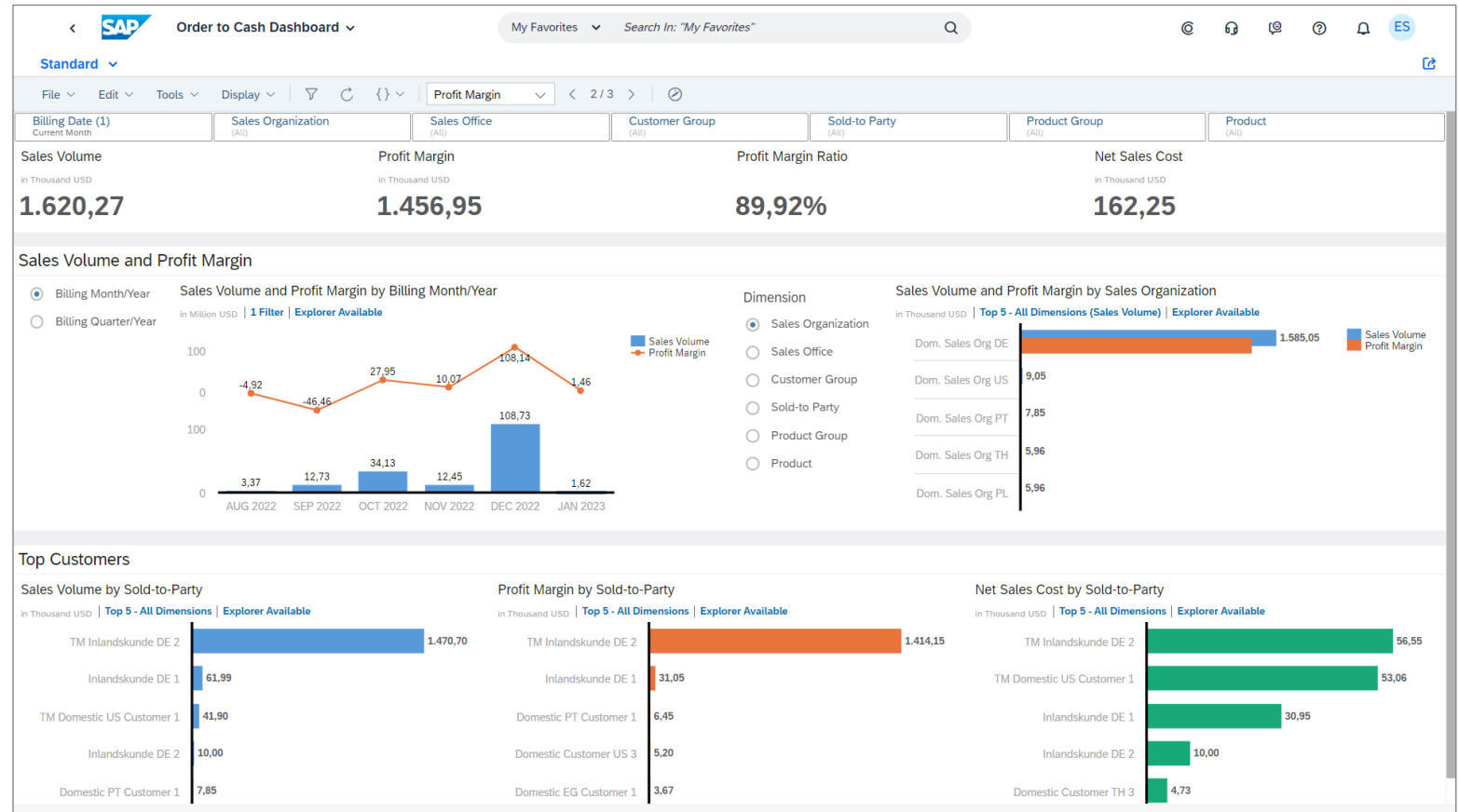


Sales: Integration with SAP Omnichannel Promotion Pricing



Sales: Order-to-Cash Dashboard

- 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



SAP S/4HANA

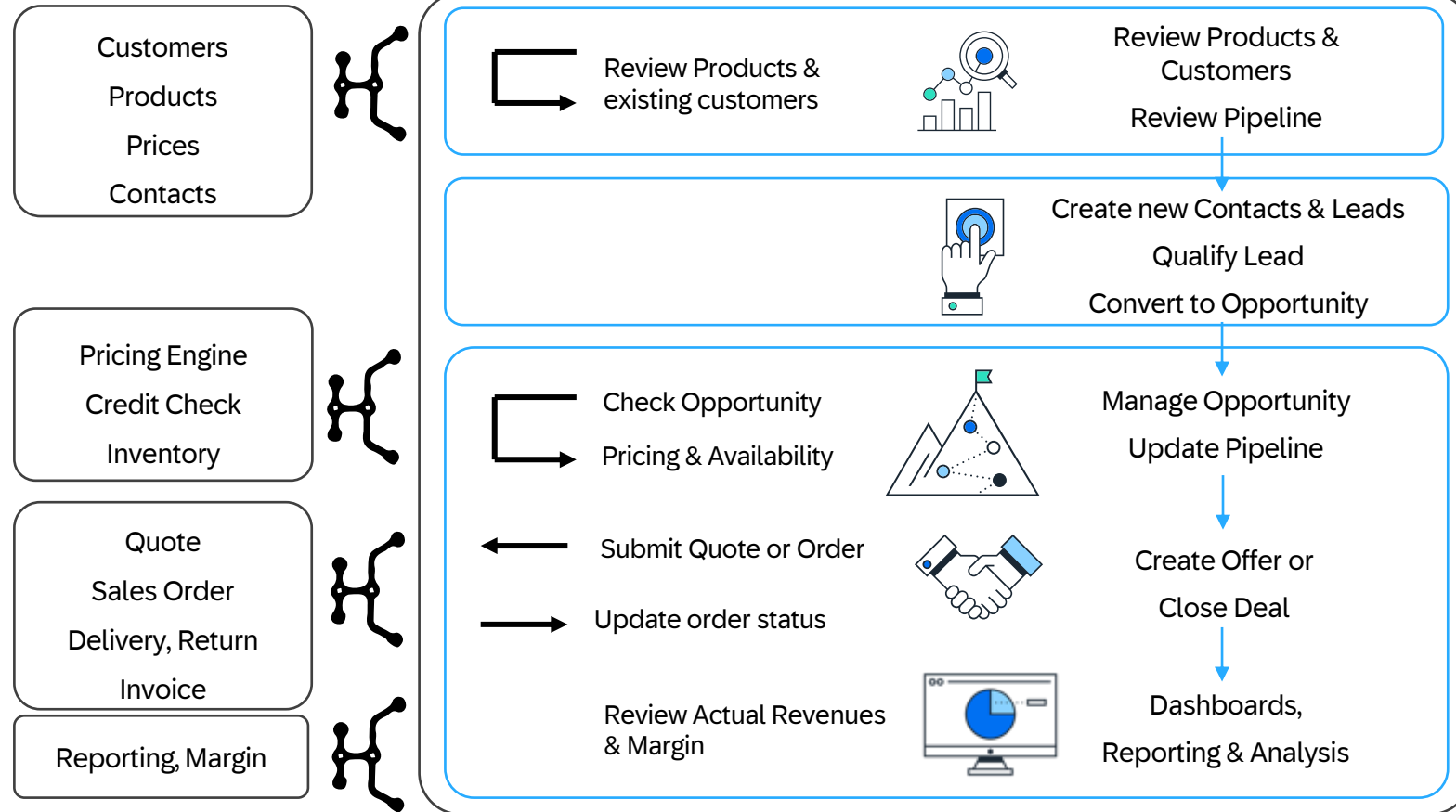
DIGITAL CORE

Digital Handshakes

SALES TEAMS



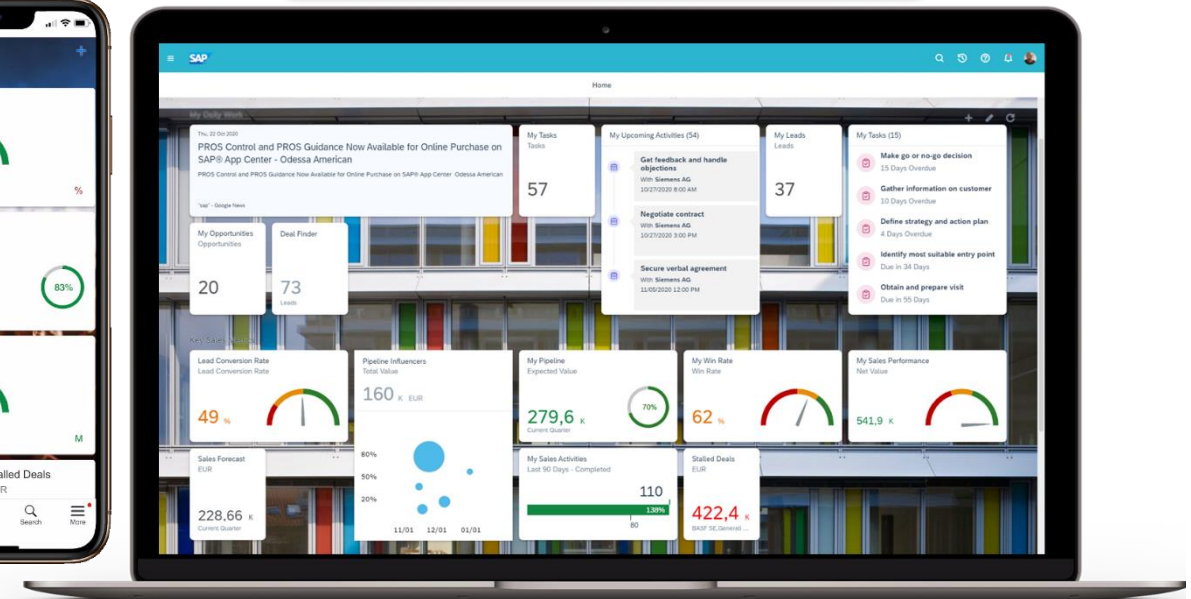
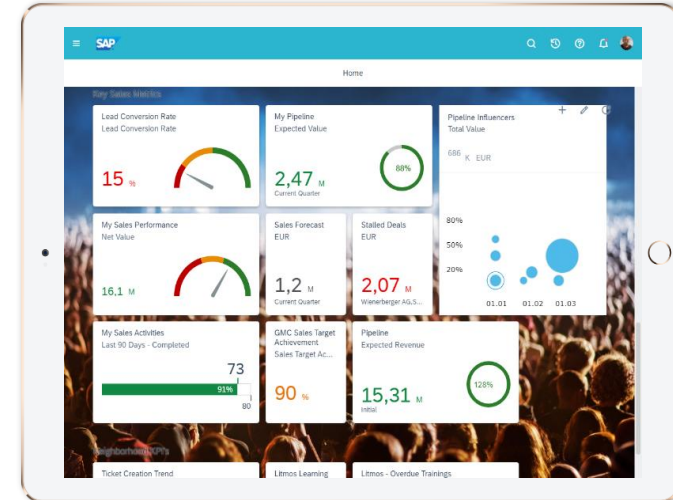
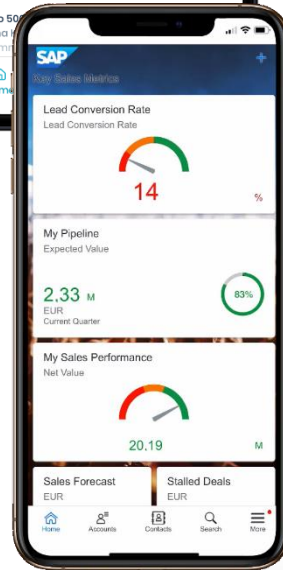
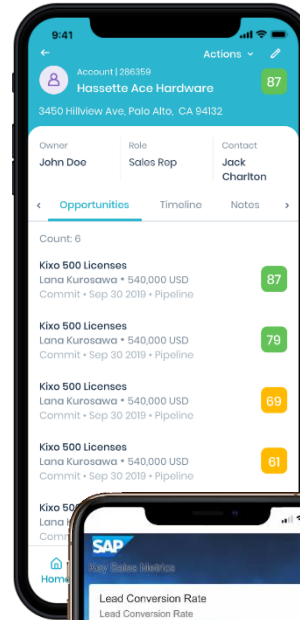
- Native integration between SAP Cloud for Customer and SAP S/4HANA
- Provides a flexible option for customers needing true hybrid scenarios and incremental updates
- Empower sales with a mobile SFA cloud solution to manage sales process together with SAP Cloud for Customer
- Provide sales with the transparency 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 S/4HANA

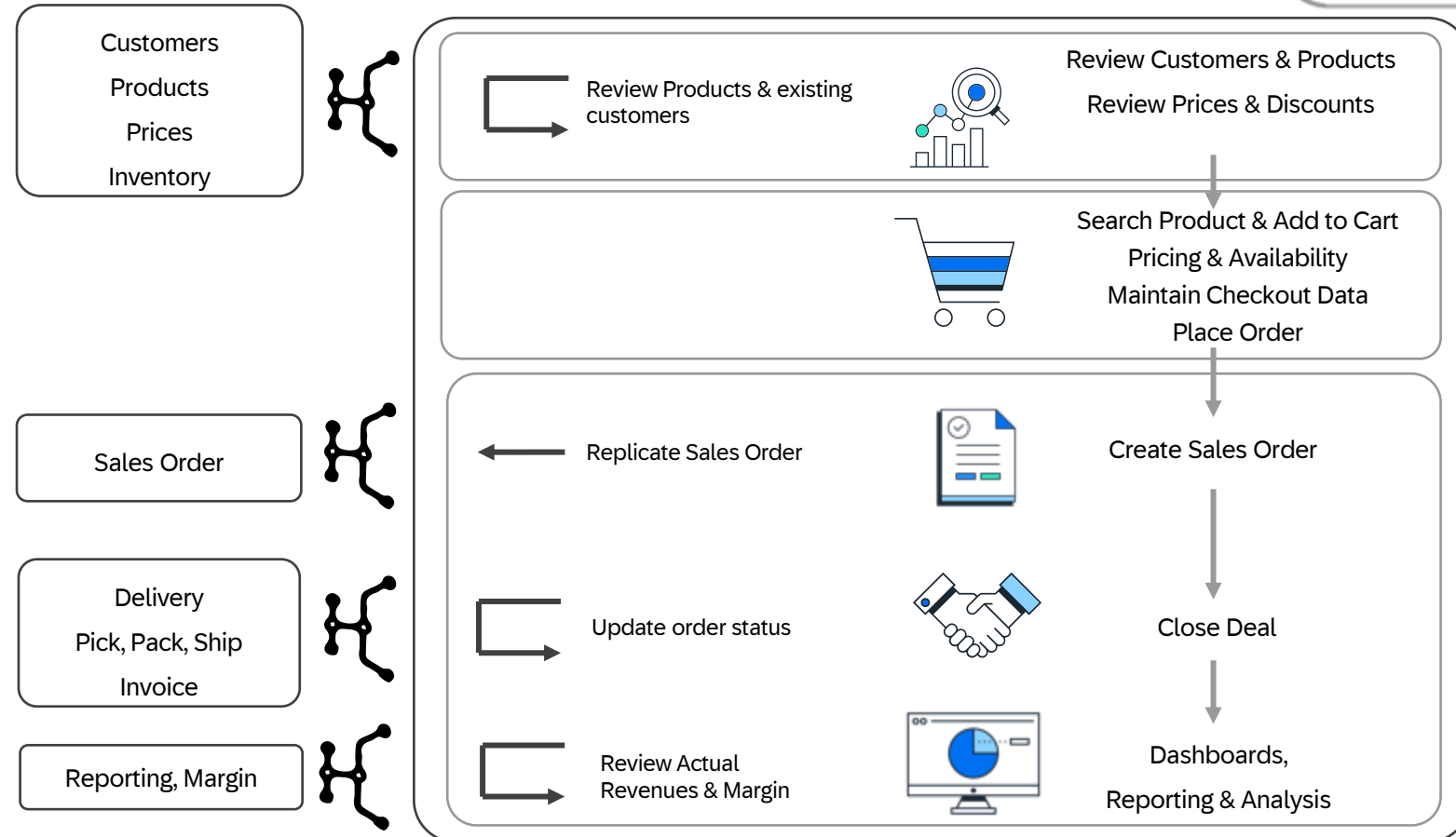
DIGITAL CORE

Digital Handshakes

Business

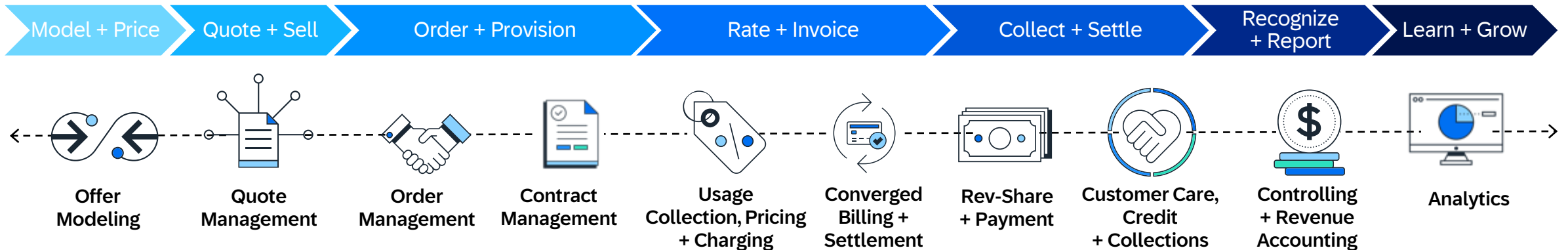
SAP Commerce Cloud

- 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



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

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

- 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)

- 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

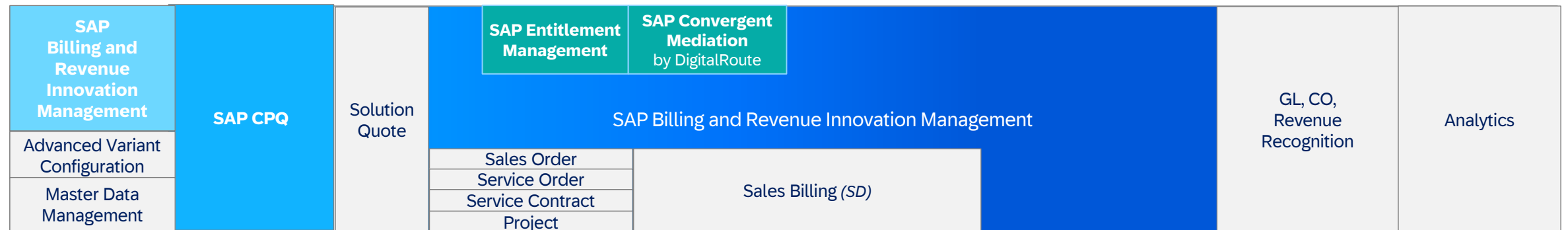
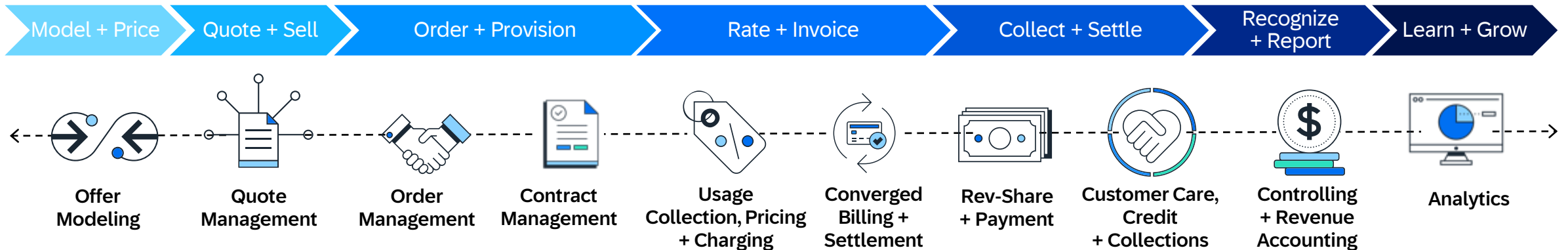
- Accounts receivables management with subledger accounting
- Payment clearing automation
- Payment deferrals and installment plans
- Credit, collections, and dispute management
- Partner rev-share settlement
- Identify revenue-loss situations using AI

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

- 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



■ Quote-to-Cash modules
 ■ Optional Quote-to-Cash modules
 ■ SAP S/4HANA / BTP core capability

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

Service Management

SAP S/4HANA Cloud Private Edition

(based on SAP S/4HANA 2023)

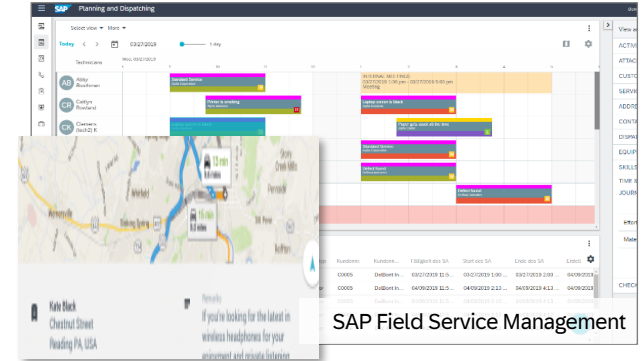


Service: Overview

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 S/4HANA LoB Apps

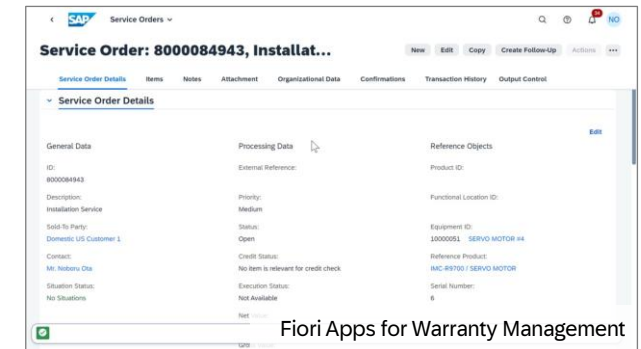
- additional license

Subscription Order Management

Extend commercial service offerings with enhanced subscription 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.



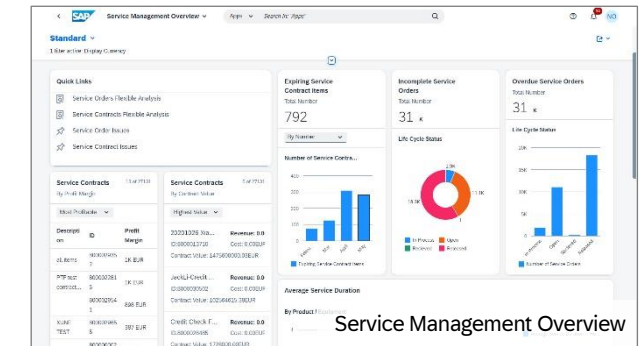
SAP S/4HANA Enterprise Management

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 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

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

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.

Service Maintenance Plan

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

Service Contract Mgmt. & Warranty Mgmt.

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.

Service Monitoring and Analytics

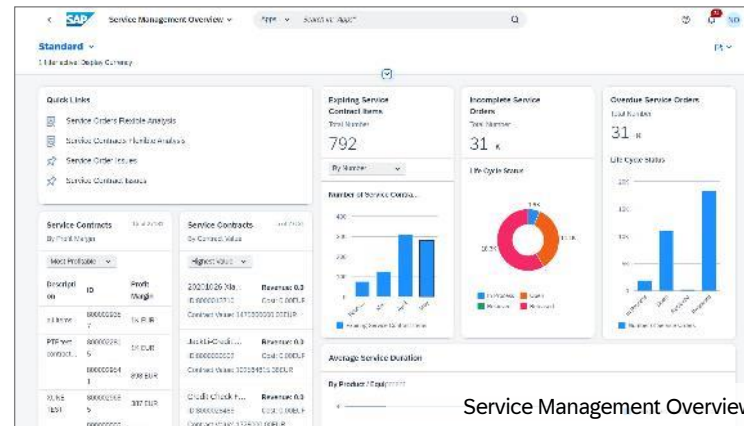
Monitor operations and business outcome of services business by holistically capturing and measuring service performance and profitability using operational reporting and dashboards.

Service Parts Management

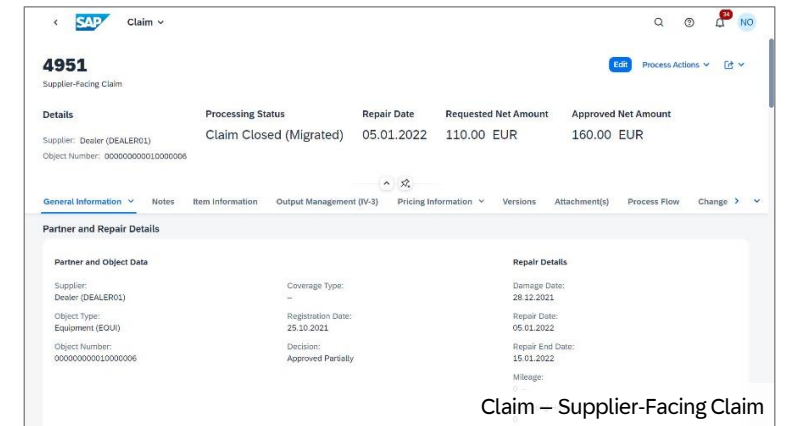
Service Parts fulfillment

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

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.**

Service Order Management

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.

In-House Repair

Plan and perform **in-house repairs more effectively by integrating the repair process across various lines of business** for greater transparency.

Service Billing fulfillment

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.**

Customer Engagement

Support efficient issue resolution through multichannel **customer engagement and smart interactions.**

The screenshot shows the SAP 'Manage In-House Repair Details' interface. A table titled 'Customer Warranty End Status' is highlighted with a circular callout. The table contains the following data:

Customer Warranty End	Status
01.02.2025	Quotation
01.02.2025	Quotation
20.06.2021	Quotation
20.06.2021	Quotation

Below the table, there is a 'Repair Objects' section with a table listing equipment, products, and serial numbers.

Manage In-House Repair

The screenshot shows the SAP 'Manage Billing Documents' interface. A circular callout highlights the 'Process Flow' section, which illustrates the flow from a 'Service Contract' to an 'Invoice'. The flow includes the following steps:

- Service Contract (8000029970) - Logical System: DRVCLNT910
- Reference to 'Cust. Mgmt Service Contract BDR 10144424'
- 'Invoiced' status with 'Invoice Planned For 01.04.2023' and 'Net Value 280.00 USD'
- 'To Be Posted' status with 'Invoice Planned For 01.04.2023' and 'Net Value 280.00 USD'

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

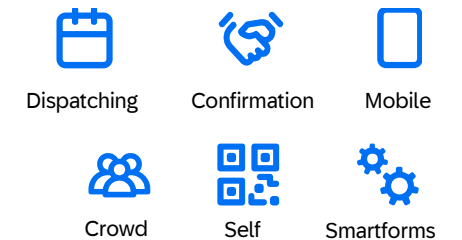
Customer Service



Service Operations



Field Service



SAP Asset Performance Management

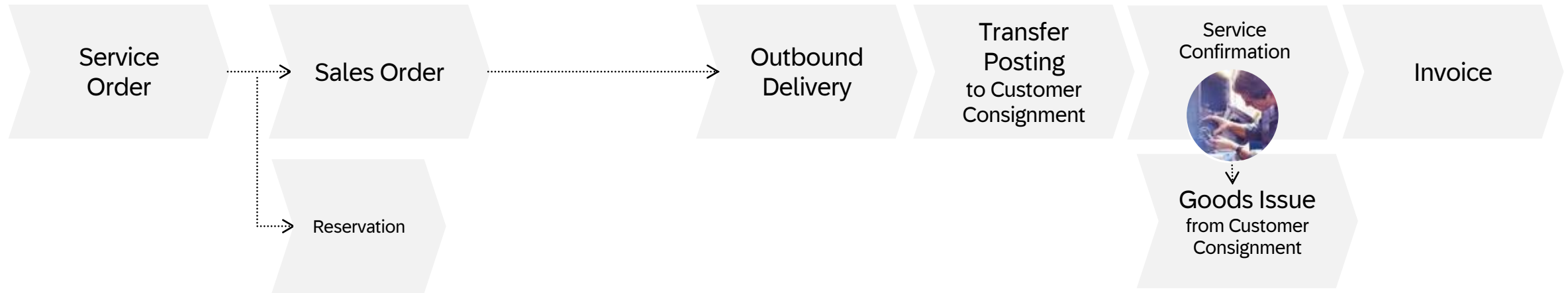


Service: Advance shipment

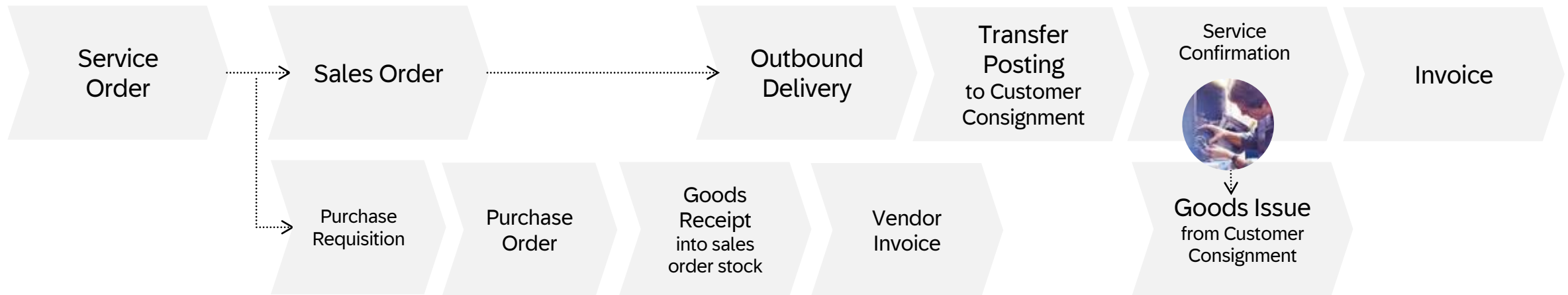
Service Operations & Processes

Service Order Management

Parts in stock

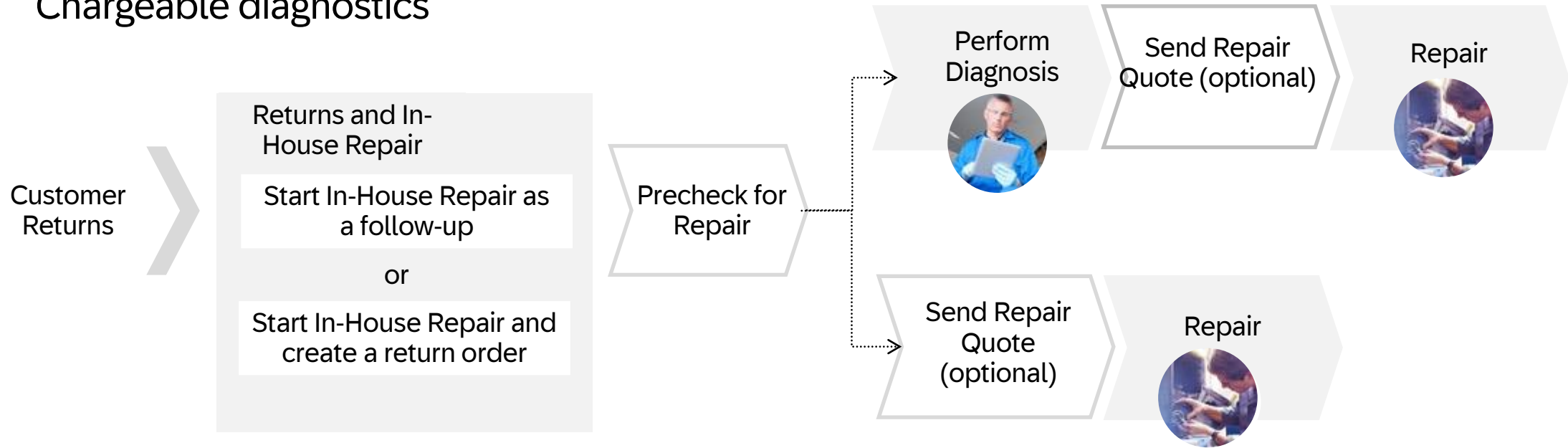



Parts not in stock



Service: Chargeable diagnostics in in-house service

- Seamless process handover with customer returns
- Chargeable diagnostics



$$\underbrace{\text{Perform Diagnosis}} + \underbrace{\text{Repair}} = \text{Bill to Customer}$$


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

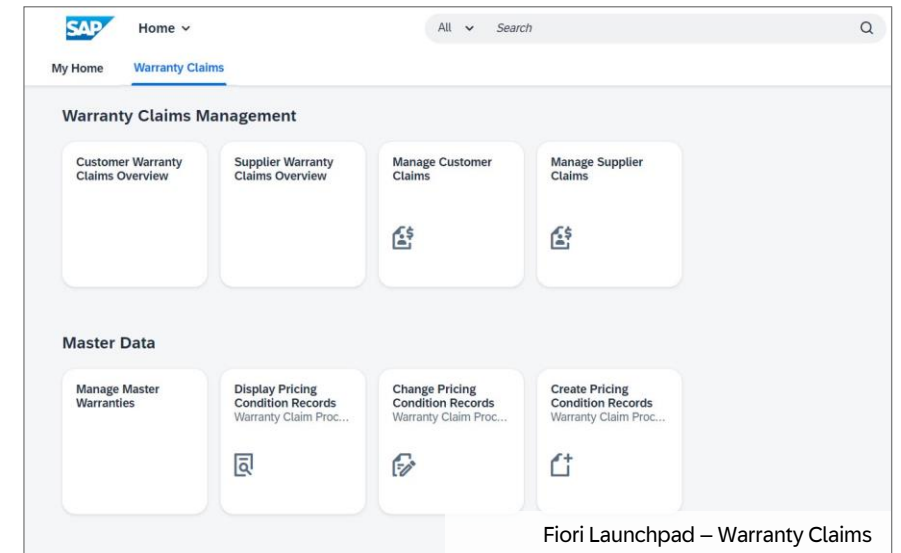
Service: Warranty claim processing

Service Master Data and Agreement Management

Warranty Management



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.

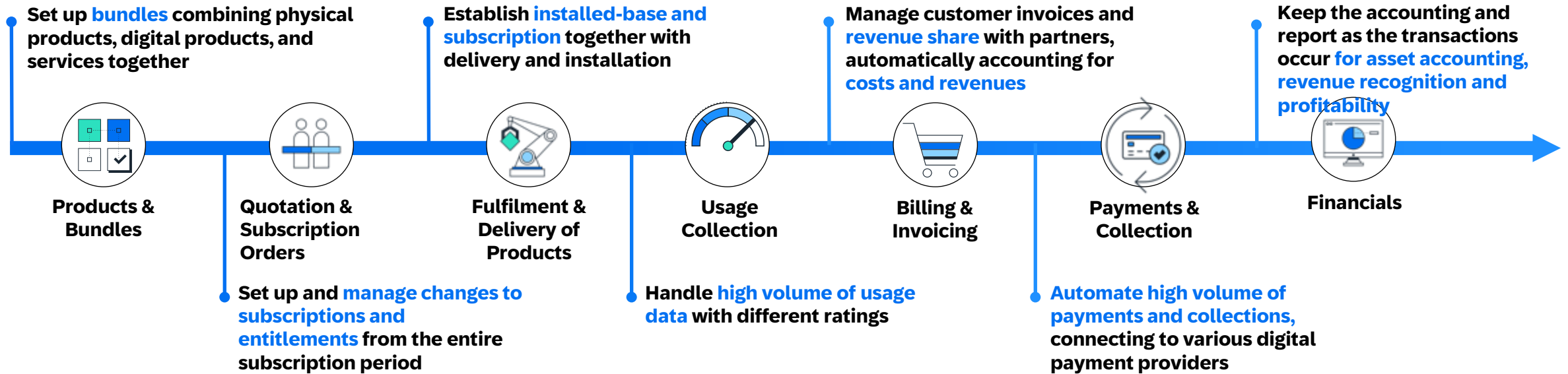


Service: Example of aftermarket solution business with SAP

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 <ul style="list-style-type: none"> • KPI 1: Number of cars painted • KPI 2 :Paint line throughput (cars / hour)

[SAP Community Call recording with system demonstration](#)

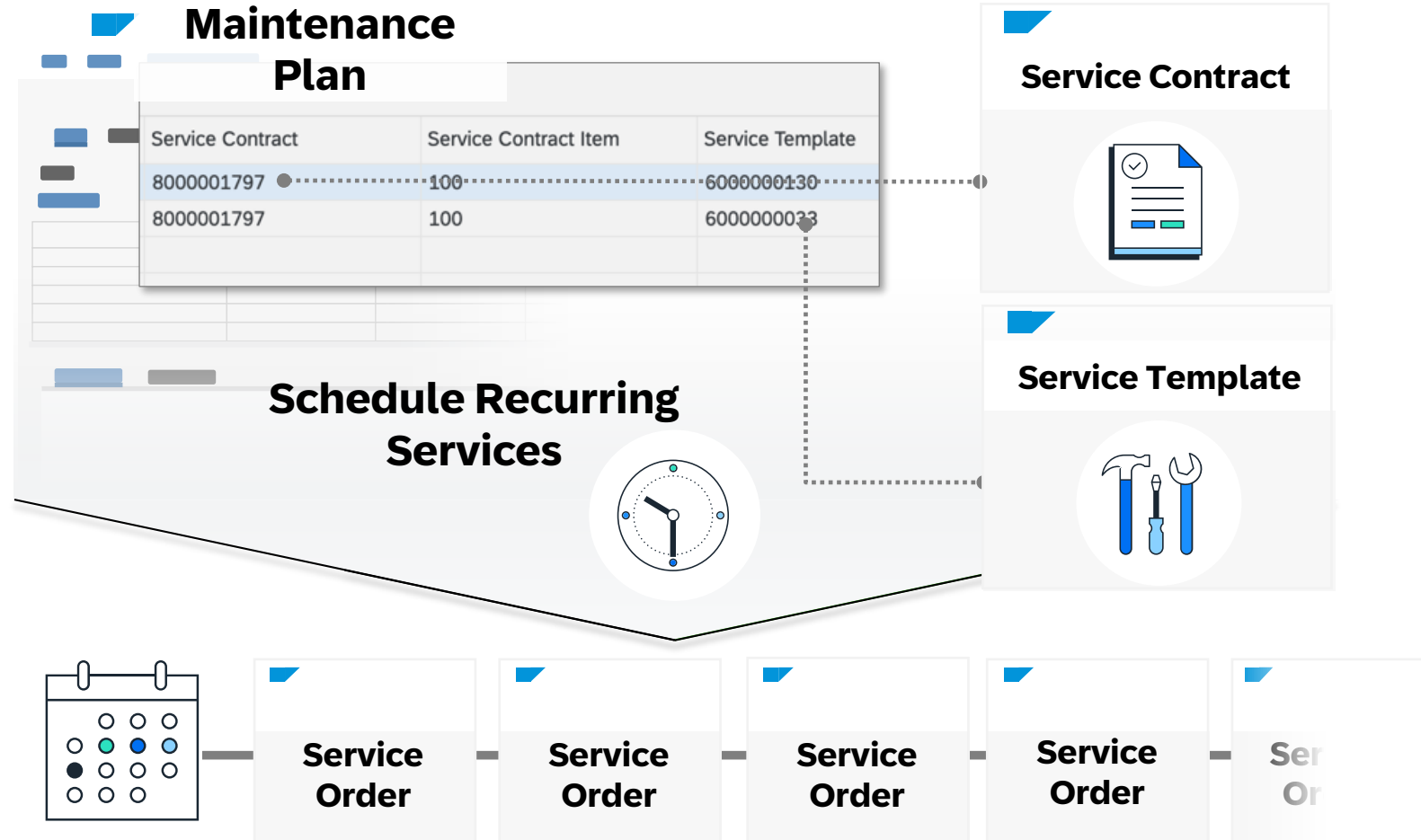
Service: Recurring service planning and scheduling

Service Operations
and Processes

Service Order
Management

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

The screenshot shows the SAP interface for Technical Object 10002798. The main section is titled 'Maintenance Items for Service' and contains a table with the following data:

Maintenance Item	Maintenance Plan	Service Contract	Service Contr...	Service Order Template
Item 10 (8836)	Item 10 (3286)	2020.01.01 - 2020.06.01 (8000001735)	100	2020.01.01 - 2020.06.01 (8000000229)
2 (8819)	MP AIAL Test04 (3273)	Change Process Lens8 (800000240)	100	Test Template 22 (800000022)
2 (8817)	MP AIAL Test03 (3272)	Change Process Lens8 (800000240)	100	Test Template 22 (800000022)

Below the table is a 'History' section with a 'Standard' dropdown menu. The label 'Technical Object' is positioned at the bottom right of the screenshot.

Service Plan History

Header Price Agreement

The screenshot shows the SAP interface for Service Contract 8000028432. The 'Price Agreement' section is expanded, showing a table with the following data:

Actions	Condition Record No.	Condition Type	Condition Amount	Condition Currency	Valid From	Valid To
	800000001	DSC3	15,00 %		28.03.2022	31.12.9999

The label 'Service Contract' is positioned at the bottom right of the screenshot.

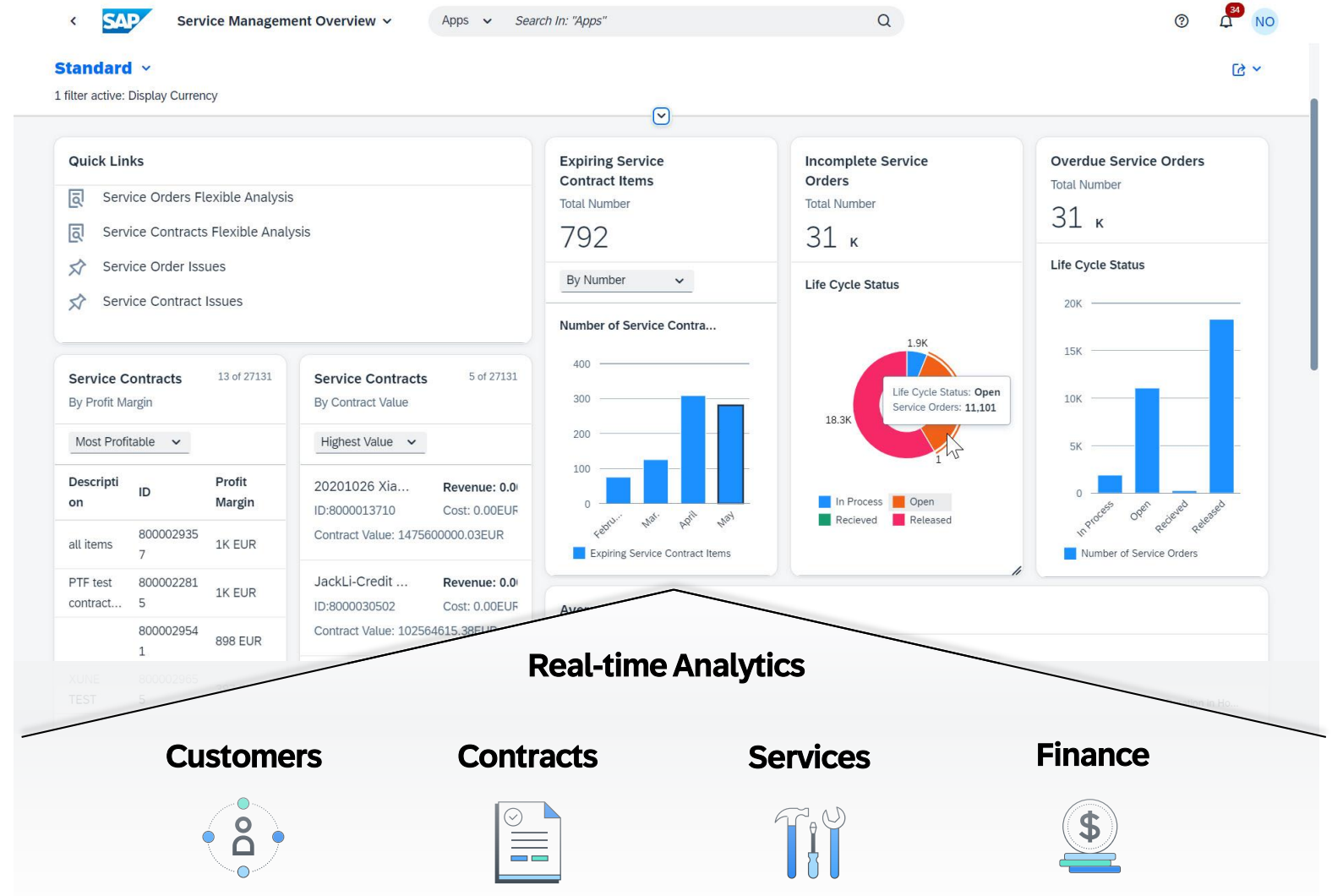
Service: Embedded analytics

Service Master Data and Agreement Management

Service Monitoring and 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

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.

The screenshot displays the SAP Service Station interface. A large circle highlights the 'Product' section, which lists:

- Field Service: Dismantle defective comps
- In-House: Diagnosis defective comps
- In-House: Repair defective comps
- Stock Service Part

Another circle highlights the 'Repair Objects (In-House Repair)' table:

Actions	In-House Repair	Repair Object	Equipment ID
	1000003969	10	10126097
	1000003969	20	10126098

A third circle highlights the 'Reference Objects' section at the bottom of the interface.

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

Service: In-House Repair 2/2

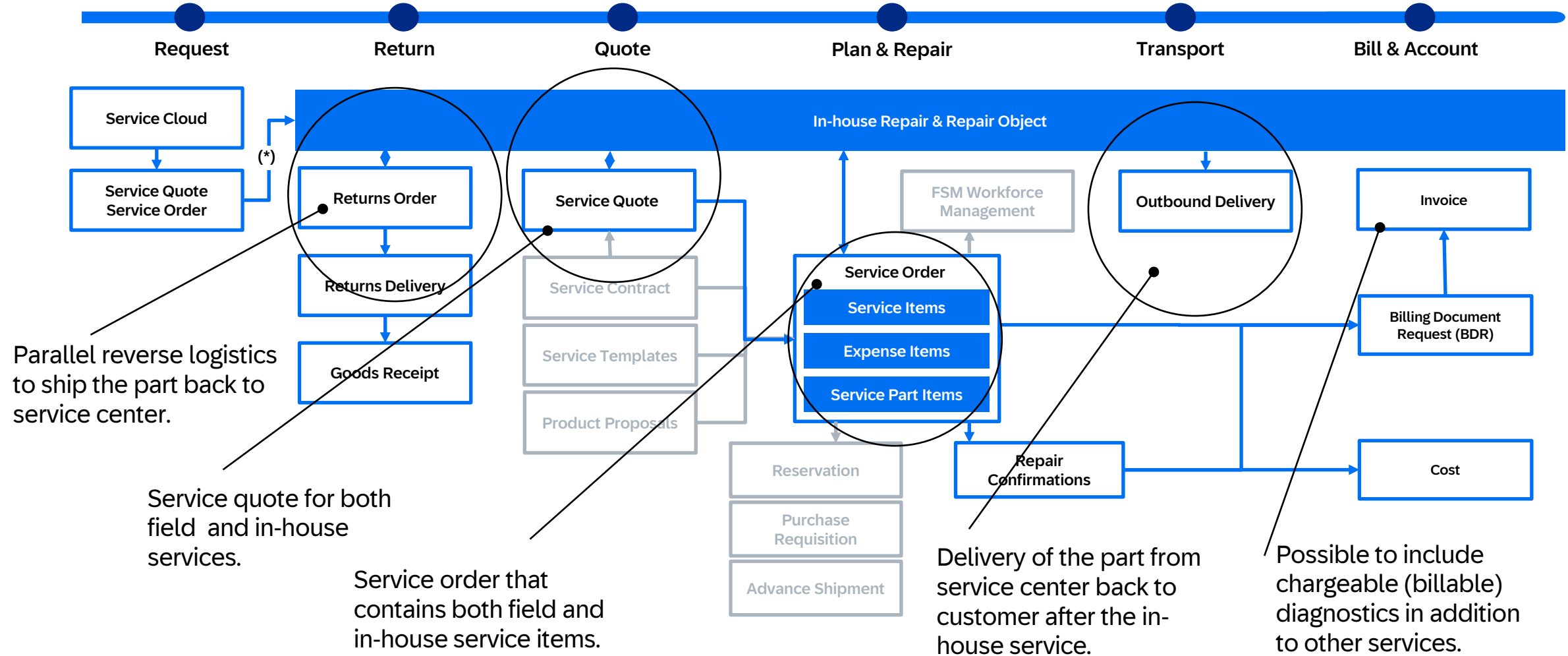
Unified service process combining field service and in-house

Service Operations and Processes

In-House Repair

Service Order Management

2023
FPS2



Service: Non-serialized products in in-house repair

2023
FPS2

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.

The screenshot displays the SAP 'Manage In-House Repair Details' interface. A modal window titled 'Add Non-Serialized Products' is open, showing a search bar and a table of products. The table lists various product types with checkboxes and quantity input fields. The 'Application Unit (AVC_RBT_APPL_UNIT)' and 'Base Frame (AVC_RBT_BASE_FRAME)' are selected. The background shows the main repair details page with tabs for 'Repair Objects', 'Notes', and 'Change Documents'.

Product	Quantity	Unit
<input type="checkbox"/> Single Article (HAWA) (ART_VAS_ICS)	1	EA
<input checked="" type="checkbox"/> Application Unit (AVC_RBT_APPL_UNIT)	3	PC
<input checked="" type="checkbox"/> Base Frame (AVC_RBT_BASE_FRAME)	7	PC
<input type="checkbox"/> Control Board (Painting) (AVC_RBT_BRD_PAINT)	1	PC
<input type="checkbox"/> Control Board (Sealing) (AVC_RBT_BRD_SEAL)	1	PC
<input type="checkbox"/> Robot Bundle (AVC_RBT_BUNDLE)	1	PC
<input type="checkbox"/> Control Board (programmable) (AVC_RBT_CNTRL_BRD)	1	PC
<input type="checkbox"/> Control Cabinet (AVC_RBT_CNTRL_CAB)	1	PC
<input type="checkbox"/> Control Unit (AVC_RBT_CNTRL_UNIT)	1	PC
<input type="checkbox"/> Control Unit (Configurable) (AVC_RBT_CNTRL_CTRL)	1	PC

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.

The screenshot shows the SAP 'Create Master Warranty: Initial Screen'. The 'Master warranty' field is set to 'Subassembly Warranty 60 Month'. The 'Warranty type' is 'Customer warranty' with the 'Pass on warranty' checkbox checked. The 'AcctIndicator' is set to 'G1'. Below this, a table lists services:

Item	Service	Text	Lon...	SortID	Incl/...	Conf...	Servi...
1	ANNUAL_TURBINE_SRV	Annual Turbine Service			In...		
2	CALIBRATION	Calibration Service (Unloader Valve)			In...		

An accounting indicator search dialog is open, showing 'Accounting Indicator (1)'. The search results list:

A...	Accounting indicator desc
G1	Special case: 50%
S1	Non-Billable Demand
Z1	Warranty (100%)
Z2	NAV_Warranty

The 'G1' indicator is selected. The 'Create Master Warranty' button is visible at the bottom right.

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.

The screenshot displays the SAP Service Orders interface. At the top, it shows 'Service Orders' and 'Service Order Item: 10, Pump Maintenance'. Below this, there are navigation tabs: 'Scheduled Actions', 'Attachments', 'Parties Involved', 'Billing', 'Dates', 'Change History', 'Transaction History', 'Service Level Agreements', 'Maintenance Orders', and 'Maintenance Order'. The 'Maintenance Orders' tab is active, showing a table with two rows of maintenance orders. A line points from the text on the left to the first row of this table.

Order	Order Type	Short Text	Planning Plant	Main WorkCtr	Plnt WorkCenter	System Status	Planned Costs
4020942	YBA1	Corrective Maintenance	1710	RES-0100	1710	REL MACM PRC SETC	688,52
4020927	YBA1	Corrective Maintenance	1710	RES-0100	1710	CRTD MACM PRC	688,52

Below the table, the 'Maintenance Order' details are shown. The 'Maintenance Order Details' section includes fields for Order Type (YBA1), ID (4020942), and Description (Pump Maintenance). The 'Status' section shows a dropdown menu with options: REL Released, MACM Material committed, PRC Pre-costed, and SETC Settlement rule created. The 'Person Responsible' section includes fields for Planner Group and Main Work Center (RES-0100 / 1710). The 'Costs' section shows Estimated Cost (0,00 USD), Planned Cost (688,52 USD), and Actual Cost (0,00 USD).

Service: Price items

Service orders and service quotations

Service Order: 8000031639, Urgent service (complex)

Service Order Details | **Items** | Notes | Attachment | Confirmations | Transaction History | Output Control

Show: All Items

Search [] | Edit List | Insert | Renumber Items | Delete | Copy | Copy from Template | Release All Items | Product Proposal | Contract Selection | ...

Actions	Item No.	Higher...	Product ID	Quantity	Unit	Product	Item Category	Net Value	C...	Status
<input type="checkbox"/>	10		CSSRV_01	1,0	HR	Service	Service (Fixed...)	9.000,00	USD	Released
<input type="checkbox"/>	20	10	SRV_02	1	EA	Service Expense	Expense (Fixed...)	150,00	USD	Released
<input type="checkbox"/>	30	10	SRV_05	1	PC	Stock Service Part	Service Part (FxPrc)	2.500,00	USD	Released
<input type="checkbox"/>	40	10	CSSRV_01	1,0	HR	Service	Price Item	105,00	USD	Open
<input type="checkbox"/>							(Not Selected)			

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.

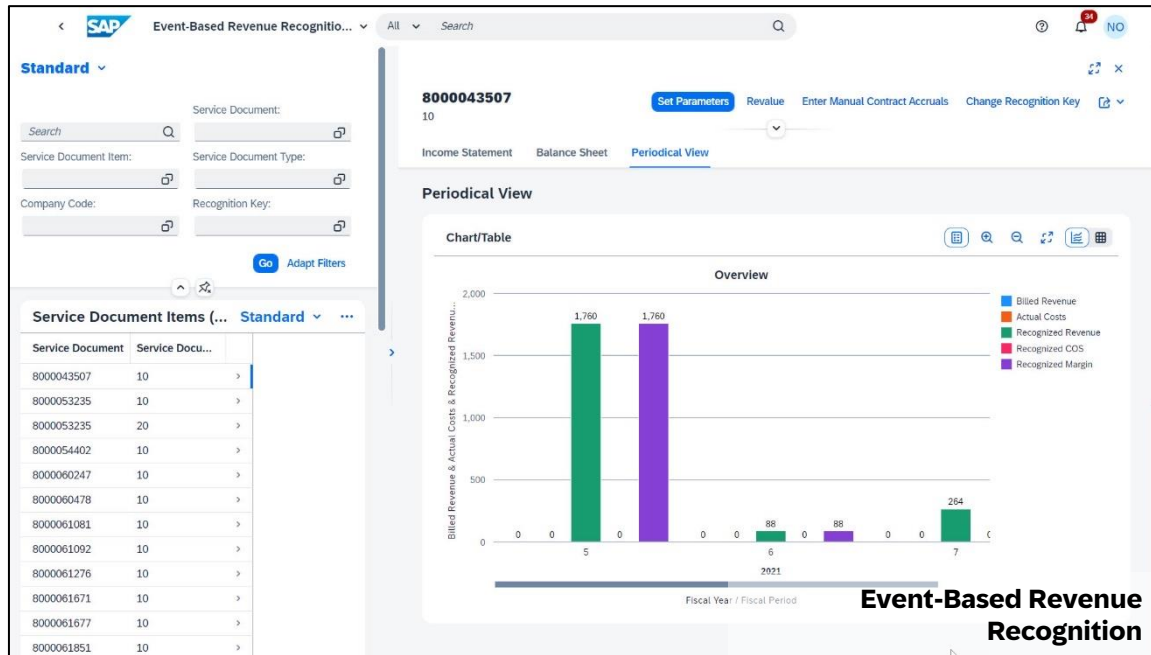
Price items are particularly useful if you discover that the fixed price agreed upon cannot cover all service costs and you need to charge your customers more.

Item-based accounting is a prerequisite for price items.

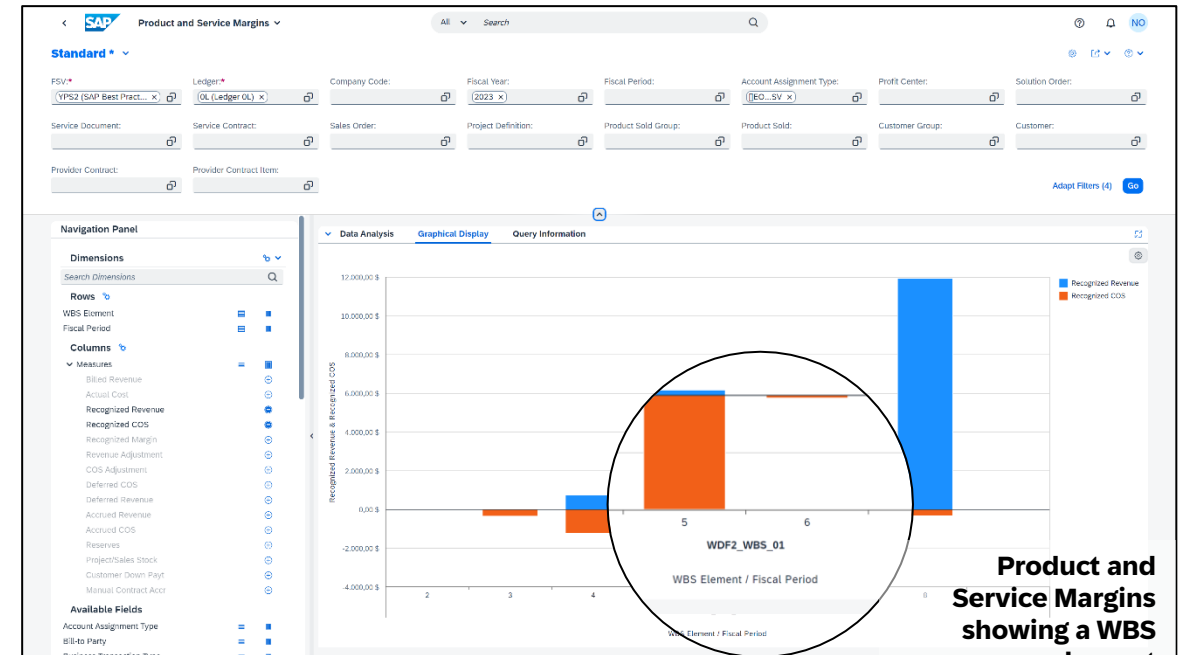
Service: Item-Based Accounting

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

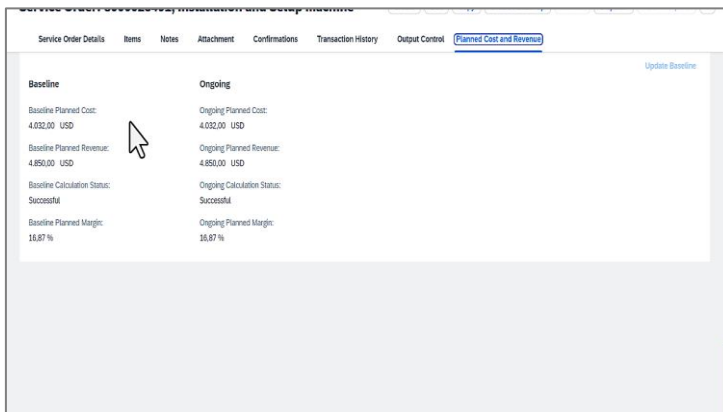
Service Operations & Processes

Service Order Management

2023
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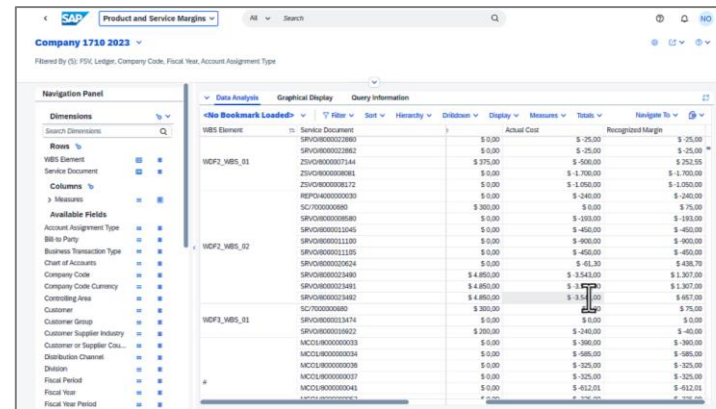
Planned cost and revenue calculation

Tracking baseline and ongoing cost and revenue per service order.



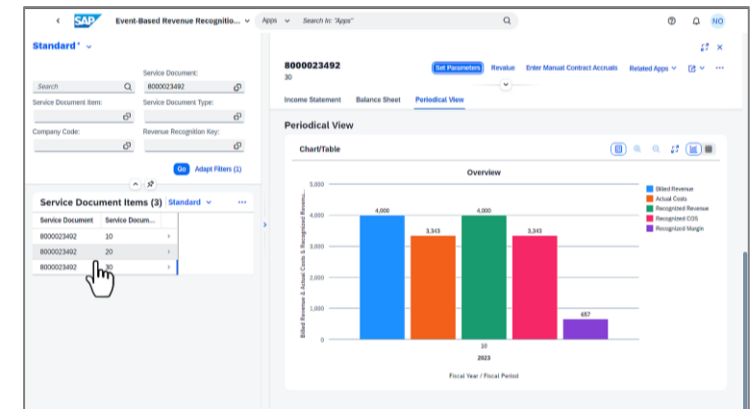
Financial reporting and margin analysis

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.

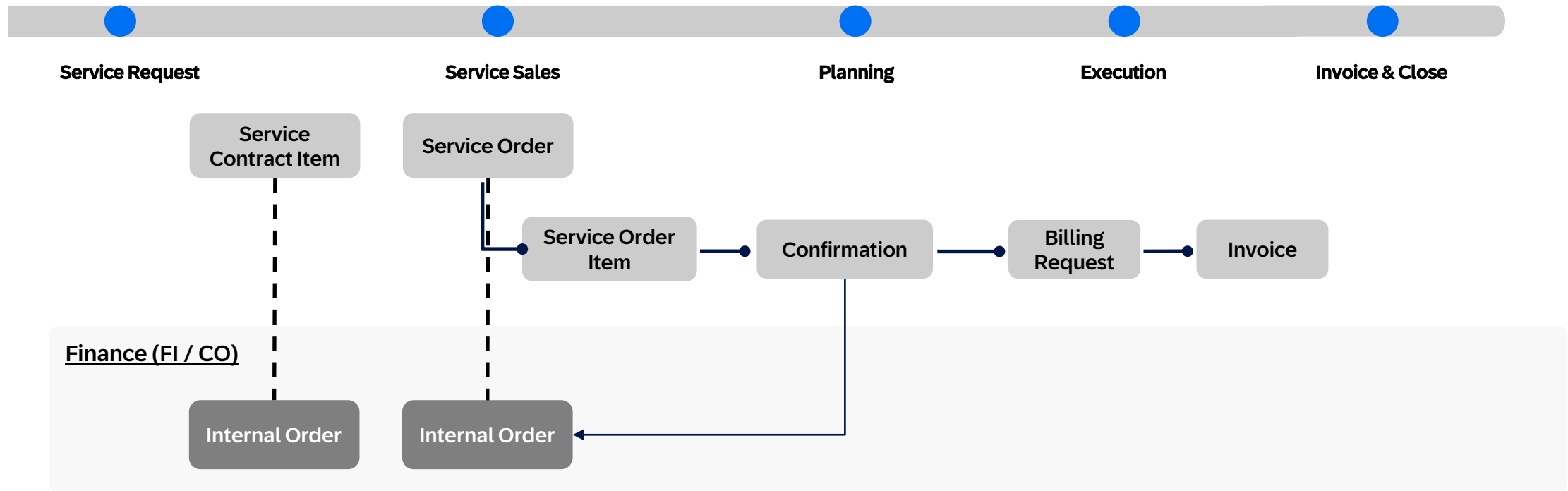


Service: Illustration of classic financial integration

Service Operation & Processes

Service Order Management

2023
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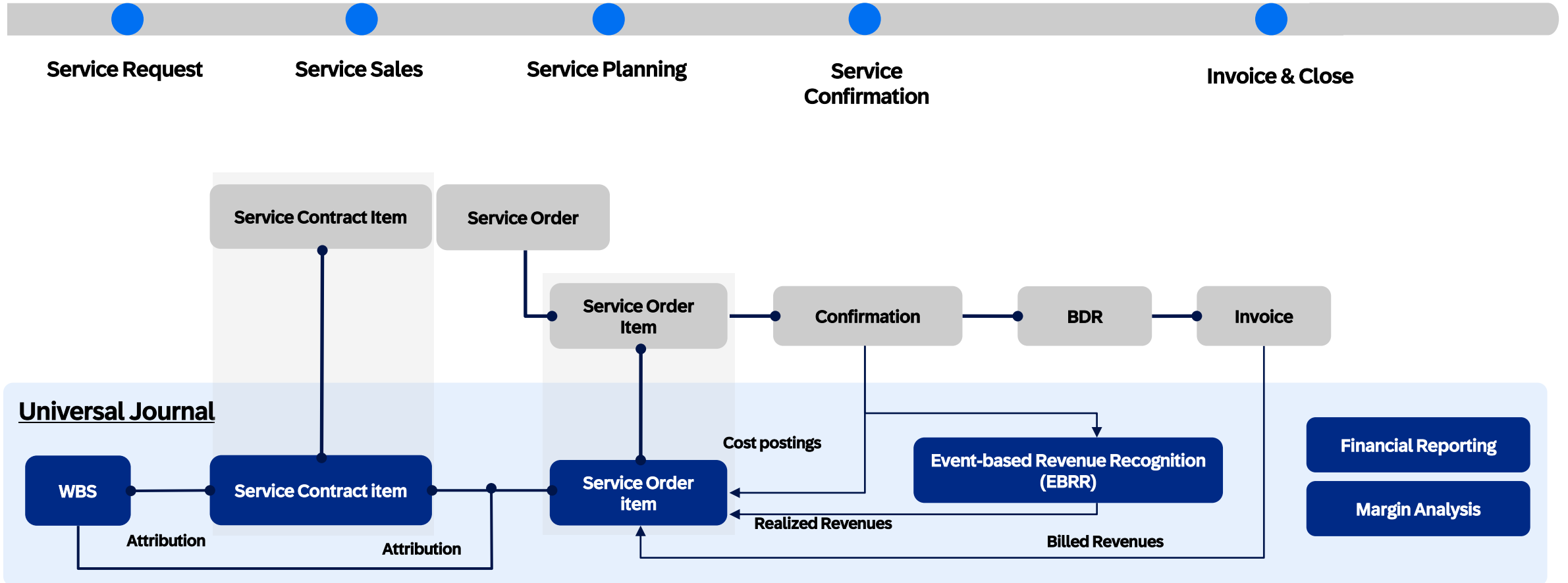


Service: Item-based accounting in service process

Service Operation & Processes

Service Order Management

2023
FPS0+1



Service: Service with Advanced Execution

Service Operations & Processes

Service Order Management

2023
FPS0+1

Service with Advanced Execution

Order: YBA1 4013944 Service Product
Sys.Status: CRTD NMAT PRC

Sales Data

Sold To Party: 17100001	Domestic US Customer 1
Sales Org.: 1710	Dom. Sales Org US
Distr. Channel: 10	Direct Sales
Division: 00	Product Division 00
Sales Office:	
Sales Group:	

Service

ServProd.: SRV_01	Service Product
Quantity: 1,0	HR
Service Transaction ID: 8000019520	
Service Transaction Item: 20	

Person responsible

PlannerGrp: / 1710	Notifctr:
Mnw.kctr: RES-0100 / 1710 Mechanics	Costs: 0,00 USD
Person respons.: 20 Aruchamy Ramkumar	PMActType: YB1 Fault Clearance

Service Order Item (Commercial)

Service Order Item: 20, Regular Inspection

Execution Order Item Details | Notes | Price Details | Billing | Dates | Service Level Agreements | Maintenance Order

Maintenance Order Details	Status	Person Responsible	Costs
Order Type: YBA1 Corrective Maintenance	System Status: CRTD Created NMAT No material components PRC Pre-costed	Planner Group: Main Work Center: RES-0100 / 1710	Estimated Cost: 0,00 USD Planned Cost: 50,00 USD Actual Cost: 0,00 USD
ID: 4013944			
Description: Service Product	User Status:		
Long Description: No data			

Show More

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

Resource-related Quote

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

Order Quotation Item: 10, Pump Maintenance (MCS Test)

Actions	Status	Price Element	Price	Unit
	▲	Charged Costs	463.51	USD
	▲	Mark-up Percentage	0.000	%
	■	Price	700.00	USD
	■	Gross	700.00	USD
	■	Sum Surcharges/Discounts	0.00	USD
	■	Net Value 1	700.00	USD
	■	Cash Discount Net	0.000	%
	■	Total Value	700.00	USD
	■	Gross Value	700.00	USD

Configurable Task Lists

Configurable service items in service quote and service order

Srvc Ord Maint: 8000021697, 308GT2 - Variant Configuration

COMPR_UPGRADE

Configuration Status: Released

Net Value: 16.200,00 USD

Document: 8000021697 / 000000

Ship-To-Party: Domestic US Customer 1 (17100001)

Order C: 1 AU

Default Group

Variable Frequency Drives (VFD): Load/unload control (with): Yes

Renew Valves: Yes

Piping and Distribution System: No

Capacity & Pressure Adjustment: Yes

Display Corrective Maintenance 4034699: Operation Over...

Availability, overall | Paging/communication | Settlement rule | Document flow | Maintenance object address | Permits

1 34699 Compressor retrofit and upgrade

D NMAT PRC

Internal	External	Dates	Act. Data	Enhancement		
Op	Work Ctr	Plant	Con...	StTextK	S...	Operation Short Text
	RES-0100	1710	YBM1			Prev Maint Tasks - Clean& Dry Drive Area
	RES-0100	1710	YBM1			PM Tasks - VFD contacts tightly secured
	RES-0100	1710	YBM1			Check & replace - discharge valves
	RES-0100	1710	YBM1			Check & replace - flow controller

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

Billing request for resource-related billing document <new>: Expenses

Menu | Showhide structure tree | Sales price | Billing request

Amount	Qty	Percent
463,51		
13,51		
50,00		
150,00		
250,00		

Description	S...	Lo...	Original amo...	Amt already bi...	Open amount	Amt to be billed
8000022484			463,51	0,00	463,51	463,51
8000022484/10			463,51	0,00	463,51	463,51
TG11 Trad.Good 11,PD,Reg.Trading			13,51	0,00	13,51	13,51
SMREPHOUR Service Repair Hour			50,00	0,00	50,00	50,00
SMREPHOUR Service Repair Hour			150,00	0,00	150,00	150,00
SMREPHOUR Service Repair Hour			250,00	0,00	250,00	250,00

Debit Memo

Document Data: Billing Date: 20.08.2023, Billing Type: 0400-Memo B.0, Reference: 0000000000

Organizational Data: Company Code: 1000, Sales Organization: 1000, Distribution Channel: 1000

Terms and Conditions: Terms of Payment: As of End of Month

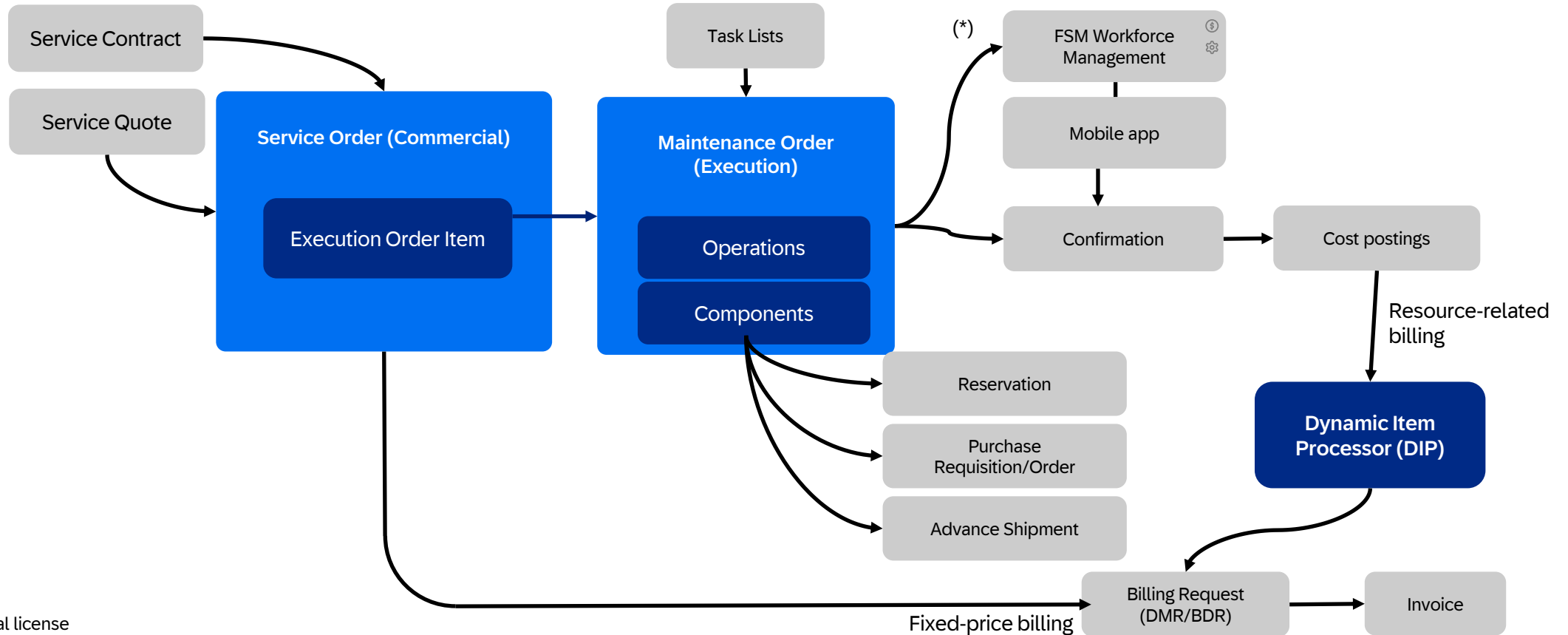
Item	Product	Invoice Quantity	Net Value
10	Prod 1000	1	120,00
10	Service Repair Hour (SMREPHOUR)	3,000	75,00
10	Service Repair Hour (SMREPHOUR)	3,000	225,00
10	Service Repair Hour (SMREPHOUR)	5,000	375,00

Service: Service with Advanced Execution

Service Operations & Processes

Service Order Management

2023
FPS0+1



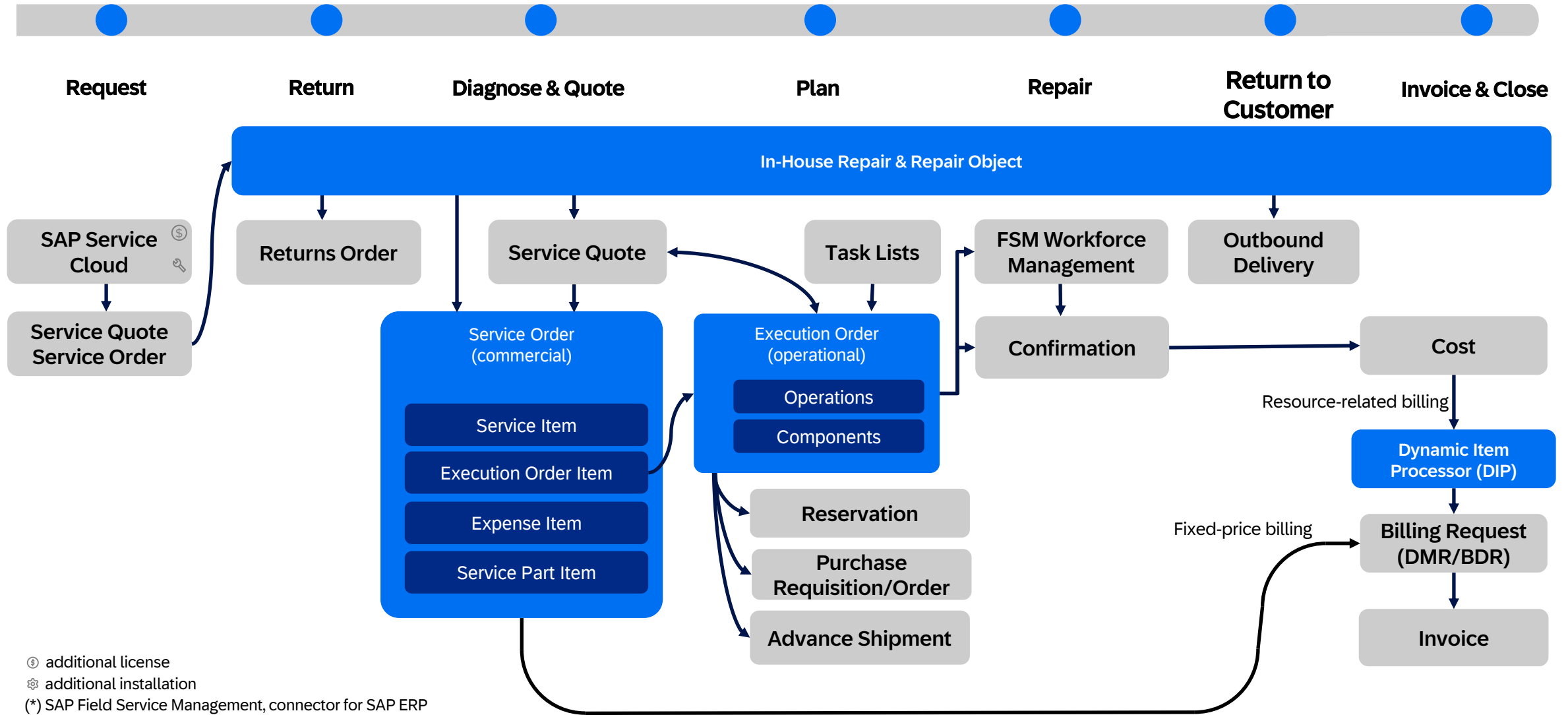
ⓘ additional license
 ⚙ additional installation
 (*) SAP Field Service Management, connector for SAP ERP

Service: In-House Repair with Advanced Execution

Service Operations & Processes

In-House Repair

2023
FPS0+1

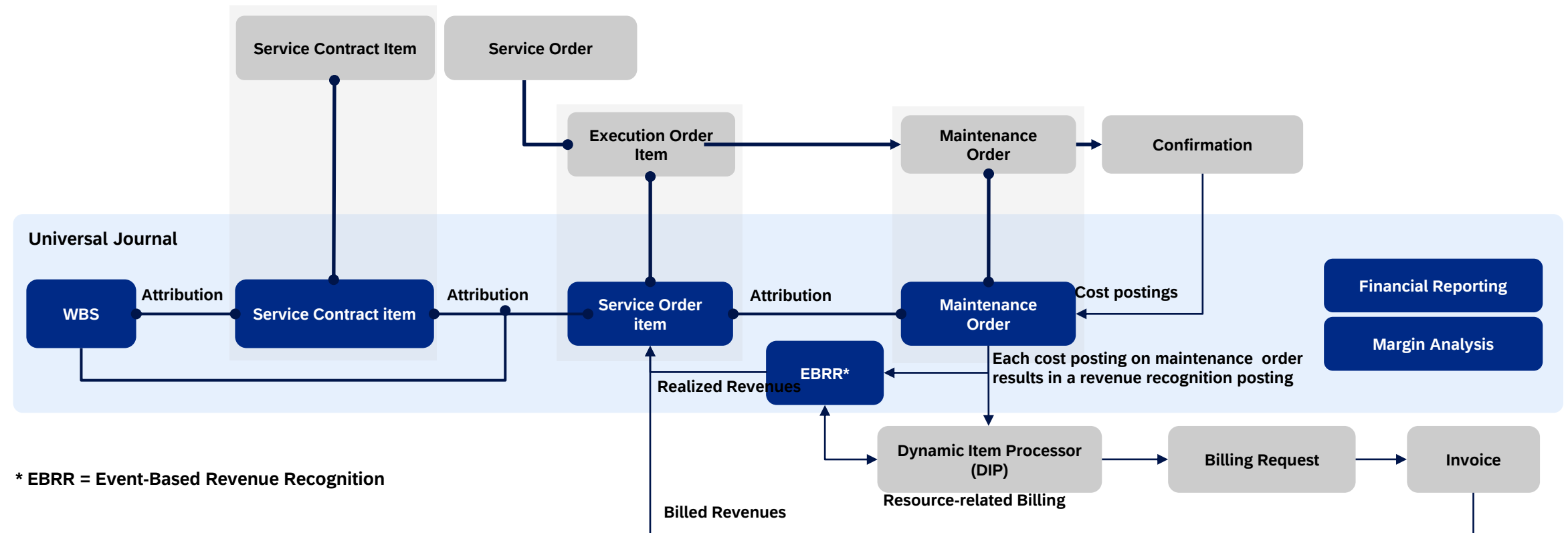


Service: Finance for Service with Advanced Execution

Service Operations & Processes

Service Order Management

2023
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* EBRR = Event-Based Revenue Recognition

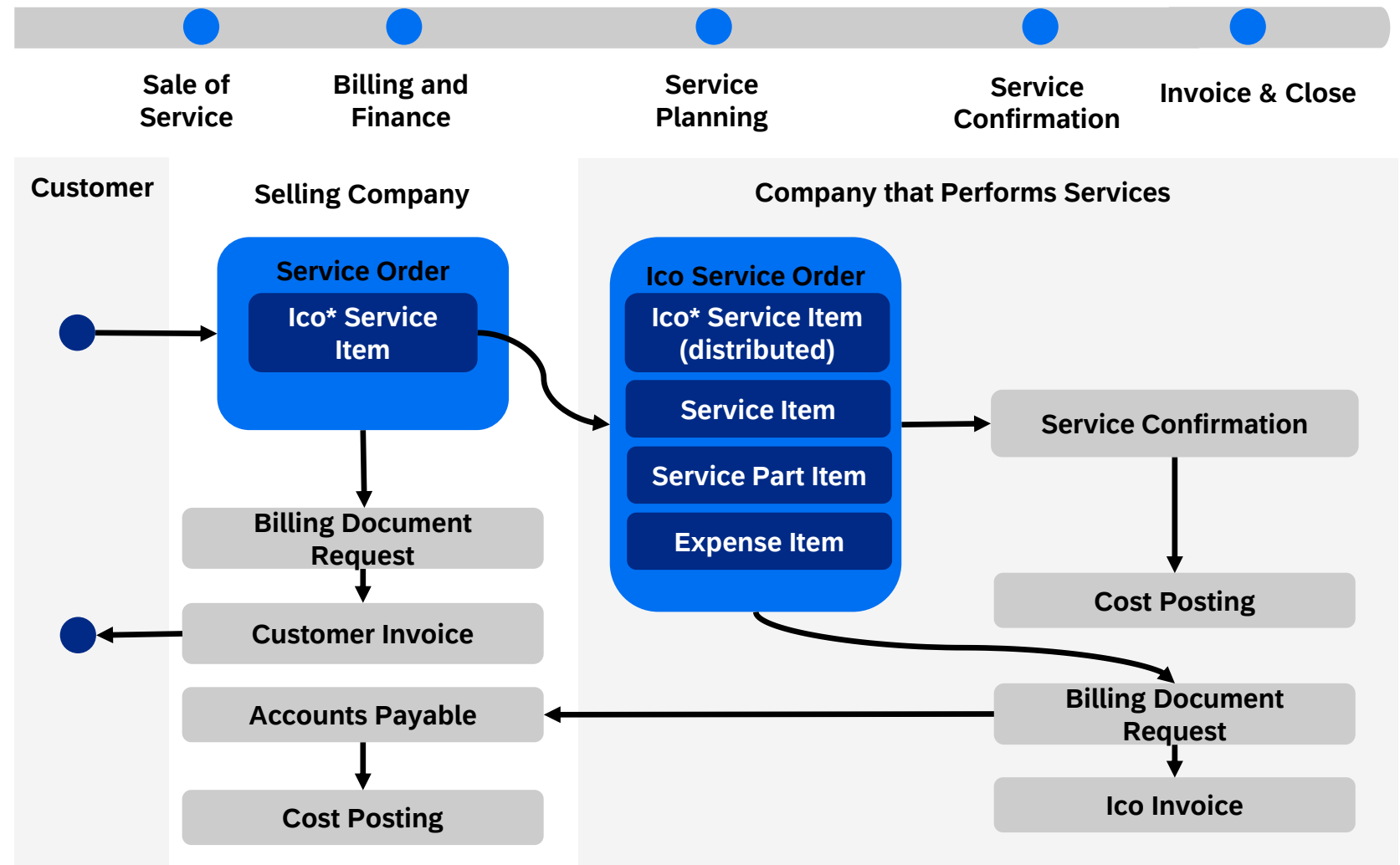
Service: Intercompany service orders

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 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.

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.

SAP S/4HANA Enterprise Management

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
- SAP S/4HANA Cloud for credit integration
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- SAP Analytics Cloud
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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






Record
Create the financial record





Account
Perform financial


Close
Perform financial closing


Report
Perform financial reporting

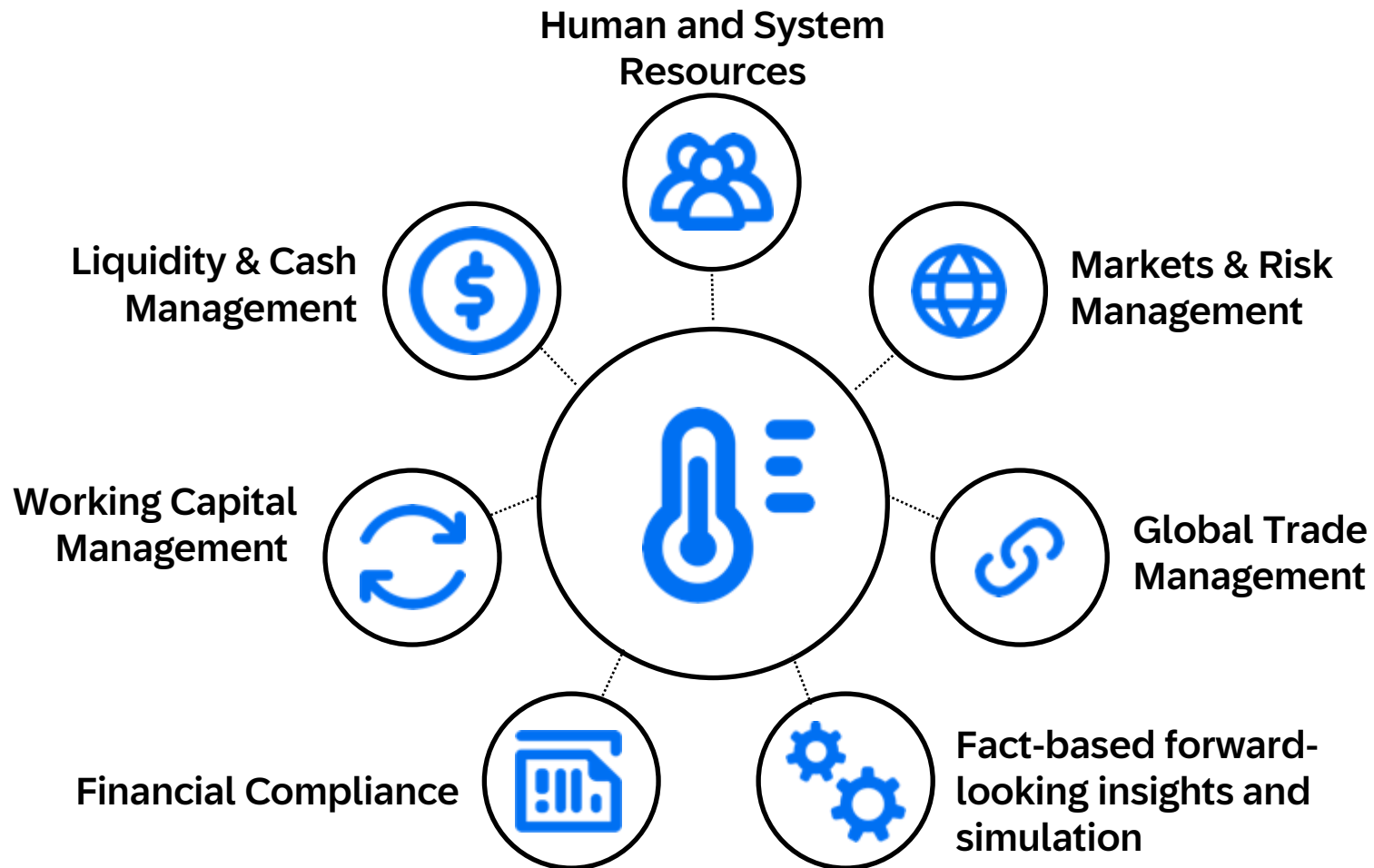
-  General Ledger Upload
-  Lock/ Unlock Profit Center
-  Group Reporting Data Collection
-  Central Finance

-  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

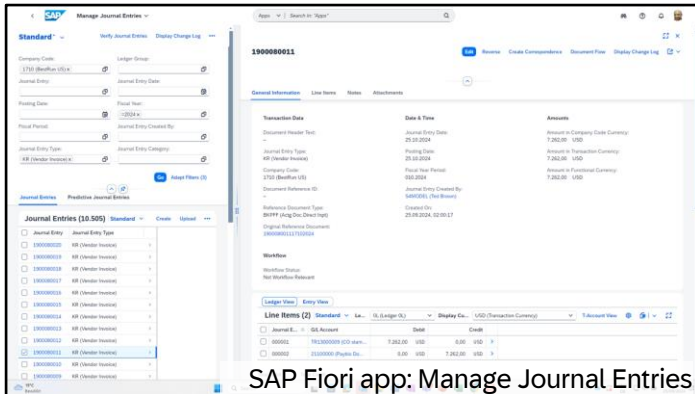
Financial Reporting

Automate financial and managerial accounting processes like revenue recognition and production costs to help companies ensure continuous compliance

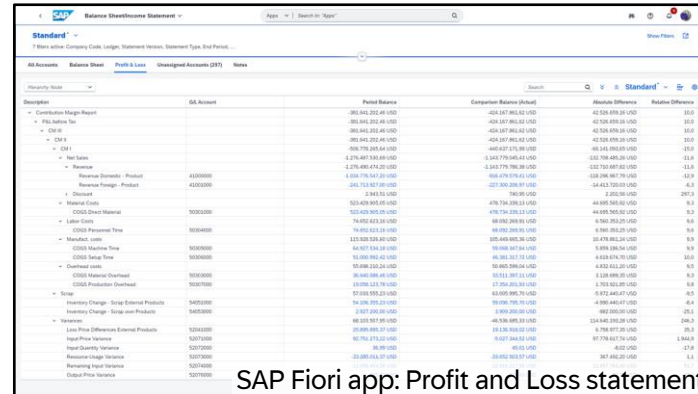
Record and summarize business transactions and create periodic reports on the financial results and financial position of a company

Close the period by performing key accounting tasks: manual adjustments, accruals, etc. Run technical financial jobs

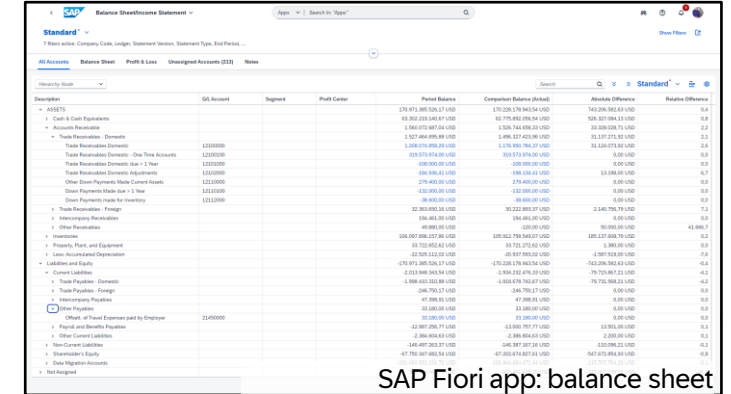
Produce statements that disclose an organization's financial status to management, investors, and the government



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

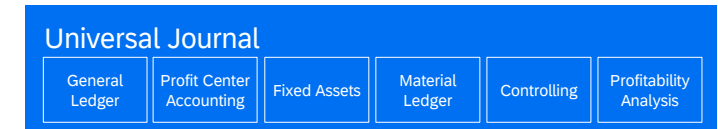
Universal journal – data reconciliation by design

- 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



Finance in SAP S/4HANA Cloud

Invoice Item	Posting Key	Net Due Date	Original Amount	Open Amount	Paid Amount	Credited Amount	Billing Document	Reconciliation Date	Dispute Case
1000000000	01	04.06.2019 (1512)	-2,000.00 EUR	-2,000.00 EUR	0.00 EUR	0.00 EUR			
1000000000	02	31.01.2019 (1271)	20.00 EUR	0.00 EUR	0.00 EUR	0.00 EUR	9000000	30.09.2022	
1000000000	03	31.01.2021 (540)	2,000.00 EUR	1,000.00 EUR	991.00 EUR				



Universal Journal - single source of truth

[Link to documentation](#)

Finance: Financial Accounting

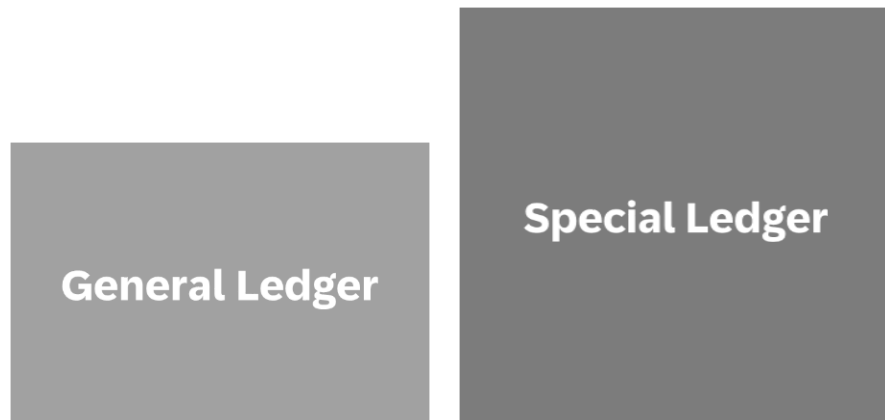
Extension Ledger – supporting the management view use case

SAP ERP

Legal Ledger

Management Ledger

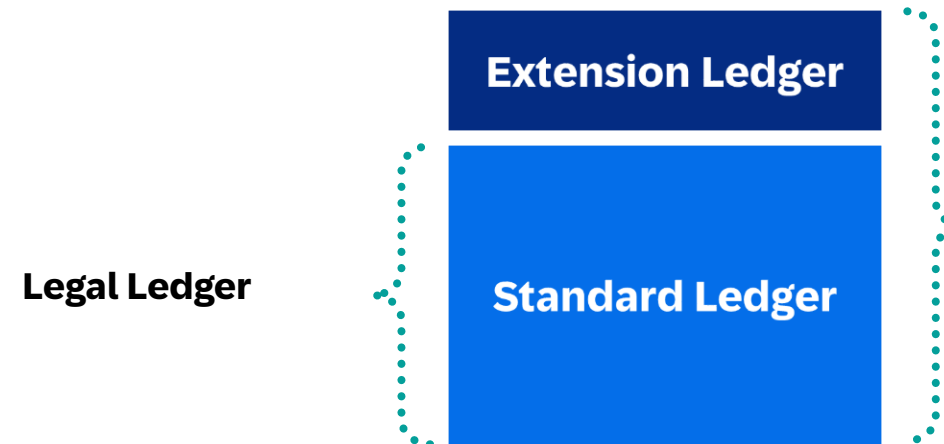
- Same legal data (95 %)
- Few adjustments (5%)
- High data redundancy



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

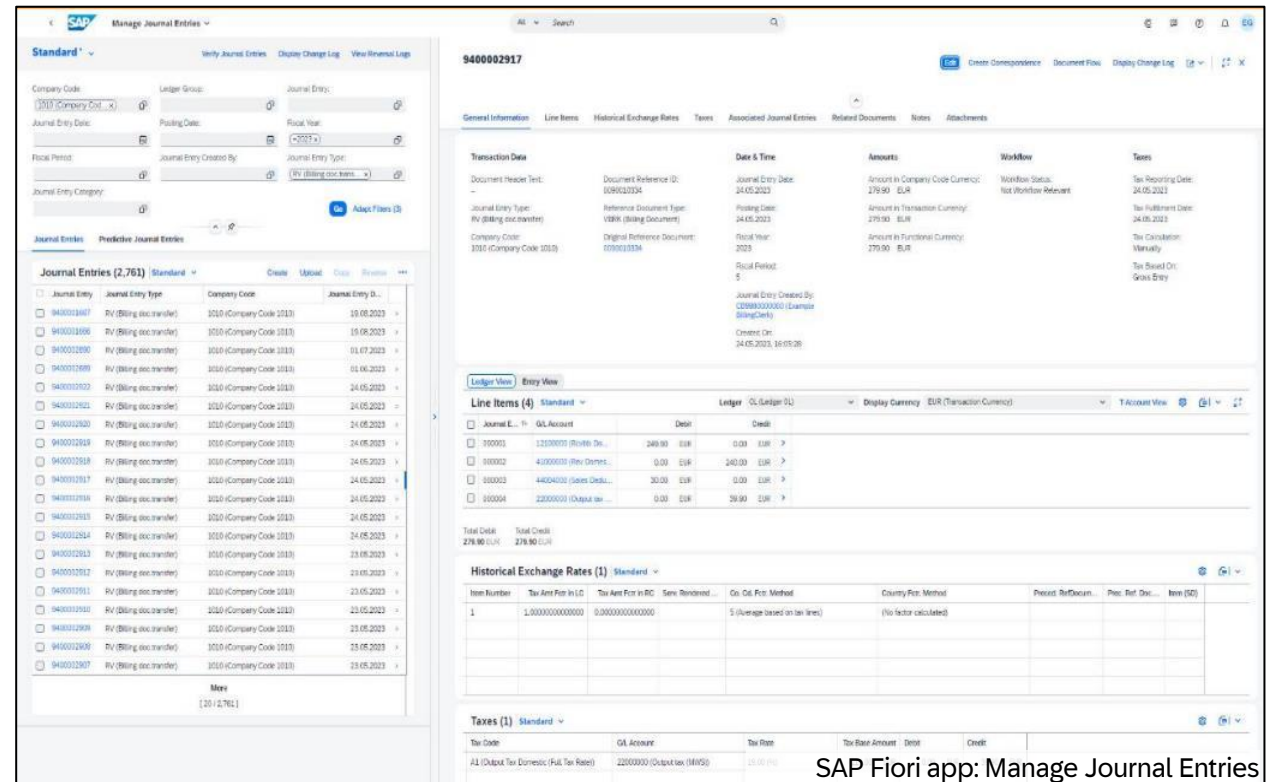
SAP Fiori app: Manage Journal Entries

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.



Finance: Major Revenue Accounting and Reporting innovations

Accounting and Financial Close

Revenue and Cost Accounting

2023
FPS0+1

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

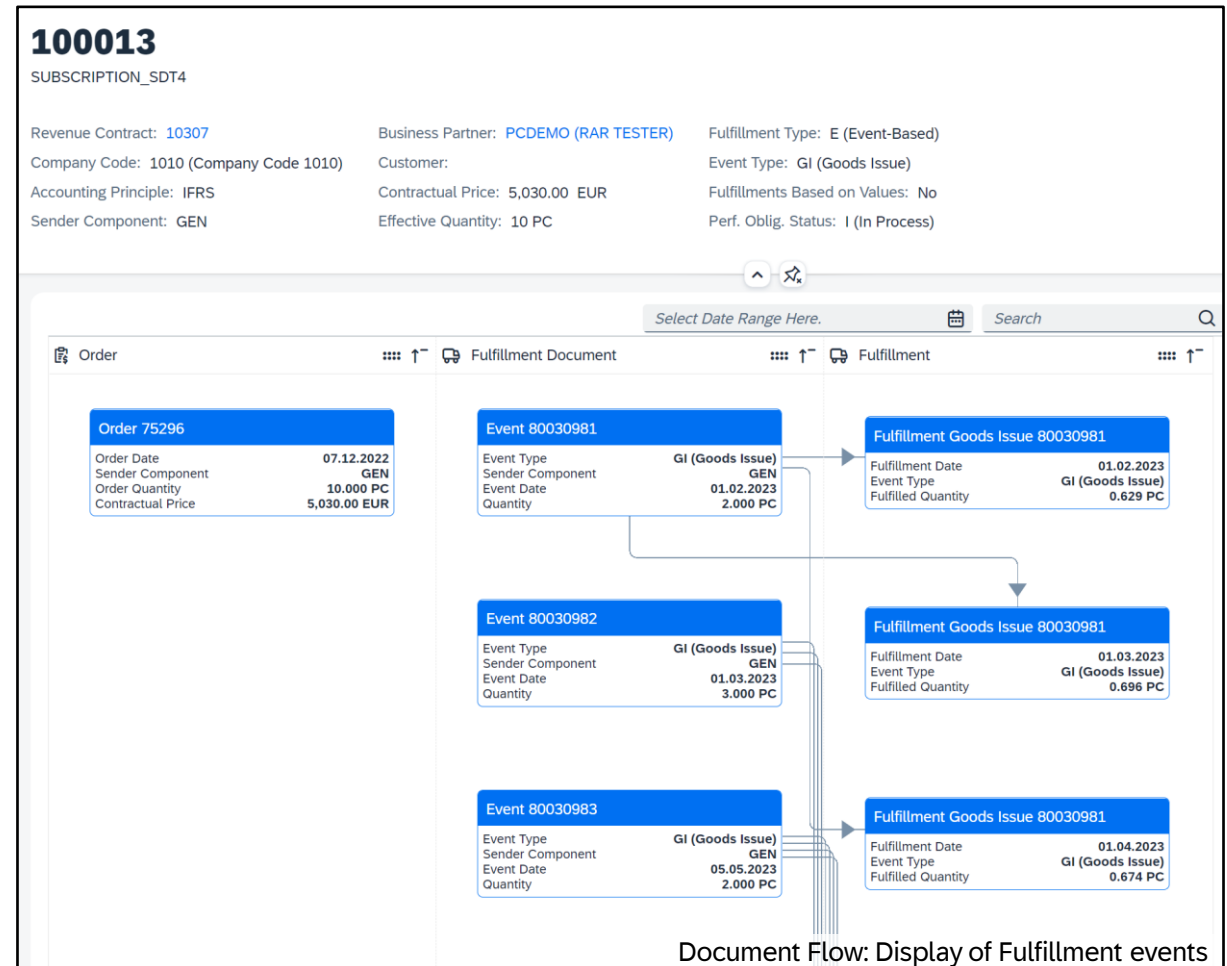
- **Start Date Type: 'Defined by Fulfillment Event Date'**

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



Finance: Ensure availability of all revenue accounting items and contracts

Accounting and Financial Close

Revenue and Cost Accounting

2023
FPS2

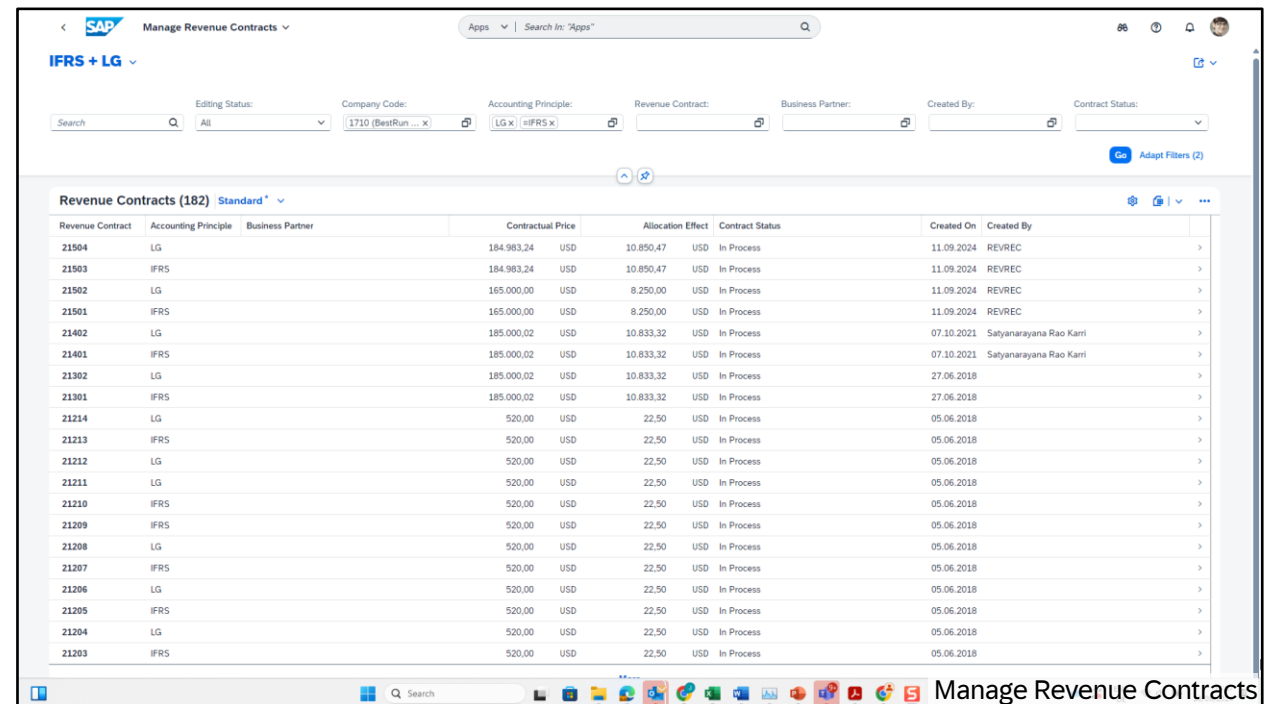
Revenue Accounting

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



The screenshot displays the SAP 'Manage Revenue Contracts' interface. At the top, there are search and filter options for 'Editing Status', 'Company Code', 'Accounting Principle', 'Revenue Contract', 'Business Partner', 'Created By', and 'Contract Status'. Below this, a table titled 'Revenue Contracts (182)' is shown. The table has columns for 'Revenue Contract', 'Accounting Principle', 'Business Partner', 'Contractual Price', 'Allocation Effect', 'Contract Status', 'Created On', and 'Created By'. The data rows show various contract numbers and their associated details.

Revenue Contract	Accounting Principle	Business Partner	Contractual Price	Allocation Effect	Contract Status	Created On	Created By
21504	LG		184.983,24 USD	10.850,47 USD	In Process	11.09.2024	REVREC
21503	IFRS		184.983,24 USD	10.850,47 USD	In Process	11.09.2024	REVREC
21502	LG		165.000,00 USD	8.250,00 USD	In Process	11.09.2024	REVREC
21501	IFRS		165.000,00 USD	8.250,00 USD	In Process	11.09.2024	REVREC
21402	LG		185.000,02 USD	10.833,32 USD	In Process	07.10.2021	Satyanarayana Rao Karri
21401	IFRS		185.000,02 USD	10.833,32 USD	In Process	07.10.2021	Satyanarayana Rao Karri
21302	LG		185.000,02 USD	10.833,32 USD	In Process	27.06.2018	
21301	IFRS		185.000,02 USD	10.833,32 USD	In Process	27.06.2018	
21214	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21213	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	
21212	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21211	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21210	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	
21209	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	
21208	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21207	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	
21206	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21205	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	
21204	LG		520,00 USD	22,50 USD	In Process	05.06.2018	
21203	IFRS		520,00 USD	22,50 USD	In Process	05.06.2018	

*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

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

Accounts Receivable

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

Cash Management

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

Electronic Bill Presentment and Payment

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.

Settlement Management

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

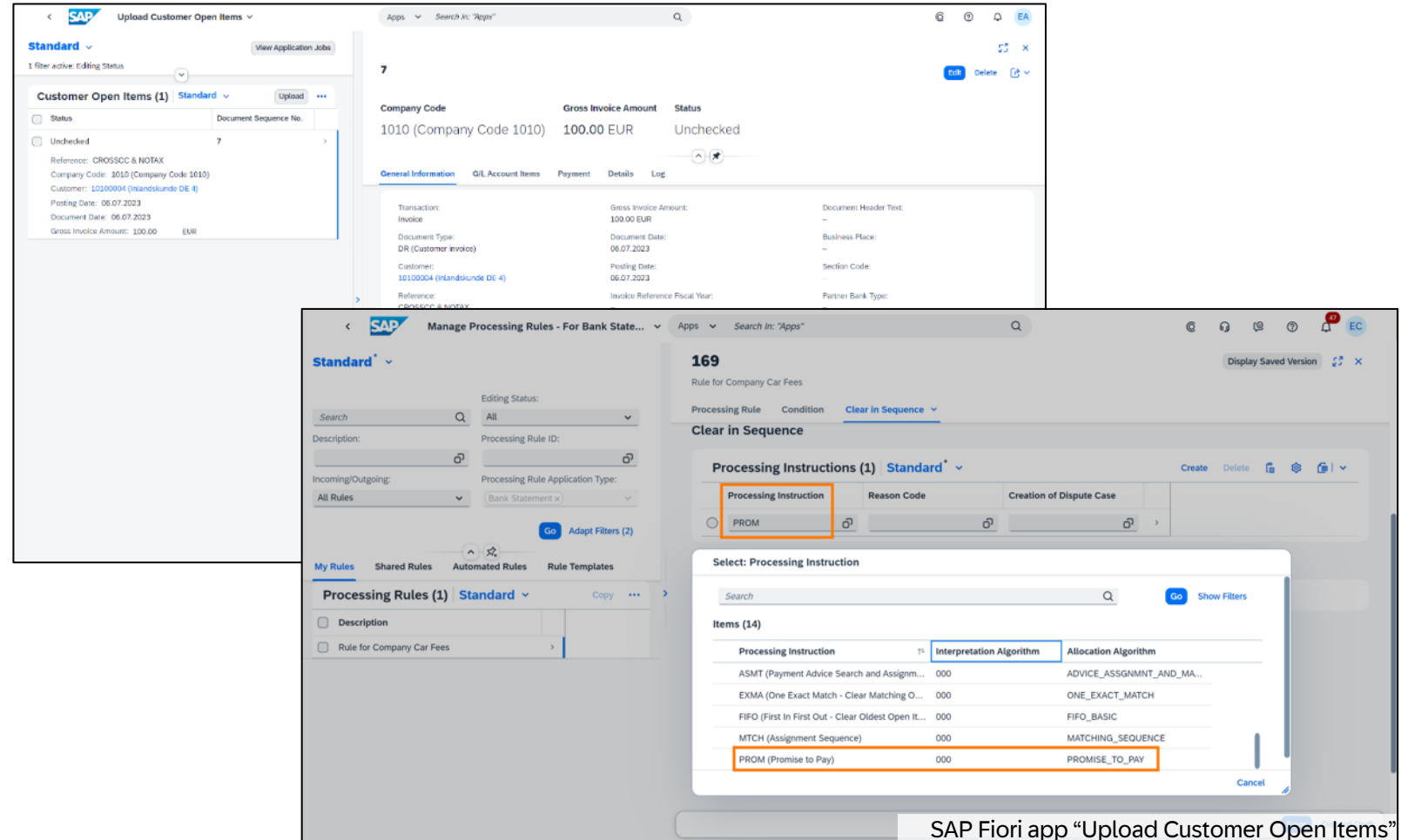
Support for mass uploading of customer open items

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.

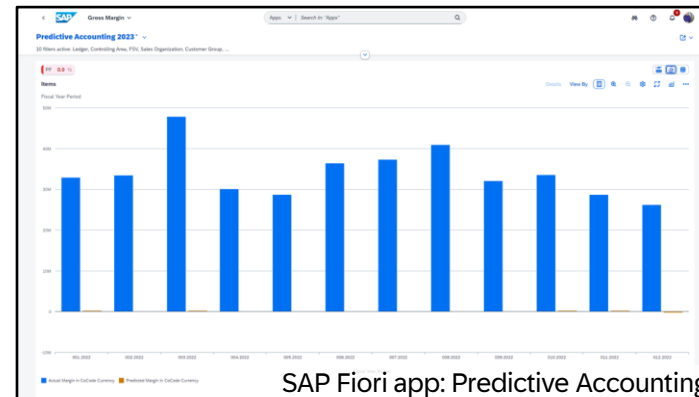
Profitability Analysis

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

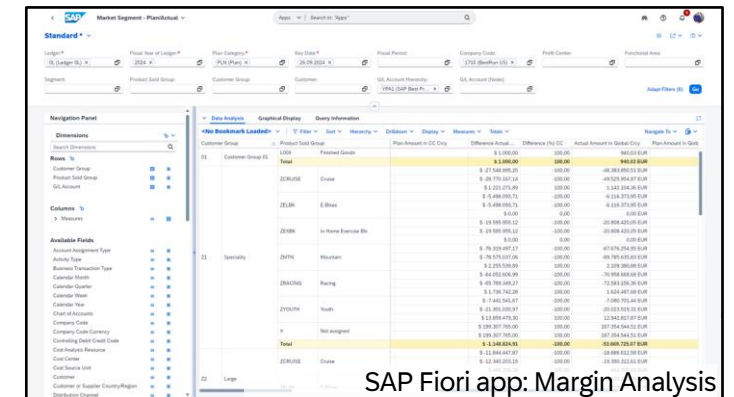
Help business users improve decision making with immediate, role-based insight into current statuses and flexibility for ad hoc reporting and analysis embedded in the system of record



SAP Fiori app: Product Margin



SAP Fiori app: Predictive Accounting



SAP Fiori app: Margin Analysis

Finance: Cost Management & Profitability Analysis

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

Statement of direction

- Provide an accounting solution, able to value 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](#)

Finance: Overhead Cost Management Universal Allocation

Cost Management &
Profitability Analysis

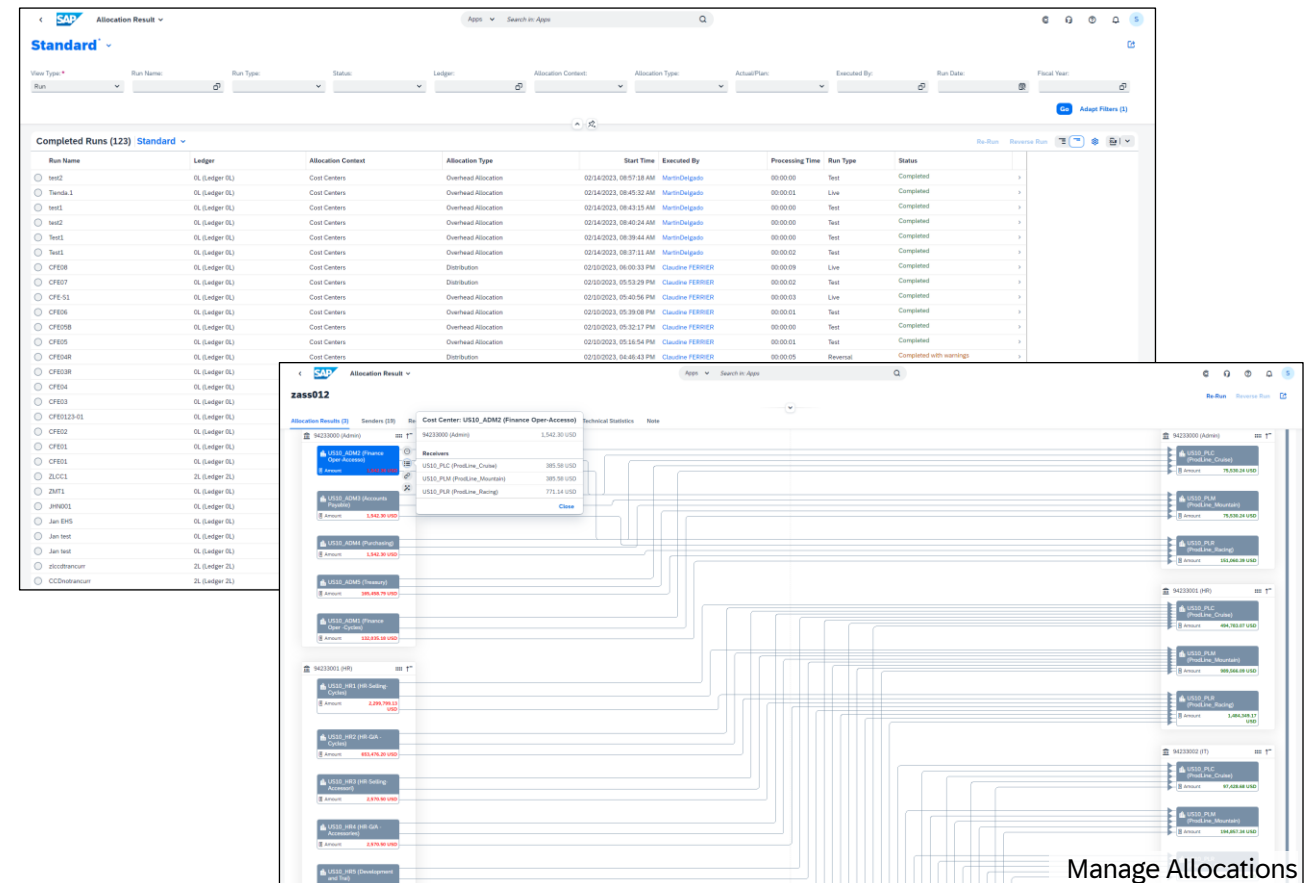
Overhead Cost Management

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



Finance: Treasury Management

Treasury Management

Cash and Liquidity 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

Payments and Bank Communications

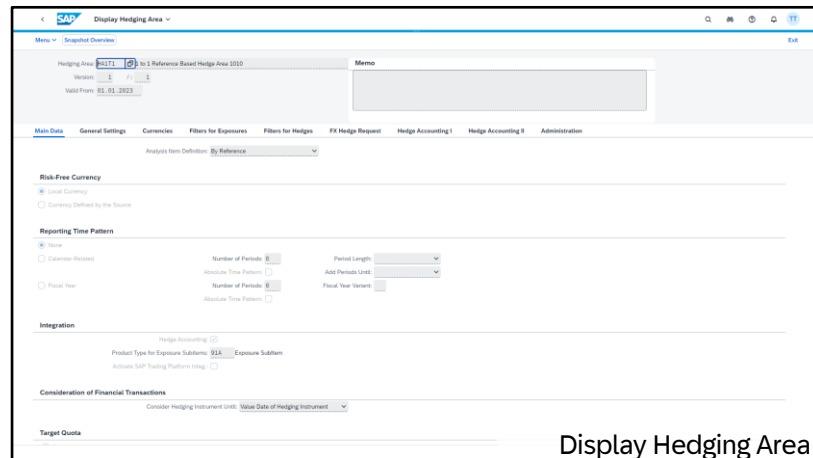
Increase compliance and automation with integrated payments and bank communications. Secure proper approvals and documentation with rule-based workflows. Monitor outgoing payment and incoming account statements from end to end. Enable bank connectivity for payments, status, and account statements. Centralize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

Debt and Investment Management

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

Financial Risk Management

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

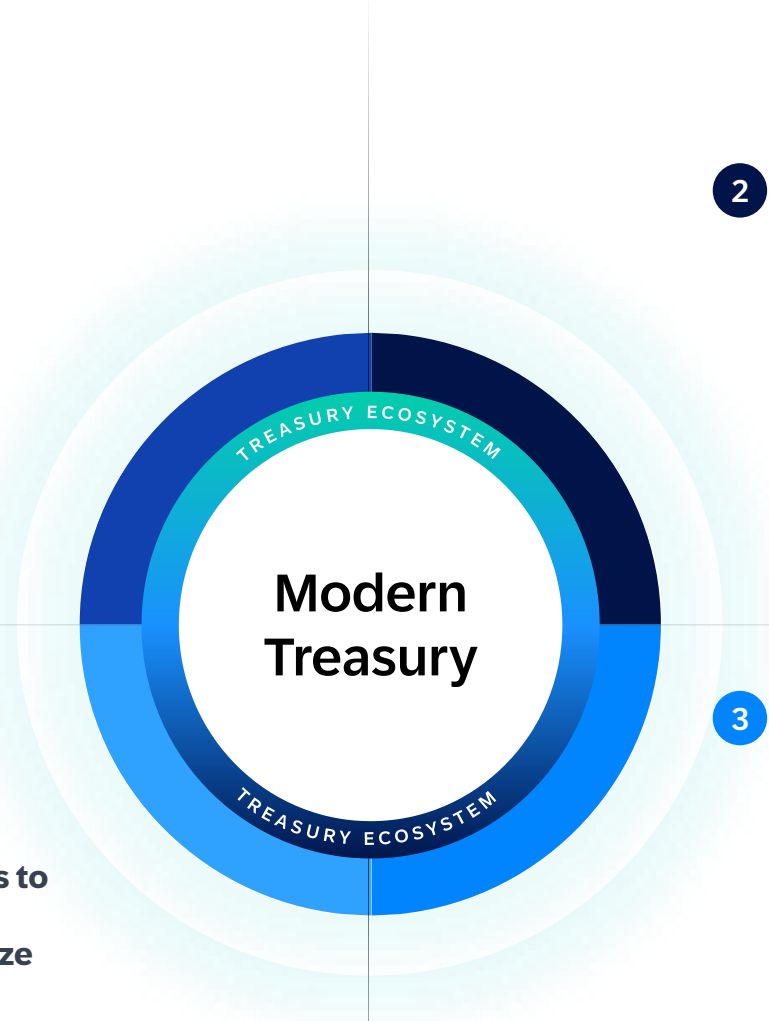
Optimize the capital structure, make informed investment decisions, and mitigate financial risks to maximize returns and safeguard the financial stability of an organization.

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

Commodity Management

Commodity Risk Management

2023
FPS0+1

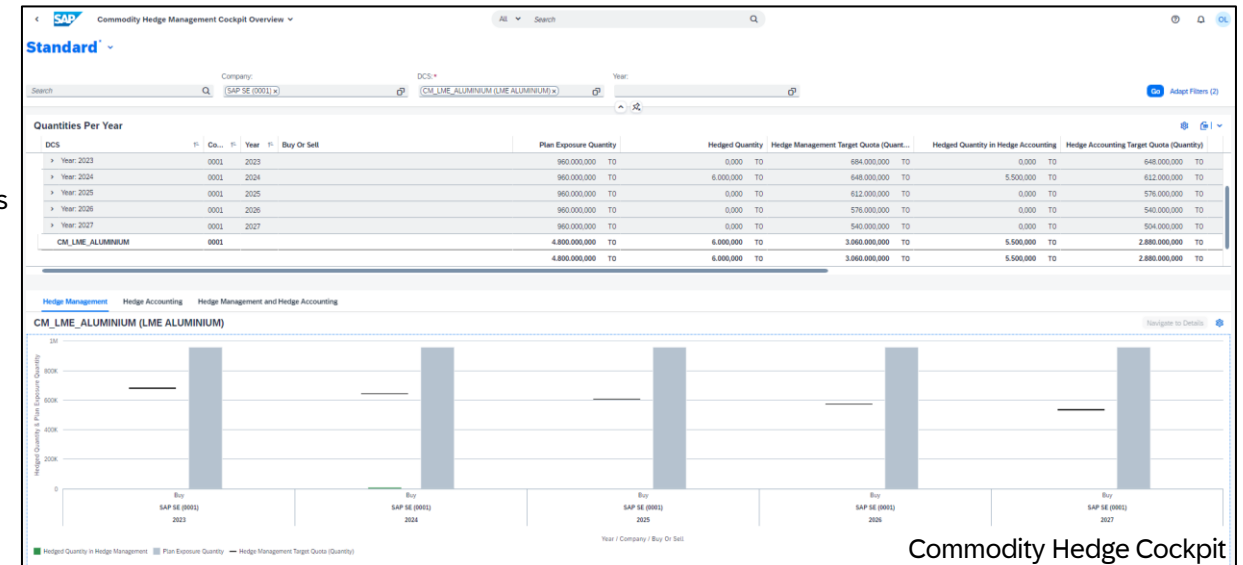
Identify and qualify Financial risks associated with commodity price volatility resulting from physical commodity sales, procurement and trading processes and mitigate by hedging them with commodity derivatives. This includes management of full e2e life cycle of Commodity Futures, Listed and OTC Commodity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



The screenshot displays the SAP Trader's Order Cockpit. It features a search bar at the top with filters for Company (SAP SE (0001)), Val at (14.02.2023), DCS (CM_LME_ALUMINIUM (LME ALUMINIUM)), and Year (2024). Below the search bar is a table titled 'Trade Orders (28)' with columns for DCS, Year, Hedge Book, Period, Order ID, Trade ID, Plan Exposure Qu., Hedged Quantity, Order Quota (Quantity), Hedge Management Target..., Delta Order Quantity, Hedged Quota, Hedge Accounting Target Q., Market Price Accepted, Order Quota P.L., Price Quotation, and Trade Price (incl. FX). The table shows data for the year 2024, including details for various orders and hedge books. The table is filtered for 'DCS: CM_LME_ALUMINIUM' and shows a list of orders with their respective quantities and prices.

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 calendar 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**.

Snapshot Overview for Hedging Area 1710HA

Snapshot ID	Snapshot Date	Time	User	Day Ref.	Day Ref. Date	Time Zone	Description	HA Version	Valid From	Valid-To Date
9	23.06.2022	13:25:23	C5341866	<input checked="" type="checkbox"/>	23.06.2022	UTC	hedge1	3	06.06.2020	31.12.9999
8	05.06.2020	06:24:30	TREASURY	<input checked="" type="checkbox"/>	05.06.2020	UTC	Snapshot for on 05/06/2020	2	02.01.2018	05.06.2020
7	06.05.2020	16:15:24	TREASURY	<input checked="" type="checkbox"/>	06.05.2020	UTC	Snap shot on 06.05.2020	2	02.01.2018	05.06.2020
6	03.09.2019	10:01:20	C5252196	<input checked="" type="checkbox"/>	03.09.2019	UTC	Snap Shot 09/03/2019	2	02.01.2018	05.06.2020
5	09.08.2018	10:18:08	C5264200	<input checked="" type="checkbox"/>	09.08.2018	UTC	SNAPSHOT 1710	2	02.01.2018	05.06.2020
4	09.08.2018	09:50:58	C5264200	<input type="checkbox"/>		UTC	SNAPSHOT 1710	2	02.01.2018	05.06.2020
3	09.08.2018	08:25:22	C5264200	<input type="checkbox"/>		UTC	SNAPSHOT for 1710HA	2	02.01.2018	05.06.2020
2	17.05.2018	08:01:38	C5264200	<input checked="" type="checkbox"/>	17.05.2018	UTC	SNAPSHOT 1710	2	02.01.2018	05.06.2020
1	17.05.2018	07:56:02	C5264200	<input type="checkbox"/>		UTC	SNAPSHOT 1710	2	02.01.2018	05.06.2020

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

The screenshot displays the SAP 'Create Int. Trade Order: Overview' interface. A 'Display logs' dialog box is open, showing two error messages:

- Item 10 is blocked by Legal Control (International Trade)
- Schedule Line 1 (Item 10) is blocked by Legal Control (Intern. Trade)

The background interface shows fields for 'Int. Trade Order', 'Net Value' (0.00 USD), 'Sold-to Party' (DECU-GT02), 'Ship-to Party' (DECU-GT02), and 'Cust. Reference' (GTS). The 'All Items' table at the bottom is partially visible, showing columns for 'Item', 'Req. Segment', 'Sea...', 'Sea...', and 'Collec...'. A status bar at the bottom indicates 'Int. Trade Order 472965 has been saved.'

Finance: SAP International Trade Management Portfolio

Key capabilities



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

The screenshot displays the SAP 'Manage Blocked Documents' interface. At the top, there are three summary charts:

- Number of Blocks by FT Organization:** A donut chart showing 5,530 blocks for IDES US INC, 685 for IDES GB - Unit..., and 695 for Other.
- Number of Blocks by Legal Regu...:** A horizontal bar chart showing 2 blocks for ITAR, 1 for USHTS, and 1 for USPAL.
- Number of Blocks by Business D...:** A horizontal bar chart showing 4 blocks for Inbound Delivery, 2 for Not Assigned, and 1 for Sales Order.

Below the charts is a table of 6,557 items. The table has columns for Document Number, Document Year, Reference Number, Business Document Category, Legal Regula..., FT Organization, Country/Region of Departure Key, and Country/Region of Destination. The first few rows show document numbers 140000010 and 140000040 with various legal regulations and FT organizations.

An inset window shows the 'Display Customs Declaration - Export / Reexport' screen for document number 140000041. It includes a 'Items' table with columns for Item, Complete, Calc., Progn., Excl. Item Number, Description of Goods, Product, Product Short Text, Net Weight, Gross Weight, Unit, and Quant. The first item is 'Ball bearing' with product code GTS-3001 and a net weight of 4.

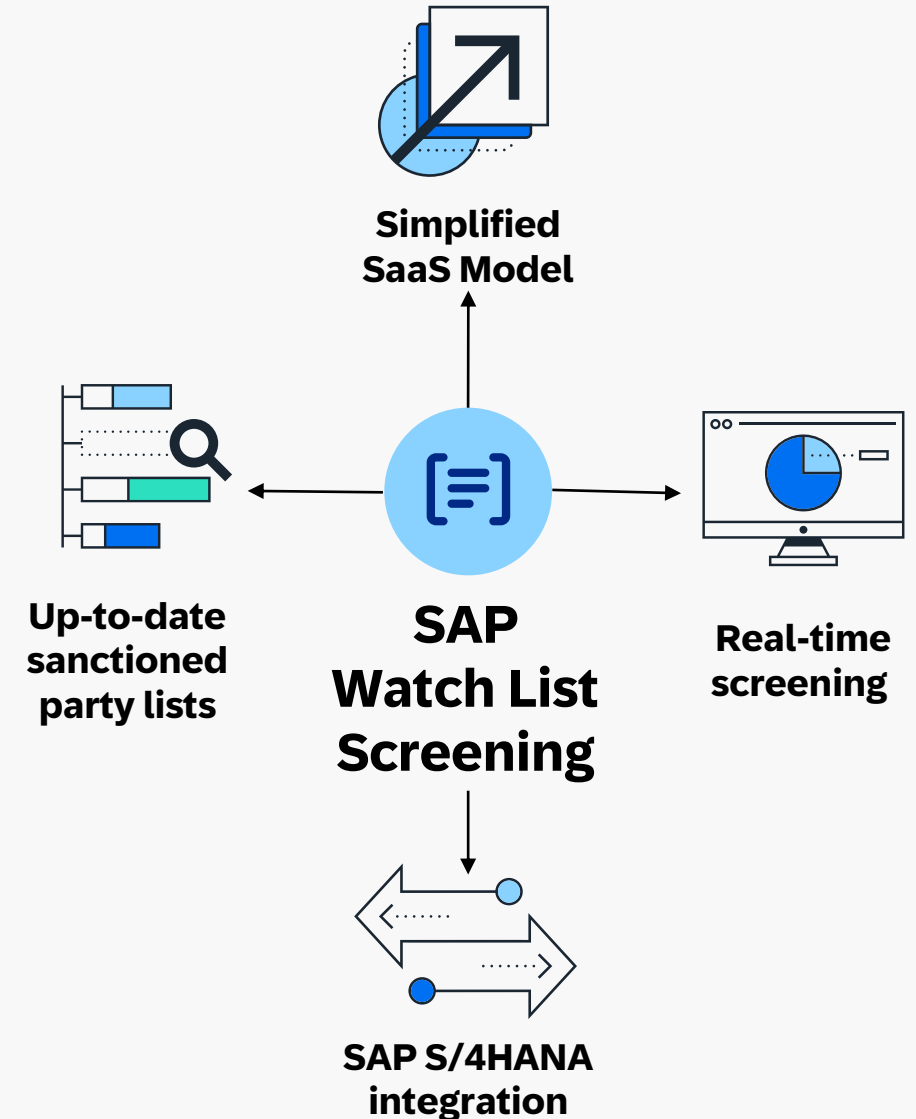
Global Trade Services

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

Enterprise Risk and Compliance

International Trade Management

2023
FPS2

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.

The screenshot displays the SAP S/4HANA Cloud interface for creating a standard order header. The main window shows the 'Partner' tab with a table of business partners. A modal window titled 'Display Logs' is open, showing a message: 'Item 10 is blocked by SAP Watch List Screening'. The message text is 'Long'. The background interface includes fields for 'Standard Order', 'Customer Reference: 1234', and 'Sold-to Party: WLS_DEM01'. The table below shows the following data:

Partn.Funct.	Partner	Do...	Assigned BP	Name	Street	Postal C...	City	Partner Definition
AG Sold-to Party	WLS_DEM01	<input type="checkbox"/>	WLS_DEM01	Global Relief Foundation Inc.	Vaatjesstr. 30	2580	Putte	
RE Bill-to Party	WLS_DEM01	<input type="checkbox"/>	WLS_DEM01					
RG Payer	WLS_DEM01	<input checked="" type="checkbox"/>	WLS_DEM01					
WE Ship-to Party	WLS_DEM02	<input type="checkbox"/>	WLS_DEM02					

At the bottom right of the interface, there is a 'Watch List Screening' button. A status bar at the bottom left indicates 'Standard Order 904331 has been saved.'

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

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

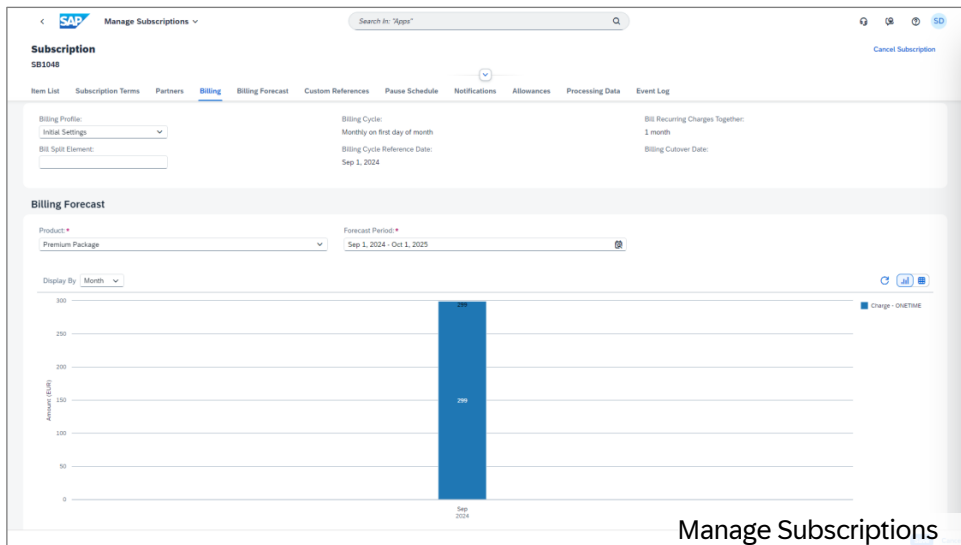
Fin. Customer Care and Dispute Management

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

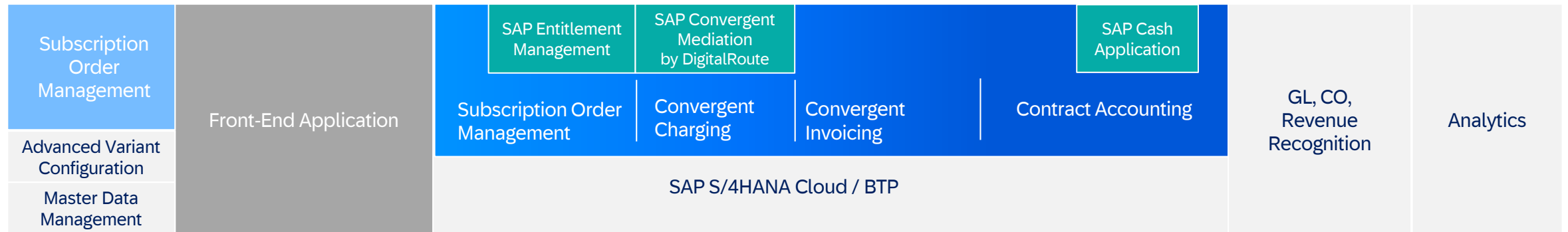
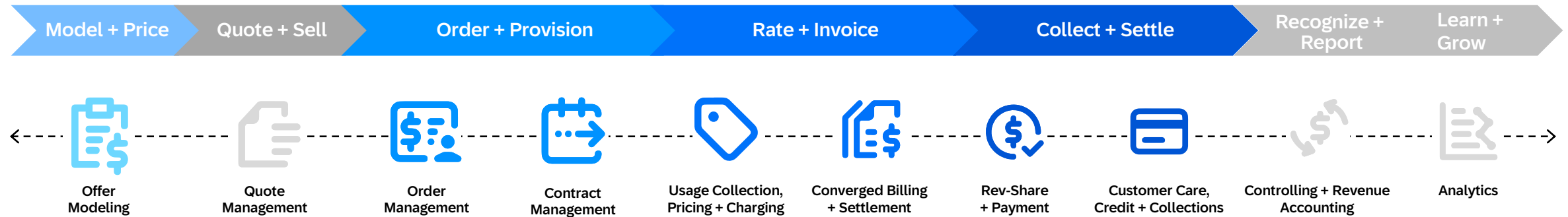
Improve service by empowering customers with a payment portal and e-billing. Electronic bill presentation and payment involves presenting bills on the web and offering customers the option of paying their bills online



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

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.



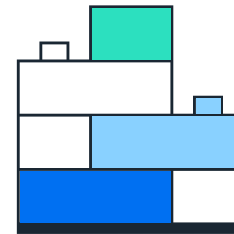
Manage subscription lifecycle, from order capture and fulfillment to renewals and contract changes.



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

Billing and Revenue Innovation Management

Subscription Order Management

2023
FPS2

Subscription Order
(Integration with SAP GTS)

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**

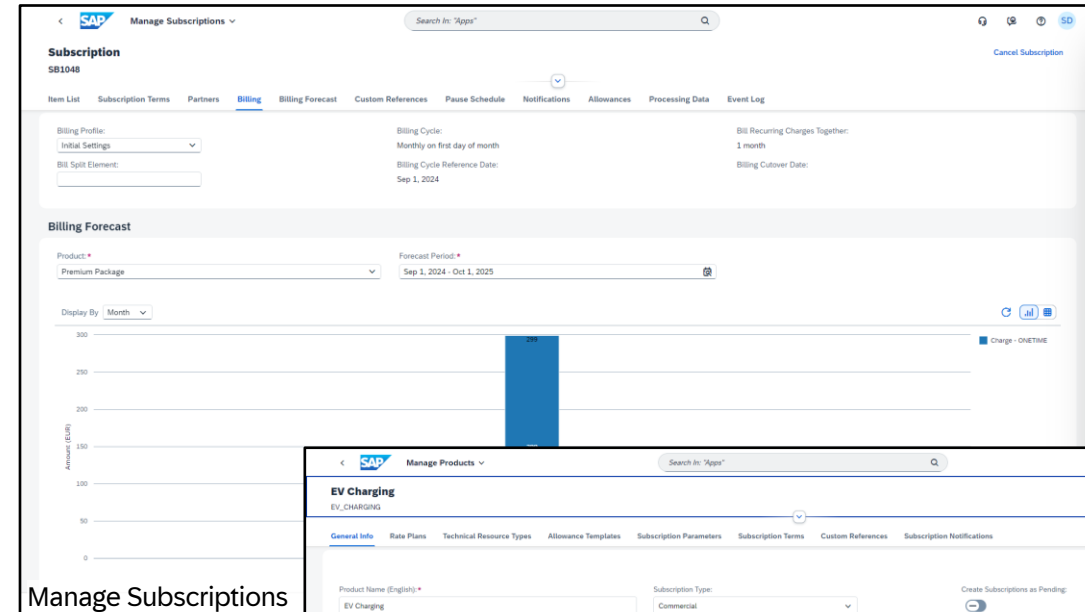
You can now choose to either Submit your change request directly or to open the 'open Change Order app' when executing a change process.

- **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

The screenshot shows the 'Manage Master Data' Fiori app interface for 'EV Charging'. The main view is the 'General Info' section. It displays various configuration fields for the product 'EV_CHARGING'. The 'Product Name (English)' is 'EV Charging'. The 'Subscription Type' is 'Commercial'. The 'Subscription Profile' is '(No Subscription Profile Selected)'. The 'Rate Plans' section shows a table with columns for 'Market and Rate Plan', 'Market Activation Status', 'Currency', 'Default', and 'Billing Cycle'. The table contains one entry for 'EV Charging Germany' with a market activation status of 'Active' and a billing cycle of 'Every month on reference date'. The 'Technical Resource Types' section shows a table with columns for 'Type', 'Type of Technical Resource ID', 'Description', 'Unit', and 'Autogenerate Technical Resource'. The table contains one entry for 'EV Charging (EV_CHARGING)' with a type of 'Card ID' and a description of 'EV Charging transaction'.

Market and Rate Plan	Market Activation Status	Currency	Default	Billing Cycle
EV Charging Germany	Active	EUR	Selected	Every month on reference date

Type	Type of Technical Resource ID	Description	Unit	Autogenerate Technical Resource
EV Charging (EV_CHARGING)	Card ID	EV Charging transaction	Each (EA)	Selected

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"



Contract and Lease Management: "Periodic Posting"

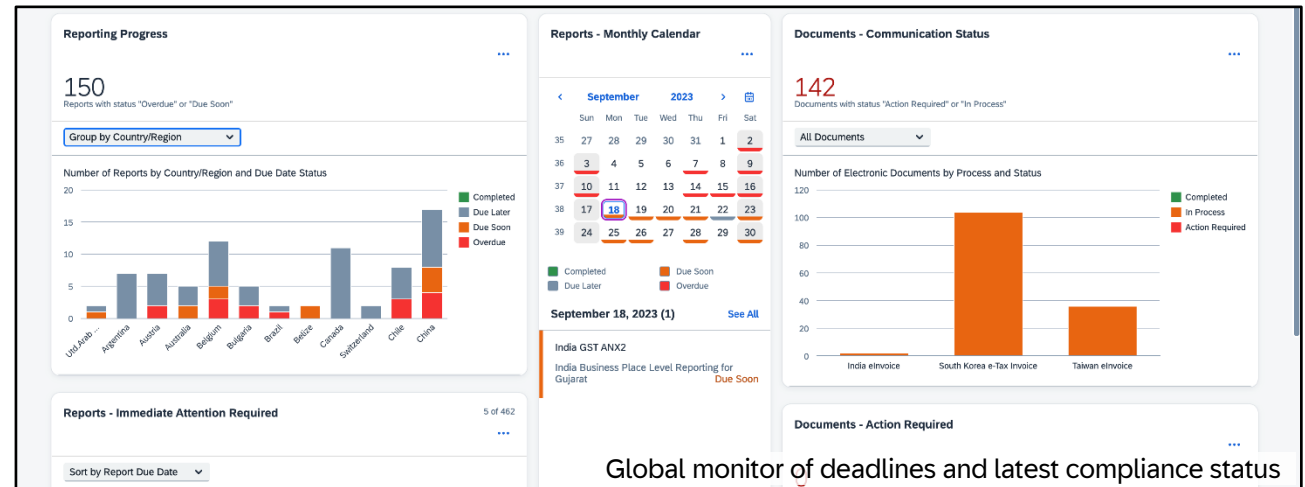
Finance: Tax Management

SAP Document and Reporting Compliance

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.**



- 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

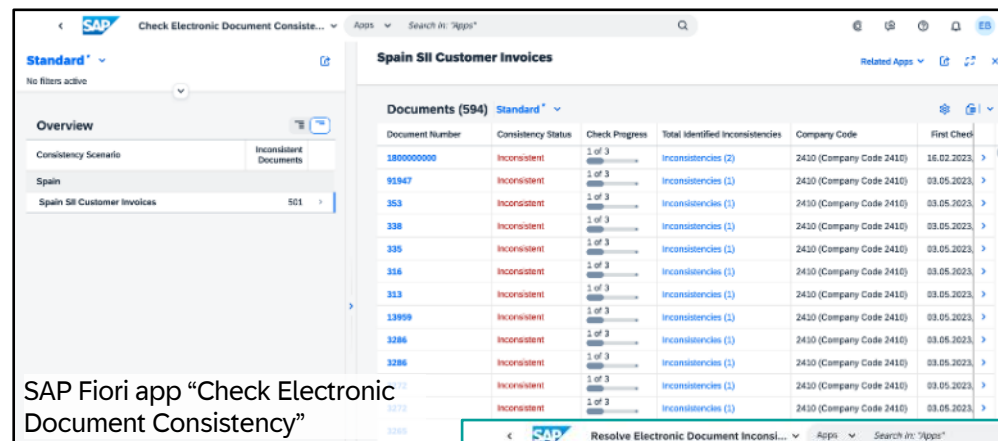
Minimized risk of noncompliance ensuring consistency between SAP S/4HANA Cloud Private Edition and tax authorities / local platforms

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

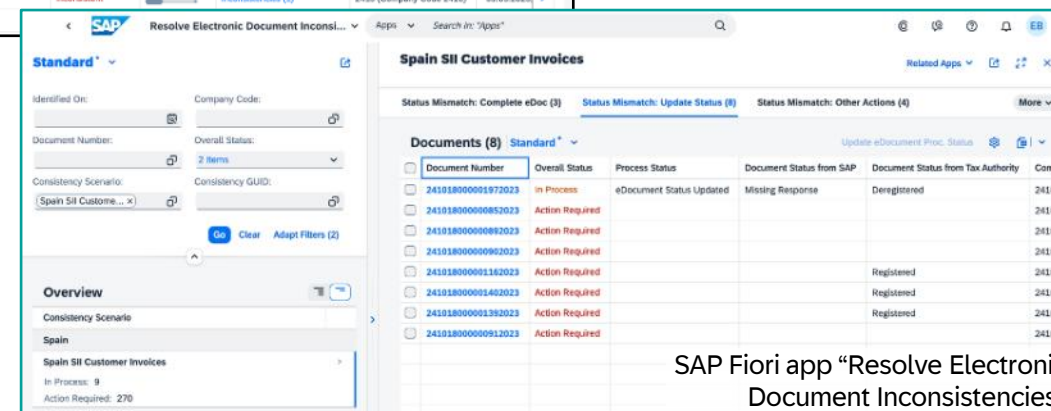
Benefit

- 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

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')

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

The top screenshot shows the 'Manage Electronic Documents' Fiori app interface. It features a navigation bar with 'Standard' and 'India invoice' (Error 81, In Process 134, Completed 15). A table lists documents with columns for Source Document Number, Status, Process Status Description, Posting Date, Log, and Attachments. A document with ID 18101800000192023 is highlighted as having errors.

The bottom screenshot shows the 'Error Analysis' view for the selected document. It includes a 'Support Information' section with fields for Person Responsible, Email Address, Solution Proposal, and Notifications To. Below this is a table of 'Documents with Errors (1)' with columns for Source Document Number, Source Description, Error Messages, and Error Code. A detailed error message is displayed: 'SupTyp' missing under 'TranDtls' node (B2B/SEZWP/SEZWOP/EXPW/EXPWOP/DEX) Field 'Gstin' (Customer GSTIN) 1234567 is not valid under the node 'BuyerDtls' HSN code not found for the item 002.

SAP Fiori app "Manage Electronic Documents"

LOCALIZATION

Finance: SAP Financial Compliance Management



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

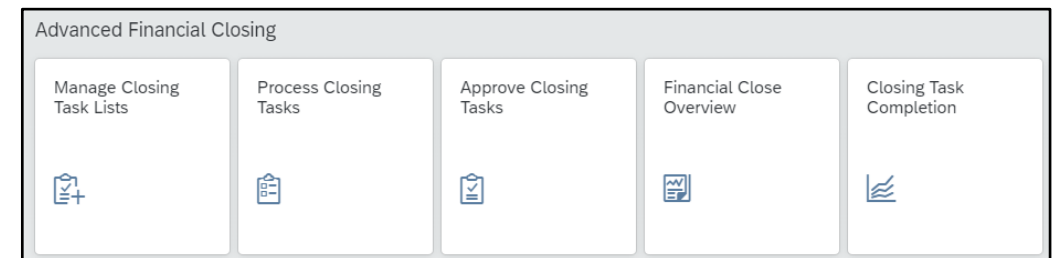


Accounting Expert

General Ledger Accountant
Asset Accountant
AR/AP Accountant

Accounting Manager

Head of Finance, Central Controlling



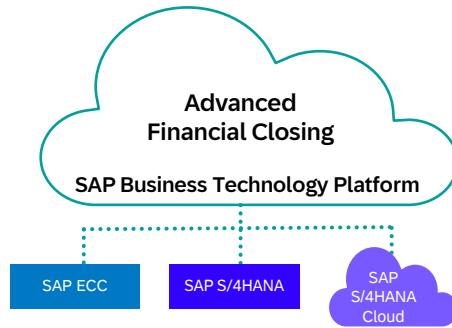
Finance: Entity Close Orchestration

SAP S/4HANA Cloud for advanced financial closing

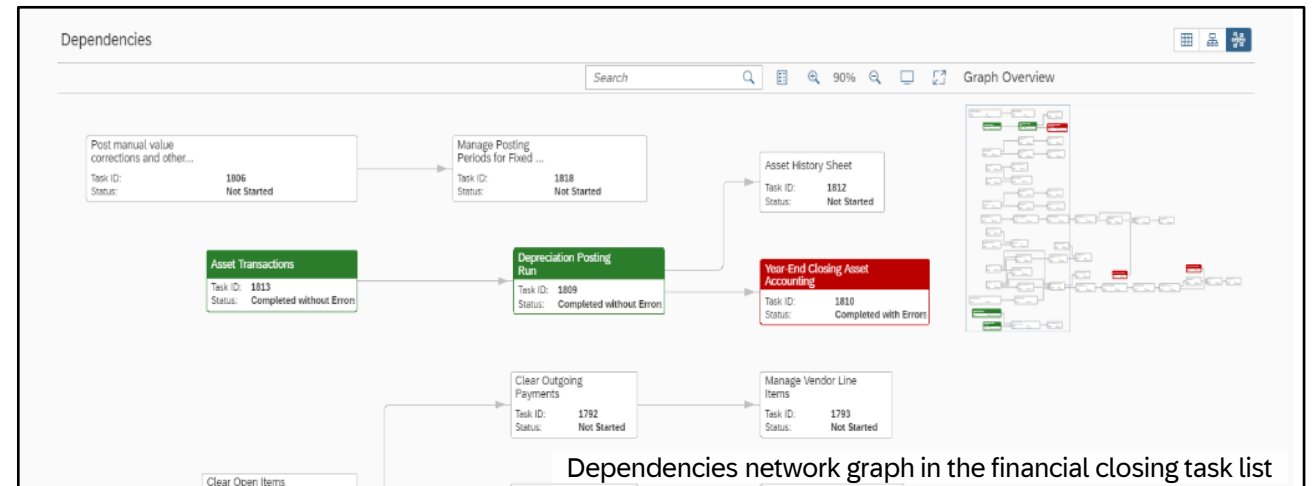
Advanced Accounting
and Financial Close

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](#)



- 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.

The image displays three screenshots of SAP Fiori applications. The top screenshot shows the 'Define Validation Rules' app, where a rule named 'CJ0002' is being configured. It includes fields for 'Rule ID', 'Status', 'Created By', and 'Created At'. Below this, there are sections for 'General Information', 'Rule Expression', and 'Reference Lists'. The middle screenshot shows the 'Manage Balance Validation Rules and Groups' app, displaying a list of rules with columns for 'Rule ID', 'Description', 'Status', and 'Group'. The bottom screenshot shows the 'View Balance Validation Results' app, displaying a detailed table of validation results for rule 'CJ0003'. The table includes columns for 'Company Code', 'Account Class', 'Amount', 'Left Side Value', 'Right Side Value', and 'Difference'. The results show various account classes with their respective amounts and differences, indicating successful or failed validations.

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

The image shows two overlapping SAP configuration screens. The background screen is titled 'Exchange rate types' and shows settings for 'System Exchange Rate Table-Based Rates'. Key fields include 'Version Ex.rate: Y10', 'Exch. rate ind.: J', 'Description: Incoming during the Year Rate', 'From Year: 2010', and 'Period Effect.: 12'. A pink box highlights the 'Group Reporting Data-Based Rates (Optional)' section, which contains 'Rate Selection: S-CT-RATE'. The foreground screen is titled 'Selection' and shows 'Type of translation' settings. It includes 'Transl. Method: Y0901 Standard translation', 'Seq.Number: 040', and 'Rounding entry' (unchecked). Under 'Type of translation', 'Exch. rate ind.: A Average rate' is selected, and 'Prior yr ER' is unchecked. A pink box highlights the 'Translation key: P Translation Using Exchange Rate of Posting Date' option.

Finance: Group Reporting

Collect multiple answers in forms and relate them to numbers

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

The screenshot shows the SAP 'Enter Package Data' interface. It features a header with 'SAP' and 'Enter Package Data'. Below the header, there are fields for 'Version: Y10', 'Fiscal Year: 2011', 'Period: 13 X', 'Cons. Unit: SOQB X', and 'FS Item: FORAHIS01'. A search bar for 'Local Currency: EUR' is also present. The main content area is divided into columns A, B, and C. Column A contains questions, column B contains text input fields, and column C contains numerical values. A table at the bottom lists expenses for audit and consulting services, with a total of 107,550.00. Annotations include a green box 'Questions asked by the corporate team' pointing to the questions in column A, a purple box 'Answers populated by the consolidation unit' pointing to the text input fields in column B, and another purple box 'Additional financial data input by the consolidation unit' pointing to the numerical values in column C.

	A	B	C
1	Ad Hoc Item		LC - Local Currency (LC=EUR)
2			
3			
4			
5		Who are your auditors and consultants?	
6	Who is your auditor?	Acme Corp.	
7	Who is your tax consultant?	ENCOM	
8	List any additional consultants which supported the data collection in this package:	-none-	
9			
10			
11			
12		Which expenses have been made for audit and consulting services?	
13			
14	CE-A - expenses for financial statement audit		73,550.00
15	CE-T - expenses for tax counseling		34,000.00
16	CE-Z - expenses for other consulting		
17	Total		107,550.00

Finance: More transparency regarding JVA-agreements than ever before

Advanced Accounting and Financial Close

Joint Venture Accounting

2023
FPS2

Joint Venture Accounting (JVA)

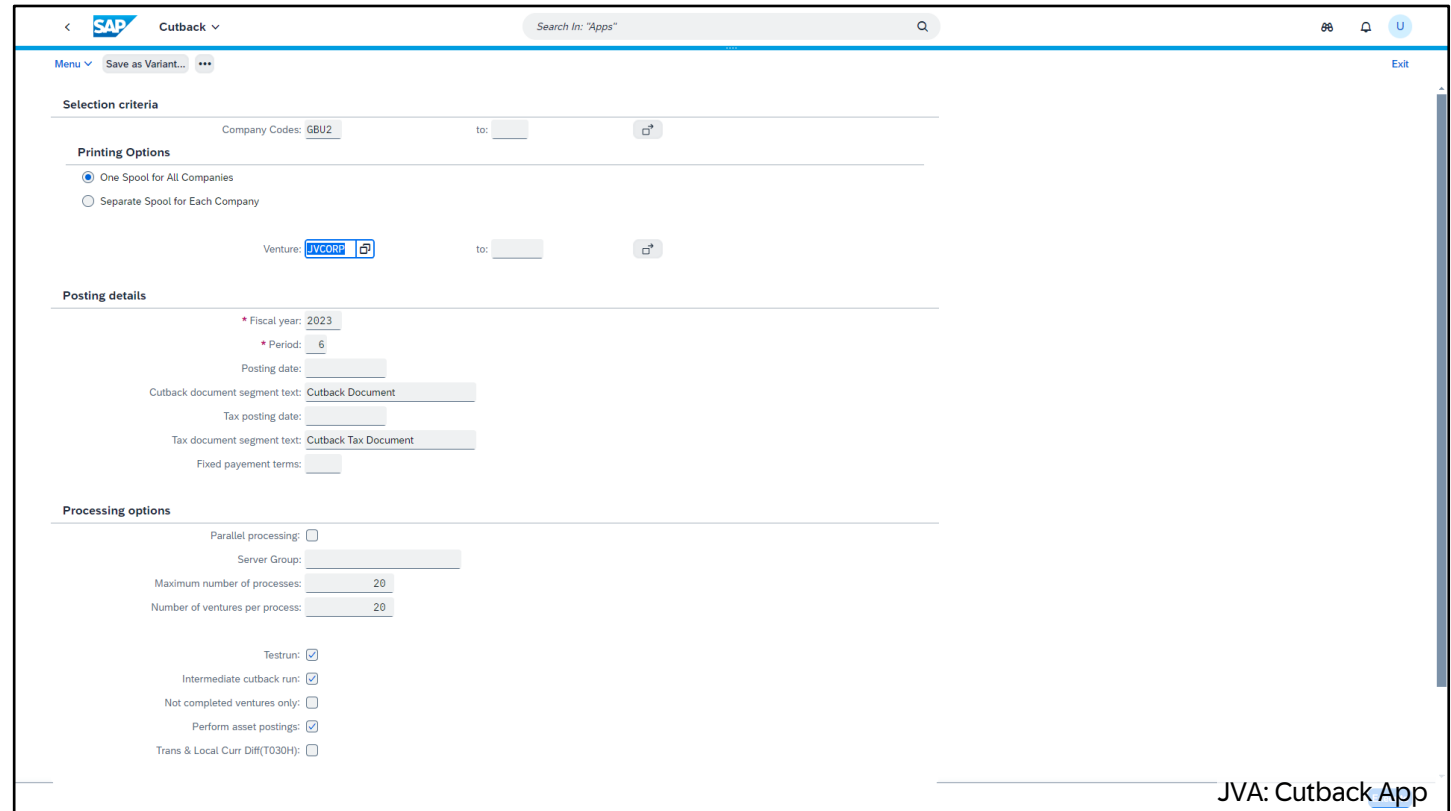
Business Background

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



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

Status Description	Customer	Customer Name	Collection Specialist	Collection Group	Priority Description	Amount Outstanding	Amount Overdue	Amount To Be Collect...	Amounts
Open	51100001	Handelskunds DE 1	Example ARAccountant	VT_SGR01	Medium	3,023,749.77	2,986,946.11	2,979,292.07	CNY
Open	51100001	TRIMAX World (DE)	Example ARAccountant	VT_SGR01	Very High	2,903,026.09	2,903,026.09	2,903,023.24	CNY
Open	519100197	Computer Systems (X7)	Example ARAccountant	VT_SGR01	Very High	640,938.62	640,938.62	640,938.62	CNY
Open	517700276	Global Computers (X5)	Example ARAccountant	VT_SGR01	Very High	525,496.55	525,496.55	525,496.55	CNY
Open	11100002	@BIB*02	Example ARAccountant	VT_SGR01	Very High	414,990.49	414,990.49	414,990.49	CNY
Open	519100197	Computer Systems (A6)	Example ARAccountant	VT_SGR01	Very High	322,781.12	322,781.12	322,781.12	CNY
Open	542100202	HyperCom Inc (DE)	Example ARAccountant	VT_SGR01	Very High	318,311.04	318,311.04	318,311.04	CNY
Open	519100197	Domestic FT Customer 1	Example ARAccountant	VT_SGR01	Very High	298,125.58	298,125.58	298,125.58	CNY
Open	51100001	TechTrade Inc (DE)	Example ARAccountant	VT_SGR01	Very High	267,441.31	267,441.31	268,428.96	CNY
Open	542100206	TRIMAX World (DE)	Example ARAccountant	VT_SGR01	Very High	242,849.17	242,849.17	242,849.17	CNY
Open	517700276	Computer Systems (A4)	Example ARAccountant	VT_SGR01	Very High	242,443.56	242,443.56	242,443.56	CNY
Open	519100197	Domestic FT Customer 2	Example ARAccountant	VT_SGR01	Very High	242,443.56	242,443.56	242,443.56	CNY
Open	519100206	Domestic FT Customer 8	Example ARAccountant	VT_SGR01	Very High	242,443.56	242,443.56	242,443.56	CNY
Open	519100206	Domestic FT Customer 5	Example ARAccountant	VT_SGR01	Very High	242,443.56	242,443.56	242,443.56	CNY

Process Receivables

Invoice Entry	Posting Key	Net Due Date	Original Amount	Open Amount	Paid Amount	Credited Amount	Billing Document	Resubmission Date	Dispute Case
380000193	11	04.06.2018 (152)	-2,000.00	-2,000.00	0.00	0.00	EUR		
380000008	01	31.01.2019 (272)	30.00	0.00	0.00	0.00	EUR	9000008	31.03.2022
380000082	01	31.01.2021 (54)	2,000.00	1,999.00	991.00	0.00	EUR		

Finance: Collections Management

Intelligent Cash Collections

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.

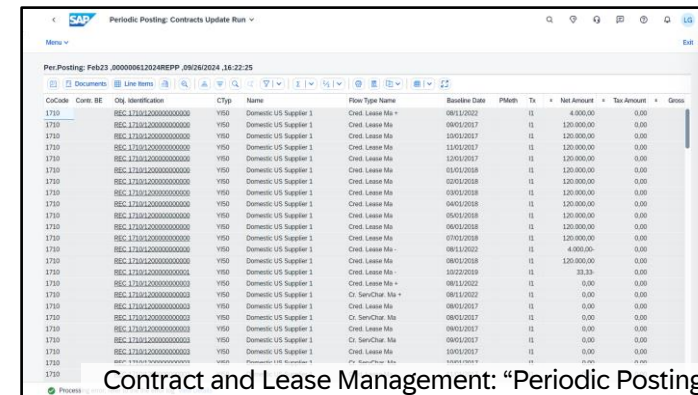
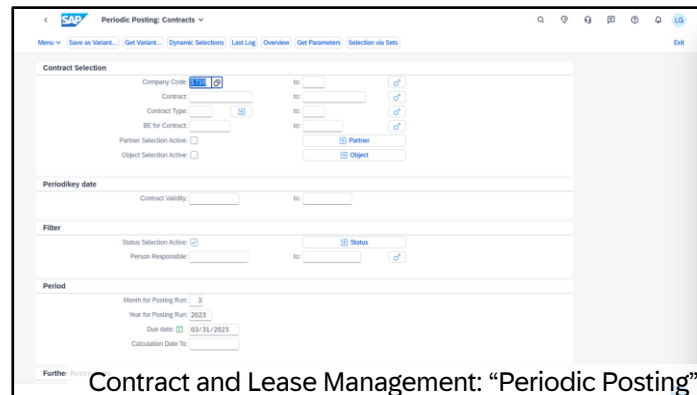
Support companies to include estimations, bid management, and project management for the efficient completion of investment projects.

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.



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

Real Estate Management

Contract & Lease Mgmt.

2023
FPS2

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

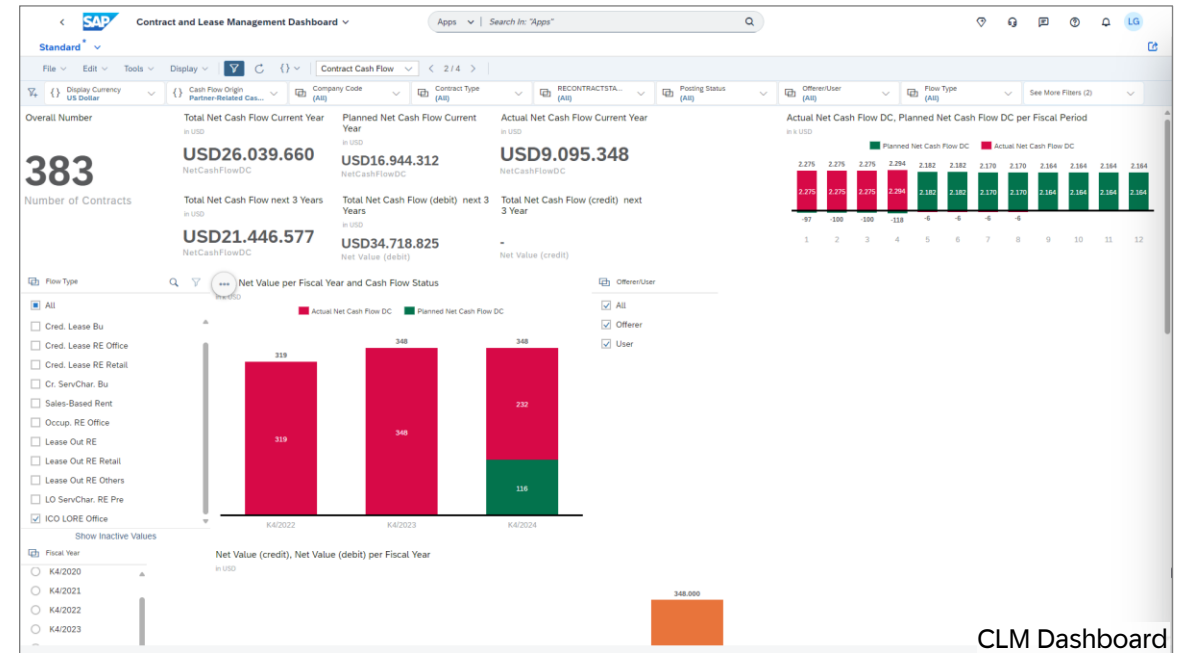
You can manage objects that are part of an intercompany lease process in the **Manage Usable Objects app** and the **Manage Rentable Objects app**.

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

- Intercompany Usable Object with and without Portfolio Structure

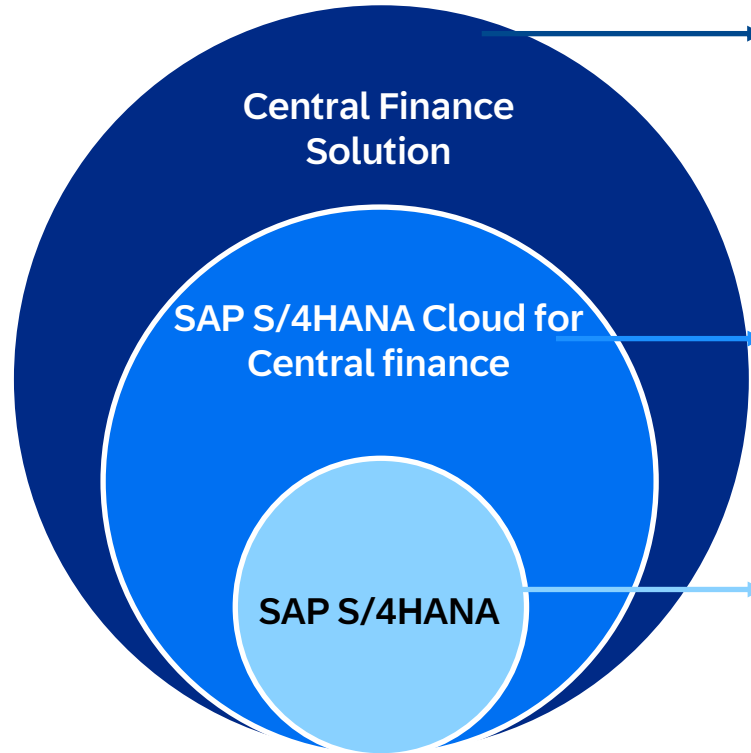
The following new usage categories have been added to the **Manage Rentable Objects app**:

- Intercompany Rentable Object with and without Portfolio Structure



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

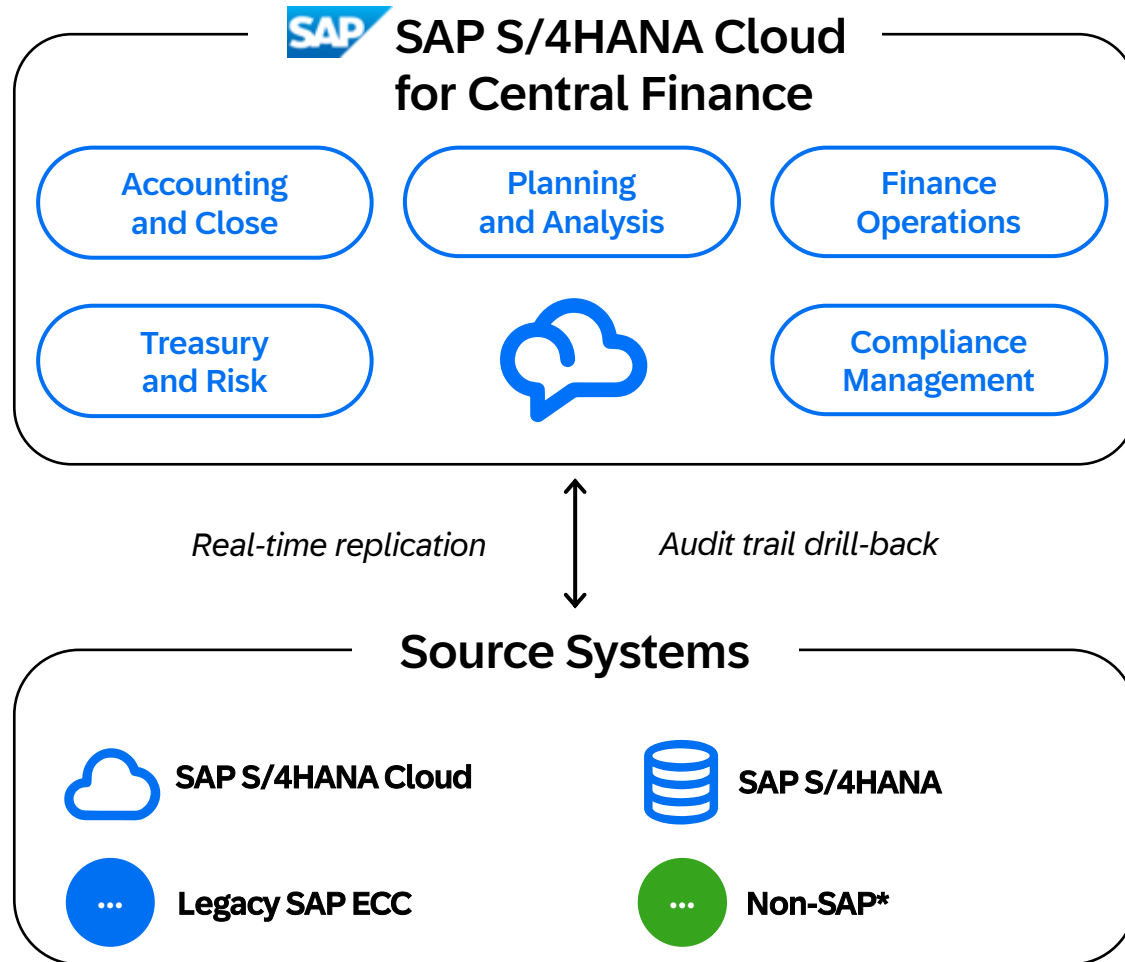
**Advanced reporting
at segment, entity and group level**

**Scalable execution
of local and central processes**

**Transformation platform
for the digital business**

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

The screenshot displays the SAP Fiori app interface for 'Manage Pending Journal Entries - Message View'. At the top, there are two charts: 'Number of Messages by Co...' and 'Number of Messages by Message Basic...'. Below these is a table of pending journal entries with columns for Company Code, Journal Entry Type, Sender Fiscal Year, Posting Date, Sender Journal Entry, Amount in Company Code Currency, and Transaction ID. A context menu is open over a specific entry, showing options like 'Alert Settings', 'Maintain Trace Levels', 'Message Dashboard - SAP Application Interface Fram...', 'Message Monitoring', 'Message Monitoring Overview', 'Message Monitoring for Administrators', and 'Message Monitoring for Integration Experts'. The Transaction ID '42010aef-4d5f-1edd-b0b7-df52ec3ef829' is highlighted in the table and the context menu.

Company Code	Journal Entry Type	Sender Fisc...	Posting Date	Sender Journal Entry	Amount in Company Code Cu...	Transaction ID
Company Code: F001						
Message Basic Text: &1 &2 &3 &4						
Message Basic Text: Activate clearing line item creation for source company code &1						
Message Basic Text: Business system for logical system &1 could not be determined						
Message Basic Text: Cost center && does not exist on &						
Message Text: Cost center C001/MK_ADMIN does not exist on 13.03.2023.						
F001 (Tools Inc. Europe)	AB (Accounting Document)	2023	13.03.2023			42010aef-4d5f-1edd-b0b7-df52ec3ef829
F001 (Tools Inc. Europe)	AB (Accounting Document)	2023	13.03.2023			d94acfef-667d-1e...
F001						
Message Text: Cost center C001/MK_ADMIN does not exist on 14.03.2023.						
Message Text: Cost center C001/MK_ADMIN does not exist on 30.06.2023.						
Message Text: Cost center C001/MK_TEMP1 does not exist on 15.03.2023.						
Message Text: Cost center C001/MK_TEMP2 does not exist on 02.05.2023.						
Message Text: Cost center C001/MK_TEMP2 does not exist on 03.05.2023.						
Message Text: Cost center C001/MK_TEMP2 does not exist on 15.03.2023.						

SAP Fiori app "Manage Pending Journal Entries"

Finance: Streamlined deviation analysis with Transfer of Plan Data app

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)

Advanced Accounting and Financial Close

Central Finance

2023
FPS2

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

The screenshot shows the SAP 'Transfer of Plan Data for Cost Centers' application interface. The title bar indicates the program name. Below the title bar, there are navigation options: Program, Edit, Goto, System, Help, and Exit. A toolbar contains buttons for 'Save as Variant...', 'Execute', 'Display Logs', and 'Display Documentation'. The main content area is divided into several sections for parameter selection:

- Selection for Source System:** Source System* MFG
- Parameters for Source System:** Version* 01, Planning Currency Type* Transaction currency
- Parameters from Central Finance System for Reading:** Controlling Area* A000, Fiscal Year* 2024, Posting Period* 01 (to: 08), Cost Center* 17101301 (to: 17101301), G/L Account* 42001040 (to: 42)
- Parameters from Central Finance System for Writing:** Ledger: US, Plan Category* FINAL, Reset Plan Data before Posting:
- Simulation:** Test Run:

The text 'Transfer Plan Data App' is visible in the bottom right corner of the screenshot.

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

Advanced Accounting and Financial Close

Central Finance

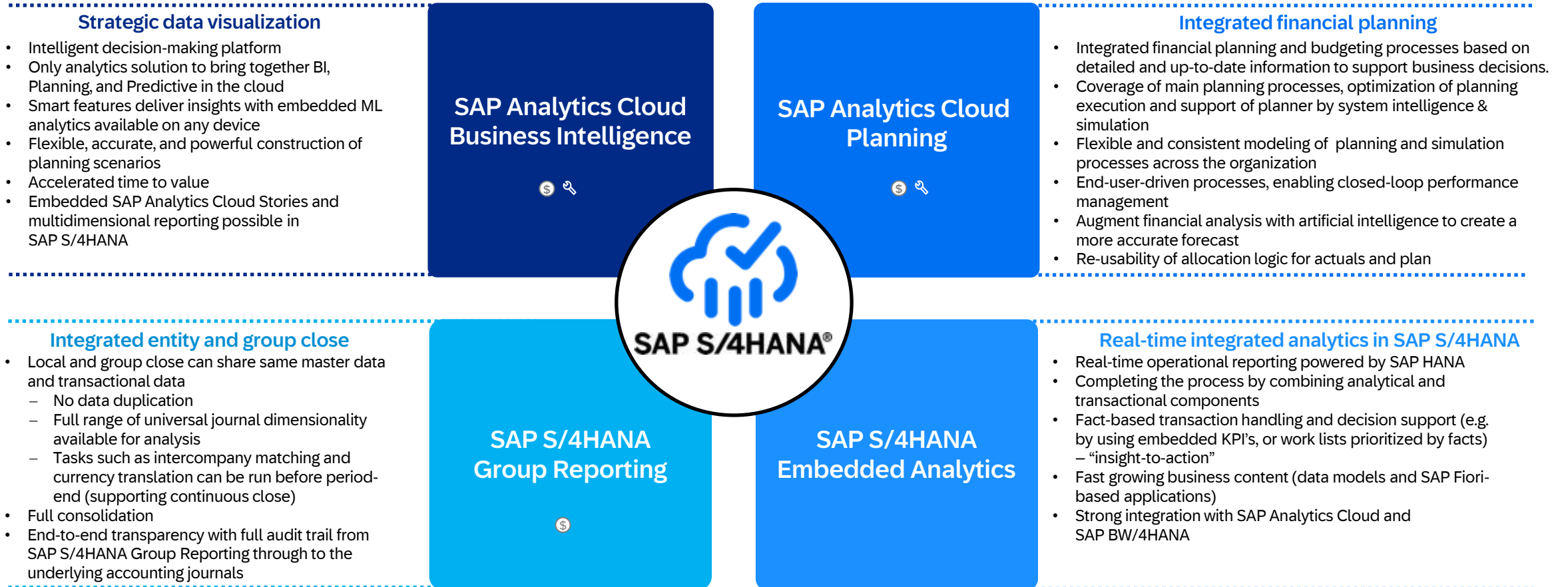
2023
FPS2

The screenshot shows the SAP 'Manage Project Procurement' interface. It features a search bar, filters for currency (United States Dollar), project (9 items), and delivery status (Completed). Below the filters is a table titled 'Purchasing Documents' with the following data:

Project	WBS Element	Material	Purchase Order Item	Delivered / Ordered Quantity	Supplier	Delivery Date / Status	Net Amount
Electric Motorbik... 342017	Detailed Project Plan... 00000000000000000000 63TTO	SERVER ML-SERVER	4500007470/00010	15EA / 25EA	US Vendor 1 (LOB) LSUPP-0001	25.05.2017	17.500,00 USD
Electric Motor Bik... 2552018	Detailed Project Plan... 00000000000000000014 57TTO	SERVER ML-SERVER	4500179412/00010	5EA / 5EA	US Vendor 1 (LOB) LSUPP-0001	04.02.2019	3.750,00 USD
Electric Motor Bik... 2552018	Detailed Project Plan... 00000000000000000014 57TTO	Brake DISC_BRAKE_1710	4500395695/00010	5PC / 5PC	US Vendor 1 (LOB) LSUPP-0001	05.02.2021	5.000,00 USD
ETO: MotorBike P... 0020000191	PHASE_1 A000 0020000191-1	Motor: 220 volt ETO MOTOR 220	4500399006/00010	1PC / 1PC	US Vendor 1 (LOB) LSUPP-0001	10.02.2021	100,00 USD
Pump for Motobik... 26062022_6	Detailed Project Plan... 00000000000000000049 42TTO	Brake DISC_BRAKE_1710	4500442767/00010	5PC / 5PC	US Vendor 1 (LOB) LSUPP-0001	04.06.2022	5.000,00 USD

Purchase Order Overview

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



Finance: Additional LoB Finance Solutions on 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.

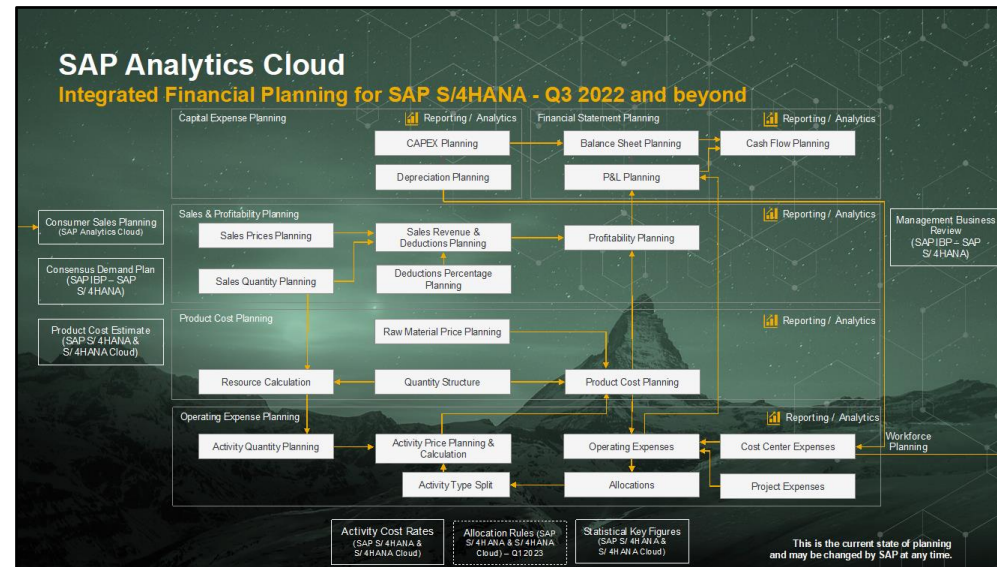
Some of the enhancements delivered in 2022 focusing on integrated enterprise-wide planning and transparency for the business user include (non-exhaustive)

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

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**

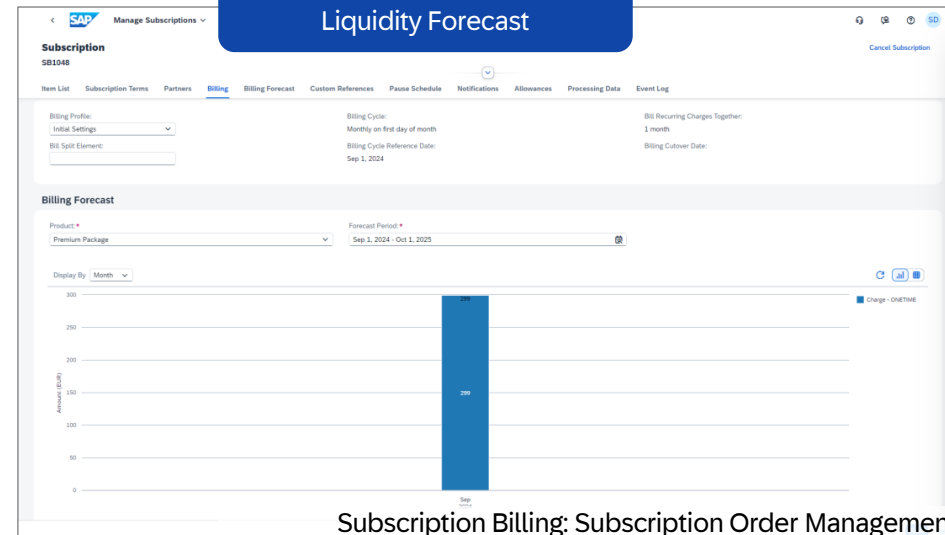
Treasury Management

- **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

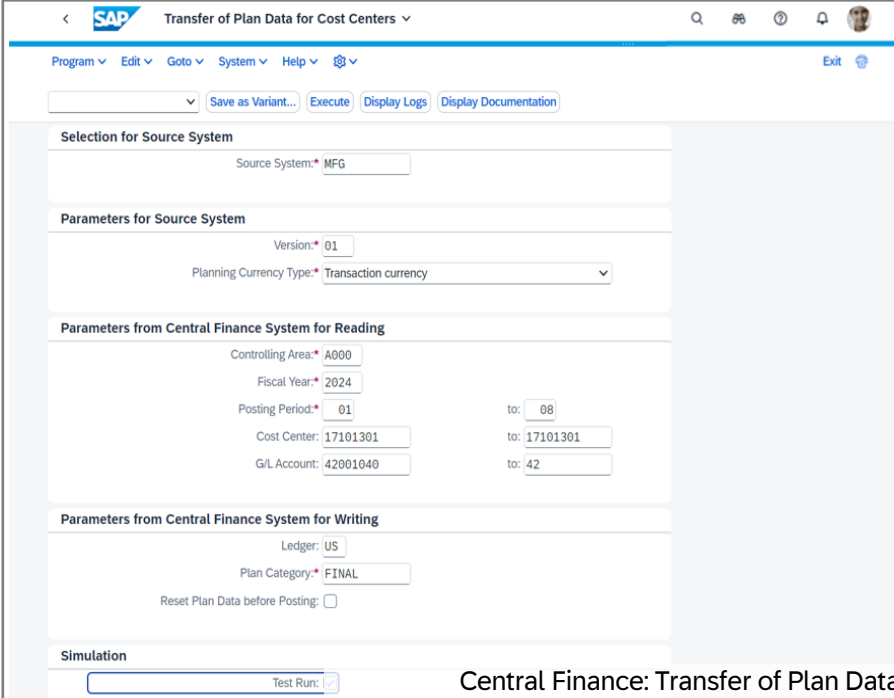


Subscription Billing: Subscription Order Management

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



The screenshot displays the SAP S/4HANA Central Finance interface for 'Transfer of Plan Data for Cost Centers'. The interface is organized into several sections:

- Selection for Source System:** Source System: MFG
- Parameters for Source System:** Version: 01, Planning Currency Type: Transaction currency
- Parameters from Central Finance System for Reading:** Controlling Area: A000, Fiscal Year: 2024, Posting Period: 01 (to: 08), Cost Center: 17101301 (to: 17101301), G/L Account: 42001040 (to: 42)
- Parameters from Central Finance System for Writing:** Ledger: US, Plan Category: FINAL, Reset Plan Data before Posting:
- Simulation:** Test Run:

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**

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. Collaborative project and resource management.
- SAP Cloud for Projects**
- SAP Responsible Design and Production** Respond to Extended Producer Responsibility (EPR) obligations and other public commitments.

SAP S/4HANA LoB Apps

- additional license

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.

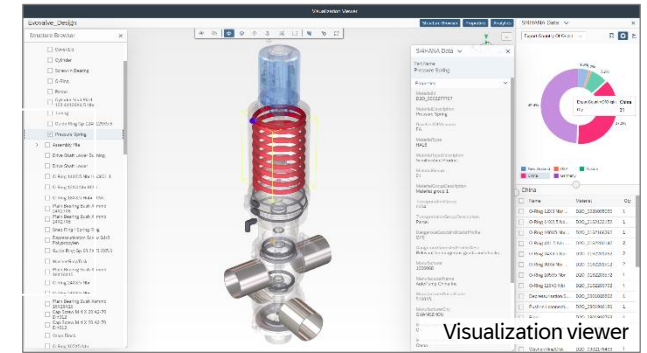
Product Engineering

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.

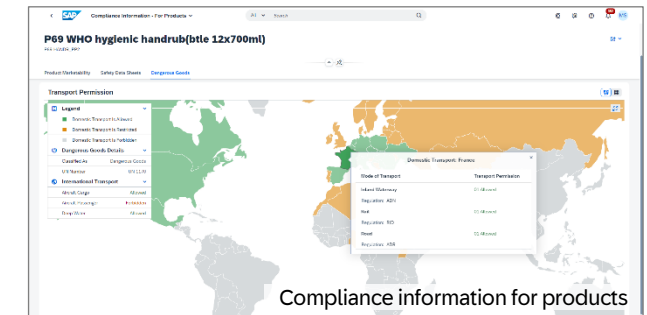
Project Control

Gain insight into cost, time, scope, resources, and quality performance of products and projects.

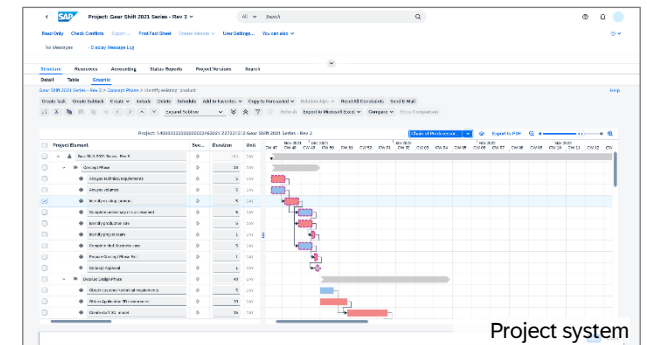
SAP S/4HANA Enterprise Management



Visualization viewer



Compliance information for products



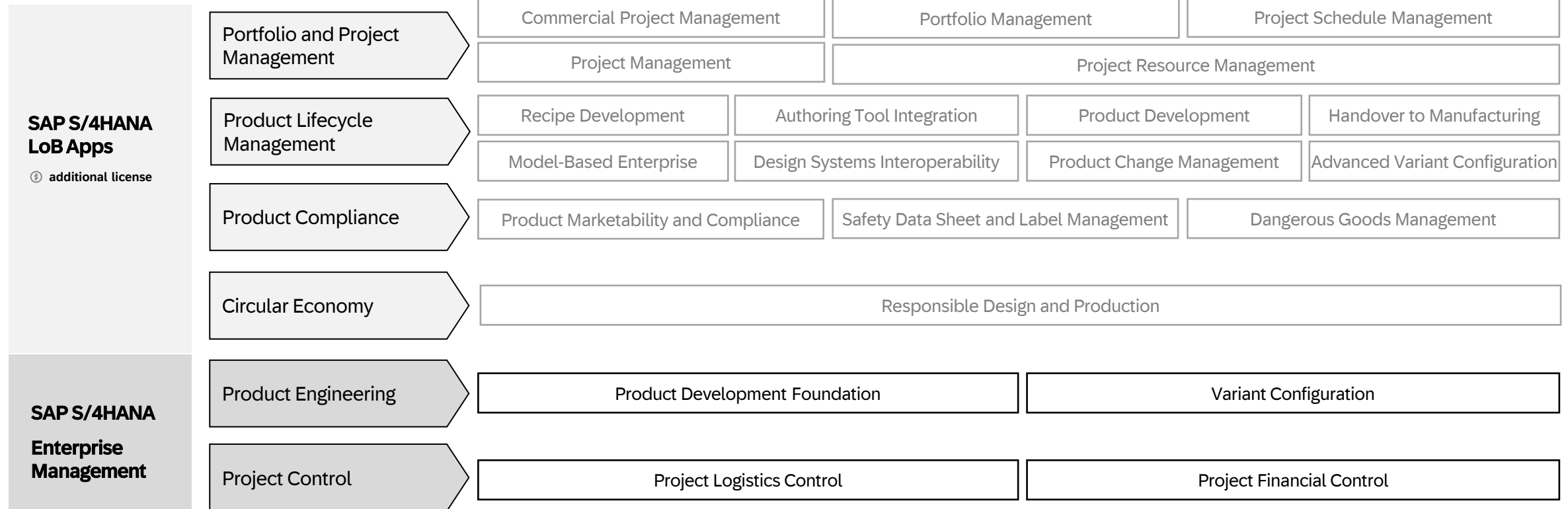
Project system

R&D: Business area 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.



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.

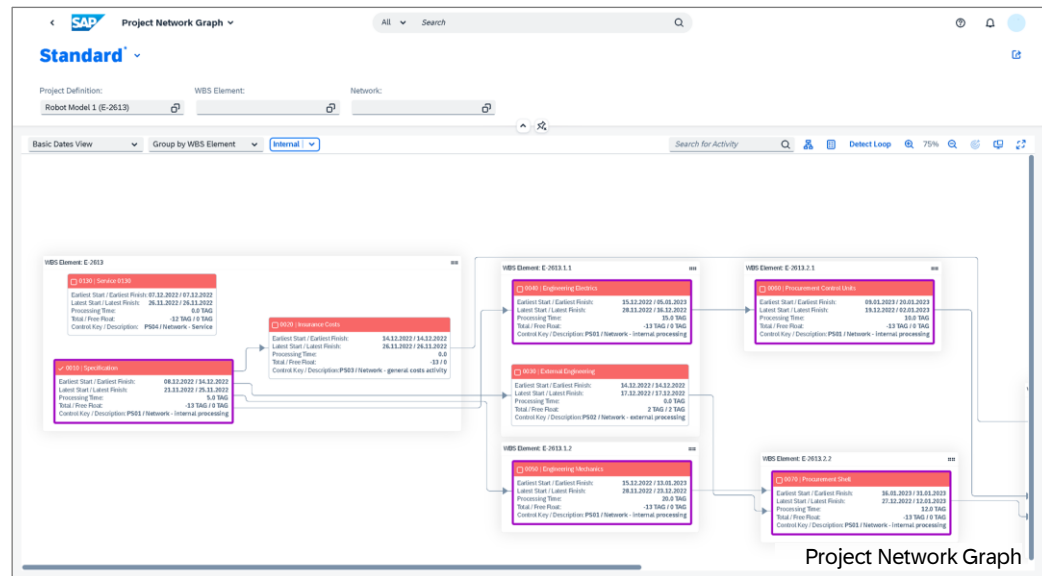
Product Engineering

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**



Component and Component Groups	Preliminary Compon...	Component and Component Grou...	Item Category	Alternative BOM	Plant	Edit
CARBURETOR	-	Carburetor	L(Stock Item)	+	Plant 1 US (Def	Edit with Change Number
ROCKER_ARM_ASSY	-	Rocker_Arm_Assy	L(Stock Item)	1	Plant 1 US (Default)	Production
INTAKE_VALVE	-	Intake_Valve	L(Stock Item)	+	Plant 1 US (Default)	
PUSH_ROD	-	Push_Rod	L(Stock Item)	+	Plant 1 US (Default)	
VALVE_CONNECTOR	-	Valve_Connector	L(Stock Item)	+	Plant 1 US (Default)	
ROCKER_ARM	-	Rocker_Arm	L(Stock Item)	+	Plant 1 US (Default)	
CRANK_SHAFT_ASSY	-	Crank_Shaft_Assy	L(Stock Item)	1	Plant 1 US (Default)	Production
FUEL_LINE_RIGHT	-	Fuel_Line_Right	L(Stock Item)	+	Plant 1 US (Default)	
FUEL_LINE_LEFT	-	Fuel_Line_Left	L(Stock Item)	+	Plant 1 US (Default)	
DRIVE_BELT	-	Drive_Belt	L(Stock Item)	+	Plant 1 US (Default)	
BELT	-	Belt	L(Stock Item)	+	Plant 1 US (Default)	
CAM_SHAFT	-	Cam_Shaft	L(Stock Item)	+	Plant 1 US (Default)	
EXHAUST_VALVE	-	Exhaust_Valve	L(Stock Item)	+	Plant 1 US (Default)	
VALVE_COVER	-	Valve_Cover	L(Stock Item)	+	Plant 1 US (Default)	
BELT_PULLY_02	-	Belt_Pully_02	L(Stock Item)	+	Plant 1 US (Default)	
BELT_PULLY_01	-	Belt_Pully_01	L(Stock Item)	+	Plant 1 US (Default)	
ENGINE_BLOCK	-	Engine_Block	L(Stock Item)	+	Plant 1 US (Default)	

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

The screenshot displays the SAP Project Builder interface for 'Project MF_0001'. A 'Lab Preview' badge is visible in the top left. The main window shows a project structure table with columns for 'Description' and 'Identification'. Below this is a 'Worklist' and 'Templates' section. A 'Joule' overlay is active on the right, displaying project details for 'MF_0001' and offering options to open the project definition, project builder, or change project builder. The overlay also includes a search bar for 'Message Joule...' and a 'Save' button at the bottom.

Project Structure: Description	Identification
MF Test project	MF_0001
WBS Element MF_0001	MF_0001
WBS Element MF_0001.2	4080187
WBS Element MF_0001.1	MF_0001.1
WBS Element MF_0001.2	MF_0001.2

Templates: Name	Project object

Joule

Open project MF Test project

Project details

Project ID: MF_0001

Description: MF Test project

Start Date:

Finish Date: 2021-12-20

To see more details, click on one of the below options:

- Project Definition (Display)
- Project Builder (Display)
- Project Builder (Change)

Message Joule...

Project Builder

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.

Sel...	Hierarchy Nu...	Description	Material	Plant	P...	Mat...	Quantity	Qu...
<input type="checkbox"/>	1	Root Node 1					0,000	
<input type="checkbox"/>	1.1	Parent Node 1					0,000	
<input type="checkbox"/>	1.1.1	Child Node (Materials)					0,000	
<input checked="" type="checkbox"/>	1.1.1.1	Test Material		0001	1	01	12	EA
<input type="checkbox"/>	1.1.1.2	Test Material		0004	1	02	12	EA
<input type="checkbox"/>	1.1.1.3	Component 2	0000000000000000295	0001	1	01	120	PC
<input type="checkbox"/>	1.1.2	Child Node (Services)					0,000	
<input checked="" type="checkbox"/>	1.1.2.1	Test Service		0001	2	02	12,0	HR
<input type="checkbox"/>	1.1.2.2	Test Services		0004	2	01	13,0	HR
<input type="checkbox"/>	1.1.2.3	Test Services		0001	2	01	13,0	HR
<input type="checkbox"/>	1.1.3	Child node (Invalids)					0,000	

Sel...	Item	Hierarchy Number	P...	A	Material	Short Text	Overall Limit	Expected Value	Targ. Qty	OUn	Net Price	Per	OPU
<input type="checkbox"/>	10	1				Root Node 1				0,000		0,00	0
<input type="checkbox"/>	20	1.1				Parent Node 1.1				0,000		0,00	0
<input checked="" type="checkbox"/>	80	1.2				Parent Node 1.2	10.000,00	9.000,00		0,000		0,00	0
<input type="checkbox"/>	90	1.2.1	2	U		Test Service				10,0	HR	2.300,00	1
<input type="checkbox"/>	100	1.2.2	2	U		Test				2	EA	23,00	1

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

The screenshot displays the SAP Project Builder interface for Network 4956490. The left sidebar shows a project structure with activities like 'znt wrtest order 1' and 'znt op 1'. The main area shows 'Identification and view selection' for activity 4956490 0010. Below this is a table with purchase requisitions.

Item	Material	Plant	Purchase Req.	Req. item	Purch. Group	Supply Process	Version	Hold On-Shore
0010	FLOG-SP11-BM-SERN	FORP	14532784	10	001	SP11		<input checked="" type="checkbox"/>
0020	FLOG-SP12	FORP	14530973	10	001	SP12		<input checked="" type="checkbox"/>
0030	FLOG-SP13	FORP		0	001	SP13	V1	<input checked="" type="checkbox"/>
0040	FLOG-SP14-NO-QM	FORP	14530975	10	001	SP14		<input checked="" type="checkbox"/>

R&D: Portfolio and Project Management

Simplified authorization handling for portfolio management

Portfolio and Project Management

Portfolio Management

2023
FPS2

- 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.

SAP Create Item

Change Creation Parameters You can also

No Messages - Display Message Log

Demo Portfolio > All Language: English

100000000000000006222024 Called From: Portfolio Demo Portfolio ID: 100000000000000006222024

Name: Portfolio Item Type: ZJGA3_PS_QVL

Specification Design Implementation Testing

Overview Documents and Notes Miscellaneous

Users (2) User Roles (0)

Add Add Multiple Show All Remove Help

Name	Admin	Write	Read	Person Responsible	Inherited From
	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	

Add Authorizations for User

User:

Last Name:

First Name:

Authorizations: Admin Write Read Person Responsible

Assign Cancel

Create item Save

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”.

Portfolio and Project Management

Portfolio Management

2023
FPS0+1

The screenshot shows the SAP Business Accelerator Hub interface for the 'Project Portfolio - Read' API. The page is titled 'Project Portfolio - Read' and includes a 'Show API Key' button. The main content area is divided into 'Overview', 'API Reference', and 'Schema View' tabs, with 'Overview' selected. The 'Introduction' section describes the service's purpose and provides two buttons: 'View the API Reference' and 'Check Schema View'. A table on the right lists key metadata:

STATUS	TYPE
ACTIVE	ODATAV4
LAST MODIFIED	VERSION
06 Aug 2024	1.0.0
RELEASE	DIRECTION
2023 FPS02	Inbound

The 'Documentation' section contains a link to 'Business Documentation'. The 'API Resources' section features a grid of buttons for 'Attributes', 'API Specification', 'Authentication Methods', 'Configuration Details', 'Extensibility', and 'Change Log'. A 'FEEDBACK' button is visible on the right side of the page.

R&D: Product Compliance (1)

Product Compliance

Product Marketability and Chemical Compliance

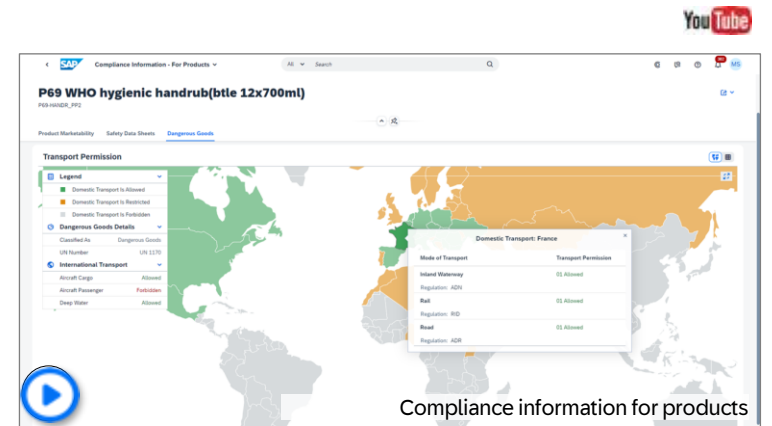
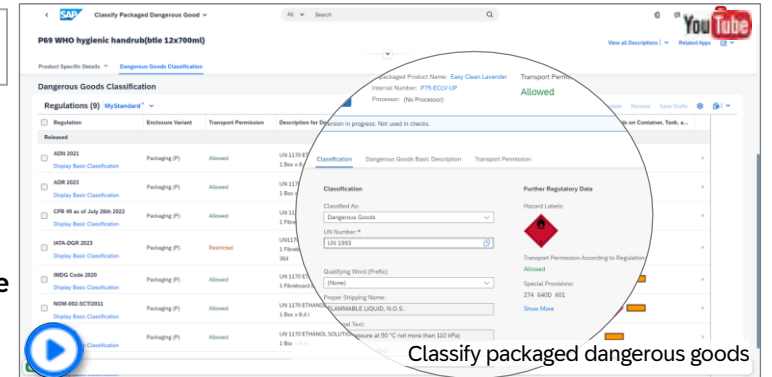
- Manage material and ingredient information and satisfy legal and customer requirements.
- Collect compliance data from suppliers and customers and publicize compliance information.
- Automatically track volumes of regulated substances, assess and verify products and materials for different compliance 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.



R&D: Product Compliance (2)

- **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.

Dangerous Goods Classification

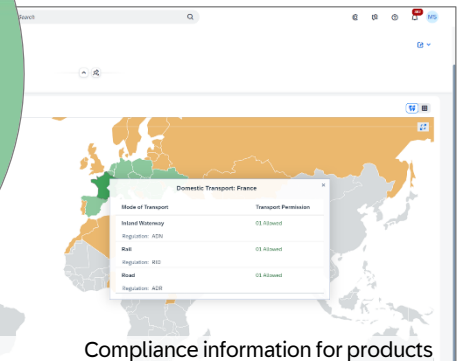
Regulation	Enclosure Variant	Transport Permission	Description for Documents	Marking Text Description	Labels on Package	Placards on Container, Tank, a...
ADN 2021	Packaging (P)	Allowed	UN 1170 ETHANOL SOLUTION, 3, II 1 Box x 8.4 l	UN 1170 ETHANOL SOLUTION	☠️ ↑↑	☠️
ADR 2023	Packaging (P)	Allowed	UN 1170 ETHANOL SOLUTION, 3, II, (DIE) 1 Box x 8.4 l	UN 1170 ETHANOL SOLUTION	☠️ ↑↑	☠️
CFR 49 as of July 26th 2022	Packaging (P)	Allowed	UN 1170 Ethanol solutions, 3, II, ERG: 127 1 Fibreboard box x 8.4 l (2.2191 US Gallon)	UN 1170 Ethanol solutions	☠️ ↑↑	☠️
IATA-DGR 2023	Packaging (P)	Restricted	UN1170, Ethanol solution, 3, II 1 Fibreboard box x 8.4 l 364	UN 1170 Ethanol solution	☠️ ☠️ ↑↑	☠️ ☠️
IMDG Code 2020	Packaging (P)	Allowed	UN 1170 ETHANOL SOLUTION, 3, II 1 Fibreboard box x 8.4 l	UN 1170 ETHANOL SOLUTION	☠️ ↑↑	☠️
NOM-002-SCT12011	Packaging (P)	Allowed	UN 1170 ETHANOL SOLUTION, 3, II, ERG: 127 1 Box x 8.4 l	UN 1170 ETHANOL SOLUTION	☠️ ↑↑	☠️
RID 2021	Packaging (P)	Allowed	UN 1170 ETHANOL SOLUTION, 3, II 1 Box x 8.4 l	UN 1170 ETHANOL SOLUTION	☠️ ↑↑	☠️

Legend

- Domestic Transport Is Allowed
- Domestic Transport Is Restricted
- Domestic Transport Is Forbidden

Dangerous Goods Details

Classified As	Dangerous Goods
UN Number	UN 1170
International Transport	
Aircraft Cargo	Allowed
Aircraft Passenger	Forbidden
Deep Water	Allowed



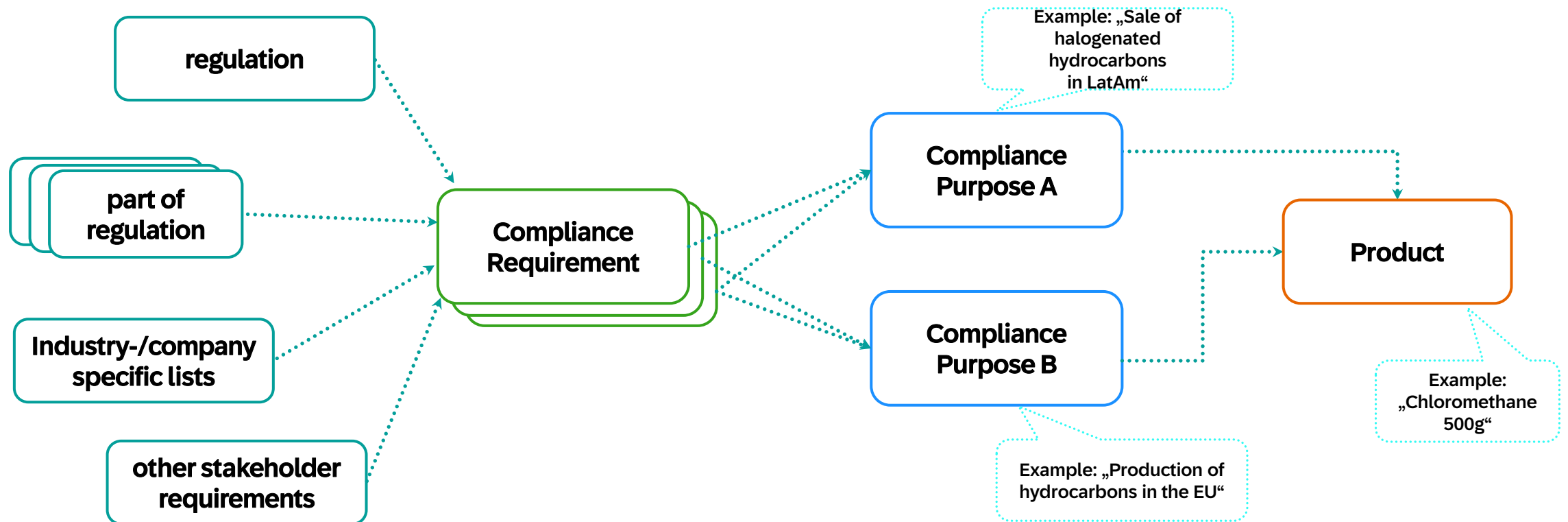
Compliance information for products

R&D: Product Compliance

New data model

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.

The screenshot displays the SAP 'Manage Phrase-Enabled Fields' interface. On the left, a sidebar lists various phrase-enabled fields, including 'Assessment Ecotoxicity: Additional Statement', which is currently selected. The main area shows the details for this field, including its context (Ecological Information), compliance requirements, and extensibility. Below this, a table lists the phrases associated with this field. The table has columns for 'Phrase Text', 'Additional Notes', 'Is Historical', and 'Hide Phrase'. The 'Hide Phrase' column contains toggle switches that can be set to 'NO' or 'YES'.

Phrase Text	Additional Notes	Is Historical	Hide Phrase
	My extra information	No	<input type="checkbox"/>
	My extra information	No	<input type="checkbox"/>
(ZSTART Language EN) engslih		No	<input type="checkbox"/>
Based on bioavailability assessment according to 1.3.2.4.5 UN GHS/CLP article 12		No	<input type="checkbox"/>
Based on harmonised classification in EU regulation 1272/2008, Annex VI		No	<input type="checkbox"/>
Based on the Catalogue of Hazardous Chemicals of China		No	<input type="checkbox"/>
Based on the harmonized classification in Turkish regulation SEA No 28848		No	<input type="checkbox"/>
Information given is based on data on the ingredients and the ecotoxicology of similar products.		No	<input type="checkbox"/>
Measured value		No	<input type="checkbox"/>
The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.		No	<input type="checkbox"/>
aerosol		No	<input checked="" type="checkbox"/>

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.

The screenshot displays the SAP 'Manage Listed Substances' interface. It features a search bar at the top and a table of listed substances. The table has the following columns: Name, CAS Number, EC Number, and Conditions for Listed Substances. The 'Standard' dropdown is set to 'Standard'. The table contains 25 rows of data, including substances like Cobalt-dichloride, Diarsenic-pentaoxide, and Anthracene oil.

Name	CAS Number	EC Number	Conditions for Listed Substances
Cobalt-dichloride	7646-79-9	231-589-4	Not Specified
Diarsenic-pentaoxide	1303-28-2	215-116-9	Not Specified
Diarsenic-trioxide	1327-53-3	215-481-4	Not Specified
5-tert-Butyl-2,4,6-trinitro-m-xylene	81-15-2	201-329-4	Not Specified
Di-(2-ethylhexyl)phthalat	117-81-7	204-211-0	Not Specified
alkanes, C10-13, chloro	85535-84-8	287-476-5	Not Specified
Bis(tributyltin) oxide	56-35-9	200-268-0	Not Specified
Arsenic acid (H3AsO4), lead(2+) salt (1:1)	7784-40-9	232-064-2	Not Specified
Butylbenzylphthalate	85-68-7	201-622-7	Not Specified
2,4-dinitrotoluene	121-14-2	204-450-0	Not Specified
Anthracene oil	90640-80-5	292-602-7	Not Specified
Anthracene oil, anthracene paste	90640-81-6	292-603-2	Not Specified
Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	Not Specified
Anthracene oil, anthracene paste, distn. lights	91995-17-4	295-278-5	Not Specified
Anthracene oil, anthracene-low	90640-82-7	292-604-8	Not Specified
Diisobutyl-phthalate	84-69-5	201-553-2	Not Specified
Lead chromate	7758-97-6	231-846-0	Not Specified
C.I. Pigment Red 104	12656-85-8	235-759-9	Not Specified
C.I. Pigment Yellow 34	1344-37-2	215-693-7	Not Specified
Pitch, coal tar, high-temp.	65996-93-2	266-028-2	Not Specified
tris(2-chloroethyl) phosphate	115-96-8	204-118-5	Not Specified
acrylamide	79-06-1	201-173-7	Not Specified
Ammonium-dichromate	7789-09-5	232-143-1	Not Specified
Potassium-chromate	7789-00-6	232-140-5	Not Specified
Potassium-dichromate	7778-50-9	231-906-6	Not Specified
Sodium-chromate	7775-11-3	231-889-5	Not Specified
Boric acid, disodium salt, hydrate	12267-73-1	235-541-3	Not Specified
Trichloroethylene	79-01-6	201-167-4	Not Specified

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.

The screenshot displays the SAP Fiori app interface for managing compliance requirements. The left pane shows a list of requirements, and the right pane provides details for the selected requirement 'DFV_2021_R'.

Compliance Requirements by Business Process

Compliance Requirement	Business Process	SVT Enabled
DFV_2021_R	Sales	Yes
US SVT 2020 June - BPC	Purchasing	Yes
DFV_2021_R	Manufacturing	No
DFV_2021_R	Purchasing	No
DN Monitor 2102	Manufacturing	No
DN Monitor 2102	Sales	No
DN Monitor 2102	Purchasing	No
DN Requirement	Sales	No
DN Requirement	Purchasing	No

DFV_2021_R Details

Compliance Requirement: DFV_2021_R
Business Process: Sales
SVT Enabled: Yes

Enabled On: 01.08.2023, 13:46:23
Disabled On: 01.08.2023, 13:45:12
SVT Enabled: Yes

Initial Tracking Date: 01.01.2022
Last Tracking Date Time: 15.09.2023, 11:07:50

Version Overview

Compliance Requirement Versions (3)

Name	Activation Status	Composition - Legal Area	Effective ...	Activated On	Deactivated On
DFV_2021_R.02.12.2021	Active	(World)	02.12.2021	20.05.2022	
DFV_2021_R.01.12.2021	Active	(World)	01.12.2021	20.05.2022	
DFV_2021_R.12.11	Active	(World)	12.11.2021	20.05.2022	

Enable Substance Volume Tracking for Compliance Requirement

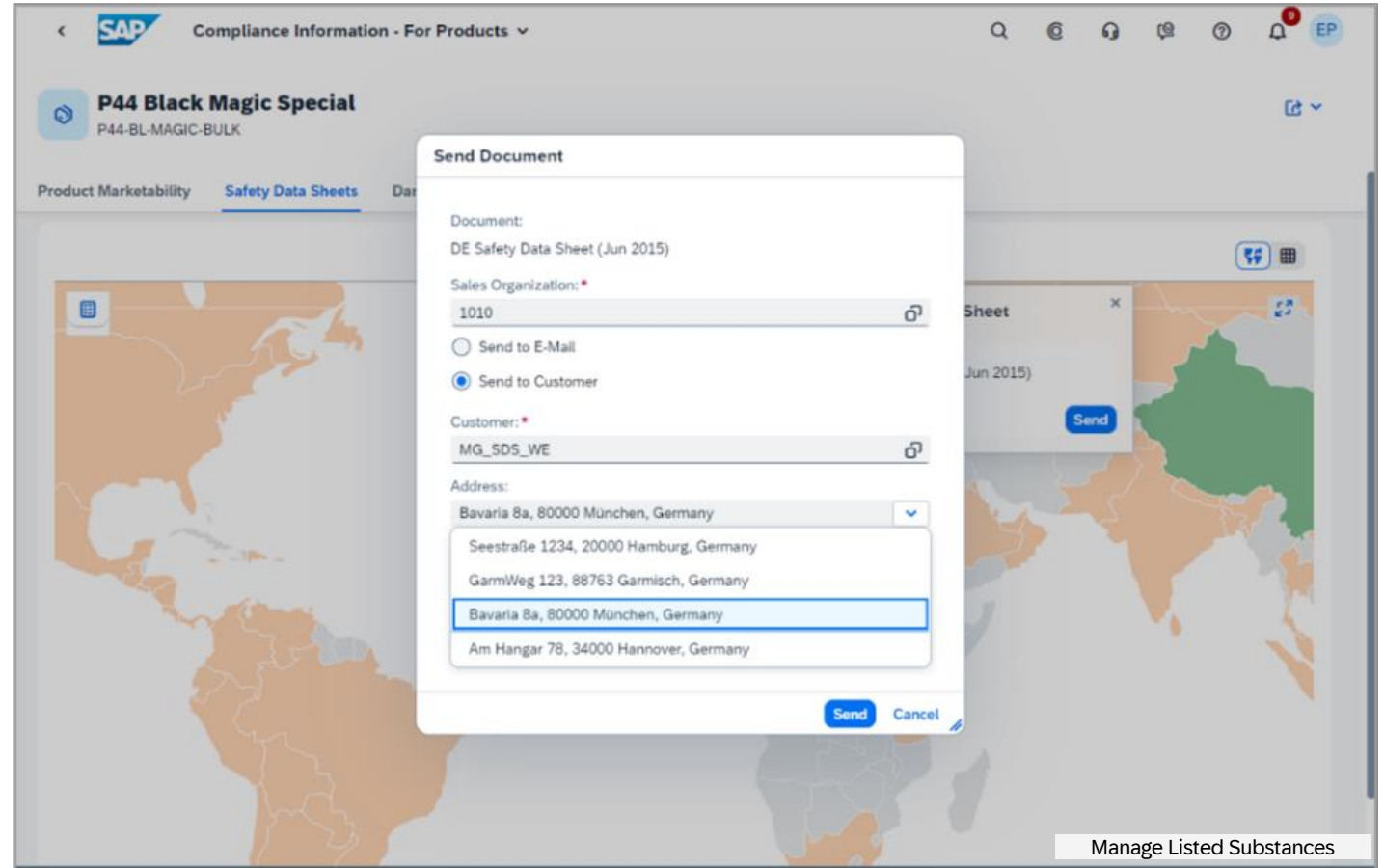
R&D: Product Compliance

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.

The screenshot displays the SAP 'Edit Ocean Freight Booking' interface for document 6700001855. It is divided into two main sections: 'Items' and 'Stages'.

Items Section: Shows a 'Freight Booking Item View' with a table of items. The table includes columns for Item Type, Description, Quantity, Unit of Measure, Gross Weight, Gross Volume, Net Weight, Net Volume, Product, Dangerous Goods Status, and Freight Order for Pick-Up and Delivery.

Item Hierarchy	Item Type	Item ... (Desc...)	Qua...	Qua... UoM	Gross Wei...	Gross Wei... UoM	Gross Volu...	Gross Volu... UoM	Net Wei...	Net Wei... UoM	Product	Dangerous Goods Status (Description)	Freight Order for Pick-Up	Freight Order for Delivery
Sales Order 21225			***		443 KG		0.442 M3		419 KG					
Freight Unit 4200014565			***		443 KG		0.442 M3		419 KG					
Product 10 Firmis Löser Zitrone (20L Fass)	PRD	Product	20	DR	420 KG		0.42 M3		400 KG		P69-VARREM_PP1	OK - Transport Allowed		
Product 20 WHO hyg_Handreiniger (2x500ml)	PRD	Product	10	CAR	16 KG		0.016 M3		14 KG		P69-HANDR_PP1	OK - Transport Allowed		
Product 30 Linalool (1L Flasche)	PRD	Product	5	BT	7 KG		0.006 M3		5 KG		P69-LINALOOL-PP	OK - No Dangerous Goods		

Stages Section: Shows a table of stages with columns for Stage, Stage Category, Transportation Mode, Source Location, UN/LOCODE (Source), Source Location Address, Destination Location, UN/LOCODE (Destination), Destination Location Address, Executing Carrier, Executing Carrier Description, SCAC of Executing Carrier, Invoicing Carrier, and Invoicing Carrier Description.

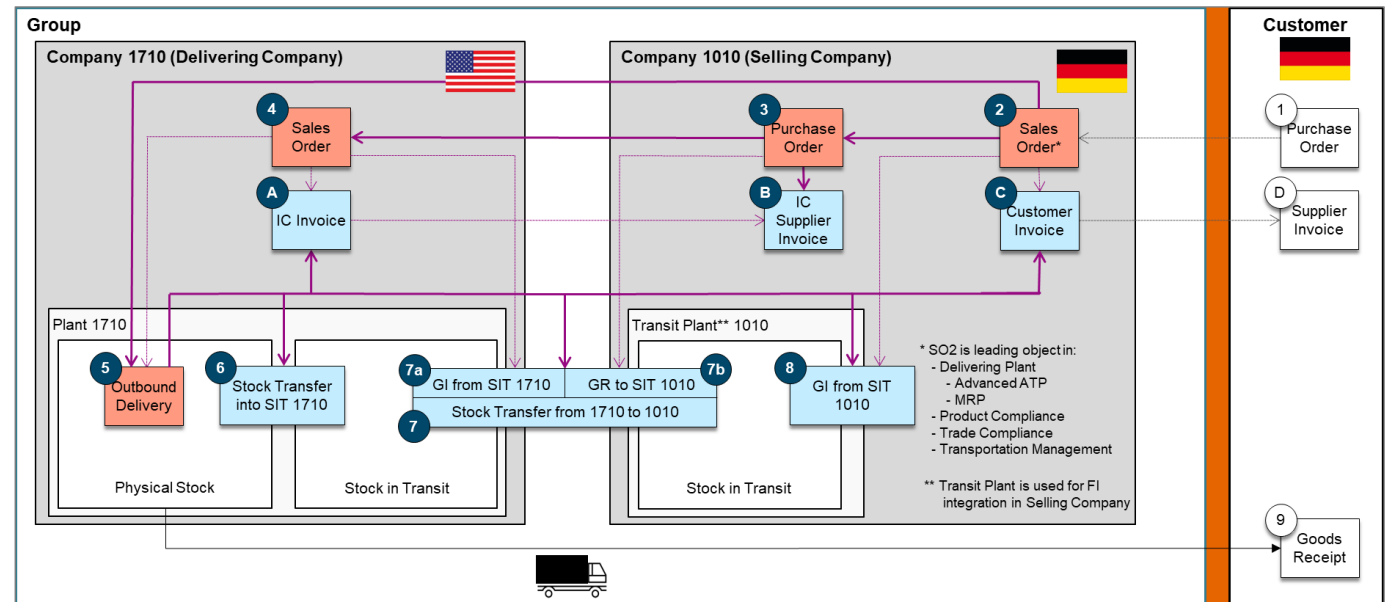
Stage	Stage Category (Description)	Transp... Mode	Transportation Mode (Description)	Source Location	UN/LOC... (Source)	Source Location Address	Destination Location	UN/LOC... (Dest...)	Destination Location Address	Executing Carrier	Executing Carrier Description	SCAC of Execut... Carrier	Invoicing Carrier	Invoicing Carrier (Description)
1	Pre-Carriage	01	Road	SP_1710		Shipping Point 1710 - ...	PORT_USLAX	USLAX	USLAX / 425 South Pa...					
2	Main Carriage	03	Sea	PORT_USLAX	USLAX	USLAX / 425 South Pa...	PORT_DEHAM	DEHAM	DEHAM / Kurt-Eckelm...					
3	On-Carriage	01	Road	PORT_DEHAM	DEHAM	DEHAM / Kurt-Eckelm...	0017100050		Foreign Customer 50 (...)					

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.

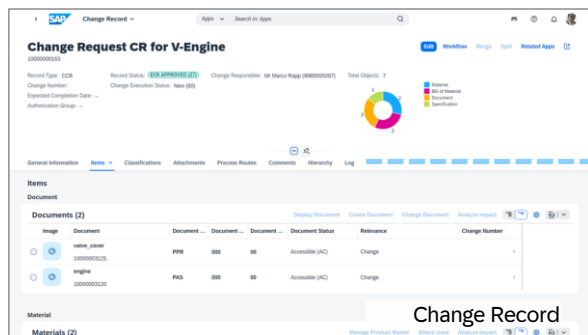
PLM for **discrete manufacturing**: accelerate design by integrating product lifecycle management in a single, real-time environment. Validate and control complex products structures; including the definition and management of hardware and software compatibility. Create individualized products by defining 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.

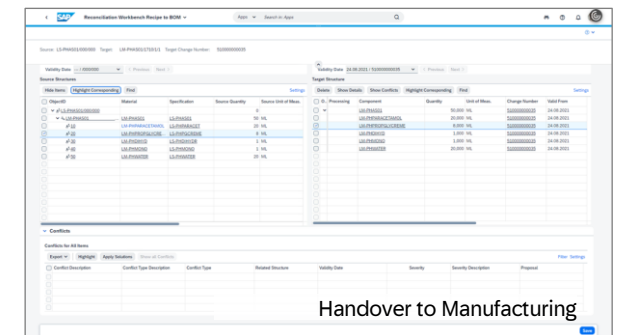
Change record:

- Support of discrete and process industry objects.
- Digital signature for change records.
- Flexible CR hierarchies.
- Visualization of status & changes.



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.



R&D: Bill of Material

Dynamic viewing (3D) of the bill of materials

- 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.

Component	Component Instance	Component Description
28933	26	pr0072
28933	27	pr0072
28933	28	pr0072
28933	29	pr0072
28933	30	pr0072
28933	31	pr0072
28933	32	pr0072
28934	1	pr0106
> 28935	1	austlassventil_af2_asm
28936	1	pr0003
28937	1	pr0002
> 28938	1	einlassventil_af1_asm
> 28939	1	airbox_asm
29047	1	pr0078
29048	1	airboxunterteil_af0
29049	1	airbox_oberteil_af0
> 29050	1	drosselklappe_af0_asm
28940	1	pr0103
28940	2	pr0103
28941	1	pr0019

R&D: Change Record

Product Lifecycle Management

Product Change Management

2023
FPS2

- 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.

The image displays two screenshots of the SAP Change Record interface. The top screenshot shows a 'Change Request CR for V-Engine' with a status of 'ECR APPROVED (Z7)'. The bottom screenshot shows a 'Change Notice CR for V-Engine Change' with a status of 'CHANGE RELEASED (H1)'. Both screenshots include a pie chart showing the distribution of objects (Material, Bill of Material, Document, Specification) and a process flow diagram for the change process.

Change Request CR for V-Engine
10000000163
Record Type: CCR
Change Number: 10000003125
Expected Completion Date: --
Authorization Group: --
Record Status: ECR APPROVED (Z7)
Change Execution Status: New (60)
Change Responsible: Mr Marco Rapp (9980005097)
Total Objects: 7

Change Notice CR for V-Engine Change
10000000294
Record Type: CCN
Change Number: Change Notice CR for V-Engine Change 100 (S13000000047)
Expected Completion Date: --
Authorization Group: --
Record Status: CHANGE RELEASED (H1)
Change Execution Status: New (60)
Change Responsible: Mr Marco Rapp (9980005097)
Total Objects: 5

Items
Document
Documents (2)

Image	Document	Docum
	valve_cover 10000003125	PPR
	engine 10000003120	PAS

Material
Manage Change Records

Process Routes

```
graph LR
    A((In Review (N1))) --> B((Change Notice Approved (N4)))
    B --> C((Change Released (N4)))
    A --- A1[Perform Change]
    B --- B1[Review Change (Approve/Reject)]
    C --- C1[Release Change]
```

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.

The screenshot displays the SAP S/4HANA Document Viewer interface. The main document is identified as '013656/-1-TM-3001 - Vendor Part Specification'. The interface is organized into several sections:

- Document Data:** Shows the object key 'Z49566240' and the vendor 'Z49566240'.
- Document Versions:** A table with columns for Document Number, Document Type, Document Version, and Document Part. It currently shows 'No entries found'.
- Document Description:** Displays the document type as 'Standard', language as 'EN', and description as 'TM-3001 - Vendor Part Specification'.
- Classification:** This section is currently empty.
- Originals:** Lists three attachments: 'Manual.pdf', 'RoHS Certification.pdf', and 'Spec TM-3001 - Copy.pdf', all uploaded by Pascal Kugler.
- VIEWER:** An embedded viewer window showing a presentation slide. The slide title is 'The Digital Thread requires a Next Generation Approach to Integration'. It highlights 'Customer Challenges' with four key points:
 - High TCI/TCO:** Every integration is based on project work. No standard integration on the market based on pre-defined scenarios.
 - Interoperability:** Current integrations tightly couple data models. A change on one system requires adoption on both sides.
 - Lack of bi-directional process integration:** Focus on master data exchange only. No process integration.
 - Resilient integration:** Integrations build on old technology stacks and are not cloud ready.

R&D: Integrated recipe development

Product Lifecycle Management

Integrated Recipe Development

Develop Recipes - Fully Integrated

Centrally Manage Ingredient and Product Details

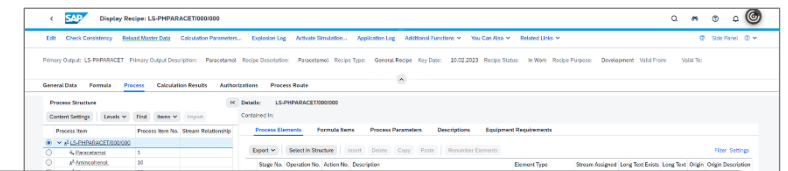
- **Specification Management:** single source for ingredient and product information to flexibly describe raw materials, semi, and finished products.
- Composition, properties, nutrient, allergen, and diet information including declarative, compliance, and packaging information.
- Use integrated Change 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.

- 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		

“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

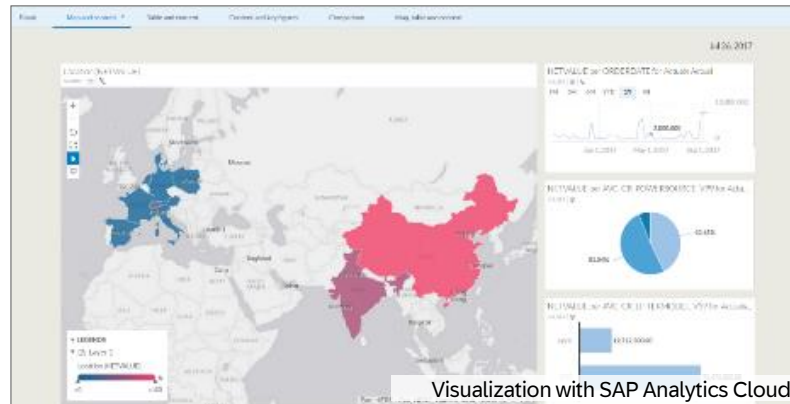
R&D: Variant Configuration core and advanced scope

Product Engineering

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

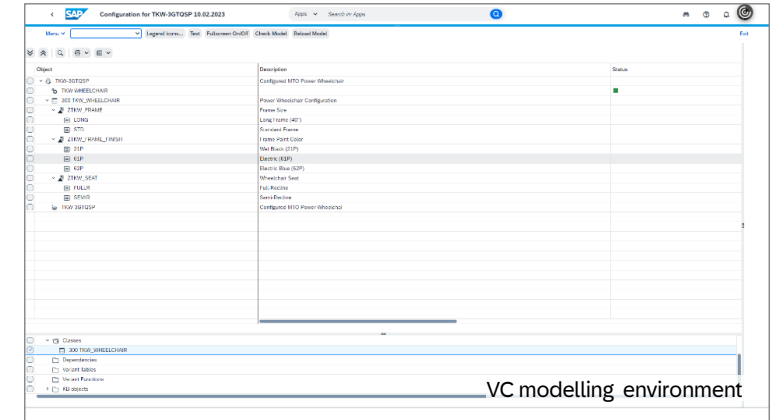


Product Lifecycle Management

Adv. Variant Configuration

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
- **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.

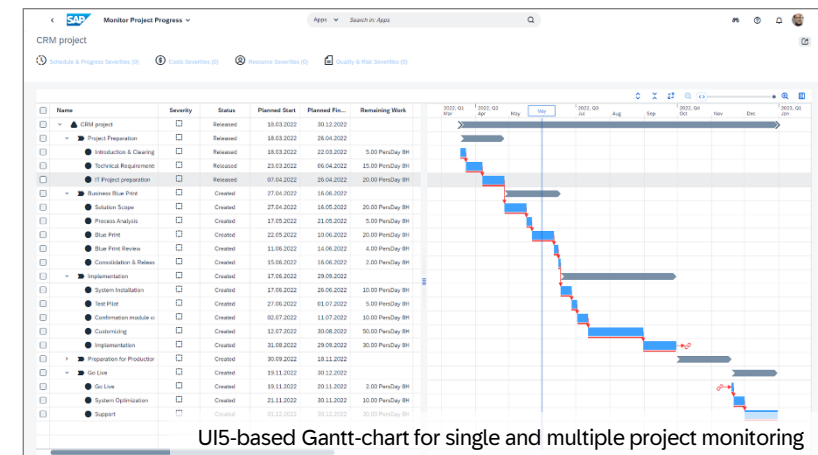
Project Management:
Automatically generate projects from a portfolio item, incl. PS and CPM projects

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.

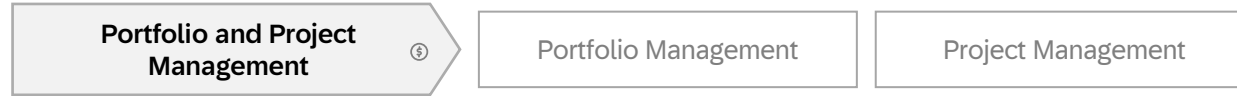
Project Connection

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.

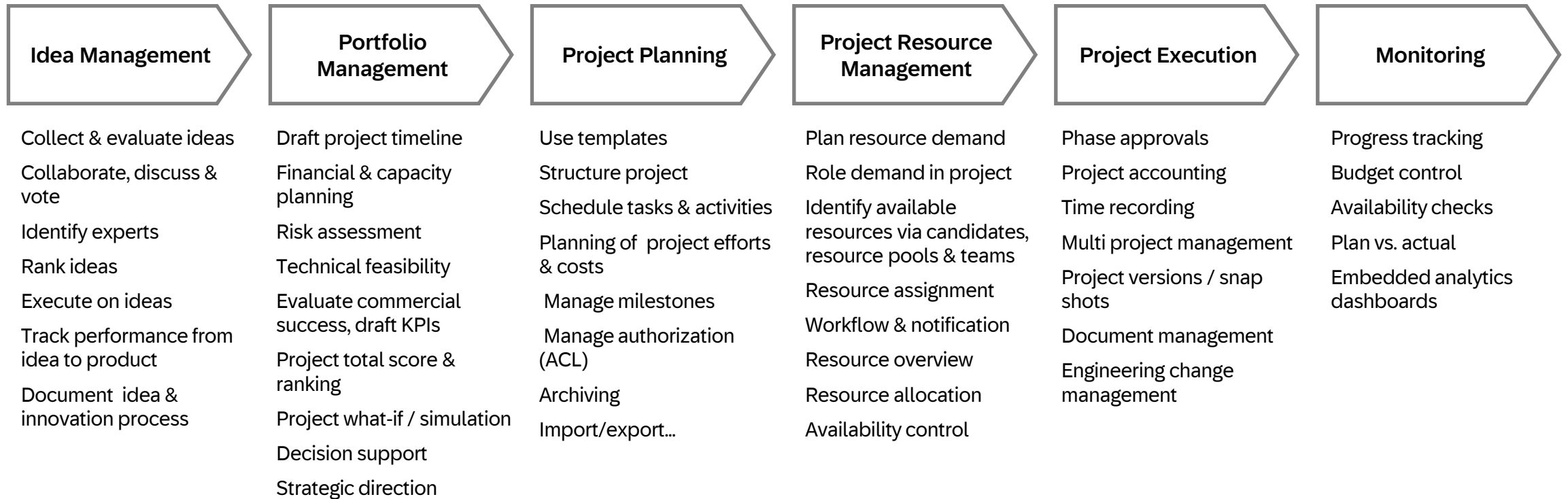


UI5-based Gantt-chart for single and multiple project monitoring

R&D: Portfolio & Project Management process



From Ideas to Project Success with Ext. Enterprise Portfolio & Project Management



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 BRFP+; 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

The screenshot displays the 'Risk Register' application. At the top, there are navigation options like 'Add Risk', 'Delete Risk', and 'Import Risk'. Below this is a table with columns for Risk ID, Risk Open, Risk Stat., Risk Description, Category, Subcat., Identified, Probability, Impact, Cost, Quality, Schedule, Scope, Risk, Risk Level, and Level. The table lists several risks, including 'Late deliveries of materials', 'Inadequate planning for long lead items', 'Cash flow difficulties', 'Fluctuations in cost of raw materials', 'Late drawings and instructions', 'Defective Design', 'Deliveries in drawings', and 'Estimate revision'. Below the table, there is a detailed view for a selected risk, showing 'Response Type' (Watch), 'Response Owner' (000034), 'Response Status' (Committed On Track), 'Response Mitigation Cost' (1,000.00 EUR), and 'Response Due Date' (20.12.2023). The 'Response Description' field contains the text: 'Risk acknowledged. Mitigation activities are put in place. Activity being pursued.'

Risk management

R&D: Delta scope summary 2023

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 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

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
- Safety Data Sheet**
 - Multiple address handling, international address version support, and multi-name print support for safety data sheets
- 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

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)

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)

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

Maintenance Management (ext.)

Combine spatial 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.

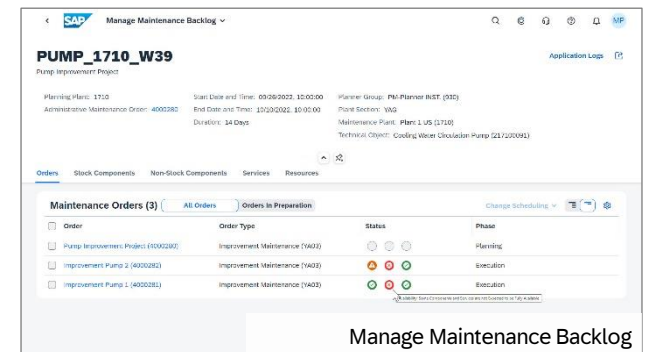
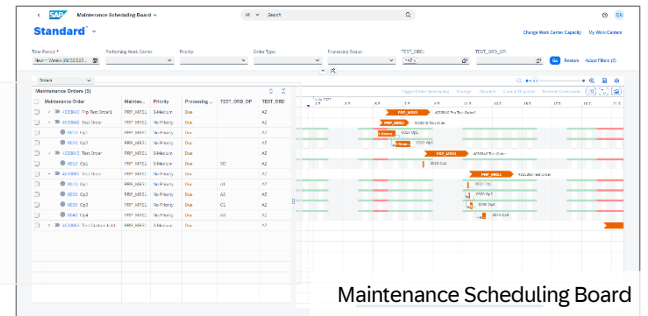
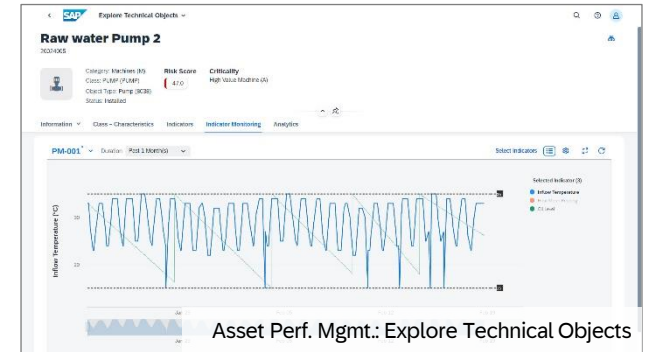
Environment, Health, and Safety

Work Permit and Isolations Management

* 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 .

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 through damage analysis.



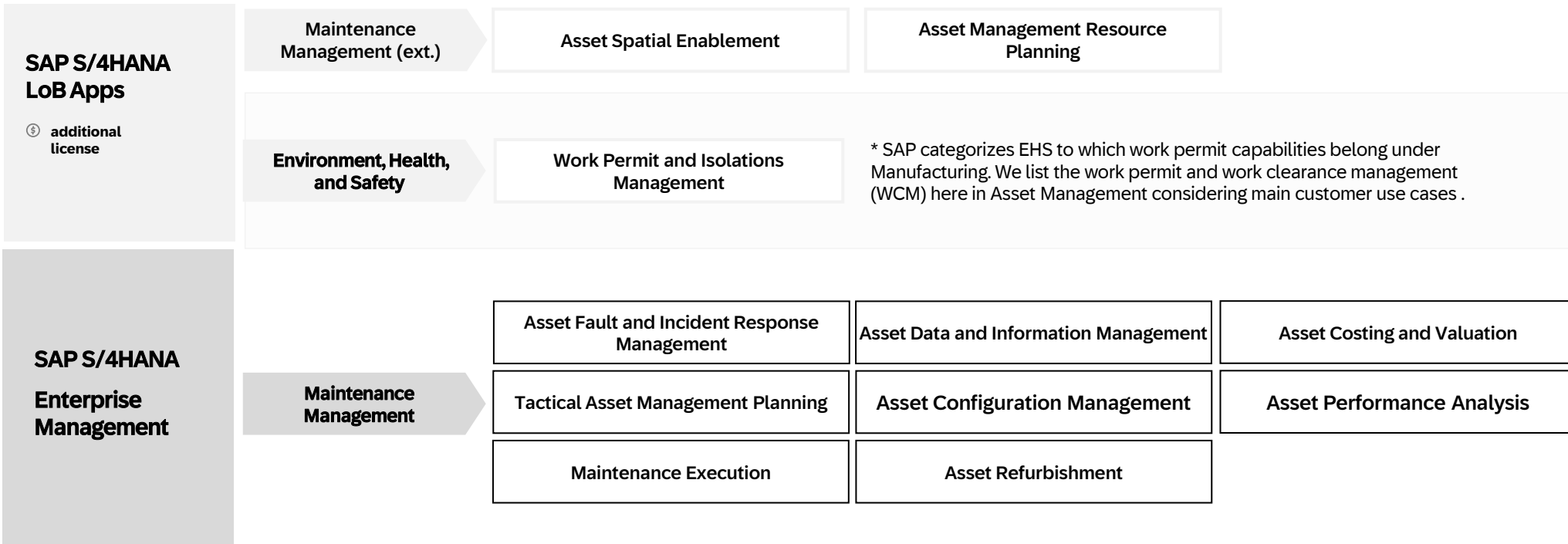
Asset Management: Business areas and capabilities

Modular Cloud LoB Solutions

③ additional license

⚙️ additional installation

- SAP Asset Performance Management
- SAP Service and Asset Manager
- SAP Asset Intelligence Network



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.)

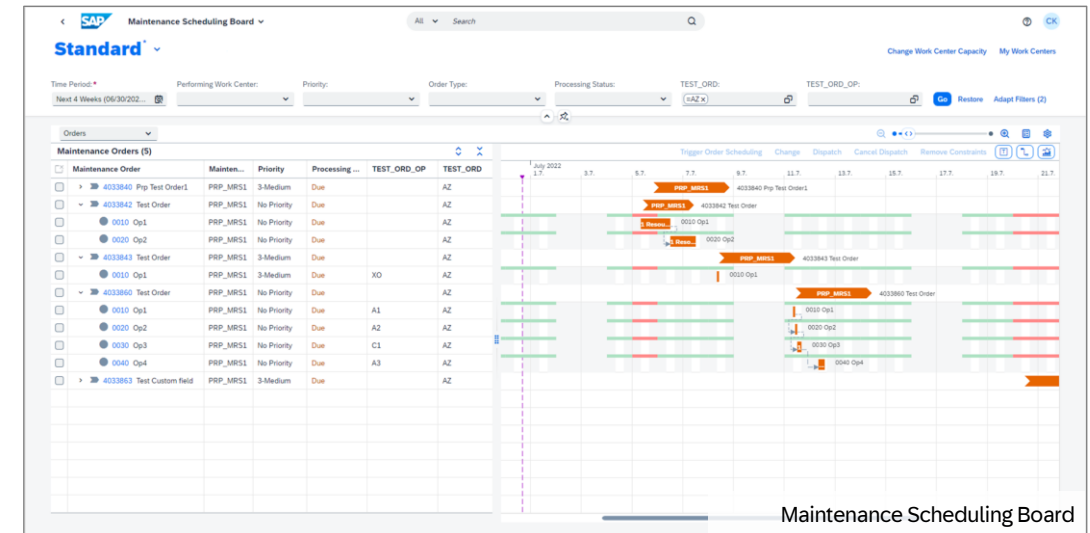
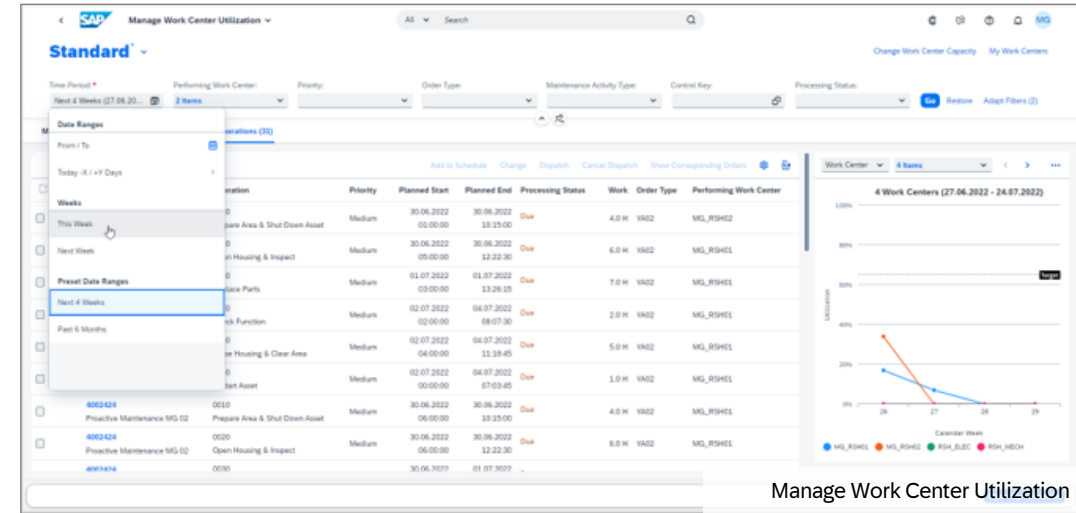
Asset Management Resource Planning

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.



Asset Management: Spatial Asset Enablement

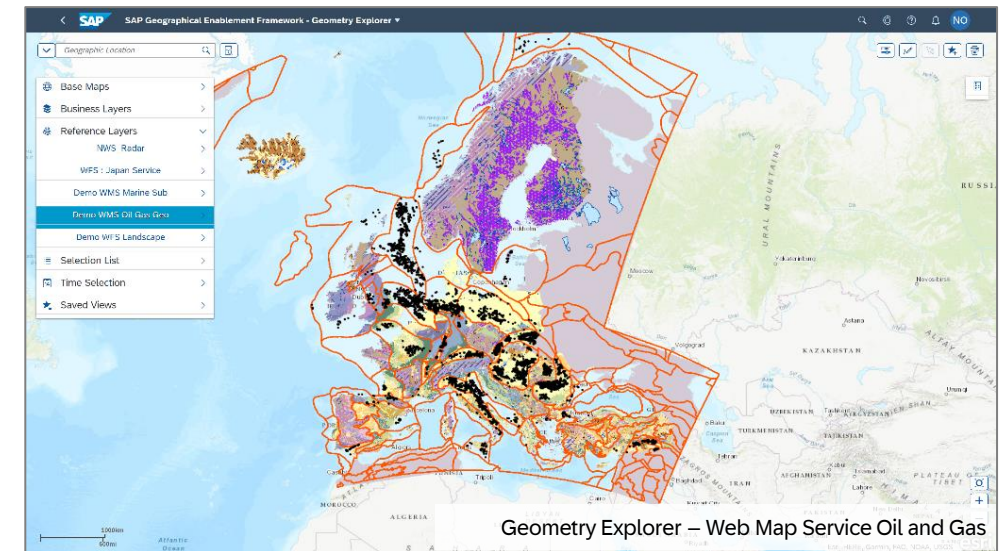
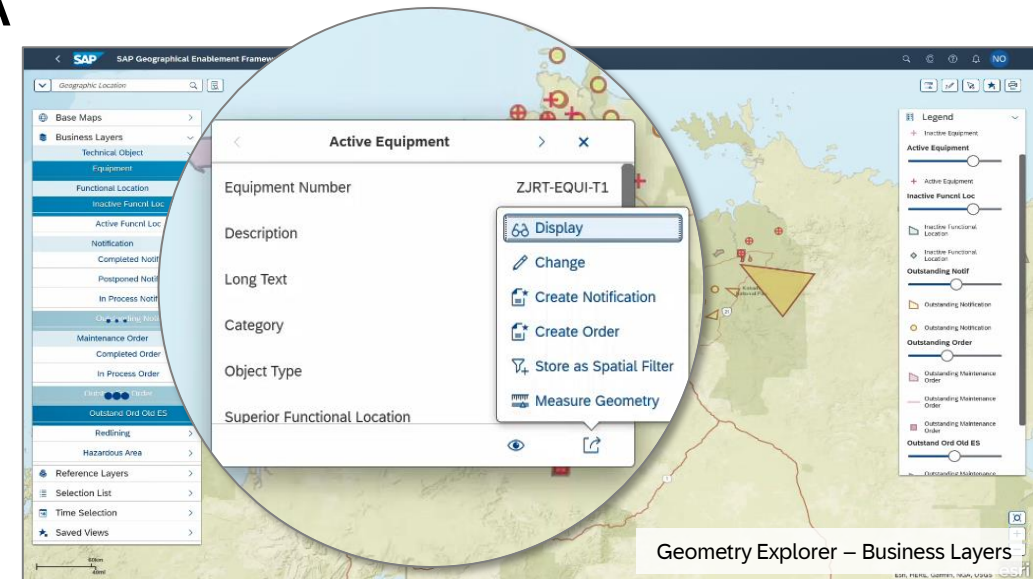
SAP Spatial Asset Management for SAP S/4HANA

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

Maintenance Management (ext.)

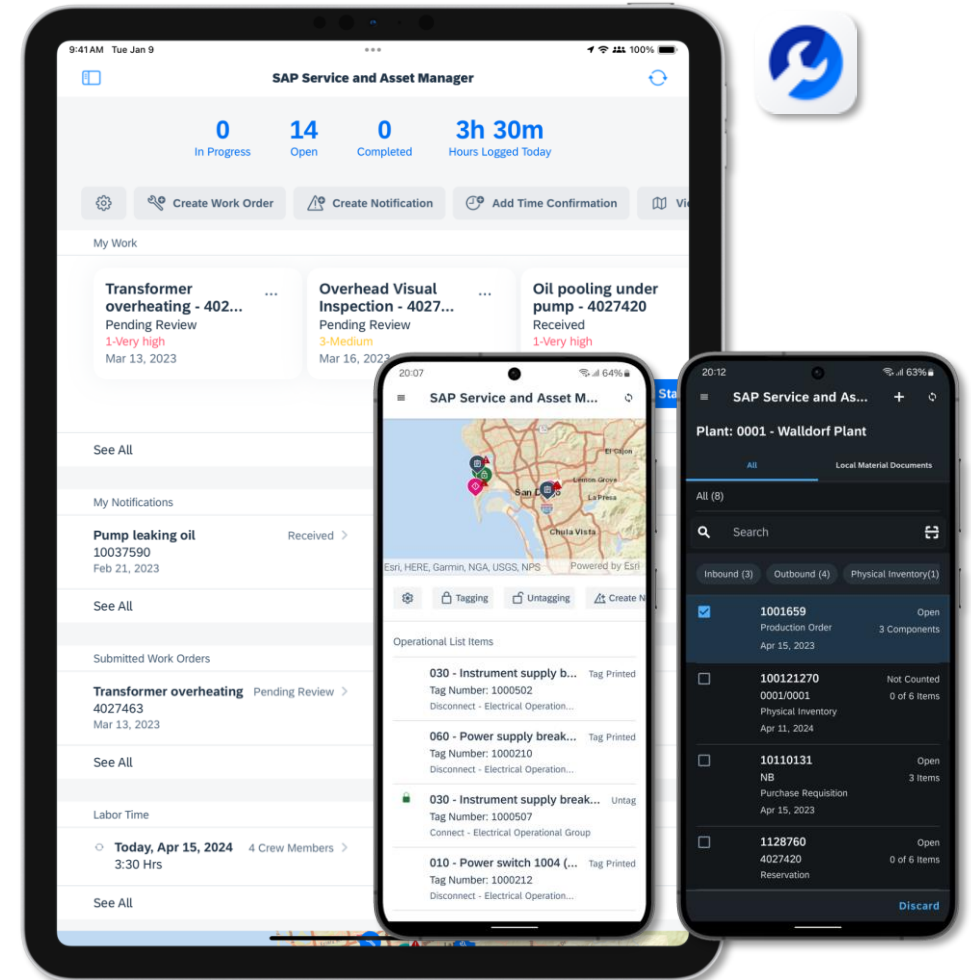
Asset Spatial Enablement ⁵



SAP Service and Asset Manager

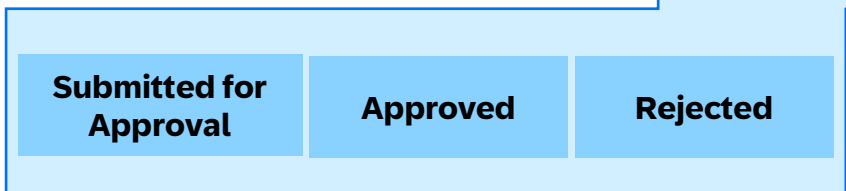
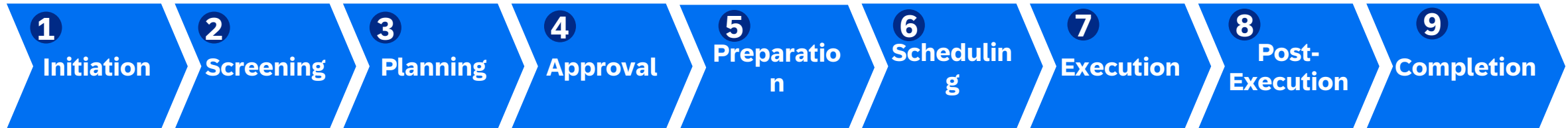
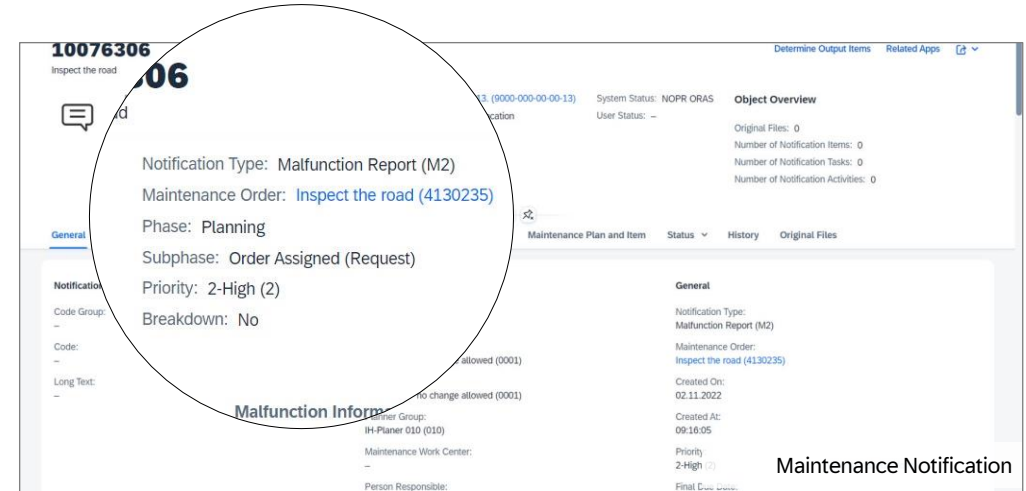
SAP Service and Asset Manager enables your field workers to see, record, and update data for maintenance and field service execution whether they are connected or working remotely in the field.

- **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

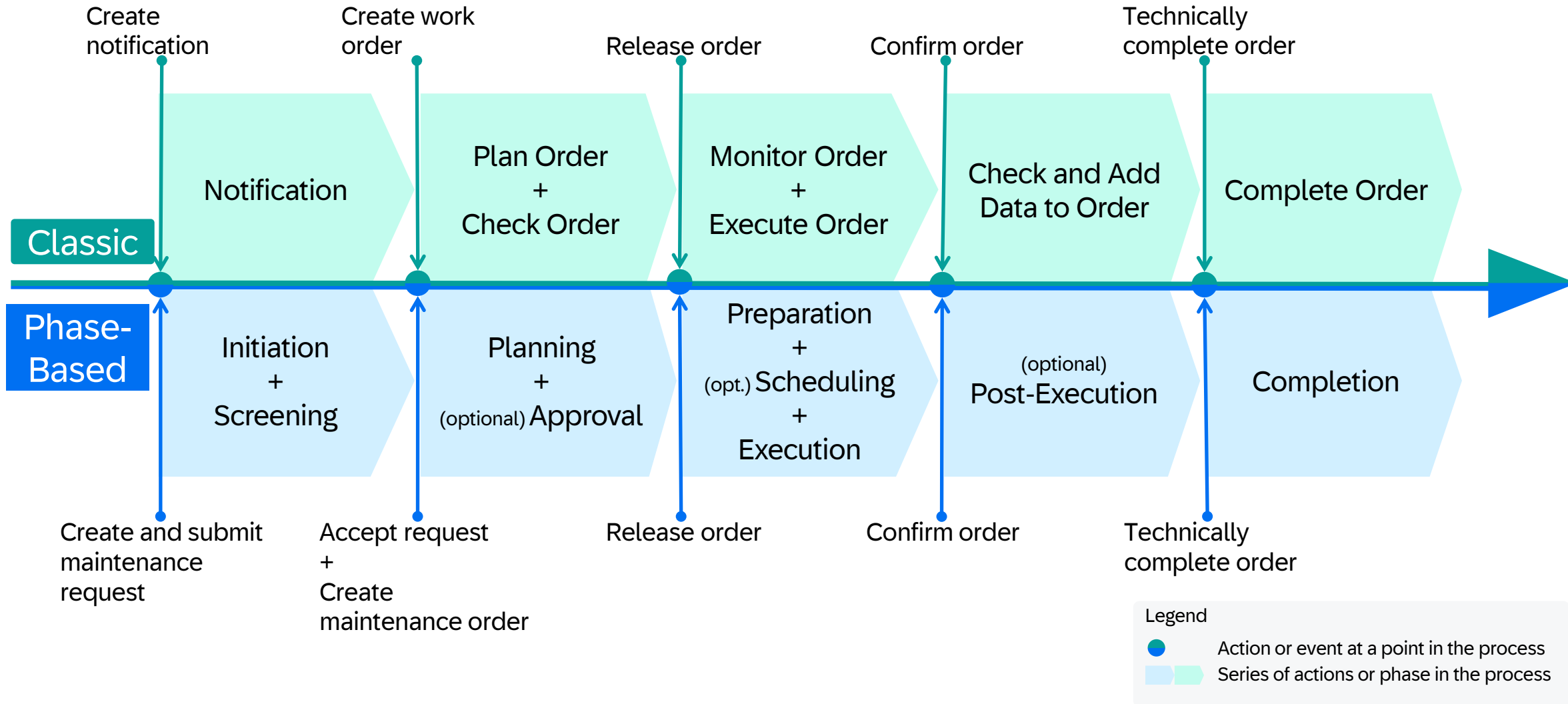
The phase-based maintenance process helps eliminate the needs for complex user status customizing and implement a standard process across different sites with unified data – key for data-driven decision-making.



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

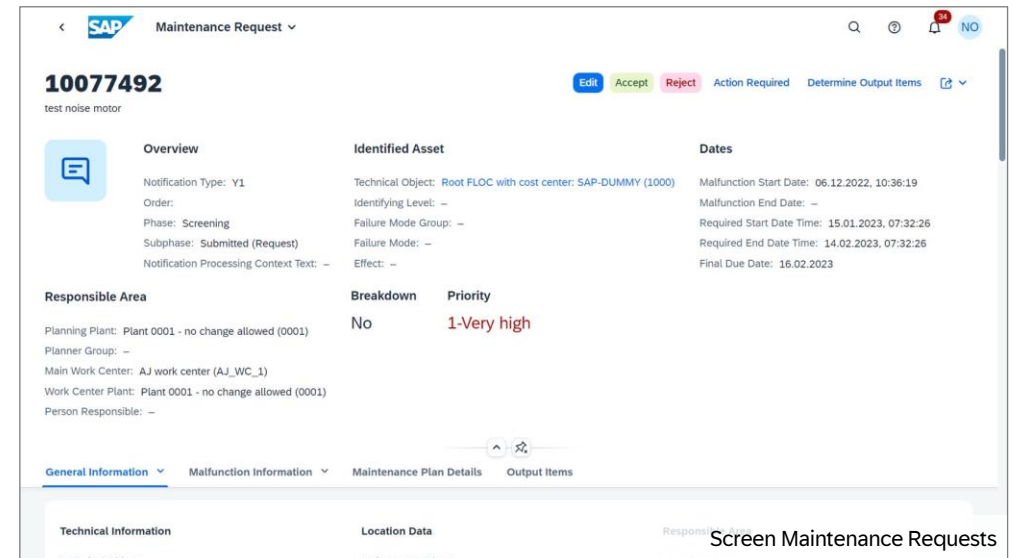
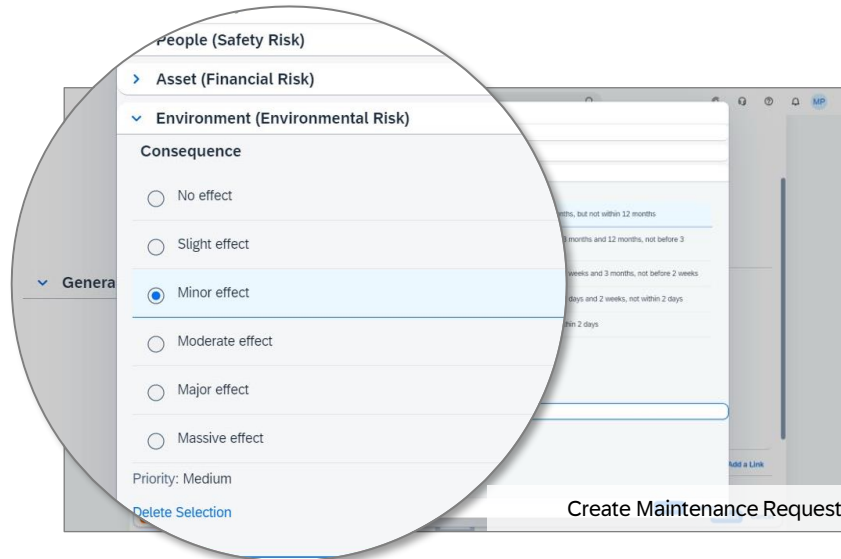
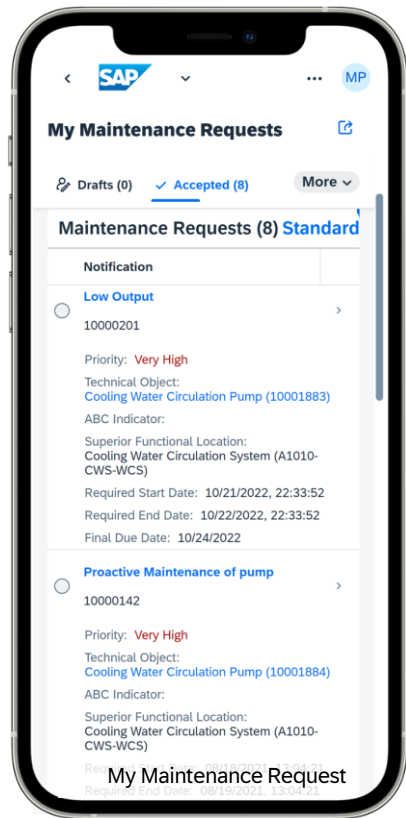
Risk Assessment

You can include a risk-based assessment of the priority of work request by evaluating expected consequences of failure and their likelihood.

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.



Asset Management: Minor work

Maintenance Management

Asset Fault and Incident Response Management

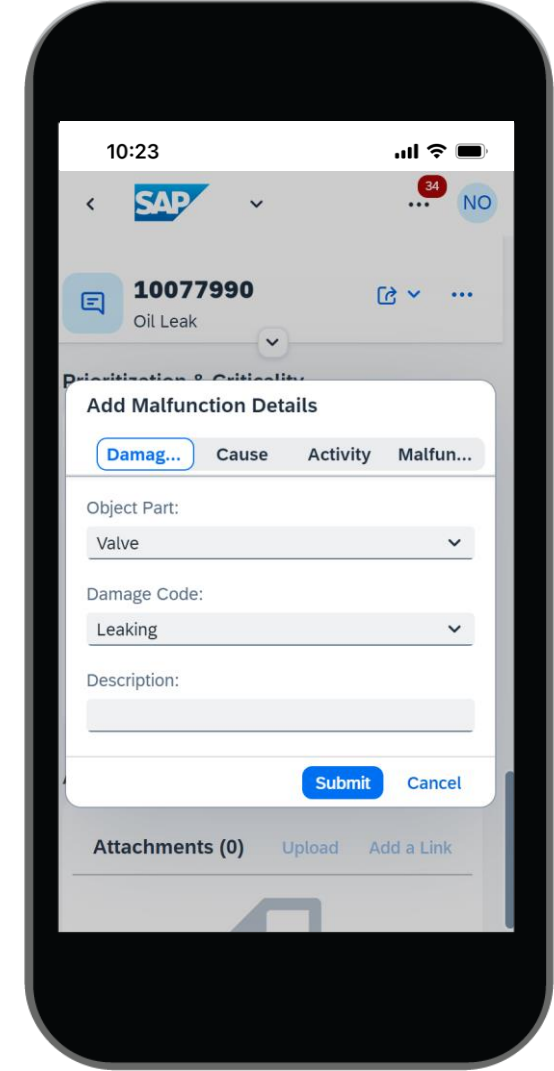
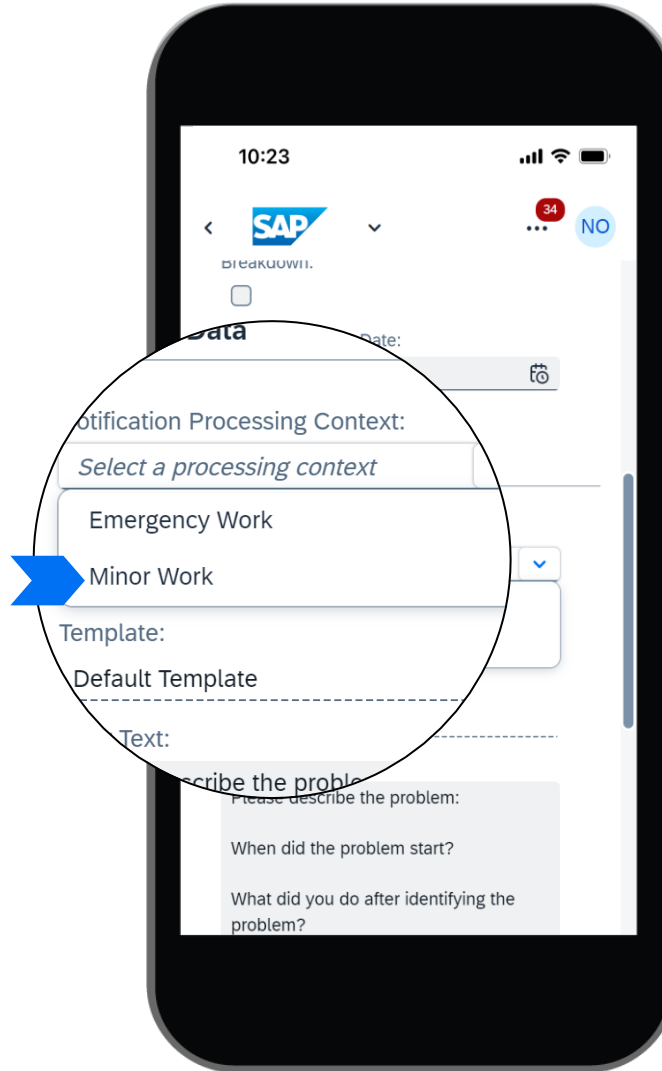
Maintenance Execution

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

Maintenance Management

Asset Fault and Incident Response Management

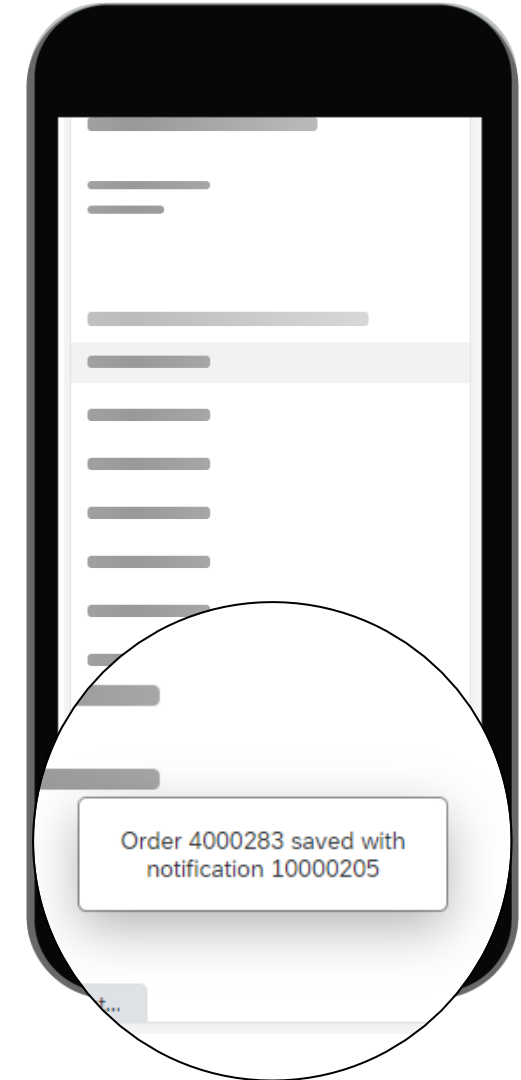
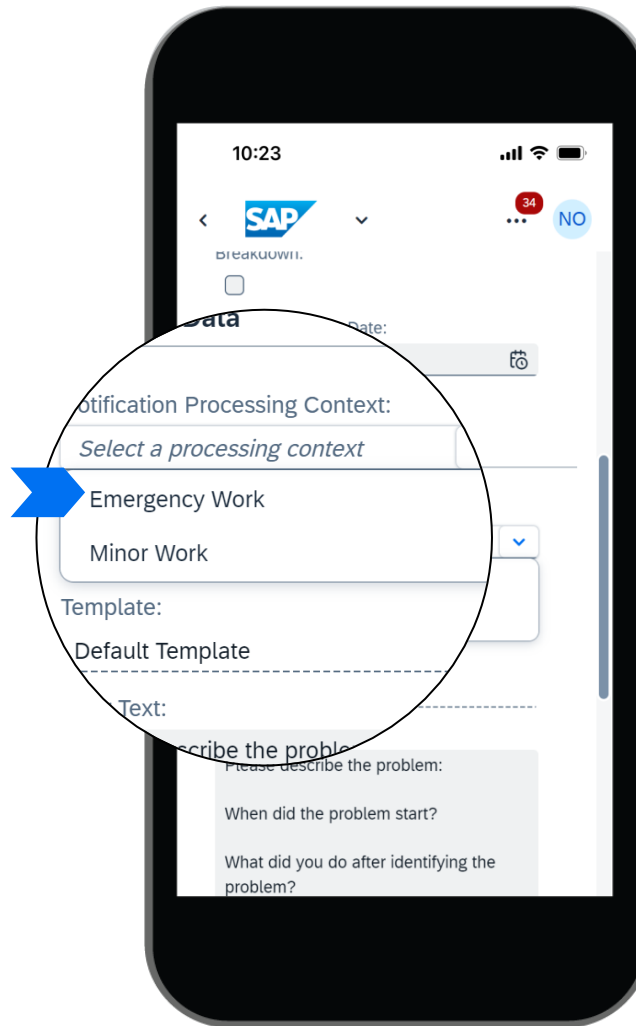
Maintenance Execution

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

Maintenance Management

Tactical Asset Management Planning

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.

The screenshot shows the 'Find Maintenance Plans' app. On the left is a table of maintenance plans. On the right, a detailed view of a plan is shown with a bar chart. The chart has two columns: 'Remaining Period' and 'Remaining Counter'. The 'Remaining Counter' column shows three bars: a green bar at 100KM, a blue bar at 6000KM, and a blue bar at 6100KM. The 'Remaining Period' column shows four bars with dates and durations: Feb 25, 2023 (344 Days), Jun 9, 2022 (83 Days), Mar 10, 2023 (365 Days), and Jun 9, 2022 (91 Days). A callout box points to the detailed view with the text: 'List of maintenance plans in Manage Maintenance Plans App'.

The screenshot shows the 'Maintenance Planning' app. It features two summary cards. The first card, 'Manage Maintenance Plans', shows a total of 13.3 k. Below this, it lists 'Marked for Deletion' (14), 'Deactivated' (127), and 'Scheduled' (7.38K). The second card, 'Manage Maintenance Items', shows a total of 19.3 k. The SAP logo and 'Home' dropdown are visible at the top.

Fiori Launchpad with the new Fiori apps

The screenshot shows the 'Maintenance Plan' app for plan 'P-TEST-01'. It displays 'Maintenance Cycles' and 'Maintenance Calls'. The 'Maintenance Cycles' table has the following data:

Sequence	Occurrence	Cycle Text	Offset	Repeat Fa...	Counter	Inactive	Planned
1	MON	Monthly	0			No	Yes
3	MON	Quarterly	0			No	Yes

The 'Maintenance Calls' section shows 'Scheduled Calls' with a table for 'Maintenance Calls (52)'. The first row shows:

Maintenance Call	Call Status	Scheduling Type	Due Packages	Planned Date	Call Date
1	Called	Rescheduled in the current cycle (Z)	1M	11.09.2018	

Maintenance Cycles and Calls within a Maintenance Plan

Asset Management: Task lists

Non-stock materials & lean services

Maintenance Management

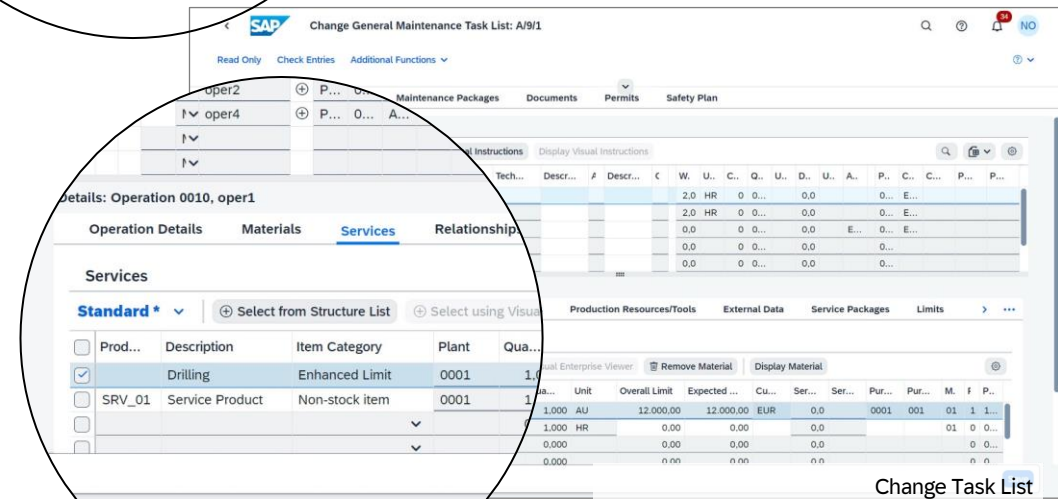
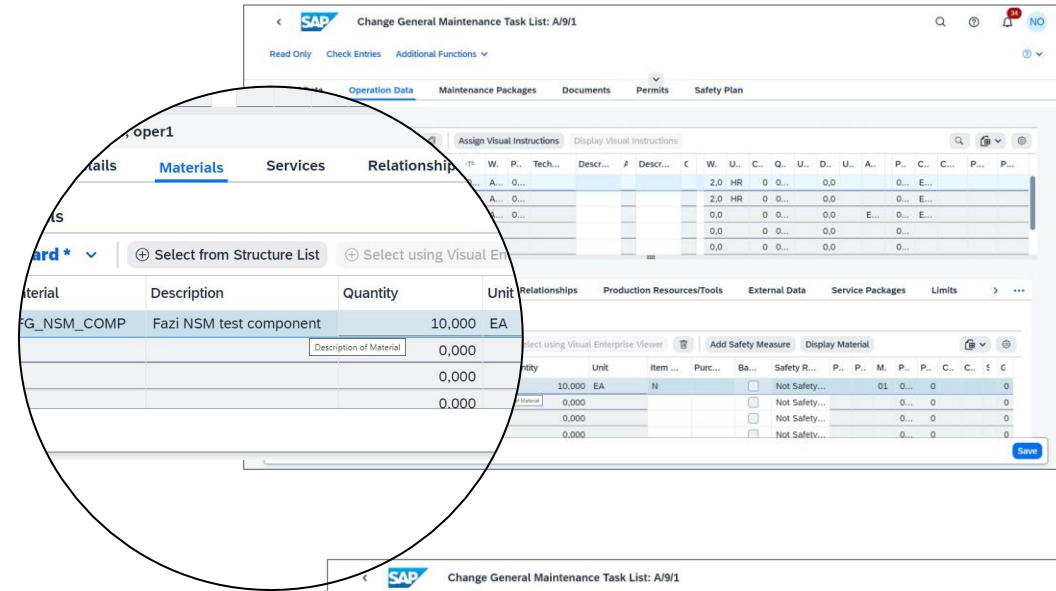
Tactical Asset Management Planning

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.



Asset Management: Lean service procurement

Maintenance Management

Tactical Asset Management Planning

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

The screenshot displays the SAP interface for 'Change General Maintenance Task List: A/9/1'. The 'Services' tab is active, showing a table of service items. A circular callout highlights the 'Enhanced Limit' item category for the 'Drilling' service. Below this, a table shows the overall limit and expected values for the service.

Prod...	Description	Item Category	Plant
	Drilling	Enhanced Limit	0001
SRV_01	Service Product	Non-stock item	0001

Unit	Overall Limit	Expected ...	Cu...	Ser...	Ser...	Pur...	Pur...	M.	F.	P.
0,000 AU	12.000,00	12.000,00	EUR	0,0		0001	001	01	1	1...
1,000 HR	0,00	0,00		0,0				01	0	0...
0,000	0,00	0,00		0,0					0	0...
0,000	0,00	0,00		0,0					0	0...

Asset Management: Approval

Manage workflows, teams, and responsibilities

Maintenance Management

Asset Fault and Incident Response Management

Tactical Asset Management Planning



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.

The screenshot shows the SAP Maintenance Notifications and Orders interface. A circular callout highlights the following details for a maintenance order:

- Location:
- Required Start Date: 08.05.2022
- Required End Date: 09.05.2022
- Final Due Date:
- Associated With: 10068556
- Subphase: Submitted for Approval (Order)

Other visible details include:

- Maintenance Order: 1950721
- Technical Object: Centrifugal Pump at Thane Plant (10262814)
- Breaking of: 10262858
- Location:
- Required Start Date: 19.05.2022
- Date: 20.05.2022

The interface also shows search filters for Maintenance Plant, Plant Section, Planning Plant, Planner Group, and Order Type. Action buttons include Create Order, Change Responsibility, Submit for Approval, Edit Orders, Assign Order, and Unassign Order.

Asset Management: planning buckets and backlogs

Maintenance Management

Tactical Asset Management Planning



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.

SAP Manage Maintenance Backlog

PUMP_1710_W39
Pump Improvement Project

Planning Plant: 1710 Start Date and Time: 09/26/2022, 10:00:00 Planner Group: PM-Planner INST. (930)
 Administrative Maintenance Order: 4000280 End Date and Time: 10/10/2022, 10:00:00 Plant Section: YAG
 Duration: 14 Days Maintenance Plant: Plant 1 US (1710)
 Technical Object: Cooling Water Circulation Pump (217100091)

Orders Stock Components Non-Stock Components Services Resources

Maintenance Orders (3) All Orders Orders In Preparation Change Scheduling

Order	Order Type	Status	Phase
Pump Improvement Project (4000280)	Improvement Maintenance (YA03)	○ ○ ○	Planning
Improvement Pump 2 (4000282)	Improvement Maintenance (YA03)	⚠ ⚠ ⚠	Execution
Improvement Pump 1 (4000281)	Improvement Maintenance (YA03)	⚠ ⚠ ⚠	Execution

Quantity: Some Components and Services are not Expected to be Fully Available

Orders in Management Maintenance Backlog

SAP Manage Maintenance Backlog

PUMP_1710_W39
Pump Improvement Project

Orders Stock Components Non-Stock Components Services Resources

Services (2) All Orders Orders In Preparation

Order	Status	Operation Details	Operation Descripti...	Item Number
Improvement Pump 1 (4000281)	⚠ ⚠ ⚠	0030 MAIN	Check the coupling	0040
Improvement Pump 2 (4000282)	⚠ ⚠ ⚠	0030	Check the coupling	0040

Empty Send Purchase Order to Vendor Web Due On 10/10/2022

Services in Management Maintenance Backlog

SAP Manage Maintenance Backlog

PUMP_1710_W39
Pump Improvement Project

Orders Stock Components Non-Stock Components Services Resources

Stock Components (8) All Orders Orders In Preparation Keep Committed Qu...

Order	Status	Operati...	Component Details	Operation Description
Improvement Pump 1 (4000281)	⚠	0010 MAIN	Mechanical Seal (SP005) Spare Parts (ERSA)	Check the pump
	⚠	0020 MAIN	Bearing (SP001) Spare Parts (ERSA)	Extend the pipes
	⚠	0030 MAIN	Coupling (SP002) Spare Parts (ERSA)	Check the coupling
	⚠	0040 MAIN	Shaft (SP003) Spare Parts (ERSA)	Check the shaft
Improvement Pump 2 (4000282)	⚠	0010 MAIN	Mechanical Seal (SP005) Spare Parts (ERSA)	Check the pump
	⚠	0020 MAIN	Bearing (SP001) Spare Parts (ERSA)	Extend the pipes

Stock Components in Management Maintenance Backlog

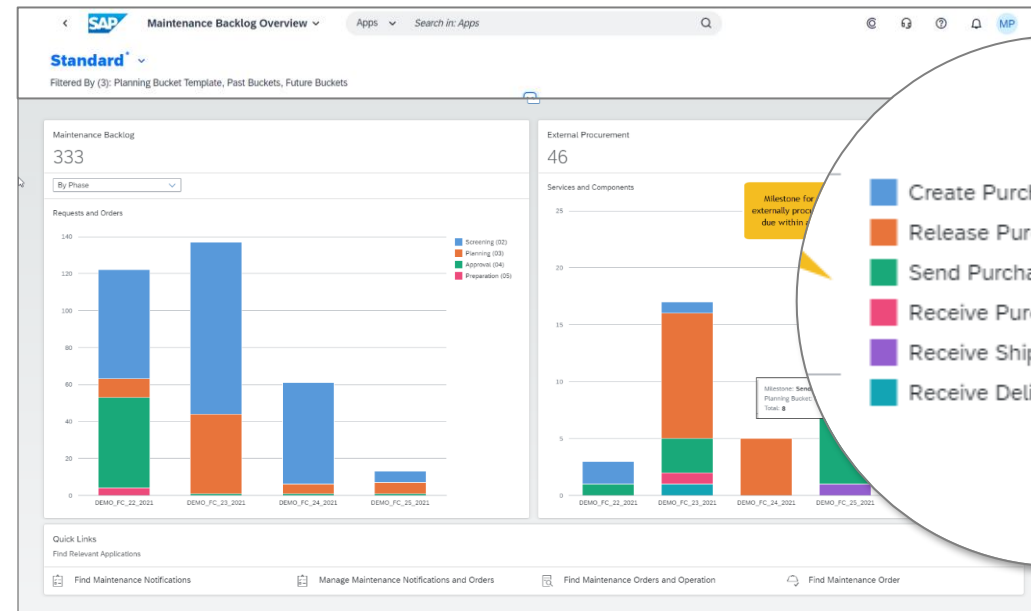
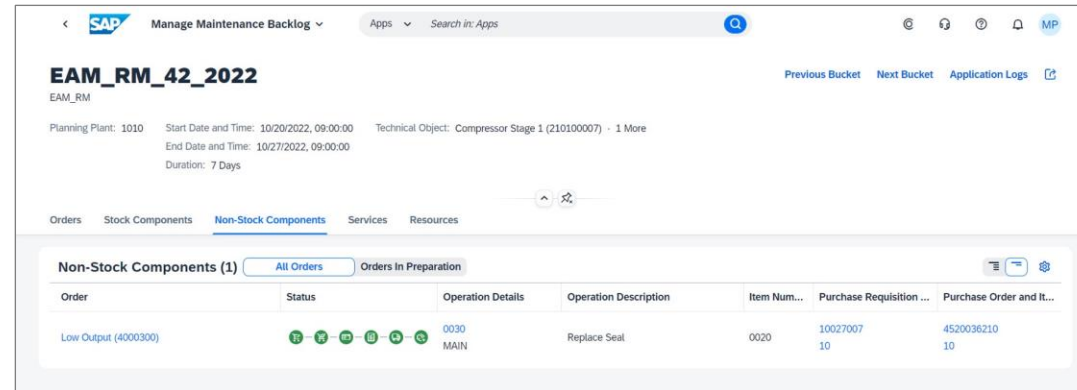
Asset Management

Backlog overview & procurement milestones



You can use Maintenance Backlog to monitor the procurement of non-stock materials and services by means of procurement milestones.

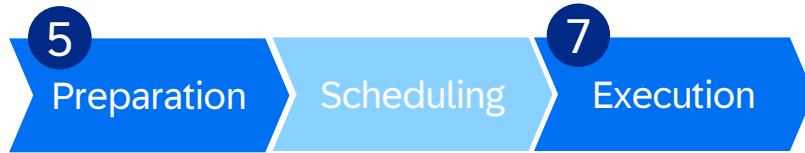
The completion of some milestones depends on changes in the purchase order and posting of the goods receipt for non-stock components.



Asset Management: Work packs and output

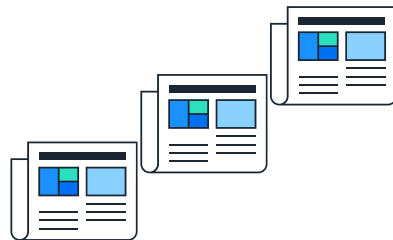
Maintenance Management

Tactical Asset Management Planning



Create a work pack (a group of operations) from a list of operations of work orders for mass output

Flexibly organize your jobs (work order operations) into job packs and work packs



Work Pack Name - 20220915 - 12:51:53
10000010

General Information

Created By: Dzmityr
Created On: 15.09.2022, 11:52:23
Last Changed By: Dzmityr
Last Changed On: 15.09.2022, 11:52:23

Job Packs (2) Standard

- Job Pack
- 10000010-0010
Job Pack Name: Order for installation of EQ to FL
Output Status: Partially Completed
Planning Plant: SAP Automotive (P001)
Job Count: 2
Output Item Count: 4
- 10000010-0020
Job Pack Name: problem with rotor head
Output Status: In Preparation
Planning Plant: Plant 0001 - no change allowed (0001)
Job Count: 2

problem with rotor head
10000010-0020

Jobs (2) Standard

Job	Maintenance Order
<input type="checkbox"/> problem with rotor head (0010) Operation Equipment: Priority: 1-Very high (1) Execution Stage: Maintaining/Repairing (MAIN) Execution Start Date: Subphase:	problem with rotor head (4000005)
<input type="checkbox"/> strip rotor (0020) Operation Equipment: Priority: 1-Very high (1) Execution Stage: Maintaining/Repairing (MAIN) Execution Start Date: Subphase:	problem with rotor head (4000005)

Output Items

Item ID	Log	Status	Dispatch Time	Output Type	Date
<input checked="" type="checkbox"/> 1		In Preparation (2)			

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.

The screenshot shows the SAP 'Change Simplified Order: 200321' interface. The 'Materials' tab is active, displaying a table with columns for Material, Description, Item Category, and Quantity. The first row shows 'Power Drive' as a 'Non-stock item' with a quantity of '10 EA'. A search results window is overlaid on the right, showing 'Search Results (16)' for 'part'. The results list various items, including 'O-Ring 16X2.5 Nbr', 'O-Ring 16X2.5 Epdm', 'O-Ring 16X2.5 Epdm', 'O-Ring 16X2.5 Epdm', 'O-Ring 16X2.5 Epdm', 'O-Ring 16X2.5 Epdm', 'Control Module Assembly', and 'Motor Cover Plate'. A 3D model of a power drive assembly is also visible in the search results window.

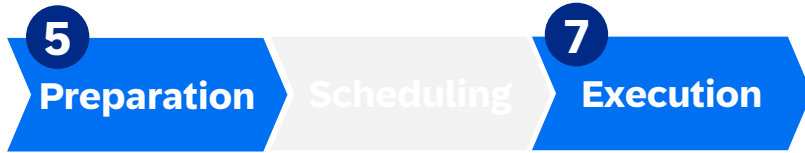
Material	Description	Item Category	Quantity	Unit
	Power Drive	Non-stock item	10	EA
			0,000	
			0,000	
			0,000	
			0,000	

Selected items from the catalog to put into the maintenance order

Asset Management: Enhanced availability check

Maintenance Management

Tactical Asset Management Planning



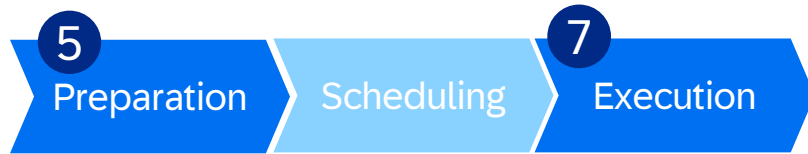
Perform an enhanced material availability check for maintenance orders and reassign committed stock material to the orders with the highest priority and urgency.

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.

The screenshot shows the SAP 'Manage Maintenance Backlog' interface for project 'PUMP_1710_W39'. A table lists stock components with columns for 'Requirement Quantity' and 'Committed Quantity'. A circular callout highlights a specific row with a 'Keep Committed Quantities' checkbox. Below the table, a dialog box titled 'Activate "Keep Committed Quantities"' is shown, indicating that the checkbox is checked for 1 component and the order is saved with number 4000281. A message at the bottom of the dialog states: '"Keep Committed Quantities" has been activated on o...'

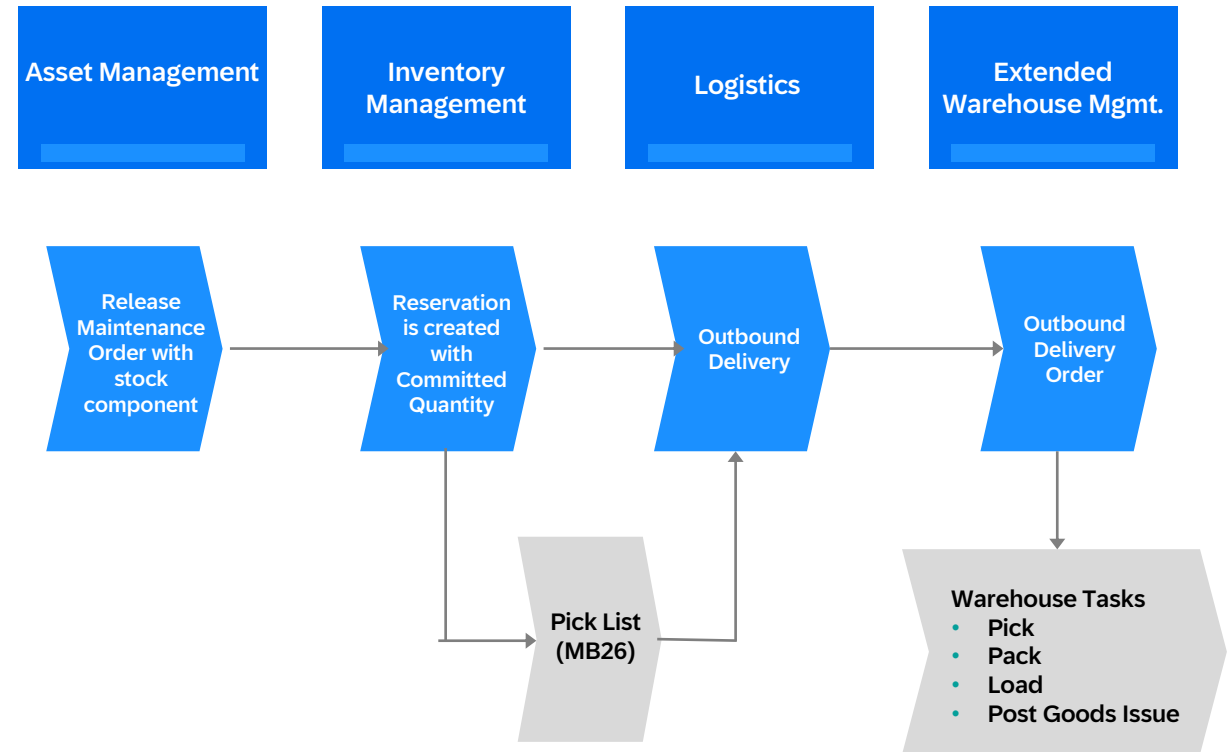
Order	Status	Component Details	Operation Description	Requirement	Requirement Quantity	Committed Quantity
Improvement Pump 1 (4000281)	Green	Mechanical Seal (SP005) Spare Parts (ERSA)	Check the pump		1 PC	1 PC
	Green	Bearing (SP001) Spare Parts (ERSA)	Extend the pipes			
	Green	Coupling (SP002) Spare Parts (ERSA)	Check the coupling	1	2 PC	2 PC
	Red	Shaft (SP003) Spare Parts (ERSA)	Check the shaft	2		
Improvement Pump 2 (4000282)	Green	Mechanical Seal (SP005) Spare Parts (ERSA)	Check the pump	1	1 PC	1 PC
	Green	Bearing (SP001)				

Asset Management: Extended Warehouse Management



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)

Maintenance Management (ext.)

Asset Management Resource Planning

6 Scheduling

Resource Scheduling has had various useability and functional improvements.

Manage Work Center Utilization

Standard

Time Period: * Next 4 Weeks (27.06.2022 - 04.07.2022) 2 Items

Performing Work Center: Priority: Order Type: Maintenance Activity Type: Control Key: Processing Status: Go Restore Adapt Filters (2)

From / To	Work Center	Priority	Planned Start	Planned End	Processing Status	Work	Order Type	Performing Work Center
Today -X / +Y Days	MG_RSH02	Medium	30.06.2022 01:00:00	30.06.2022 10:15:00	Due	4.0 H	YA02	MG_RSH02
This Week	MG_RSH01	Medium	30.06.2022 05:00:00	30.06.2022 12:22:30	Due	6.0 H	YA02	MG_RSH01
Next Week	MG_RSH01	Medium	01.07.2022 03:00:00	01.07.2022 13:26:15	Due	7.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	02.07.2022 02:00:00	04.07.2022 08:07:30	Due	2.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	02.07.2022 04:00:00	04.07.2022 11:18:45	Due	5.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	02.07.2022 00:00:00	04.07.2022 07:03:45	Due	1.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	30.06.2022 06:00:00	30.06.2022 10:15:00	Due	4.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	30.06.2022 06:00:00	30.06.2022 12:22:30	Due	6.0 H	YA02	MG_RSH01
	MG_RSH01	Medium	30.06.2022 06:00:00	01.07.2022 -	-	-	-	-

4 Work Centers (27.06.2022 - 24.07.2022)

Utilization: 0% to 100%

Calendar Week: 26, 27, 28, 29

Legend: MG_RSH01 (blue), MG_RSH02 (orange), RSH_ELEC (green), RSH_MECH (red)

Maintenance Scheduling Board

Standard

Time Period: * Next 4 Weeks (06/30/2022 - 07/07/2022)

Performing Work Center: Priority: Order Type: Processing Status: TEST_ORD: TEST_ORD_OP: Go Restore Adapt Filters (2)

Maintenance Order	Mainten...	Priority	Processing ...	TEST_ORD_OP	TEST_ORD
4033840 Prp Test Order1	PRP_MRS1	3-Medium	Due	AZ	
4033842 Test Order	PRP_MRS1	No Priority	Due	AZ	
0010 Op1	PRP_MRS1	No Priority	Due	AZ	
0020 Op2	PRP_MRS1	No Priority	Due	AZ	
4033843 Test Order	PRP_MRS1	3-Medium	Due	AZ	
0010 Op1	PRP_MRS1	3-Medium	Due	XO	AZ
4033860 Test Order	PRP_MRS1	No Priority	Due	AZ	
0010 Op1	PRP_MRS1	No Priority	Due	A1	AZ
0020 Op2	PRP_MRS1	No Priority	Due	A2	AZ
0030 Op3	PRP_MRS1	No Priority	Due	C1	AZ
0040 Op4	PRP_MRS1	No Priority	Due	A3	AZ
4033863 Test Custom field	PRP_MRS1	3-Medium	Due	AZ	

Maintenance Scheduling Board

Asset Management: Resource scheduling (2/2)

Maintenance Management (ext.)

Asset Management Resource Planning

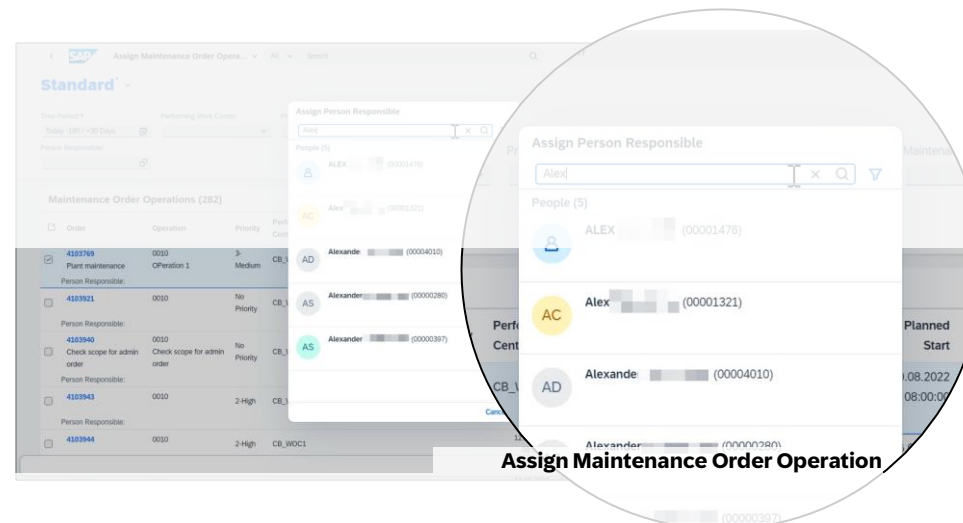
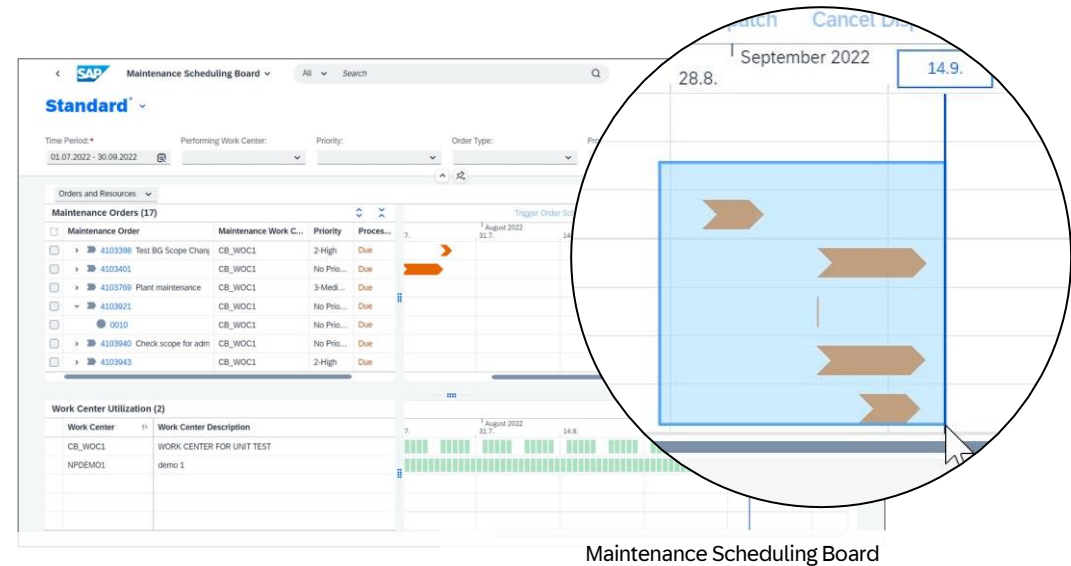
6 Scheduling

Intuitive user interface with

- Drag-and-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

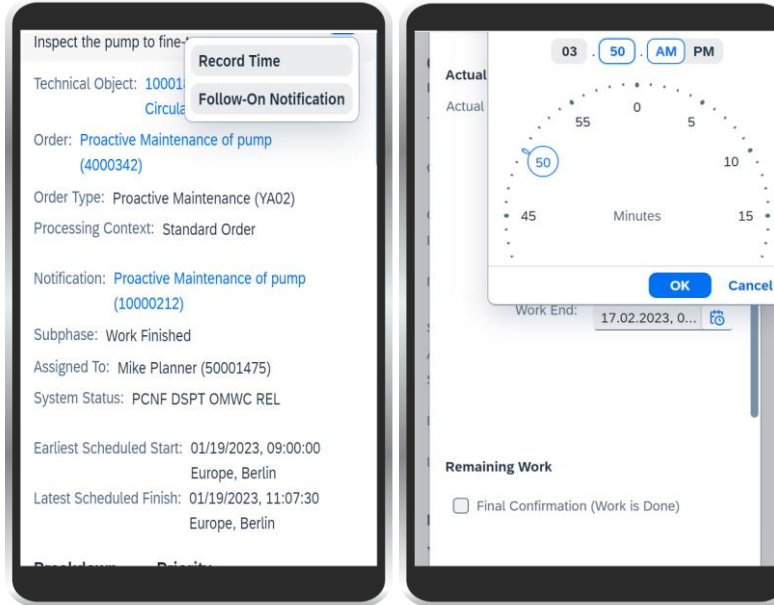


Asset Management: Job confirmation

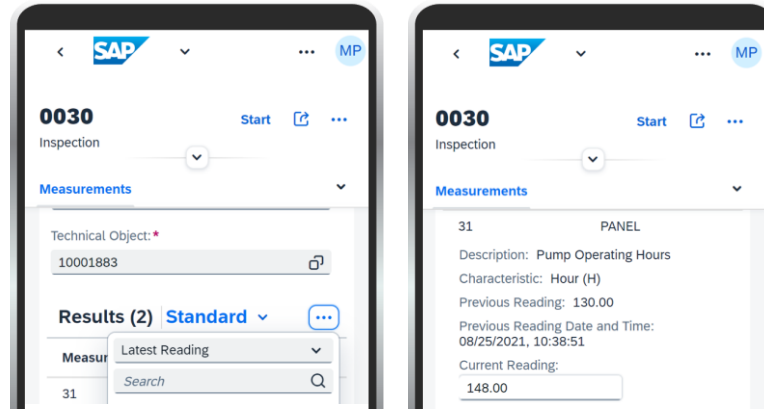
7 Execution

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



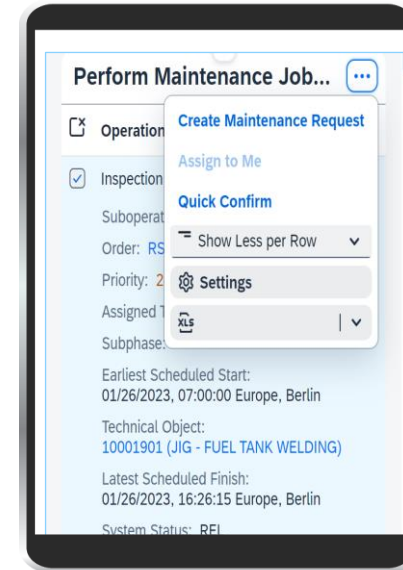
Record measurements



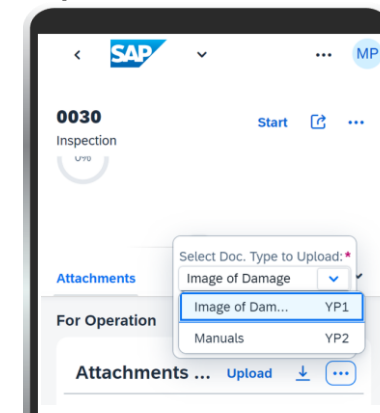
Maintenance Management

Maintenance Execution

Quick confirm for multiple jobs from the list



Upload attachments



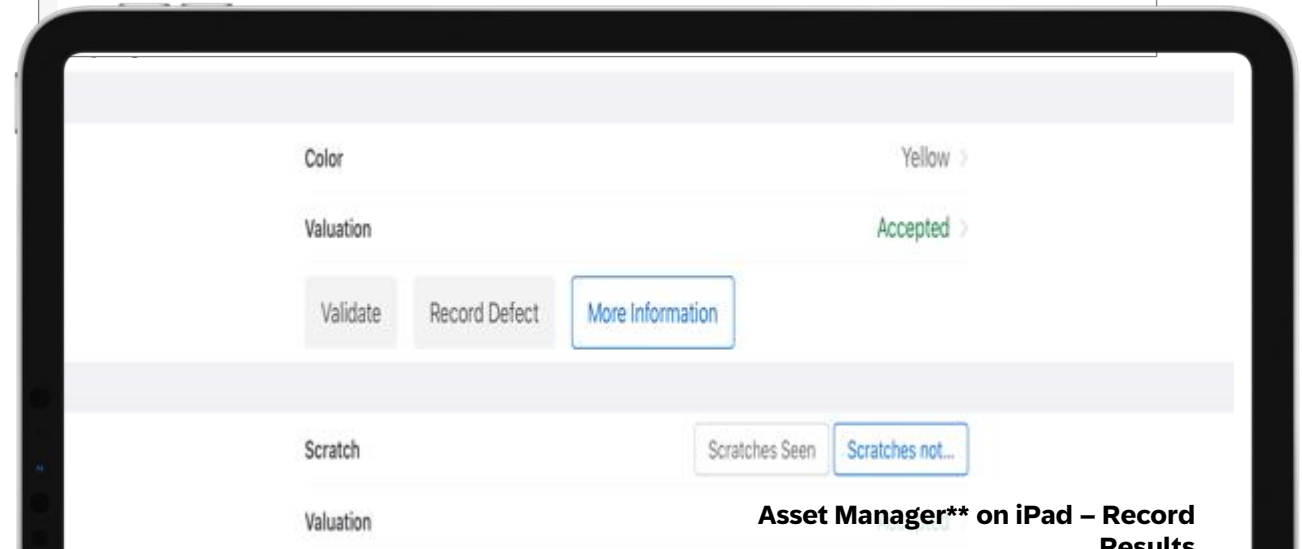
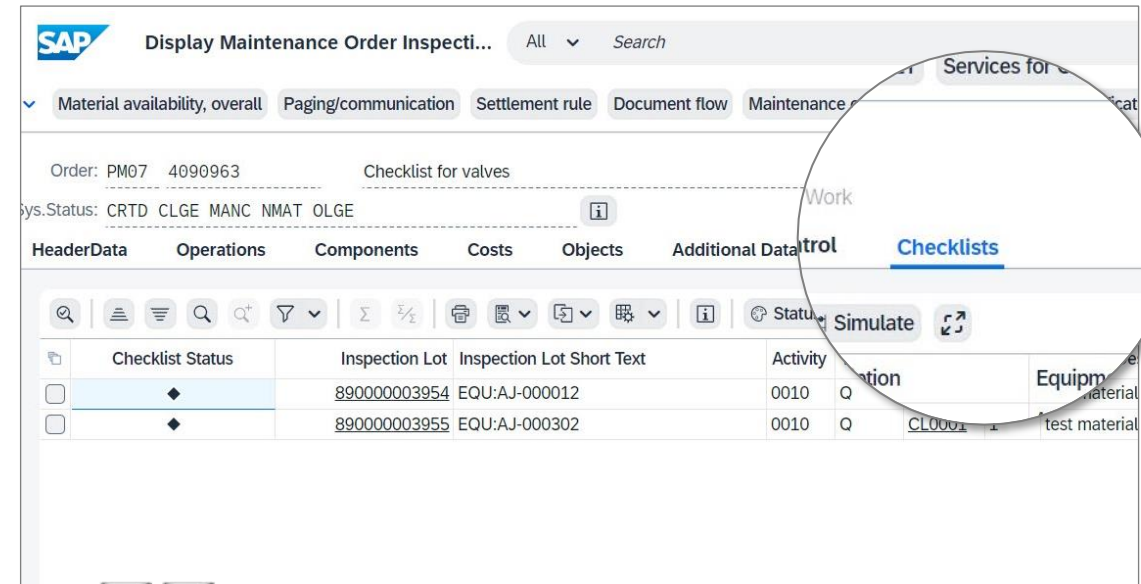
Asset Management: Inspection checklist

Maintenance Management

Tactical Asset Management Planning

Maintenance Execution

- 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

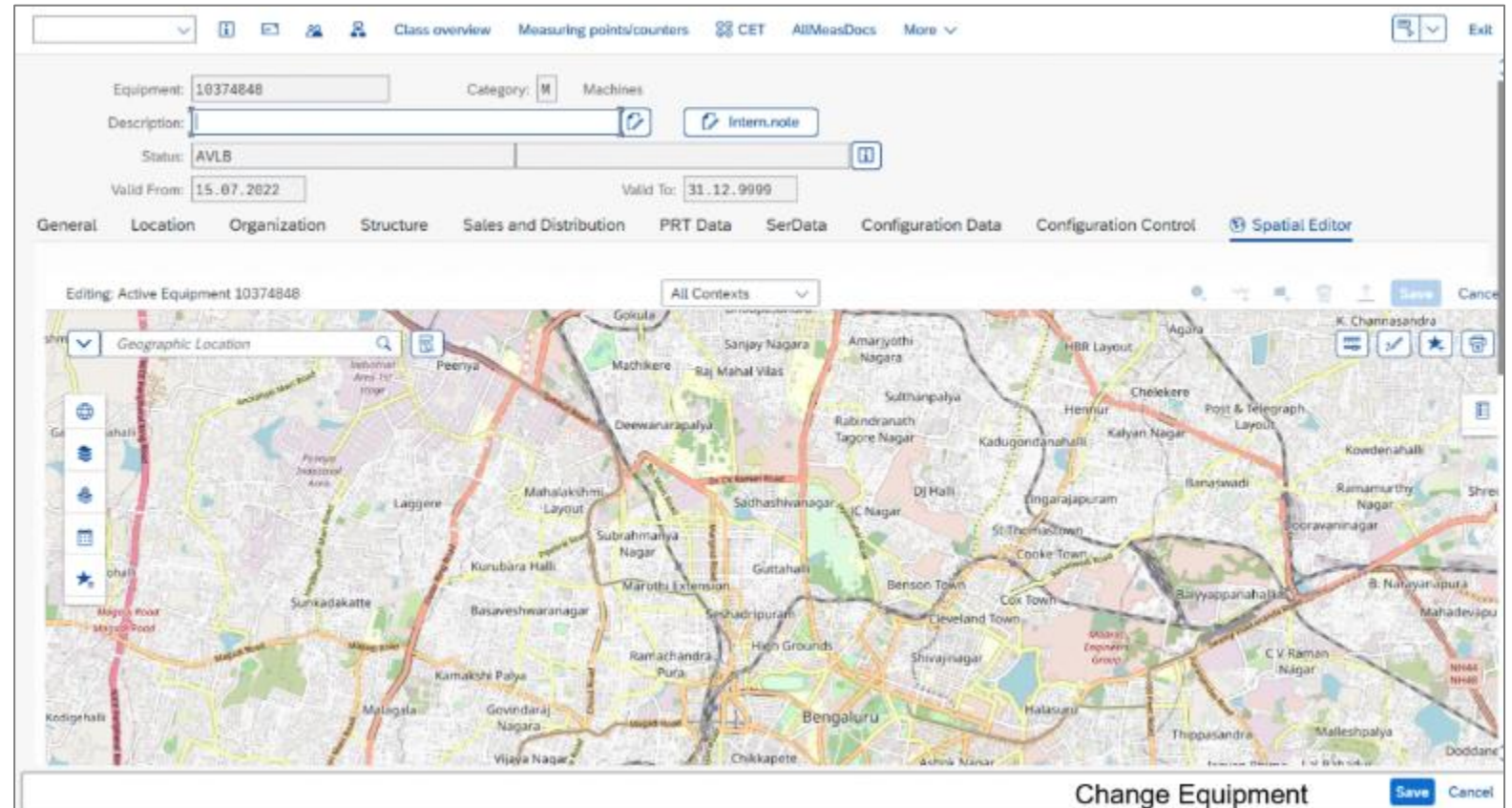
Asset Management: Asset Spatial Enablement

Maintenance Management (ext.)

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.

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

The screenshot displays the SAP 'Maintenance Notifications and Orders' interface. A 'Create Order' dialog box is open, showing a list of recommendations. The 'Best Match' recommendation is selected, showing a matching score of 9.5 / 10 and a copy from order ID 4000012. Two alternative recommendations are also visible, with matching scores of 8.5 / 10 and 8.0 / 10, copying from order IDs 3092819 and 4000234 respectively. The background shows a table of maintenance notifications with columns for Execution Object Type, Execution Object, and Due Date.

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).

The screenshot shows the SAP 'Create Maintenance Request' interface. The 'Technical Data' section includes fields for Technical Object (Lubrication Centrifugal Pump (10554621)), Location (Werk 0001 Standort 0001 (0001)), Current Location, Failure Effect, Failure Mode (Low Suction (01)), Detection Method (Corrective Maintenance (0007)), Operational Effect, Breakdown, and Malfunction Start (24.07.2024, 13:27:00). The 'General Data' section includes Notification Processing Context, Notification Text (Repairing the pump), Template, Long Text (Enter a description), Priority (3-Medium), and Task List. A 'Get Recommended Task Lists' button is visible.

The 'Select: Task List' dialog box is open, showing 'General' information (Notification: -, Priority: 3-Medium, Planning Plant: Plant 0001 (0001)) and 'Recommendation Selection Criteria' (Technical Object: Lubrication Centrifugal Pump (10554621), Catalog Profile: General Notification (AM-PP-PUM), Failure Mode Group: Codes of Pump (CODE-PUM), Failure Mode: Low Suction (01)).

Task List	Recommendation	Recommendation Type	Recommendation Prior...	Recommendation Maintenance ...	Recommendation Validity ...	Recommendation Valid...	Recommendation Source	Recommendation Subtype
<input type="radio"/> Pump Repair (A11793/1)	Pump overhaul (PUMP_OVERHAUL)	PROACTIVE	3-Medium	Repair	01.01.2024, 01:00:00	31.12.2029, 01:00:00	RCM	CALENDAR
<input type="radio"/> Emergency Inspection (A11803/1)	Pump Maintenance emergency inspection (PUMP_EMERGENCY_INSPECTION)	REACTIVE	2-High	Inspection	01.01.2024, 01:00:00	31.12.2025, 01:00:00	FMEA	

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.

Inspection Lot	Activation Status	Usage Decision	Characteristics	Total Characteristi...	Order Technical Object	Maintenance Order	Order Operation
<input type="checkbox"/> EQU:10496258 (890000008150)	Activated	Adjustment required (R1)	<div style="width: 100%;"><div style="width: 30%;"></div></div>	9	Pump (Checklist) (10496258)	Checklist test w/ condition char. + calc (4410234)	Checklist test w/ condition char. + calc (0010)
<input type="checkbox"/> EQU:10496258 (890000008901)	Activated		<div style="width: 100%;"><div style="width: 20%;"></div></div>	9	Pump (Checklist) (10496258)	Demo Checklist (4604372)	Demo Checklist (0010)
<input type="checkbox"/> EQU:10496258 (890000009907)	Activated		<div style="width: 100%;"><div style="width: 90%;"></div></div>	9	Pump (Checklist) (10496258)	No Checklist should be found (4817816)	No Checklist should be found (0010)
<input type="checkbox"/> EQU:10496258 (890000010203)	Activated	Can be used (A)	<div style="width: 100%;"><div style="width: 80%;"></div></div>	9	Pump (Checklist) (10496258)	Checklist test w/ condition char. + calc (4410234)	Second: Checklist test w/ condition (0020)
<input type="checkbox"/> FL:A-J-B32-2A/1 (890000010512)	Activated	Reject with Notif+Meas+Doc+TO status cha (2020)	<div style="width: 100%;"><div style="width: 50%;"></div></div>	7	Pump (Checklist) (10496258)	Inspection with several checklists (4908654)	Inspection Operation for deactivating (0010)
<input type="checkbox"/> EQU:10496258 (890000010513)	Activated	Accept with Meas+Doc+set FLCO to TO (2015)	<div style="width: 100%;"><div style="width: 60%;"></div></div>	9	Pump (Checklist) (10496258)	Inspection with several checklists (4908654)	Inspection Operation for deactivating (0010)
<input type="checkbox"/> EQU:10496258 (890000011450)	Activated		<div style="width: 100%;"><div style="width: 90%;"></div></div>	9	Pump (Checklist) (10496258)	Checklist with Test Equipment (824879)	Inspection Operation for deactivating (0010)

Semantic object based cross-app navigation is enabled

[- Blog on Expert Talk](#)

[- YouTube video: Expert Talk on Inspect Checklist](#)

Asset Management: Purchasing contracts in task lists

Maintenance Management

Tactical Asset Management Planning

2023
FPS2

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.

The screenshot shows the SAP S/4HANA interface for a task list. The main window displays a task list with columns for Product, Description, Quantity, Unit, Item Category, Outline Agreement, Outline Agreement Item, Purch. Organization, Purchasing Group, Material Group, Overall Limit, Expected Val..., Price Unit, Price, and Currency. A dialog box titled 'Select from Contract' is open, showing search criteria and a list of contracts. The dialog box has a 'Standard *' dropdown and a 'Go' button. The list of contracts includes columns for Hierarchy Number, Purchase Contract, Contract Name, Item, Short Text, and Product. The background shows a task list table with columns for Product, Description, Quantity, Unit, Item Category, Outline Agreement, Outline Agreement Item, Purch. Organization, Purchasing Group, Material Group, Overall Limit, Expected Val..., Price Unit, Price, and Currency.

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

Environment,
Health, and Safety

Work Permit and
Isolations Management

2023
FPS2

You can now create a new work permit or view assigned work permits while processing a maintenance order.

The screenshot shows the SAP 'Change Proactive Maintenance' interface for order 1957299. The 'Additional Functions' menu is open, and 'Manage Work Permits' is highlighted. Other menu items include 'Add to Favorites', 'Print', 'Determine Costs', 'Schedule Order', and 'Status Information'. The main screen displays details for the maintenance order, including description, technical object (AJ-B32-2A/1), priority (3-Medium), and dates (Required Start: 20.03.2024, Scheduled Start: 20.03.2024). A blue arrow points from the 'Manage Work Permits' menu item to the right-hand screenshot.

The screenshot shows the SAP 'Work Permits' interface. A 'New Work Permit' dialog box is open, allowing the user to create a new permit. The dialog includes fields for 'Planning Plant' (Plant 0001 (0001)), 'Work Permit Type' (Select Work Permit Type), 'Validity Start' (e.g. 31.12.2024, 23:59:58), 'Validity End' (e.g. 31.12.2024, 23:59:58), 'Reference Maintenance Order' (Inspection with Permit to Work (0000...)), and 'Create with Reference to' (Select Reference). The background shows the 'General Information' tab of the work permit screen.

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).

Asset Management

Recommendations from Asset Performance Management 1/2

Maintenance Management

Tactical Asset Management Planning

2023
FPS2

Maintenance tasks lists and maintenance items are enhanced by the related commmendations 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

The screenshot displays the SAP Maintenance Task Lists interface. The main header shows 'Maintenance Task Lists' with a search bar. The task details for 'A/10/1' are visible, including 'Inspect: updated delta demo - 14-Sep', 'Task List Type: General Maintenance Task List', 'Technical Object: Routine Inspection of Booster Pump (RCMD_BPMP_INSP_RM01)', 'Task List Group: 10', 'Valid From: 30.07.2015', 'Task List Group Counter: 1', and 'Key Date: 15.01.2024'. The status is 'Released for Order (2)'. The 'Recommendations' section shows 11 items, with the first one being 'RCMD_10162405 (RCMD_10162405)' of type 'PROACTIVE'. The 'Failure Modes' section shows 2 items, with the first one being 'Spillage (04)' and the second one being 'Low Suction (01)'. The 'Low Suction (01)' failure mode is expanded, showing its 'Code Group' as 'Codes of Pump (CODE-PUM)' and its 'Long Description' as 'A lot of reasons can be discussed for this low suction failure mode. It includes low indoor temperature, bubble building, dirty filters, restricted ducts, undersized ducts, closed dampers, frosted coils, restricted refrigerant line, restricted piston, restricted strainer, and bad indoor evaporator motor.' The 'Attachments' section shows one attachment: 'Low Suction (Failure Mode) - Noise (Failure Effect) - Cavitation.jpg', uploaded by 'Jörg Medack' on '09.01.2024 10:12:34'.

Maintenance Task Lists

Asset Management

Recommendations from Asset Performance Management 2/2

Maintenance Management

Asset Fault and Incident Response Management

2023
FPS0+1

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"

The screenshot displays the SAP Maintenance Request interface. The main window shows 'Malfunction Information' for a pump with a reduced outcome. A modal dialog titled 'Select: Task List' is open, showing a table of recommended task lists. The table has columns for Task List, Recommendation, Recommendation Type, Recommendation Priority, Recommendation Maintenance, Recommendation Validity From, Recommendation Subtype, and Recommendation Validity To. Two task lists are listed: 'Centrifugal Pump Maintenance (A/878/1)' with a REACTIVE recommendation type and '2-High' priority, and 'Inspect-updated delta demo - 14-Sep (A/10/1)' with a PROACTIVE recommendation type and '1-Very high' priority. The second task list is selected. Below the table, there is a 'Recommended Task List' button. The background interface shows 'Maintenance Plan Details' and 'Maintenance Request' information.

Task List	Recommendation	Recommendation Type	Recommendation Priority	Recommendation Maintenance	Recommendation Validity From	Recommendation Subtype	Recommendation Validity To
Centrifugal Pump Maintenance (A/878/1)	Pump Casing Service Procedure (RCMD_REP_PRC_0001)	REACTIVE	2-High	Repair service	FMEA		
Inspect-updated delta demo - 14-Sep (A/10/1)	Routine Inspection of Booster Pump (RCMD_BPMP_INSP_RM01)	PROACTIVE	1-Very high	Inspection	FMEA	CALENDAR	

Asset Management: Inspection checklist process

Maintenance Management (ext.)

Asset Management Resource Planning

2023
FPS0+1

The screenshot shows the search and list view of the 'Perform Maintenance Jobs' app. The search filters are set to 'Standard', 'All Jobs', and 'Quarterly inspection - mechanical (MON_03_M)'. The list displays two job entries for 'Pressure Vessel - NDE (1000848)'. The first entry is highlighted with a blue box, showing details like 'Inspection NDE with inspection type (0010)', '10000330 (Pressure Vessel)', and 'Number of Checklists: 3'.

Perform Maintenance Jobs

The search and list display within Perform Maintenance Jobs app are now enhanced with additional information, search criteria, and filters

The screenshot shows the details view for a specific job '0010'. It includes technical object information, order details, and a 'Checklists' tab. A progress indicator shows 40% completion. Below the tabs, there is a table of inspection lots with a progress bar for each. One lot is highlighted with a blue box, showing a progress of 1 green and 2 red segments.

New Checklists tab

The screenshot shows the 'Inspection Lot Details' view for 'EQU:10000334 (890000000102)'. It displays characteristics for 'Measure Thickness' with values: 'CML Thickness with limits' (Accepted), 'Diameter' (Rejected), 'Length' (Rejected), and 'Weight' (Open).

Maintenance Request Close

Asset Management

Safety certificates and integration with work permits*

SAP Safety Certificates

Standard Cleaning Procedure

Planning Plant: Plant 0001 (0001)
Safety Certificate Type: Ionizing radiation certificate (ION)
Processing Status: Planning and Preparation

General Information | Object List | Safety Precautions | **Assigned Permits** | Partners | Approvals | Comments | Status | Attachments

General Data

Safety Certificate Description: Standard Cleaning Procedure

Validity Start: 03.02.2024, 10:00:00

Validity End: 03.02.2024, 20:00:00

Long Text: Clean up activities at the site

Reference Safety Certificate Template: -

Reference Object

Technical Object: test BRF Single Cycle Si...

Technical Object Type: Functional Location

Responsibility

Main Work Center: * WORK CENTER FOR UN...

Main Work Center Plant: Plant 0001 (0001)

Authorization Group: -

Location Data

Maintenance Plant: Plant 0001 (0001)

Location: -

Room: -

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.

General Information | Object List | Safety Precautions | **Assigned Permits** | Partners | Approvals | Comments | Status | Attachments

Work Permits (2) Standard

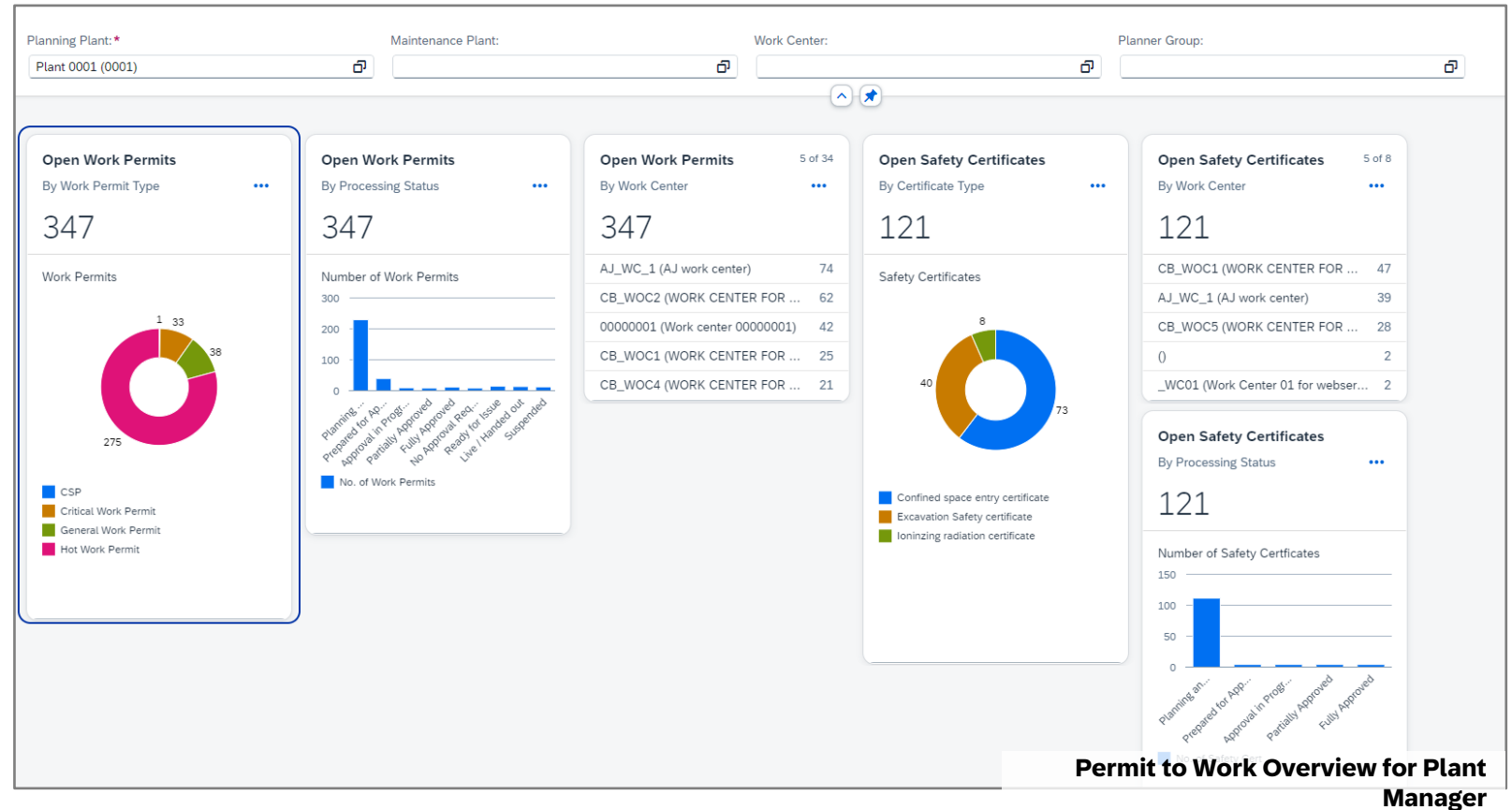
Work Permit	Planning Plant	Processing Status	Work Permit Type	Main Work Center
<input type="radio"/> Drain Cleaning (3000000)	Plant 0001 (0001)	Partially Approved	Critical Work Permit (CWP)	WORK CENTER FOR UNIT TEST
<input type="radio"/> Toms Follow-on Order follows 200240 (3000004)	Plant 0001 (0001)	Planning and Preparation	Critical Work Permit (CWP)	AJ work center

* 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.



Asset Management: Mass editing Header details of maintenance orders

Maintenance
Management

Tactical Asset Management
Planning

2023
FPS0+1

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.

The screenshot displays the SAP Maintenance Orders application interface. At the top, there's a navigation bar with the SAP logo and 'Maintenance Orders' dropdown. Below it, a filter bar shows 'Standard' and '3 filters active: Search Terms, Order Type, Order Status'. A toolbar contains various actions like 'Change Responsibility', 'Change Status', 'Change Scheduling', 'Create Work Pack', 'Print', 'Edit Orders', and 'Dispatch Operations'. The main area is a table of maintenance orders with columns for Order, Order Type, Priority, Technical Object, Scheduled Start, and Scheduled Finish. An 'Edit Orders' modal dialog is open, showing a search bar and a 'General Data' section with dropdown menus for Description, Maintenance Activity Type, Priority, and System Condition. The dialog has 'Save', 'Simulate', and 'Cancel' buttons. A 'Find Maintenance Orders' button is visible at the bottom right of the table.

Order	Order Type	Priority	Technical Object	Scheduled Start	Scheduled Finish
4000202	Maintenance order (PM01)			04.08.2015, 08:00:00	04.08.2015, 08:00:00
4000240	Maintenance order (PM01)			10.08.2015, 00:00:00	10.08.2015, 00:00:00
4000241	Maintenance order (PM01)			07.08.2015, 08:00:00	07.08.2015, 08:00:00
4000302	Maintenance order (PM01)			07.08.2015, 08:00:00	07.08.2015, 08:00:00
4000304	Maintenance order (PM01)			18.08.2015, 08:00:00	18.08.2015, 08:00:00
4000321	Maintenance order (PM01)	No Priority	Electric pump 001 (SW-1000-SW01)	07.08.2015, 08:00:00	07.08.2015, 08:00:00
4000380	Maintenance order (PM01)	No Priority	Centrifugal Pump SpecPumps XY330 (KM-1000-CF01)	12.08.2015	

Asset Management: Mass editing Warranty details of technical objects

Maintenance
Management

Tactical Asset
Management Planning

2023
FPS0+1

You can now select one or more technical objects and edit customer warranty and vendor warranty details in the Find Technical Object app (F2072).

The screenshot displays the SAP Find Technical Object app interface. A list of technical objects is shown, with several selected. A 'Mass Edit Technical Objects' dialog box is open, allowing for the editing of warranty details. The dialog includes sections for General Data, Location and Organizational Data, Customer Warranty Data, and Vendor Warranty Data. The Vendor Warranty Data section is expanded, showing fields for Vendor Master Warranty (275), Vendor Warranty Start Date (07.09.2023), and Vendor Warranty End Date. A calendar widget is visible for selecting the end date, showing the month of September 2025. The background shows a list of technical objects with columns for Technical Object Type, Technical Object, and Planner Group.

Technical Object Type	Technical Object	Planner Group
Equipment	Pump 2022081202 (10376057)	IH-Planner 010 (010)
Equipment	Pump 2022081203 (10376057)	IH-Planner 010 (010)
Equipment	Pump 2022081204 (10376057)	IH-Planner 010 (010)
Equipment	Motor 2022081201 (10376057)	IH-Planner 010 (010)
Equipment	Motor 2022081202 (10376057)	IH-Planner 010 (010)
Equipment	Motor 2022081203 (10376057)	IH-Planner 010 (010)
Equipment	Motor 2022081204 (10376057)	IH-Planner 010 (010)

Asset Management: Object list

Adding object list entries to maintenance items

Maintenance Management

Tactical Asset Management Planning

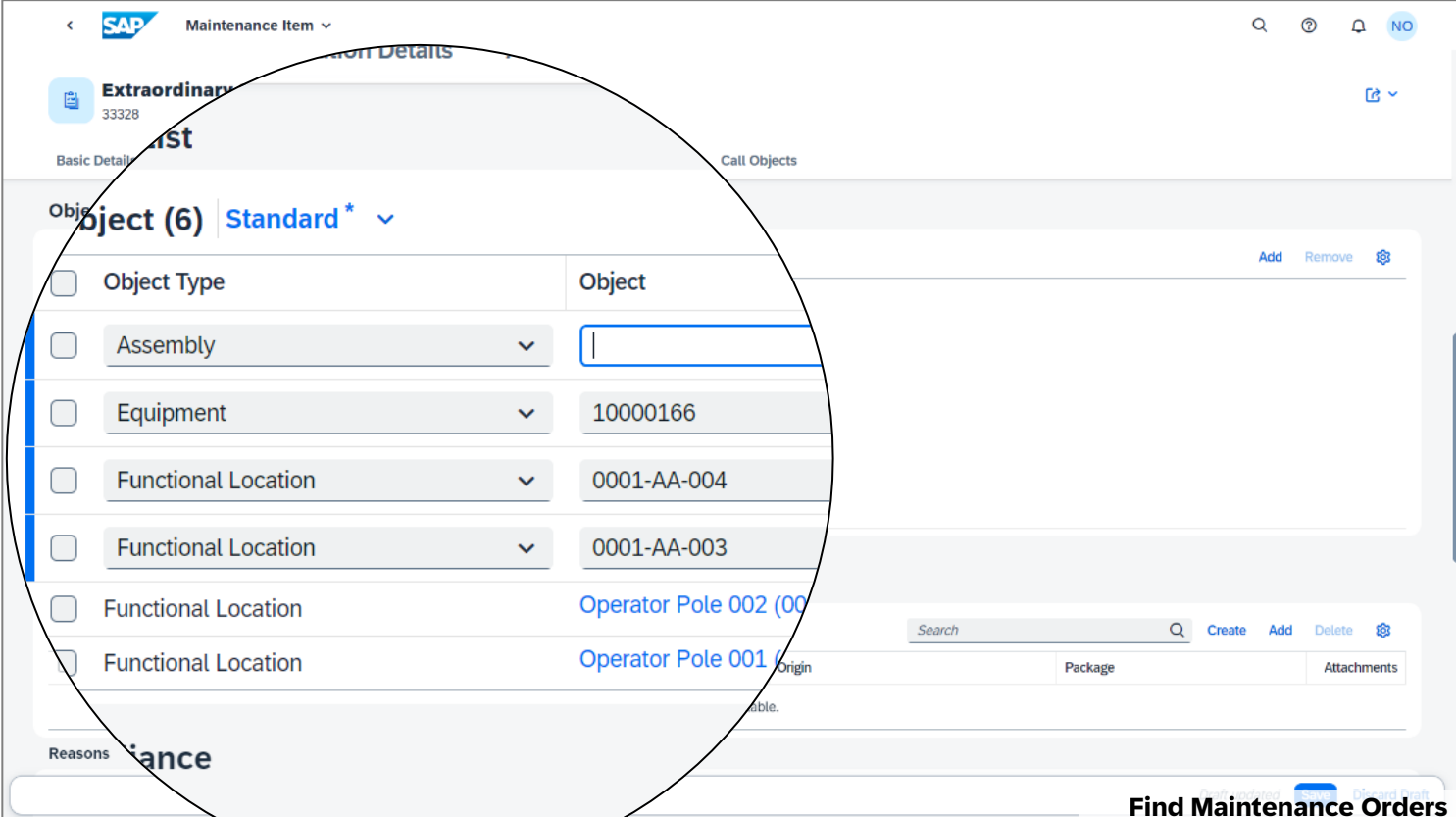
2023
FPS0+1

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.



The screenshot displays the SAP Manage Maintenance Items app interface. A circular callout highlights the 'Object List' section. The list is titled 'Object (6) Standard *' and contains the following entries:

Object Type	Object
Assembly	
Equipment	10000166
Functional Location	0001-AA-004
Functional Location	0001-AA-003
Functional Location	Operator Pole 002 (00
Functional Location	Operator Pole 001

At the bottom of the screen, there is a search bar and a button labeled 'Find Maintenance Orders'.

Asset Management: Equipment structure

Maintenance Management

Asset Configuration Management

2023
FPS0+1

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).

The screenshot shows the SAP Technical Object app interface. The 'Manage Structure' dropdown menu is open, highlighting the 'Dismantle Subordinate Equipment' option. Below the menu, the 'Dismantle Subordinate Equipment' dialog is displayed, showing the selected technical object: Pump 2022081201 (10376050). The dialog lists subordinate equipment items in a table.

Position	Equipment	Material Name	Serial Number	Installation Date/Time	Dismantling Date/Time
<input checked="" type="checkbox"/>	Motor 2022081201 (10376054)	Pump (226727)		12.08.2022, 08:23:09	04.09.2023, 12:29:56
<input type="checkbox"/>	Motor 2022081202 (10376055)	Pump (226727)		12.08.2022, 02:00:00	04.09.2023, 12:29:56
<input type="checkbox"/>	Motor 2022081203 (10376056)	Pump (226727)		12.08.2022, 02:00:00	04.09.2023, 12:29:56
<input type="checkbox"/>	Motor 2022081204 (10376057)	Pump (226727)		12.08.2022, 02:00:00	04.09.2023, 12:29:56
<input type="checkbox"/>	Motor 2022081205 (10376058)	Pump (226727)		12.08.2022, 02:00:00	04.09.2023, 12:29:56

Buttons: Dismantle, Cancel

Find Maintenance Orders

Asset Management: Printing

Maintenance Management

Tactical Asset Management Planning

Maintenance Execution

2023
FPS0+1

Automatic Attachments for Output Items

Manage Work Packs

Work Pack ID	Work Pack Name	Work Pack Type	Output Status
111	Work Pack Name - 20230621 - 00:55:18	Reactive Maintenance	Completed
101	Work Pack Name - 20230620 - 18:28:18	Reactive Maintenance	Completed
91	Work Pack Name - 20230620 - 18:15:52	Preventive Maintenance	Completed
81	Test Work Pack 1	Preventive Maintenance	Completed
71	Work Pack Name - 20230607 - 12:47:57	Preventive Maintenance	Completed
33	Work Pack Name - Test 06	Reactive Maintenance	Completed
31	Work Pack Name - Test 03	Reactive Maintenance	Completed
21	Work Pack Name - Test 01	Reactive Maintenance	Completed
Output Status: Partially Completed			
151	Name des Arbeitspakets - 20230831 - 06:38:28	Preventive Maintenance	Partially Completed
127	Work Pack Name - 20230622 - 10:18:50	Preventive Maintenance	Partially Completed
61	Work Pack Name - 20230524 - 20:20:31	Reactive Maintenance	Partially Completed
51	Test Work Pack 123 EDITED	Preventive Maintenance	Partially Completed
32	Work Pack Name - Test 05	Reactive Maintenance	Partially Completed
22	821	Reactive Maintenance	Partially Completed
11	Work Pack Name - 20220613 - 16:48:46	Reactive Maintenance	Partially Completed
Output Status: Partially Failed			
52	Test Work Pack 234	Reactive Maintenance	Partially Failed
41	Work Pack Name - Test 01	Reactive Maintenance	Partially Failed

Manage Work Packs

Work Pack Name - 20230620 - 18:15:52

Work: 18,00 H
Job Pack Count: 1
Job Count: 3
Output Item Count: 12

Output Status: Completed

Oper1
91-0010

Output Details

Item ID	Log	Status	Dispatch Time	Output Type	Role
1	[Log]	Completed (4)	Immediately (1)	Job Card (JOB_CARD)	XX
2	[Log]	Completed (4)	Immediately (1)	Job Card (JOB_CARD)	XX
3	[Log]	Completed (4)	Immediately (1)	Time Ticket (TIME_TICKET)	XX
4	[Log]	Completed (4)	Immediately (1)	Time Ticket (TIME_TICKET)	XX
5	[Log]	Completed (4)	Immediately (1)	Operation Control Ticket (OPERATION_CONT_ROL_TICKET)	XX
6	[Log]	Completed (4)	Immediately (1)	Operation Control Ticket (OPERATION_CONT_ROL_TICKET)	XX
7	[Log]	Completed (4)	Immediately (1)	Pick List (PICK_LIST)	XX
8	[Log]	Completed (4)	Immediately (1)	Pick List (PICK_LIST)	XX
				Material Issue Slip (MATERIAL_ISSUE_SLIP)	XX
				Material Issue Slip (MATERIAL_ISSUE_SLIP)	XX

- Output Management: Enable Automatic Attachments for Output Items
- Simplified Printing for Multiple Orders and Operations

Print

Suboperation | Technical Object

Job has been scheduled to create and print work pack. Please check the application log to track the status.

Asset Management: People Gantt Maintenance Scheduling Board

Maintenance Management (ext.)

Asset Management Resource Planning

2023
FPS0+1

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.

The screenshot displays the SAP 'Resource Scheduling for Maintenance Planners' interface. The main window is titled 'MG_RSH_Board' and shows a Gantt chart for the date 13.06.2023. The chart has columns for time slots from 00:00 to 20:00. A task bar for '4012254/0020' is visible, with a sub-task bar for '4012218/0010' highlighted in blue. A 'Delete' button is shown over the sub-task bar. Below the Gantt chart, a table lists assigned people:

Person	Function	Work C...	Action
SS Sylvia Steffens	External	ELEC	✓ As...
AW Andy Watson	Lead	ELEC	✓ As...
JP Johanna Peterson	External	ELEC	Un...
PB Peter Brand	Internal	ELEC	✓ As...

At the bottom of the interface, there is a 'Work Center Utilization (2)' section with a table:

Work Center	Work Center Description
ELEC	Electricians
MECH	Mechanics

Below the utilization table, there is a bar chart showing utilization percentages for June 2023. The chart shows utilization for 13.6., 15.6., 17.6., and 19.6. The values are 0%, 75%, 25%, 25%, 7%, 346%, 184%, 138%, 100%, and 15%.

The bottom right corner of the screenshot contains the text 'Resource Scheduling for Maintenance Planners'.

Asset Management: Generate recurring schedules

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.

The screenshot shows the SAP S/4HANA 'Generate Recurring Schedules' interface. It is divided into three main sections: 1. Template Selection, 2. Scheduling Options, and 3. Parameters. A large circular callout highlights the 'Schedule Description', 'Schedule Start Date', 'Schedule End Date', 'Maintenance Planners', and 'Reviewers' fields. Another circular callout highlights the 'Planned Start Date', 'Planned End Date', 'Performing Work Center', 'Order Type', 'Operation Subphase', and 'Not in Any Schedule Yet' fields. The interface includes a 'Generate Recurring Schedules' button at the bottom right.


Field	Value
Job Template	EAM Resource Scheduling - Generate Recurring Schedules
Job Name	EAM Resource Scheduling - Generate Recurring Schedules
Start Immediately	<input checked="" type="checkbox"/>
Job Start (Local Time)	19.12.2022, 11:56:58 Europe/Berlin
Maintenance Schedule Header	
Details	
Schedule Description	Schedule-{YYYY}-{MM}
Schedule Start Date	Start Date (16.12.2022)
Schedule End Date	Start Date + 5 Day(s) (21.12.2022)
Maintenance Planners	Markus
Reviewers	Adrian
Not in Any Schedule Yet	<input checked="" type="checkbox"/>
Planned Start Date	Start Date (16.12.2022)
Planned End Date	Start Date + 5 Day(s) (21.12.2022)
Performing Work Center	MECH / 1010 (10002334) x
Order Type	Proactive Maintenance (YA02) x
Operation Subphase	In Planning (0110) x Ready

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

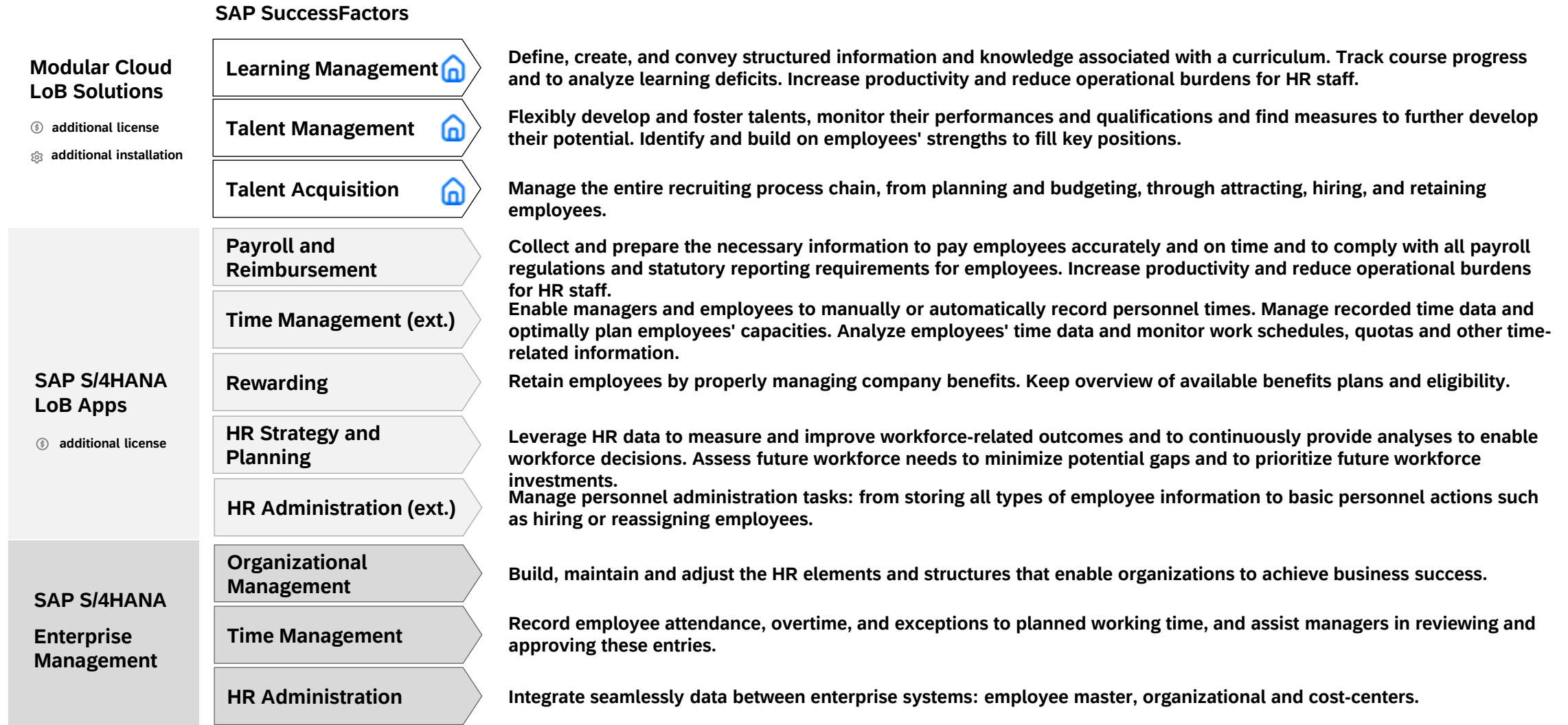
Human Resources

SAP S/4HANA Cloud Private Edition

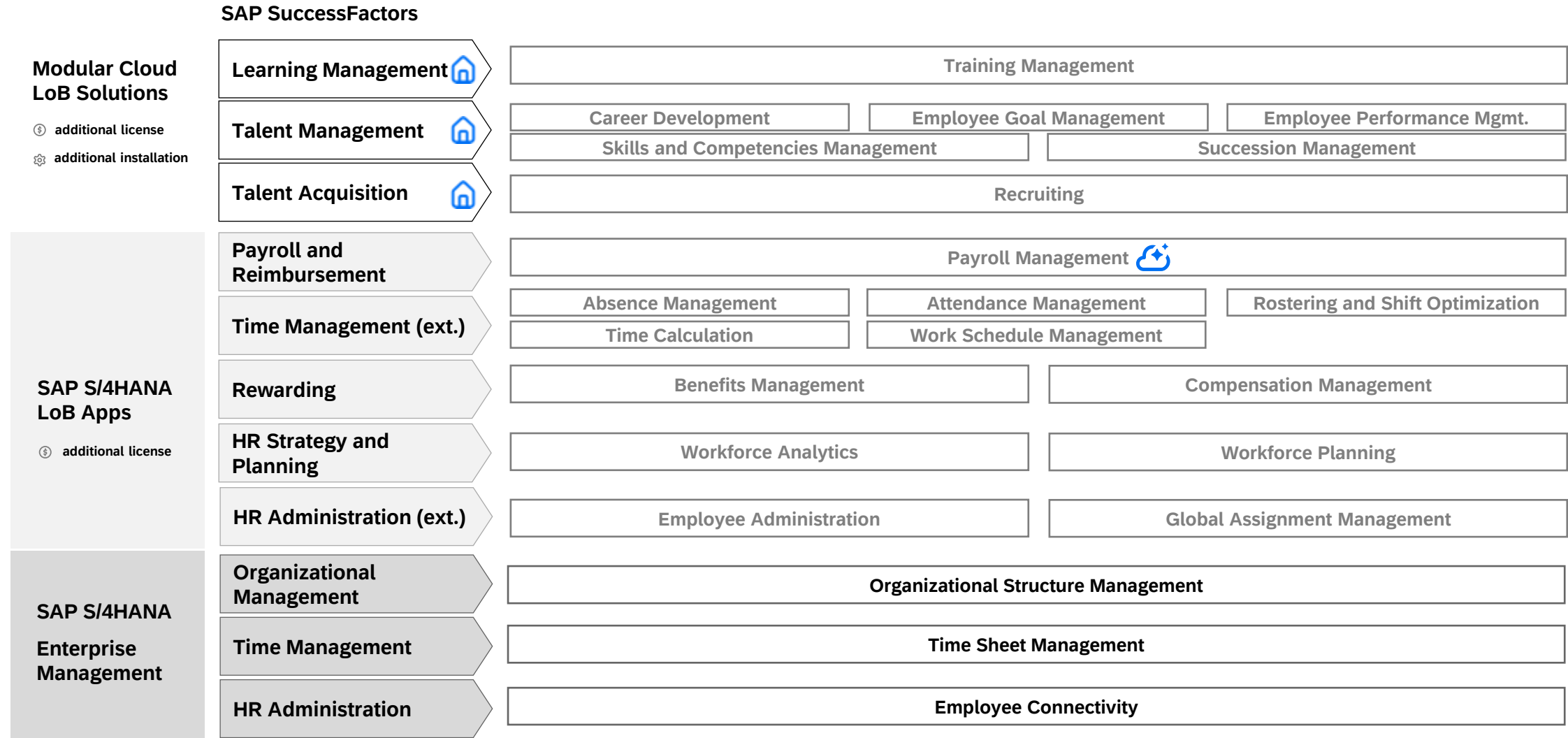
(based on SAP S/4HANA 2023)



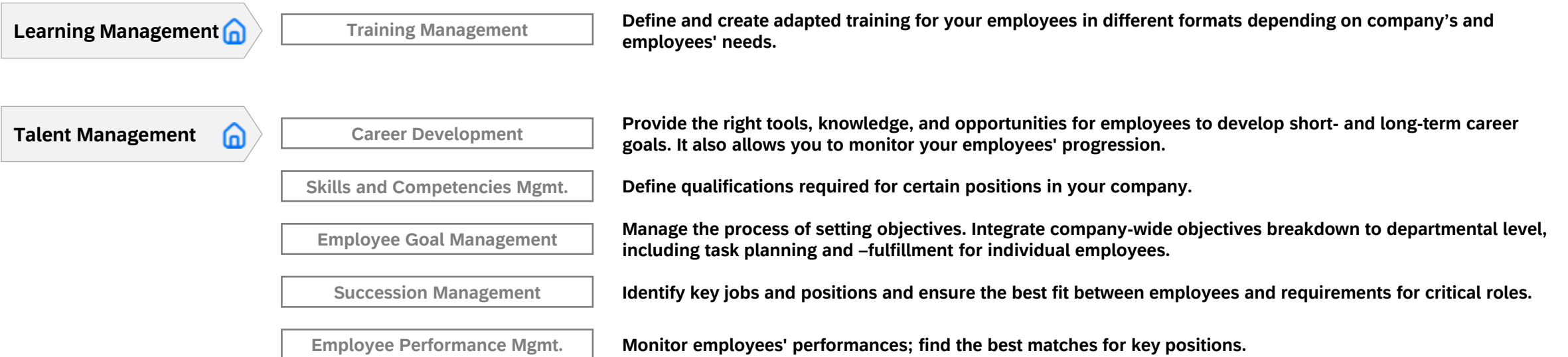
Human Resources: Business area overview



Human Resources: Business area overview

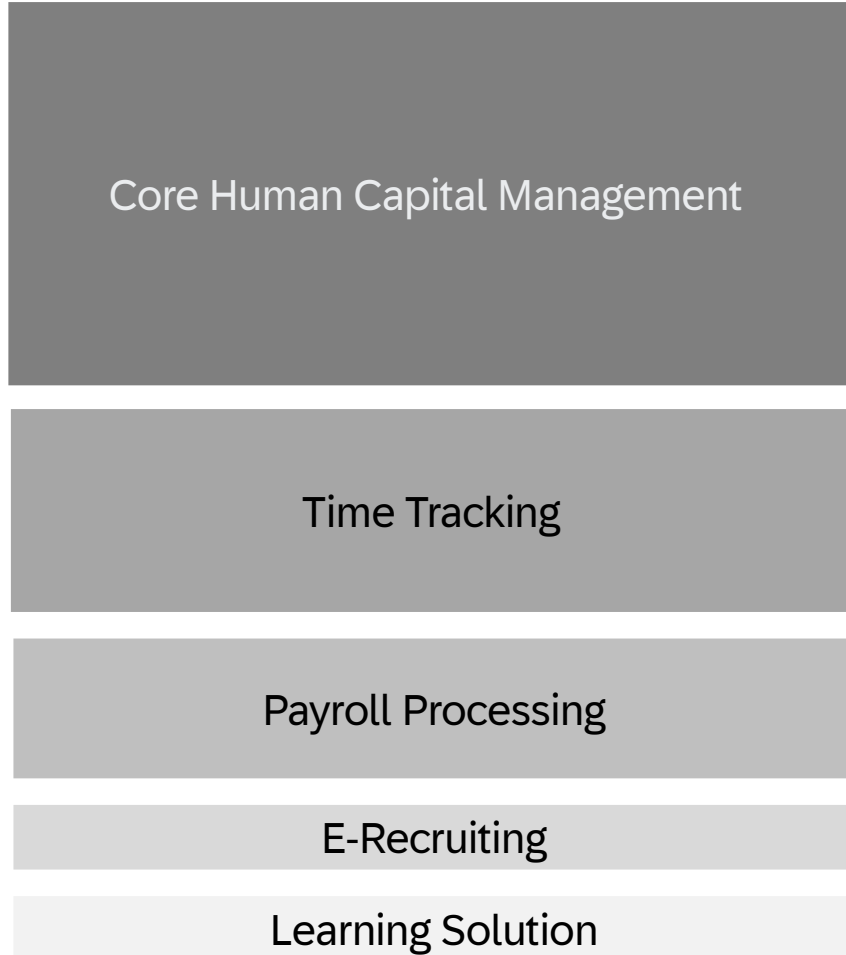


Human Resources: Capabilities available exclusively in SAP SuccessFactors and SAP S/4HANA on-premise



Human Resources: Structure

Licenses



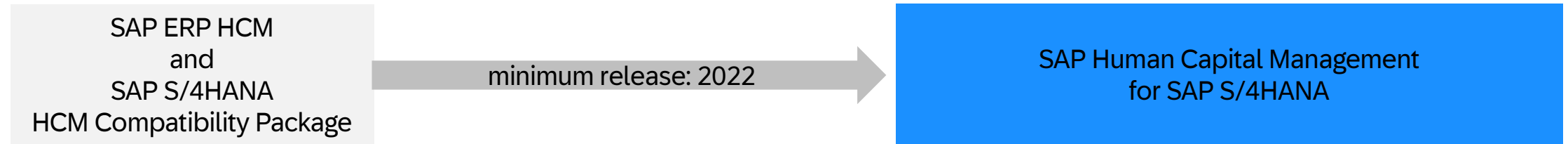
Solution Capabilities

- 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
- Work Schedule Management
 - Absence Management
 - Attendance Management
 - Time Calculation
 - Rostering and Shift Optimization
- Payroll
 - Pension funds
 - VADM
- Recruiting
- Training Management

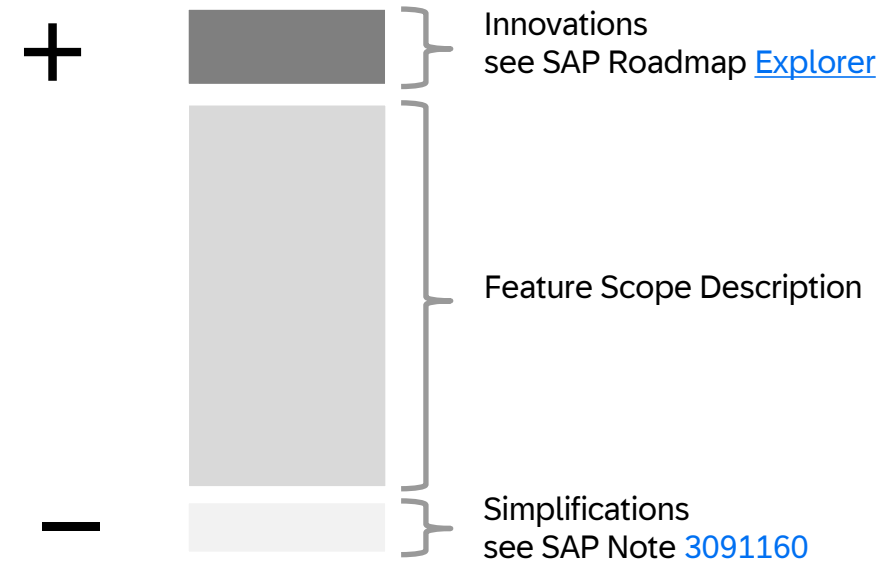
Deployment Models

SAP S/4HANA Cloud Private Edition	On-premise
Talent Mgmt: SAP SuccessFactors	
SAP SuccessFactors	
SAP SuccessFactors	

Human Resources: Innovation and simplification



- 1 Conversion / Upgrade to SAP S/4HANA 2022+
- 2 New licensing structure
- 3 Activation of Business Function



Important SAP notes:

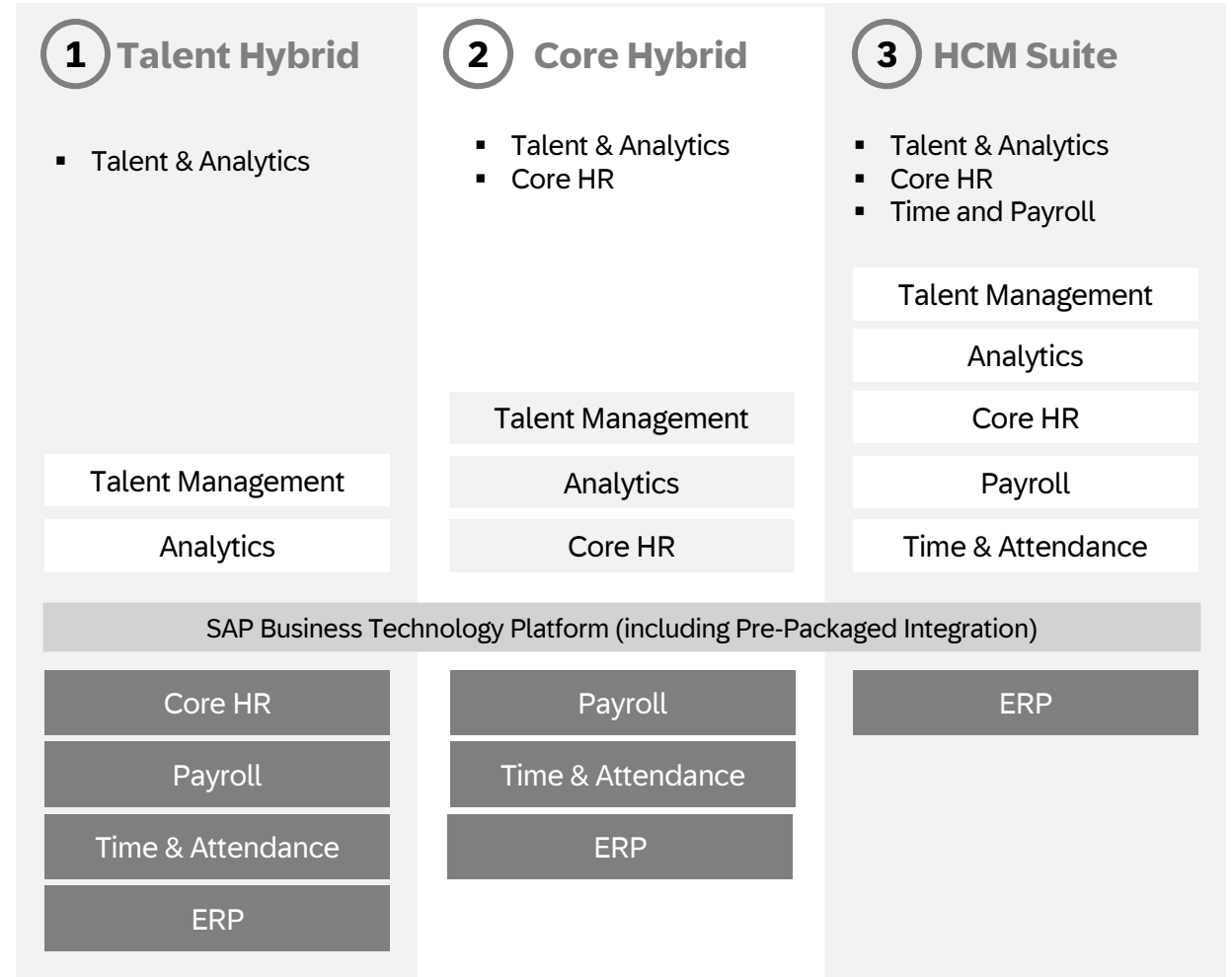
- SAP Note [2273108](#)
- SAP Note [3091160](#)
- SAP Note [2269324](#)
- SAP Blog [SAP HCM for S4](#)

Human Resources: Human capital management transformation options

Move HCM to the public cloud, SAP SuccessFactors, via three deployment options

SAP SuccessFactors

SAP S/4HANA Cloud
Private Edition



Human Resources: Customer evolution program for HCM

More information: [Simplify your move](#)

The screenshot shows the SAP Customer Evolution Program for HCM website. The main headline is "Simplify your move from on-premise HCM to the cloud". Below this, it says "Migrate from traditional human capital management (HCM) software to cloud-powered SAP SuccessFactors solutions." There are two buttons: "Request a meeting" and "Calculate your potential savings". A green bar for "SuccessConnect" is visible. Below that, it says "Move to the cloud with proven expertise that only SAP can offer".

A video player showing two people in a video call. On the left is Bonnie Tinder, Founder & CEO of Raven Intelligence. On the right is Keith Clark, Director of Human Resources at MANN + HUMMEL. A large play button is centered over the video.

Understand the economic benefits of moving to the cloud

The document is titled "Analyzing the Economic Benefits of Moving from SAP ERP HCM to SAP SuccessFactors HXM". It features a bar chart showing various metrics. The text on the page discusses the economic benefits of moving to the cloud, including increased operational efficiency and cost savings.

A video player showing a woman in a white jacket and green scarf speaking. The video is titled "Hire to Retire - Strategy, Implementation, and Operations" and is part of the openSAP Learning Center. The video player shows a progress bar at 00:10.

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

Human Resources: Delta scope 2023 - Details

Employee Administration

Training Management*

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:

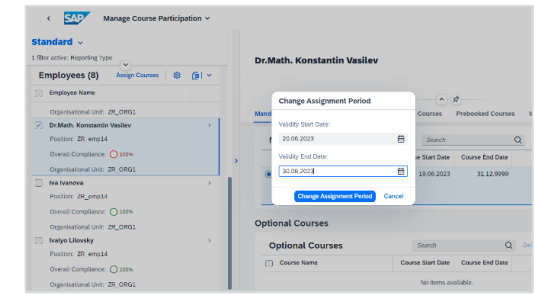
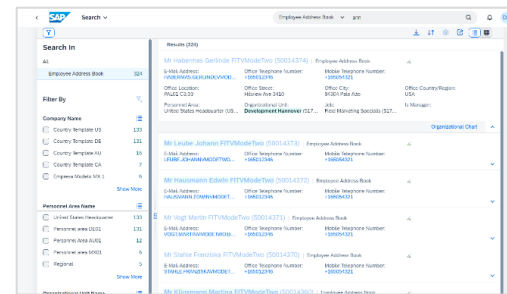
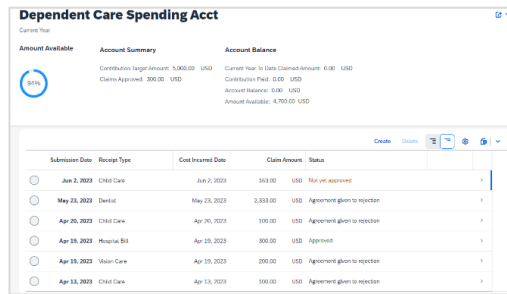
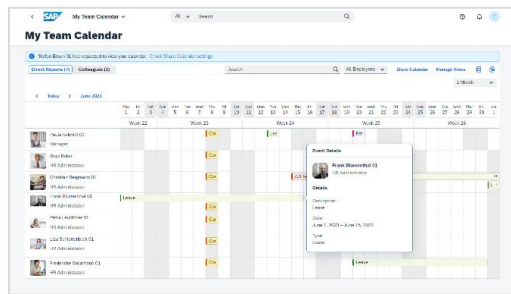
- Get an overview of all FSA claims
- Create new FSA claims
- Update existing FSA claims
- Delete existing FSA claims
- Accept the rejected FSA claims

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

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.

For further information, refer to SAP Note [3304275](#)



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, [F1309E](#). 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

- 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

The screenshot displays two SAP 'Compare Schemas' windows. The top window compares schema ZRA1 (Initialization of payroll) against the standard schema UI00. The bottom window compares ZRAU (US Payroll) against U000. Both windows use a tree structure on the left to navigate through schema levels and a table on the right to compare function details. Key differences are highlighted: 'text changed' in yellow and 'Read tax data' in red. The bottom window also shows a difference in parameter '2' for function P0207.

Schema hierarchy	Function	Par.1	Par.2	Par.3	Par.4	Text
Initialization of payroll	BLOCK	BEG				Initialization of payroll
	PGM	ABR				text changed
	UPD	YES				Database updates performed
	OPT	INJET				Read only processed info...

Schema hierarchy	Function	Par.1	Par.2	Par.3	Par.4	Text
Initialization of payroll	BLOCK	BEG				Initialization of payroll
	PGM	ABR				Program type payroll
	UPD	YES				Database updates performed
	OPT	INJET				Read only processed info...

Schema hierarchy	Function	Par.1	Par.2	Par.3	Par.4	Text
Initialization of payroll	BLOCK	BEG				Basic data process
	ENAME					Retrieve employee
	WPBP					Read org. assignm
	P0002					Read personal dat
	P0006					Read address
	GON					Continue with com
	P0014	UW14	GEN	NOAB		Split WPBP and se
	PRINT	NP	NAM			Print employee nar
	PRINT		WPBP			Print org. assignm
	PRINT		TAXR			Print resident auth
	PRINT		PERM			Print personal data
	IF		SPRN			If special run
	RFRSH		IT			Clear internal table
	ENDIF					Endif
	BLOCK	END				

Schema hierarchy	Function	Par.1	Par.2	Par.3	Par.4	Text
Initialization of payroll	BLOCK	BEG				Basic data pro
	ENAME					Retrieve empl
	WPBP					Read org. assi
	P0002					Read persona
	P0006					Read address
	P0207	2				Read tax data
	GON					Continue with
	P0014	UW14	GEN	NOAB		Split WPBP ar
	PRINT	NP	NAM			Print employe
	PRINT		WPBP			Print org. assig
	PRINT		PERM			Print personal
	IF		SPRN			If special run
	RFRSH		IT			Clear internal
	ENDIF					Endif
	BLOCK	END				

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

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)

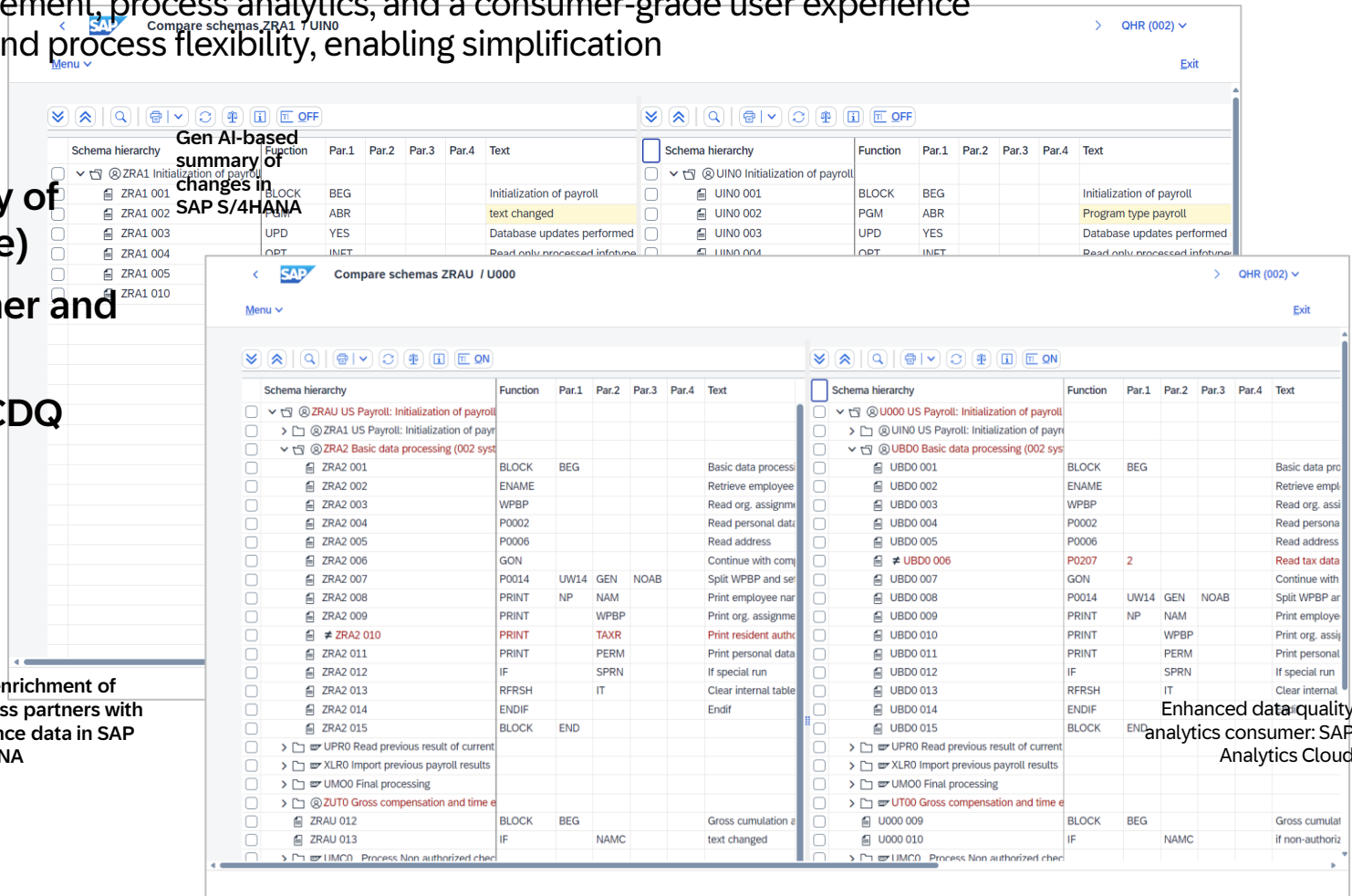
Data Quality Analytics 2.0 for business partner and product master data

Mass enrichment of business partner from CDQ reference data

Continuous Improvements

Mass enrichment of business partners with reference data in SAP S/4HANA

Enhanced data quality analytics consumer: SAP Analytics Cloud



Cross-topics: Generative AI for assisted changes/summary of changes in central governance (classic mode)

Feature Highlights

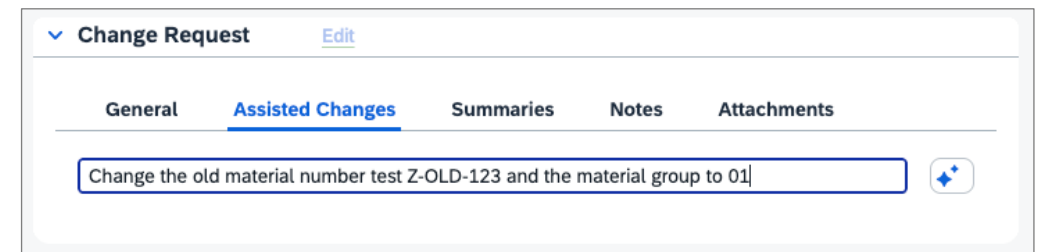
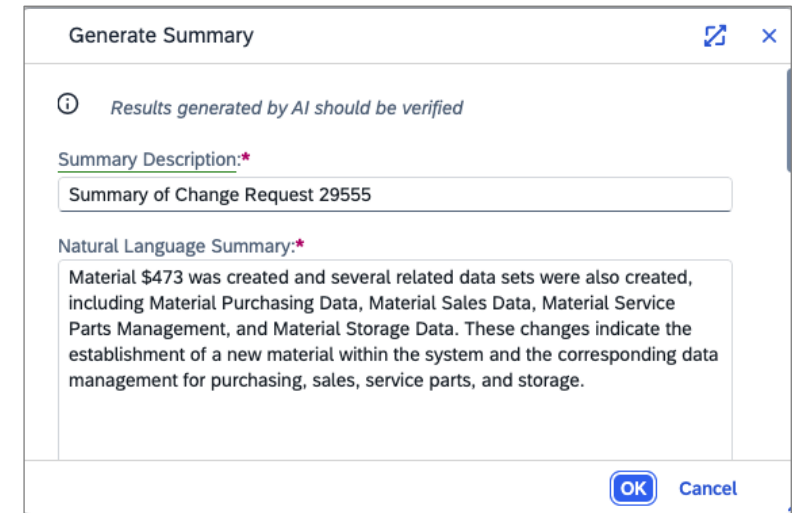
Summarize Changes:

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

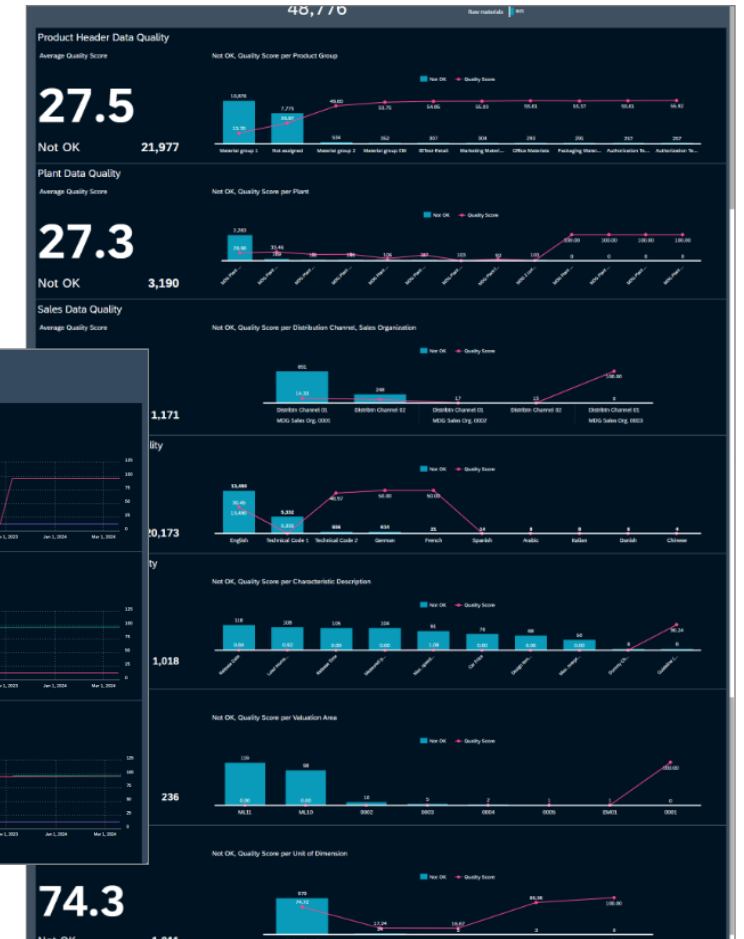
Feature Highlights

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

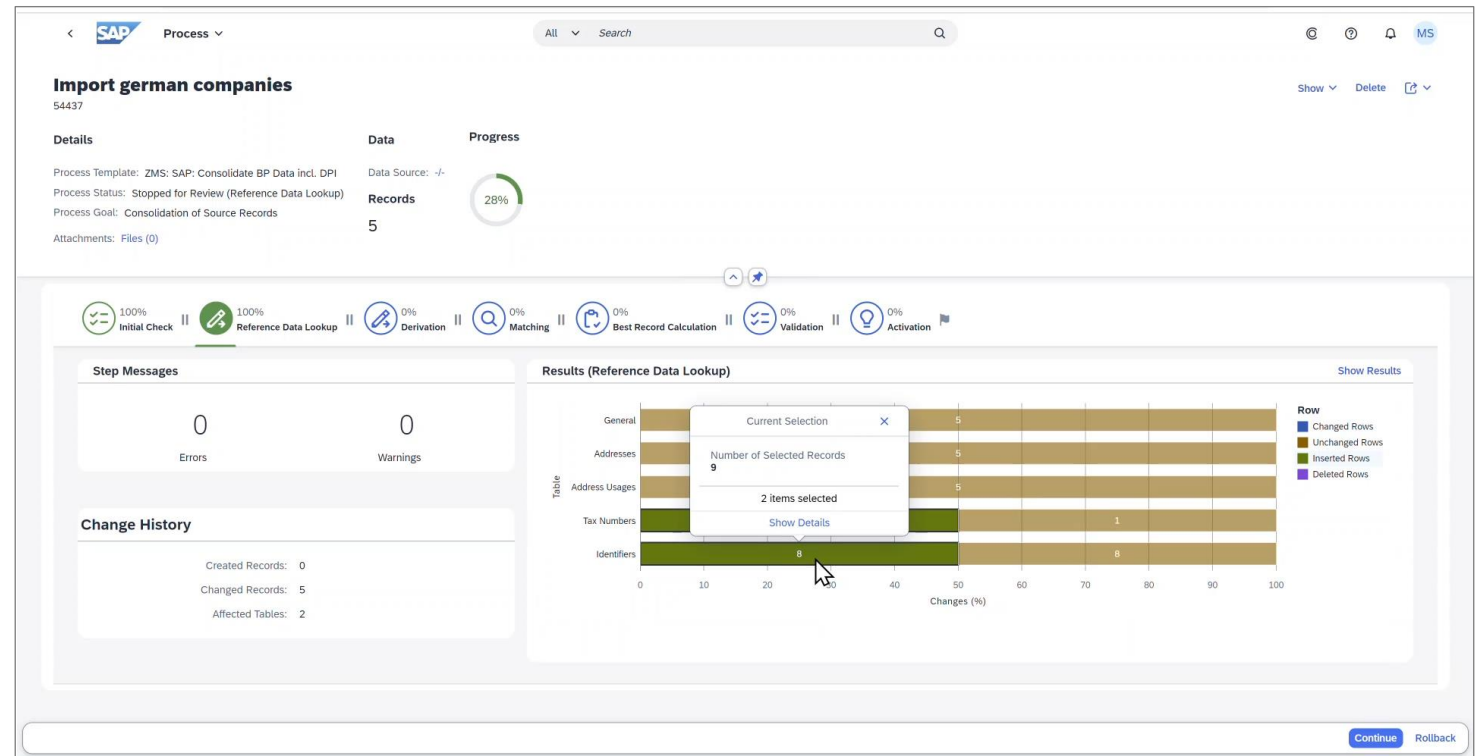
Cross-topics: Mass enrichment of business partners from CDQ reference data

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



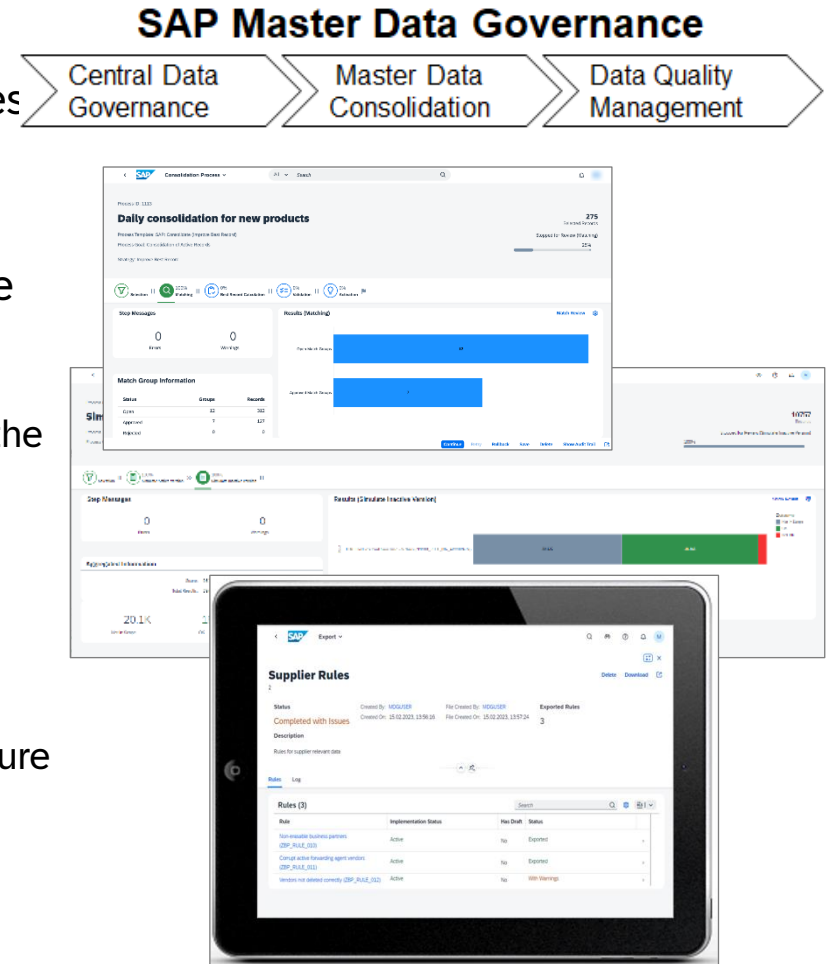
Cross-topics: Master Data Governance Summary

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)

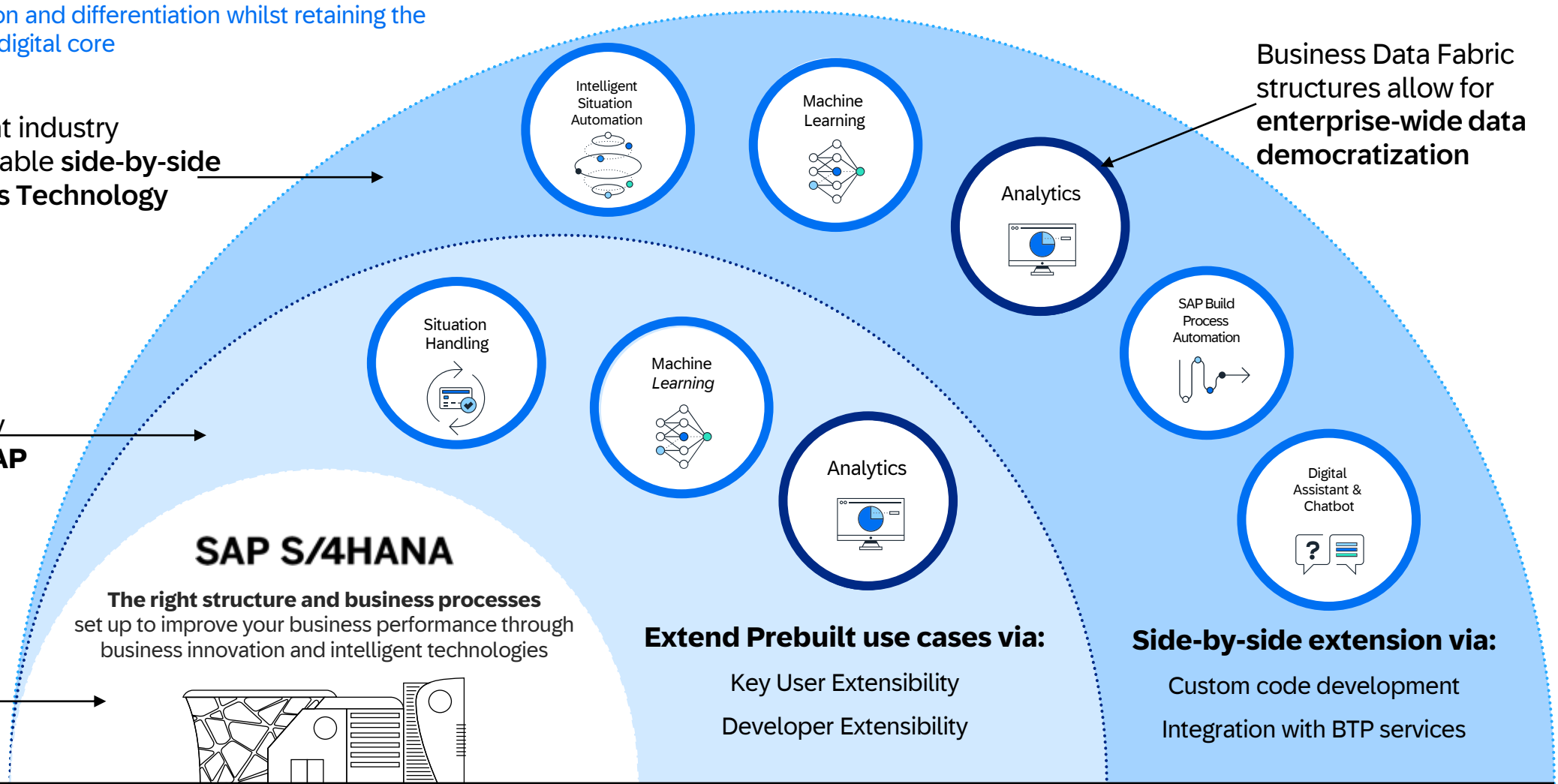
Comprehensive extensibility capabilities to allow cloud lifecycle compliant innovation and differentiation whilst retaining the benefits of a clean digital core

Find all scenarios here:
<https://d.dam.sap.com/a/hHzXdEW?rc=10>

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



SAP S/4HANA

The right structure and business processes set up to improve your business performance through business innovation and intelligent technologies

Extend Prebuilt use cases via:

- Key User Extensibility
- Developer Extensibility

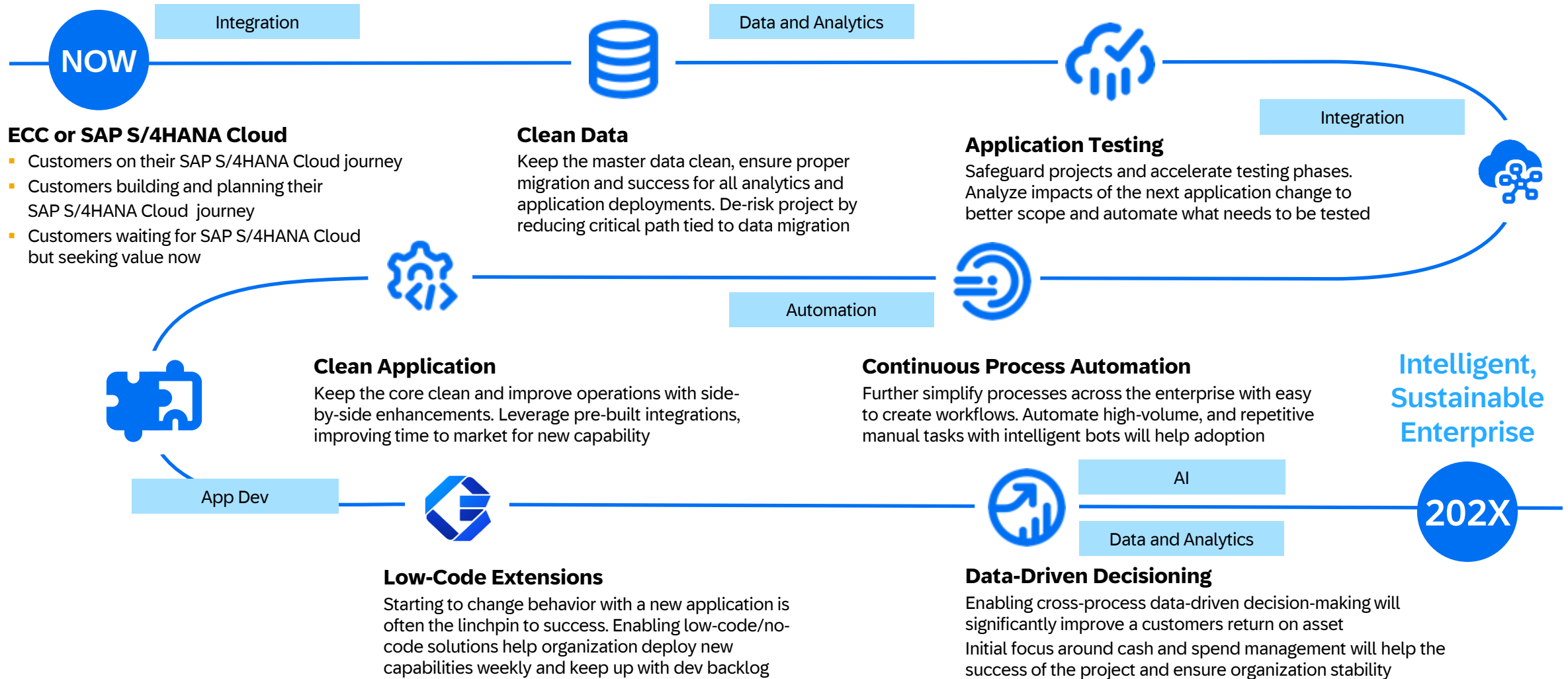
Side-by-side extension via:

- Custom code development
- Integration with BTP services

Business Data Fabric structures allow for enterprise-wide data democratization

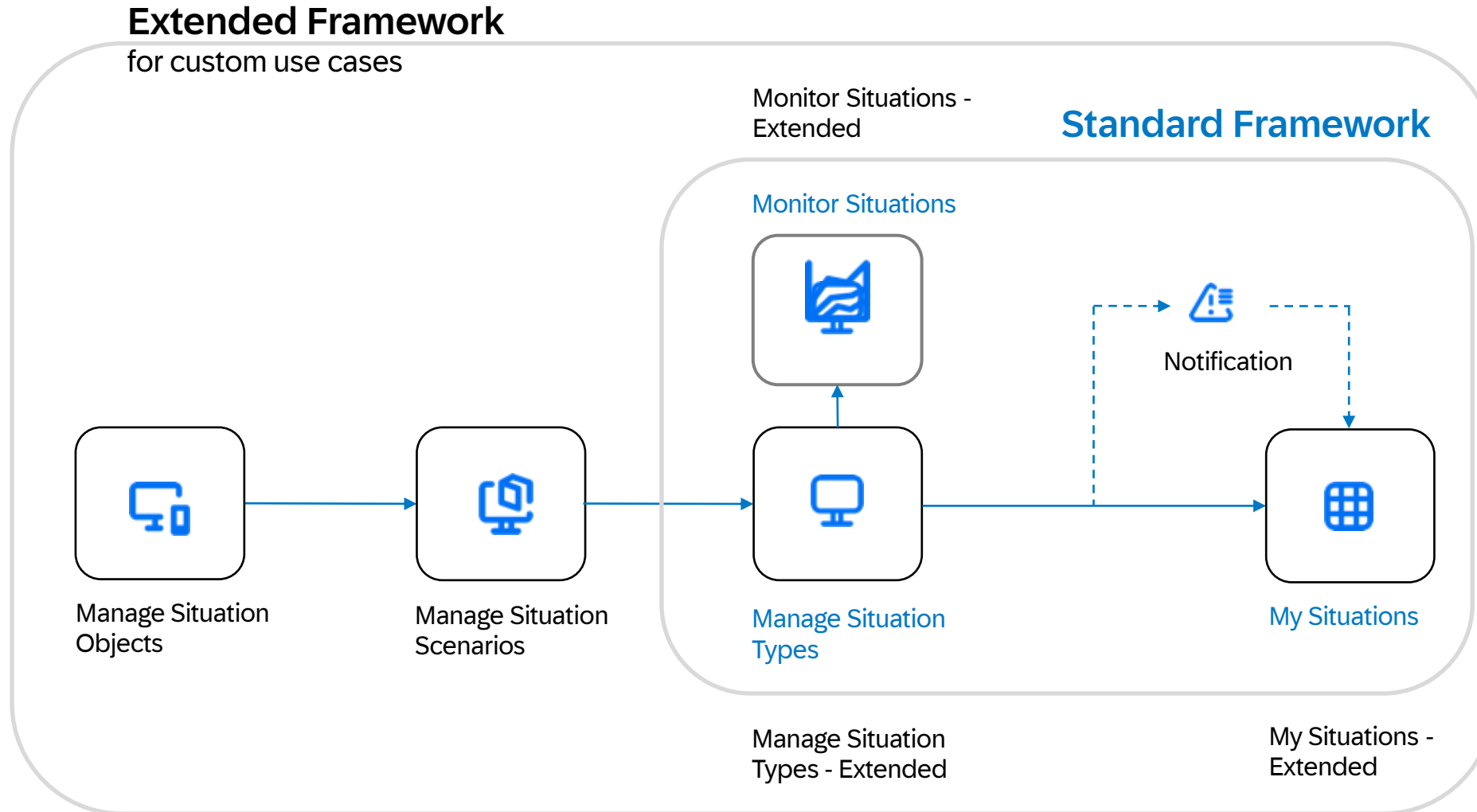
Cross-topics: BTP Helps Accelerate Transformation to an Intelligent Enterprise

How to get from an SAP ECC to an SAP S/4HANA Cloud environment and keep the speed



Cross-topics: Situation Handling

Standard and extended framework



Cross-topics: SAP User Experience in SAP S/4HANA Cloud SAP Collaboration Manager (Releases 2023, and beyond)

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.

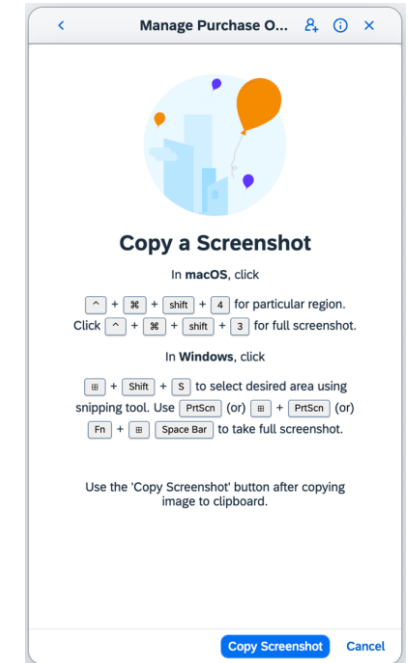
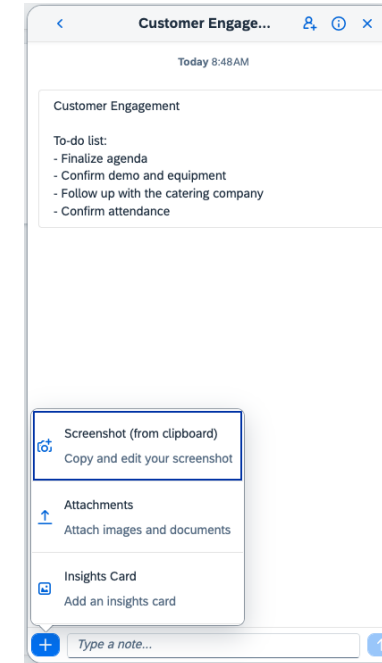
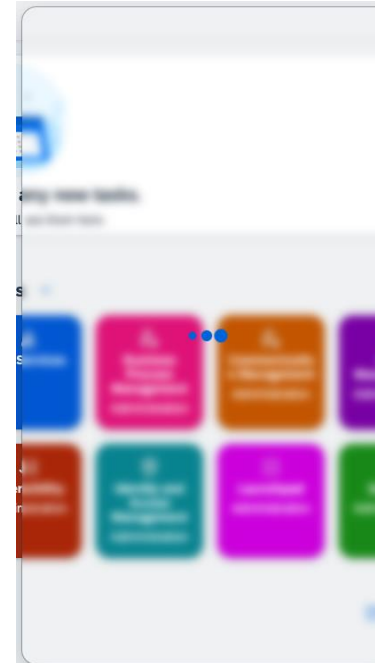
For more information, see: [Integrating SAP Collaboration Manager](#), or [SAP Collaboration Manager Will Replace SAP CoPilot in SAP S/4HANA Cloud and SAP S/4HANA](#)

The screenshot displays the SAP Fiori Collaboration Manager interface. On the left, a 'My Inbox' sidebar lists several tasks, including 'Approve Purchase Requisition' and 'Release of Sales Order'. The main area shows a task titled 'Approve Purchase Requisition 10037315 00020' with a chat window overlaid on top. The chat window, titled 'Approve PR00020', shows a conversation between 'Paul Peterson' and 'Vedim Pavlak'. Paul Peterson asks, 'Hi Paul, can you please help approve this?' and Vedim Pavlak responds, 'Did it, Approved.' Paul Peterson then says, 'Thanks, Paul!'. The chat window also shows a 'Send' button and an 'Add a message...' input field. The background task screen displays details for the purchase requisition, including 'Unit of Measure: PC', 'Material Group Description: Raw Materials (L002)', and 'Quantity: 1,000,000'.

Cross-topics: SAP Collaboration Manager

Provide a modern interface which is more intuitive, user-friendly, and engaging

- 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

The screenshot shows the SAP 'Manage Sales Orders - Version 2' interface. A 'Share to Microsoft Teams' dialog box is open, allowing the user to share the current view with a Teams channel. The dialog includes a 'Share to' dropdown menu with 'Sales Processing' selected, a text area for a message, and a 'Share' button. The background shows a list of sales orders with columns for Net Value, Document Date, and Delivery Block.

Net Value	Document...	IF
70.736,00 USD	02/25/2023	>
70.736,00 USD	02/24/2023	>
440.332,00 USD	02/24/2023	>
700,17 USD	02/24/2023	>
700,17 USD	02/24/2023	>
220.608,00 USD	02/23/2023	>
220.608,00 USD	02/23/2023	>
149.872,00 USD	02/22/2023	>

The screenshot shows the Microsoft Teams interface with the SAP 'Manage Sales Orders - Version 2' app integrated into a Teams channel. The app displays the same list of sales orders as the previous screenshot, with columns for Sales Order, Sold-to Party, Customer Reference, and Requested Delivery Date. The Teams interface includes a search bar, a list of teams, and a 'Meet' button.

Sales Order	Sold-to Party	Customer Reference	Requested Delivery...
325604	SK Vision Corp-C (1000294)	20230225	02/28/2023
325603	SK Vision Corp-C (1000294)	20230224	02/27/2023
325602	SK Vision Corp-C (1000294)	20230224	02/27/2023
325601	Tech Bike Corp-W (1000292)	20230224	02/26/2023
325600	SK Vision Corp-C (1000294)	20230224	02/27/2023

Share **access to critical 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

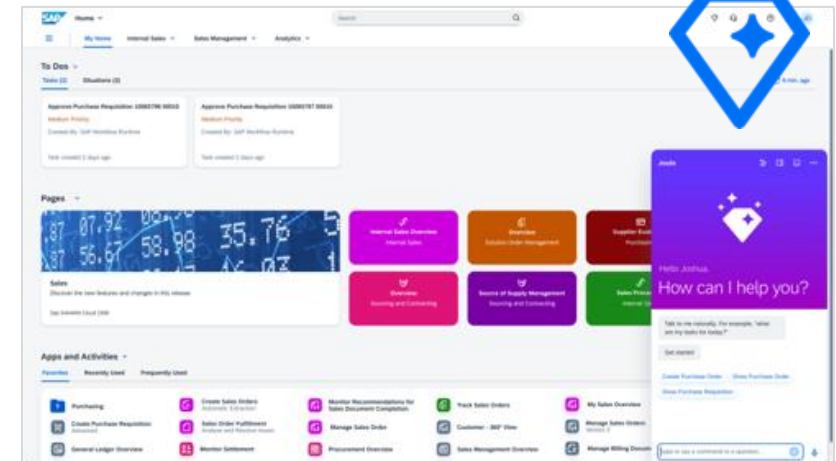
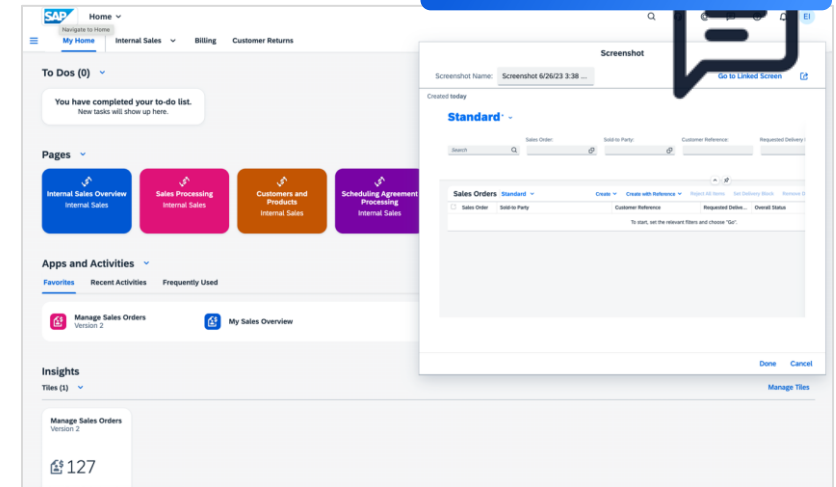
Joule Human-to-Machine (H2M) communication

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.

SAP Joule
Navigation



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:

The screenshot displays the SAP Responsibility Management interface. It is divided into several sections:

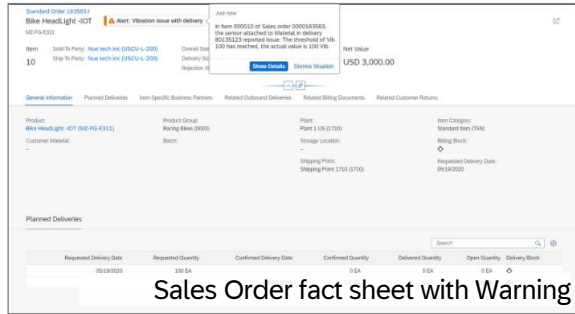
- Left Panel:** A list of teams under the 'Standard' profile. A search filter 'Procurement' is applied. A 'Team Members' section is visible. A callout circle highlights the 'Replace Team Member' button.
- Center Panel:** A tree view of 'Team Hierarchies'. The tree shows categories like 'OPERATIONAL PROCUREMENT', 'OFFICE SUPPLIES', 'IT EQUIPMENT', 'STRATEGIC PROCUREMENT', and 'FREE TEXT ORDERS'. A callout circle highlights the 'Manage Sub Teams' button.
- Right Panel:** A 'Team Member Authorization Status' table. It shows columns for 'Team Member', 'Pub. Title', 'Last ID', 'Max. No.', 'Status', and 'Action'. Two rows are shown, both with 'Authorized' status. A callout circle highlights the 'Authorized' status.

Additional callouts include 'Changed By BusinessPr' and 'Manage Teams and Responsibilities' pointing to the team list, and 'Manage Team Hierarchies' pointing to the tree view.

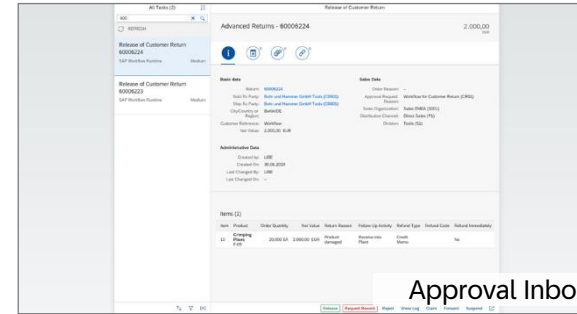
In 2023, Responsibility Management has delivered Write APIs that enable customers to create, update, delete teams and their details in Responsibility Management. For more information, see https://help.sap.com/docs/SAP_S4HANA_ON-PREMISE/a156fdaa471548bba5cd0bbaaec9b6bd/b211414de1eb41a69b4a477dc4009083.html?locale=en-US

Cross-topics: Responsibility Management in Business Processes

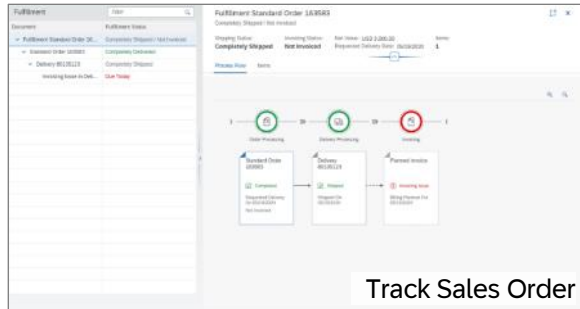
Ship the delivery ---> Receive abnormal situation warning ---> Trigger customer return process ---> Approve return request ---> Compensate customer (credit memo/repl. material)



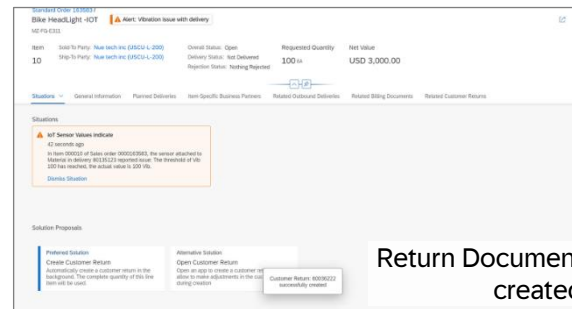
Sales Order fact sheet with Warning



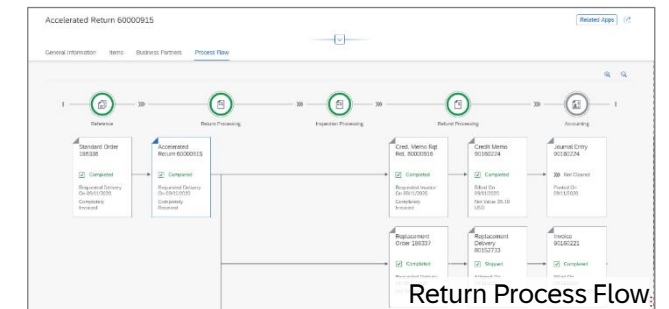
Approval Inbox



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

ID	Description	BADI Filter Value
AGENT_SELECTED	Fetch agent based on selection	CNV_FLT
AUTHORUSRAND	AuthOly to get User with AND	AUTHOBJA
AUTHORUSROR	AuthOly to get User with OR	AUTHOBJD
BSMAGT_SIT_USER	Determine M3C Connector Situation Notification User	BSMAGT_SIT_USER
EPPM_GET_PR_RESP	Get Project Responsible Users	PRIORESP
EPPM_PB_PA_RSM	Rule to determine project Accountant of project	
EPPM_PB_FC_RSM	Rule to determine project Controller of project	
EPPM_PB_PM_RSM	Rule to determine project Manager of project	
EPPM_PB_PP_RSM	Rule to determine project Partner of project	
EPPM_PFC_RSM	Rule to determine Project Financial Controller of project	
EPPM_PM_RSM	Rule to determine project manager of project	
EPPM_SCM_RSM	Rule to determine Steering Committee Member of project	

Manage Responsibility Contexts

ID	Type	Parent Context ID	Description
BEI_CONTEXT	SITU		
CA_ARUN_CANCEL_DATE_FORTHCOMING	SITU		Approaching Cancellation Date
CA_ARUN_CANCEL_DATE_PAST	SITU		Cancellation Date Exceeded
CA_ARUN_LATE_SUPPLY	SITU		Supply Arriving Late
CA_ARUN_QUANTITY_EXCEPTION	SITU		Order with Open Requirements
CA_ARUN_UNASSIGNMENT	SITU		Orders Unassigned
CA_ATP_SUP_MULTIMATCH	SITU		Multiple Matches in Supply Protection
CA_DATA_MIGRATION_STEP_COMPLETED	SITU		Data Migration Complete
CA_DIGITAL_ACCESS	SITU		
CA_DIGITAL_ACCESS_CONSUMED	SITU		
CA_OC_OUTPUT_ITEM_ERROR	SITU		
CA_RM_UNAVAILABLE_TEAM_MEMBER	SITU		Unavailable Team Member

Manage Team Categories

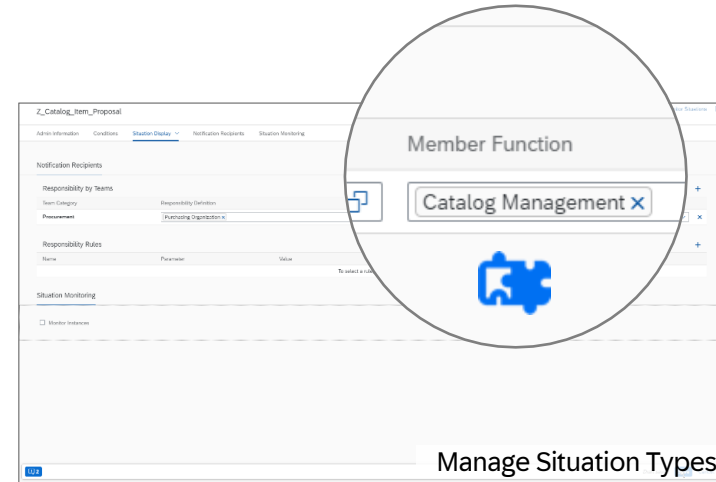
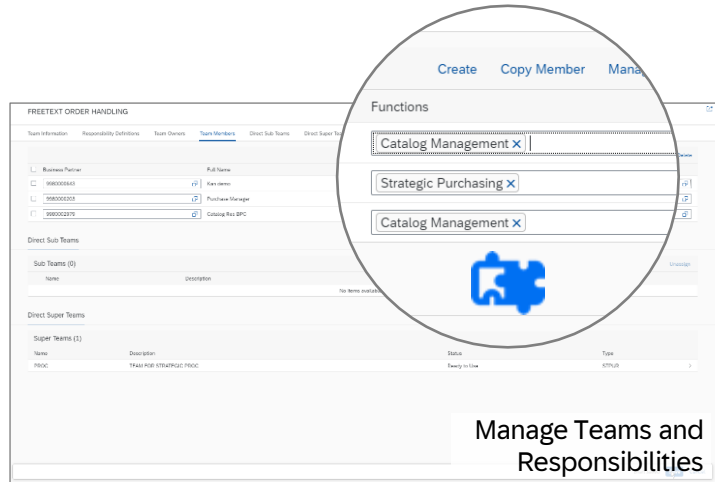
ID	Team Category Description
_JESI	Team Category Test for Situation(Test only)
ACR	Advanced Compliance Reporting
BCM	Bank Communication Management
BILLING	Billing
BSMAVC	Budget Management Availability Control
BSMAGT	SAP Multi-Bank Connectivity
CCM	Condition Contract Management
CFIN	Central Finance
COLL_INV	Collections Invoice Processing
CPROC	Central Procurement
DGACLICAUD	Digital Access License Audit
DUMMY	Dummy Team Category for testing purpose only
EAMTC	EAM Team Category For Situation Handling
EARMFUND	Earmarked Funds

Agility through flexible adaption of responsibilities and hierarchies allowing to alignment with business processes.

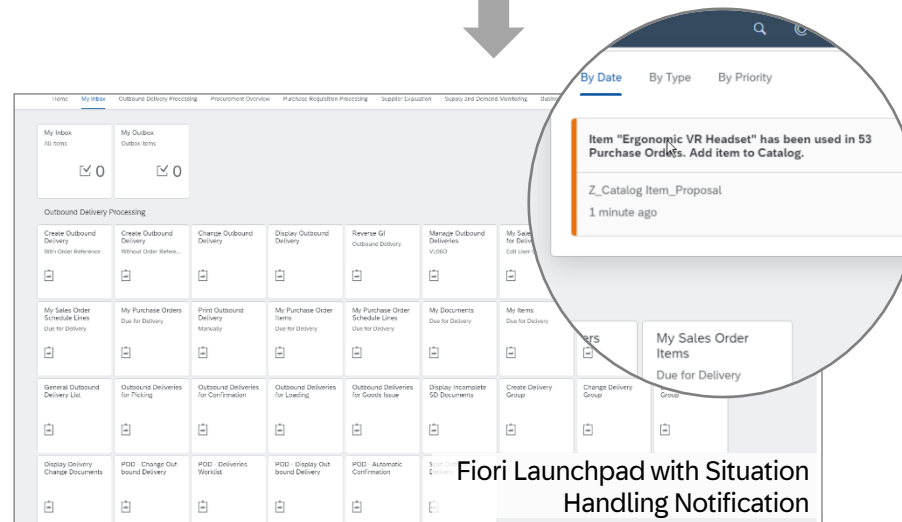
Centralized monitoring of responsibilities to directly react to organizational changes without disrupting processes.

Reduced implementation efforts and more flexibility with intuitive user interface allowing key users to do edits.

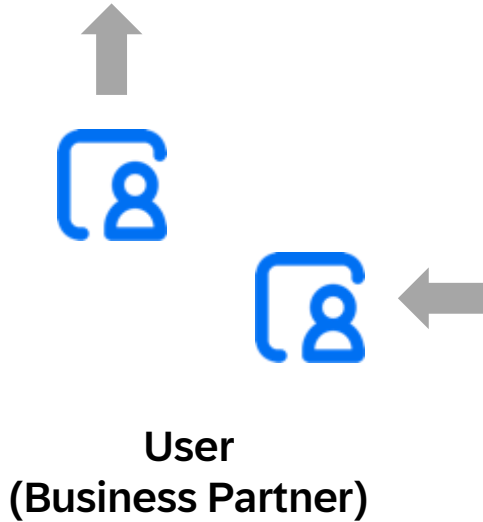
Cross-topics: Responsibility Management: Using Teams for situation handling



- Add users (Business Partners) to logical teams serving dedicated functions
- Define the recipients of Situation Handling Notifications via defined teams and functions

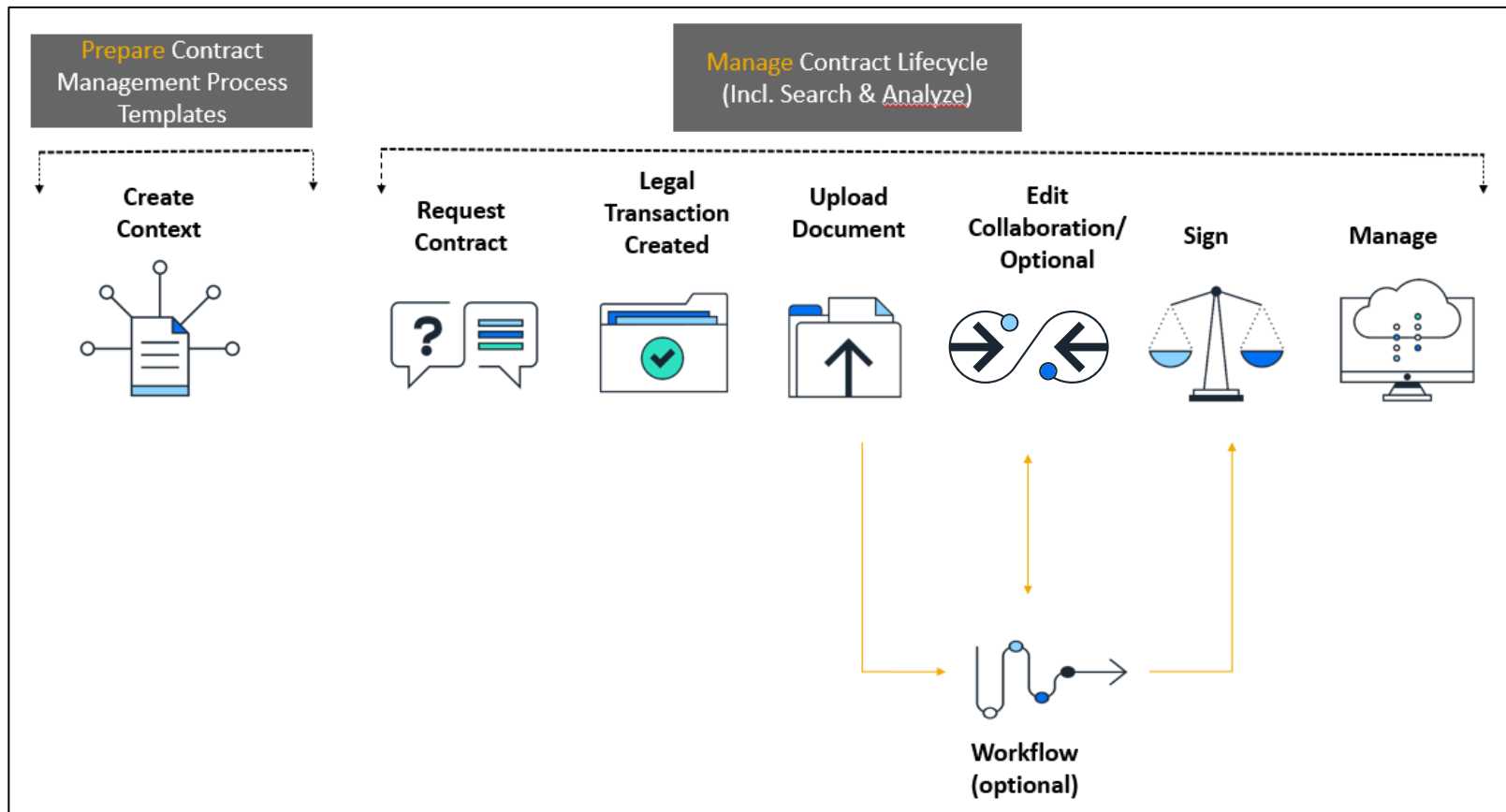


- Flexible management of teams, hierarchies, and responsibilities
- Monitoring and changes to team structure in one central place
- Decoupling of business partners from ultimate function for more resilient business processes



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)

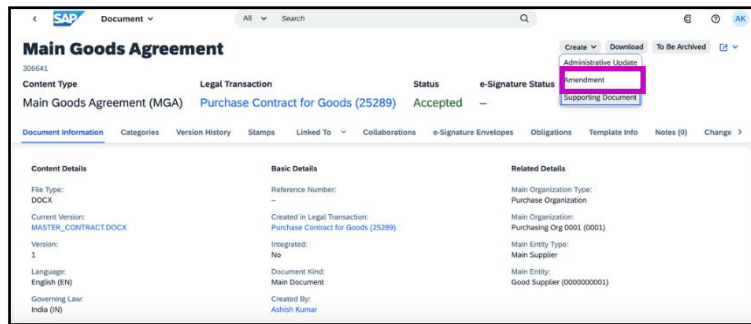


Cross-topics: SAP S/4HANA for Enterprise Contract Management - 2

2023
FPS0+1

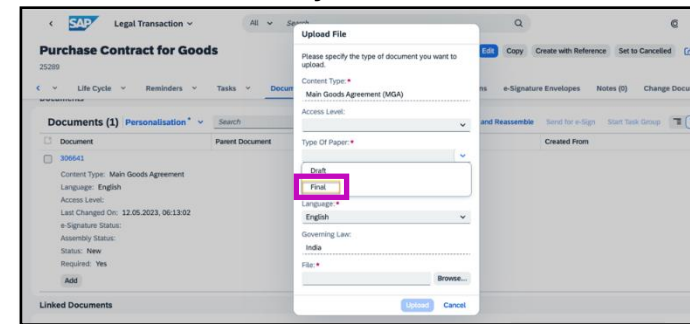
Create amendment for main contract

- Users can now correct, change, add or delete content in the existing contracts that have already been signed.



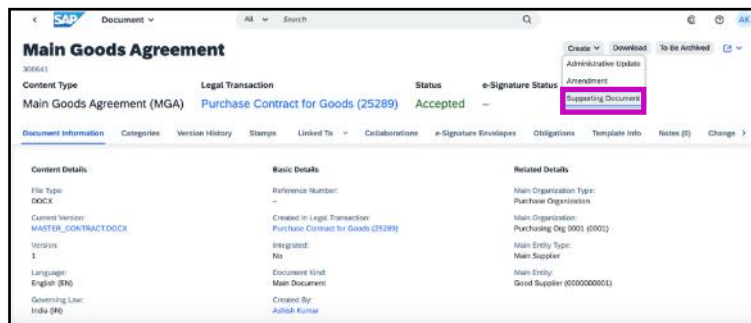
Upload signed copy of contract to legal transaction

- 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.



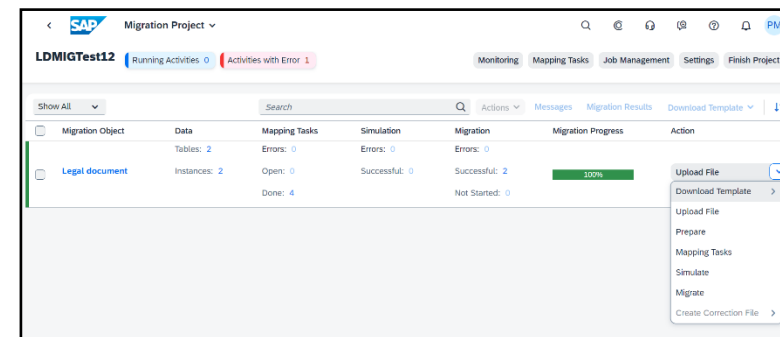
Upload supporting documents for main contract

- 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.

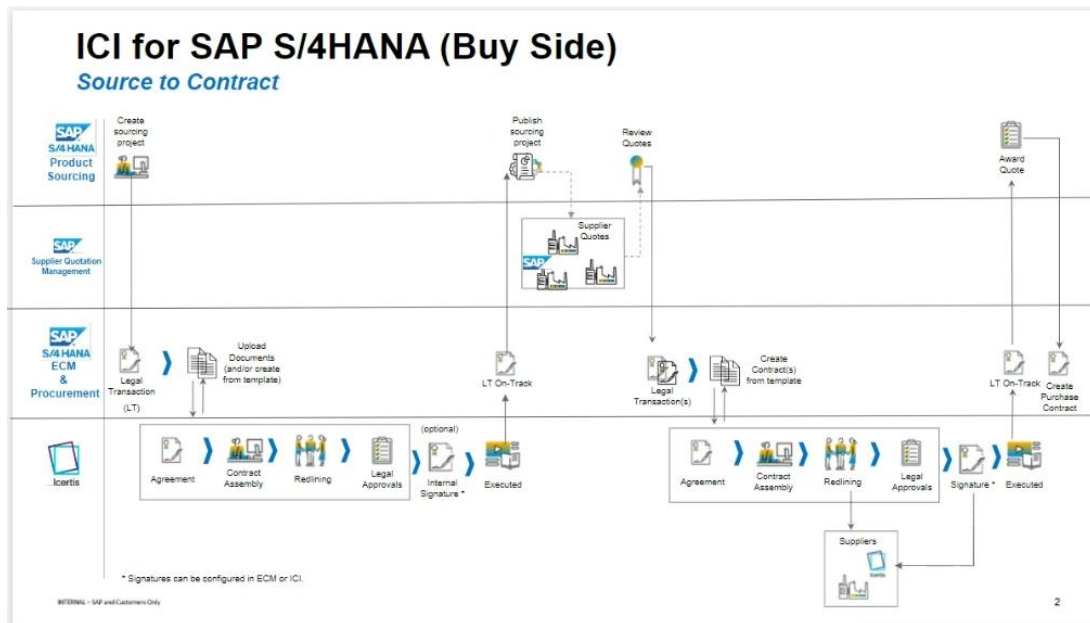


Cross-topics: SAP S/4HANA for Enterprise Contract Management - 3

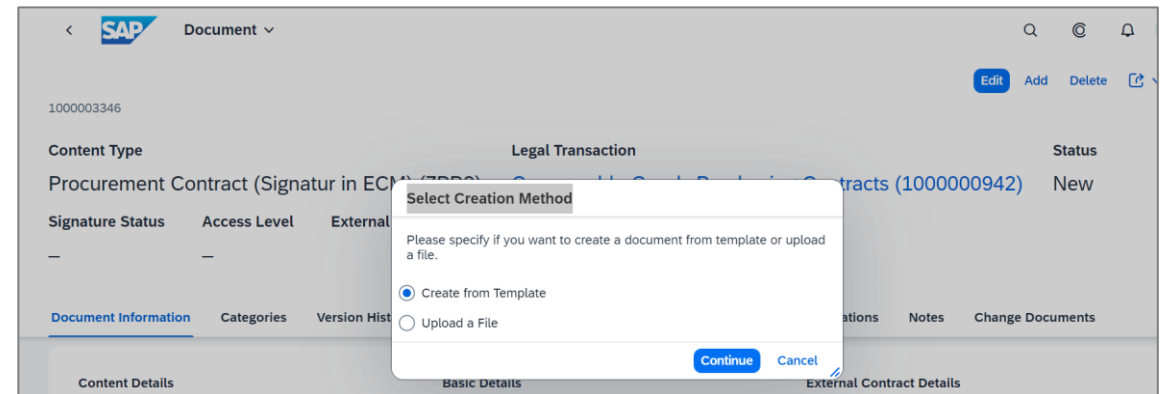
2023
FPS2

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.



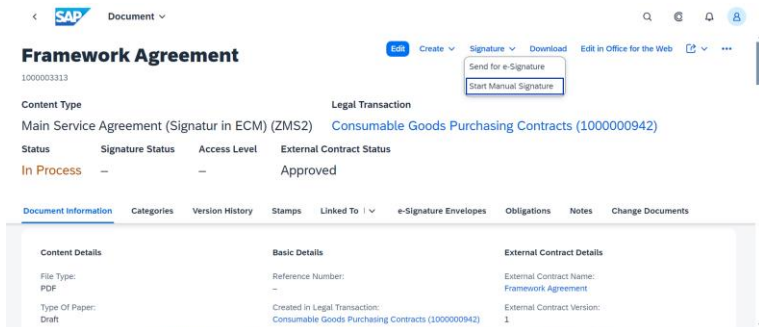
- Users can now create a document with the help of a template or by uploading content, using the integration scenario.



Cross-topics: SAP S/4HANA for Enterprise Contract Management - 4

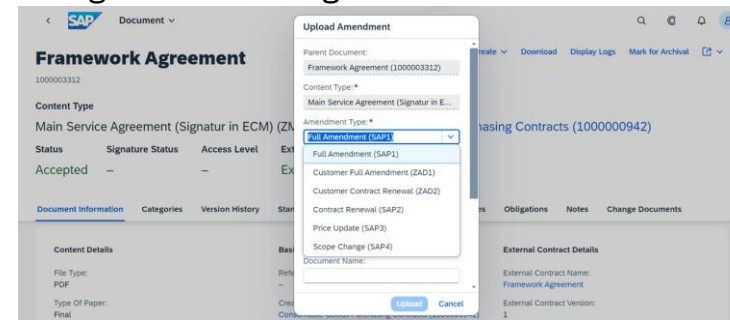
New signature options for legal contracts

- Users can now select whether signature is required for contract and choose between manual signature or e-signature for legal contracts.



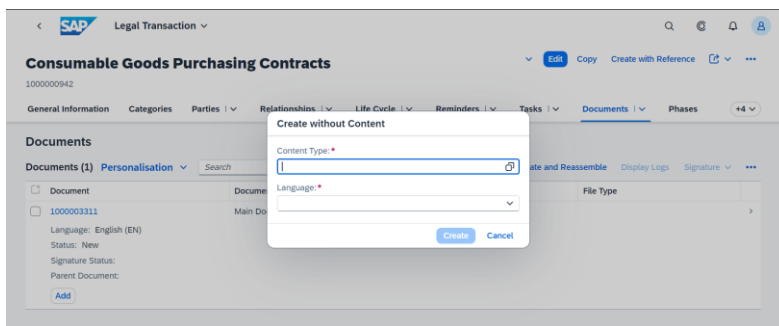
Choose the amendment type for a main document

- 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.



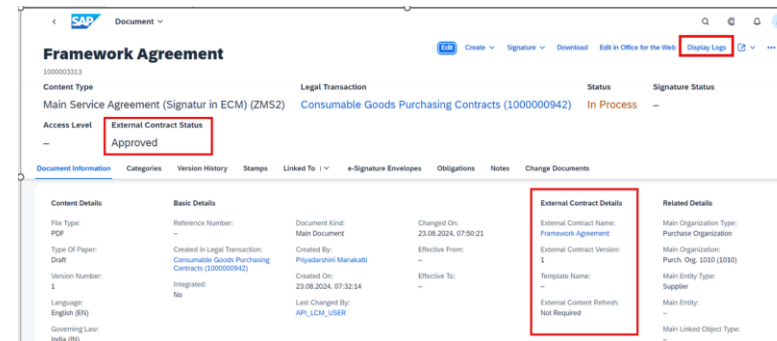
Creation of optional document without content

- 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

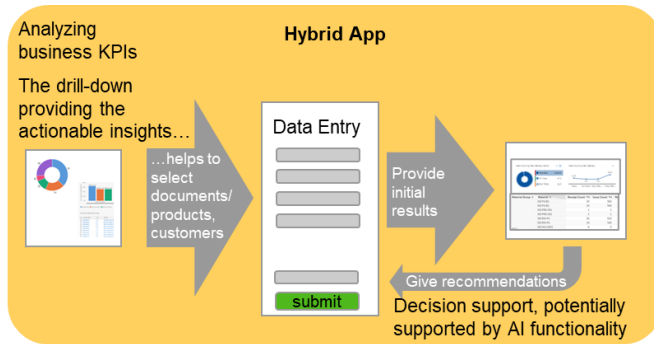
- Users can now view the status details of external contracts and check the logs to trace the latest operations performed with respect to the Icertis Contract Intelligence system.



Cross-topics: Embedded Analytics: The basics you need to know

Concepts

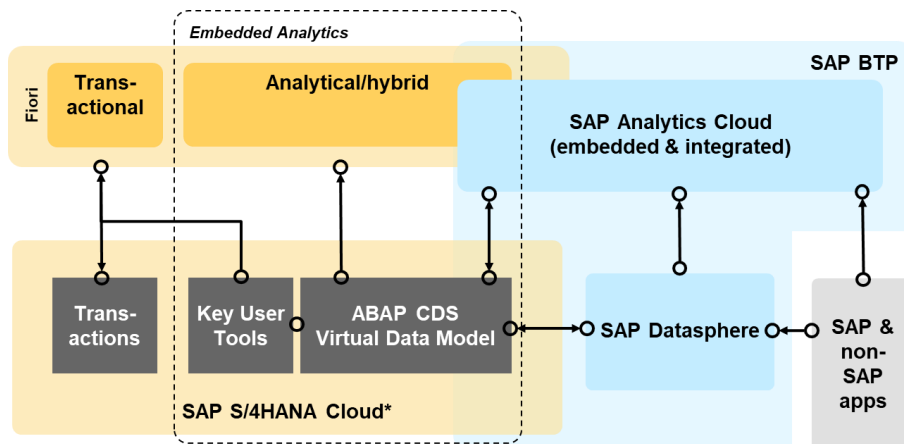
Enhanced ERP process example:



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

Architecture



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.”

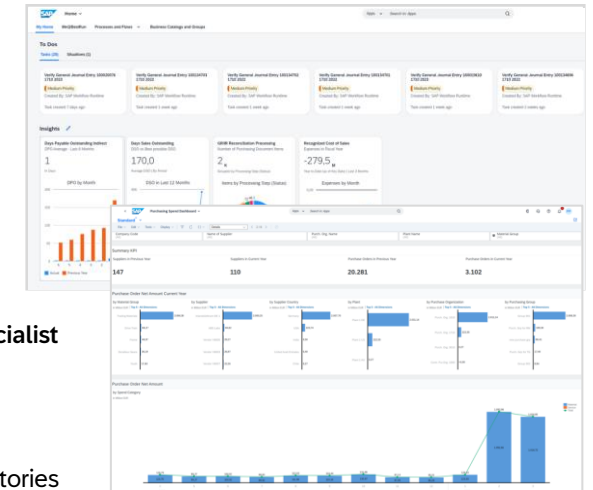
Functionality

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

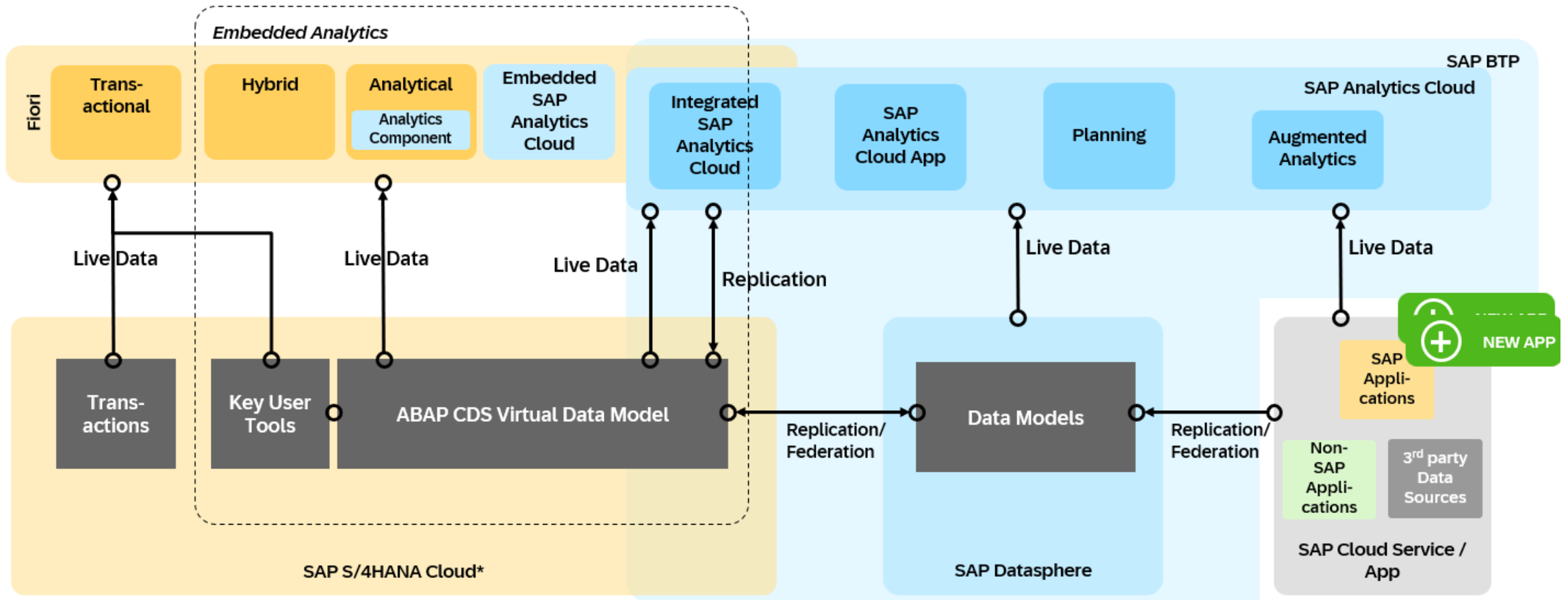
Key user tools for the Analytics Specialist

- 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



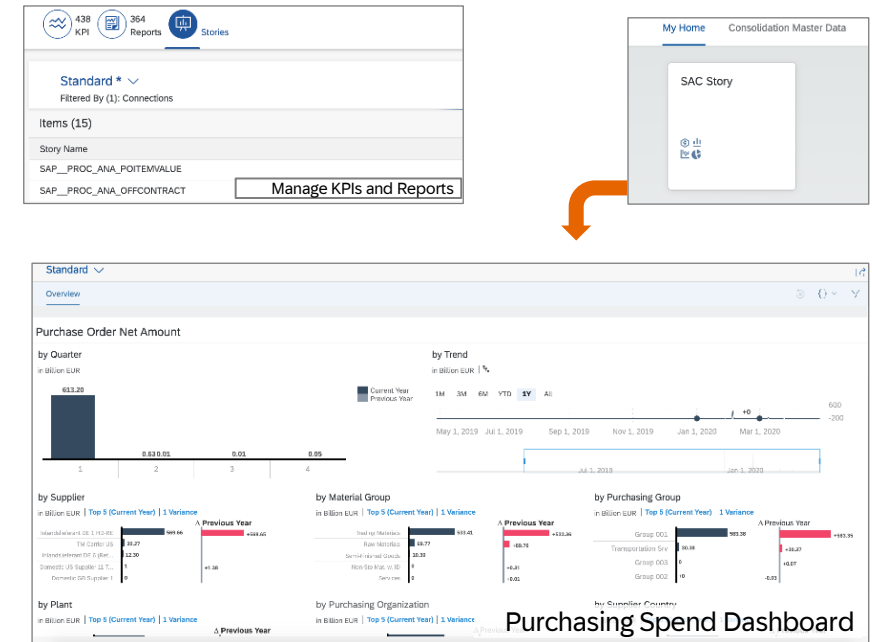
*including SAP S/4HANA Cloud Public Edition, SAP S/4HANA Cloud Private Edition, and on-premise deployments of SAP S/4HANA

Cross-topics: Embedded Analytics



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.

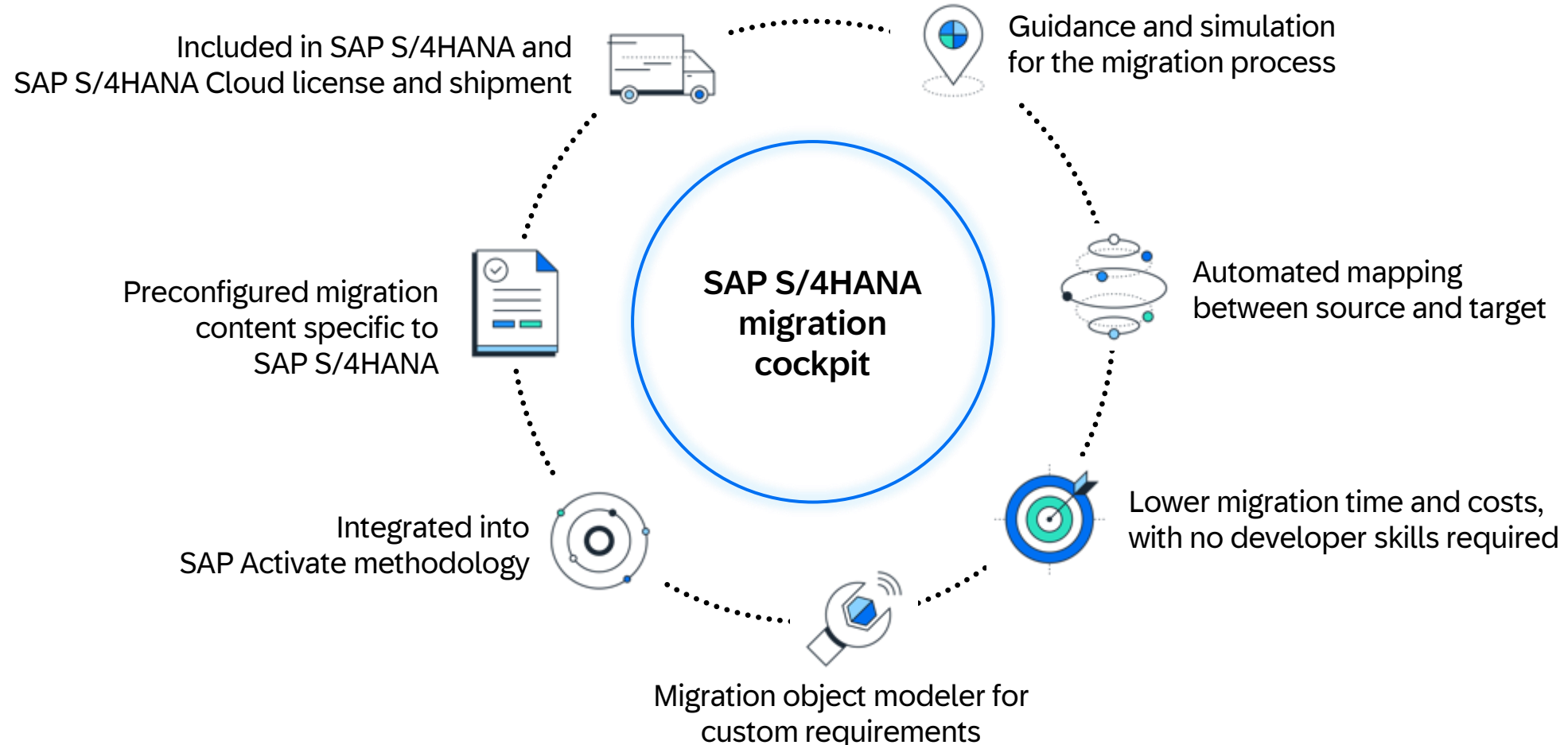
Latest functionality added for this release:

- 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

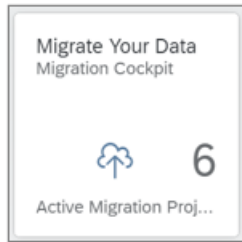
- Staging tables are created automatically in SAP HANA DB (either locally or in a remote system)
- Populate these staging tables with business data using:
 - XML template files
 - CSV template files
 - SAP or third-party ETL tools

Migrate Data Directly from SAP System (Direct Transfer)

- 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

SAP Fiori App Migrate Your Data



Process & content

1. General Data

Here, you specify general information about the migration project.

Migration Approach: Migrate Data Using Staging Tables

Name: Migration Project x

Mass Transfer ID: M4A

Database Connection: Local SAP S/4HANA

Migration Object	Data	Mapping Tasks	Simulation	Migration	Migration Progress	Action
Bank	Tables: 1 Instances: 463	Errors: 0 Open: 0 Done: 3	Errors: 0 Successful: 0	Errors: 0 Successful: 463	100%	Upload File
CO - Profit center	Tables: 2 Instances: 10000	Errors: 0 Open: 1 Done: 7	Errors: 0 Successful: 20	Errors: 0 Successful: 0 Not Started: 10000	Migration Not Started	Mapping Tasks
Product	Tables: 27 Instances: 4	Errors: 0 Open: 4 Done: 10	Errors: 1 Successful: 0	Errors: 0 Successful: 0 Not Started: 4	Migration Not Started	Mapping Tasks

Data load



SAP S/4HANA Cloud
Private Edition



SAP S/4HANA

Staging Tables

Staging Tables

- Excel XML
- CSV
- ETL tools of choice

Direct Transfer

- SAP ERP 6.0
- SAP APO
- SAP AFS
- SAP CRM
- SAP EWM

+220 Migration objects Staging



+255 Migration objects Direct Transfer

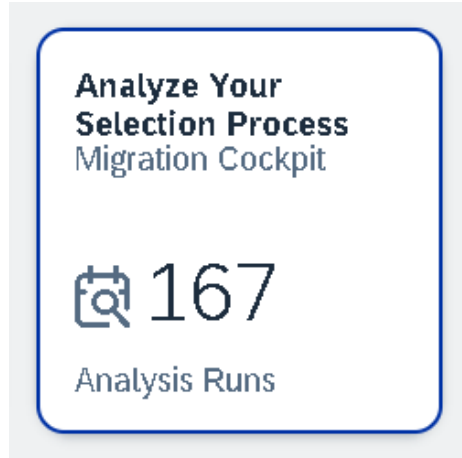


Cross-topics: Migration Cockpit, Direct transfer

Analyze Your Selection Process App

2023
FPS2

Analyze project transfers
in Migration Cockpit



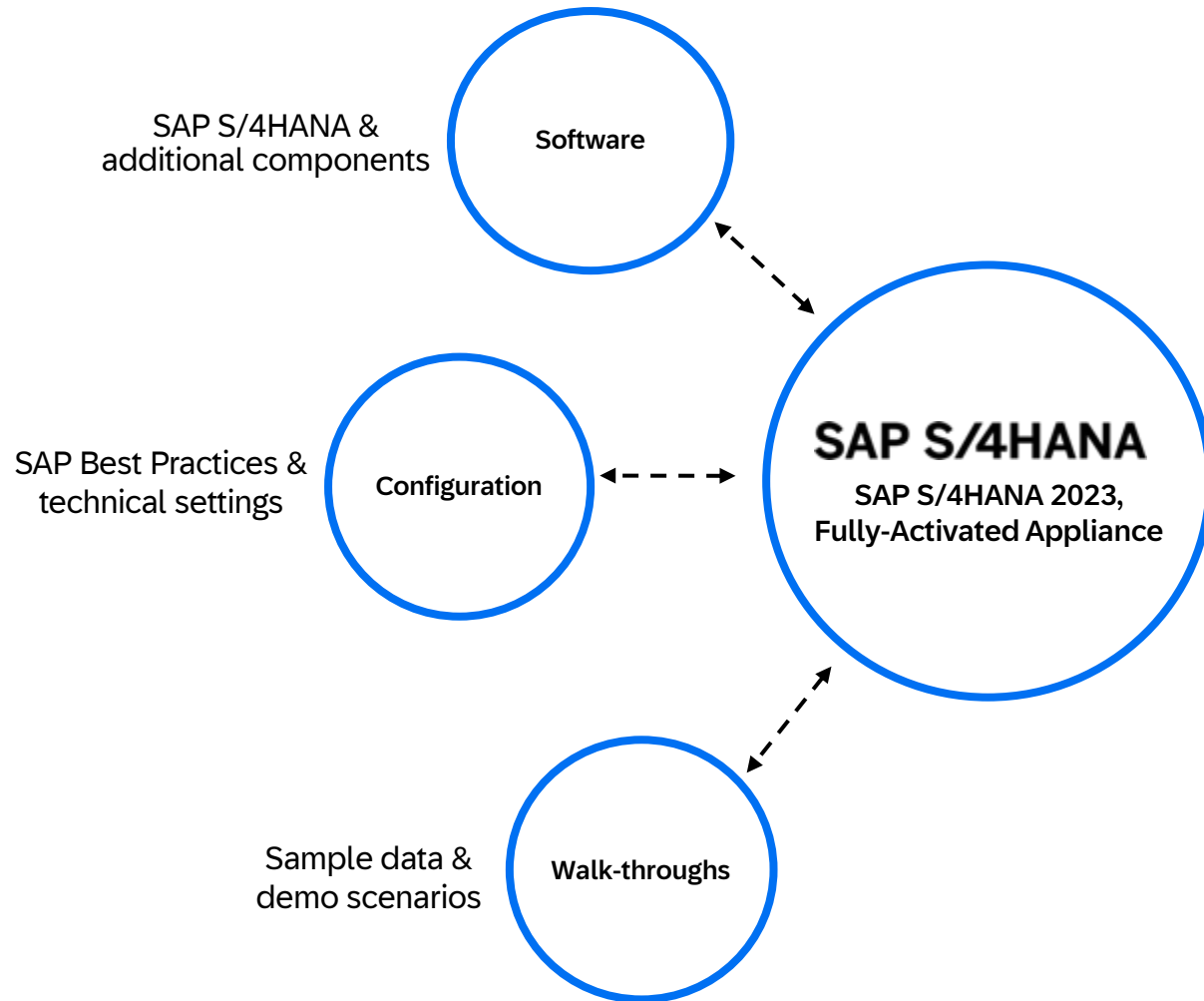
New

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



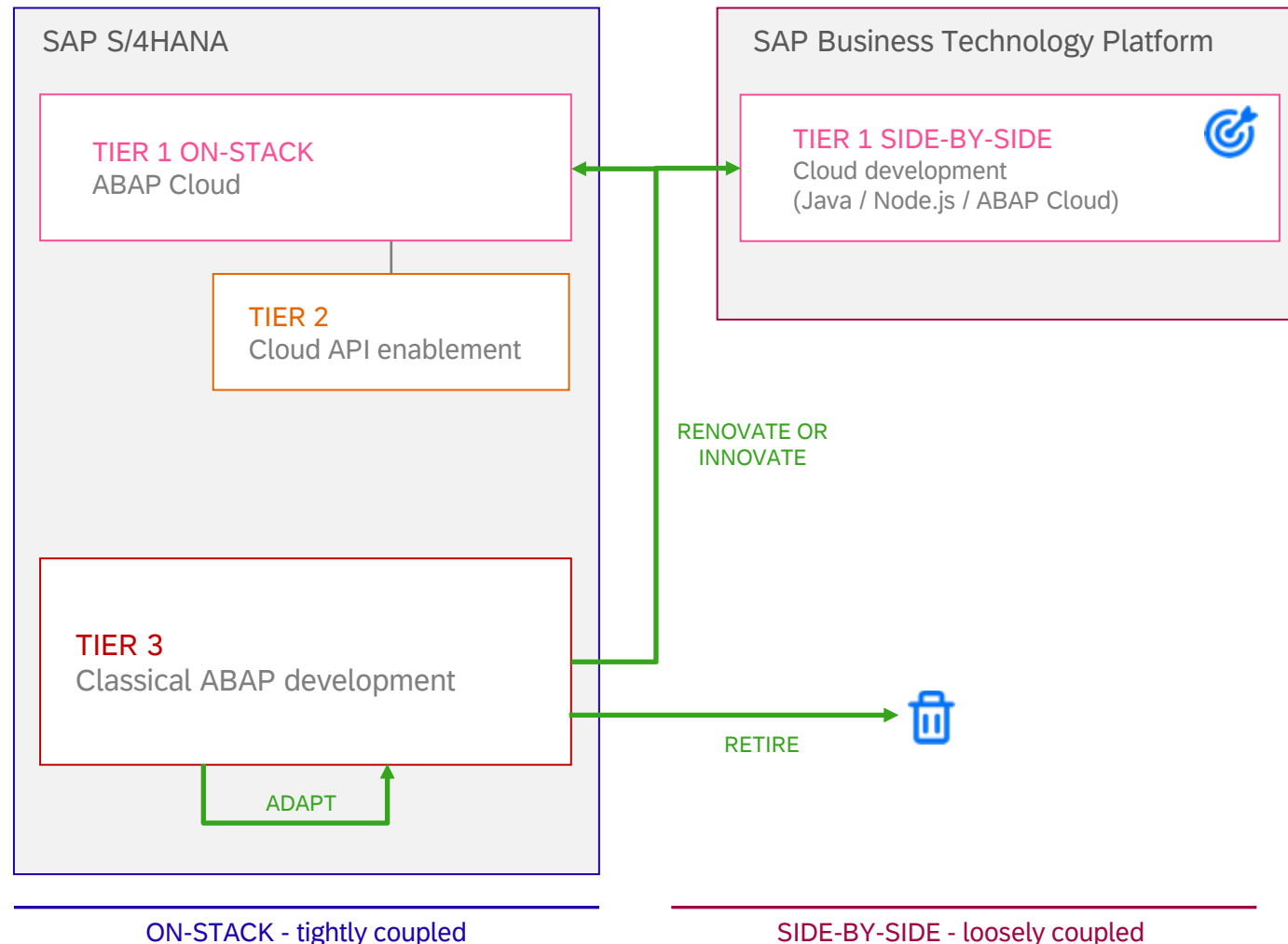
Open to customers, partners, public users, and SAP employees

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

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 <small>(Onboarding Advisor)</small>	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 <small>(flat entitlement)</small>	X <small>(dynamic entitlement)</small>
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:



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 Product	SAP S/4HANA Cloud Public Edition
Release Cycles	quarterly (e.g. 2402)
Minimum Upgrade Frequency	quarterly
UX	SAP Fiori
Deployment Types	new implementation
SAP Best Practices	yes
Configuration Options	Self-Service and Expert Configuration
Custom Code	no
Modification of SAP code	no
3 rd Party Add-ons	certified Public Cloud add-ons allowed
Infrastructure	SAP, Alibaba, AWS,. etc. (SAP decision)
Upgrades	included and mandatory
Compatibility Scope	n/a
Licensing	

subscription

business engagement



SAP S/4HANA Cloud Private Edition

functional scope

SAP S/4HANA
By annually, plus 6 months Feature/Support Packs (e.g. 2023)*
7 years* (to stay in mainstream maintenance)
SAP Fiori and SAP GUI
new Implementation, System Conversion, Selective Data Transition
optional (for New Implementation)
Implementation Guide (IMG)
optional
optional
allowed unless operating system access required
SAP, AWS, Azure, GCP, (customer preference)
customer owned, installation on request
mostly allowed – see note 2269324



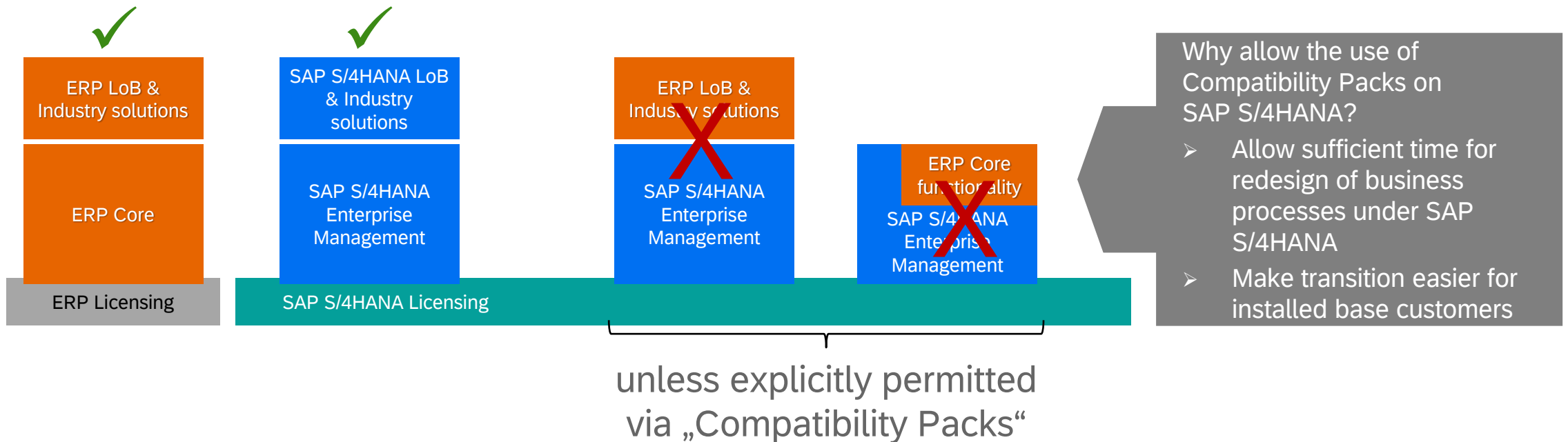
SAP S/4HANA

allowed
customer preferred infrastructure
not included
allowed
perpetual

SAP S/4HANA Compatibility Packs: Commercial Separation from the Business Suite World

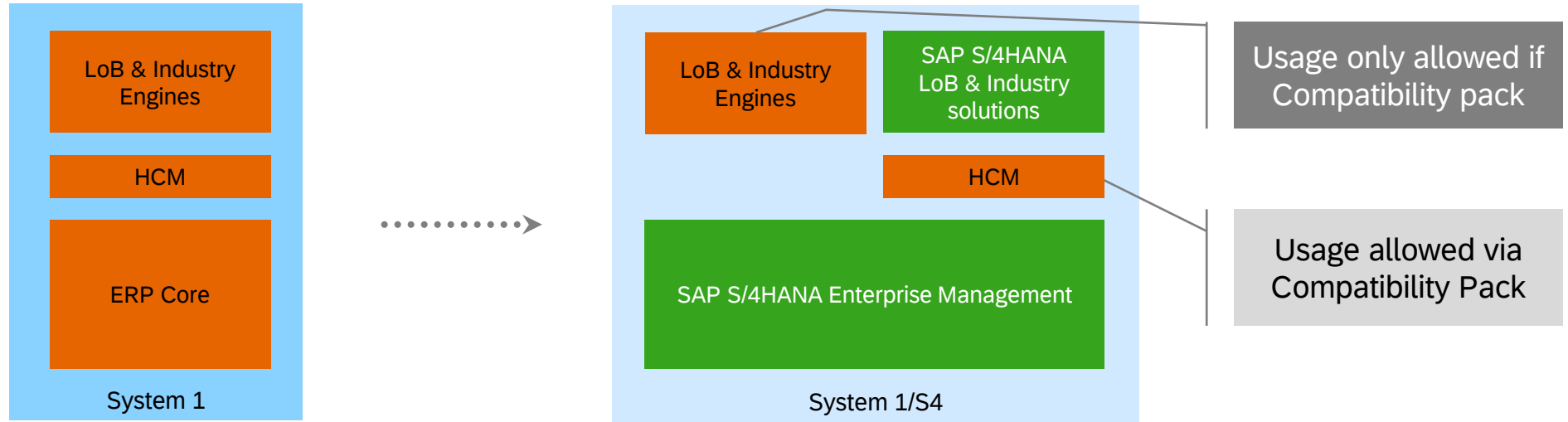
Only SAP S/4HANA solutions are allowed to run on an SAP S/4HANA installation

- 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:

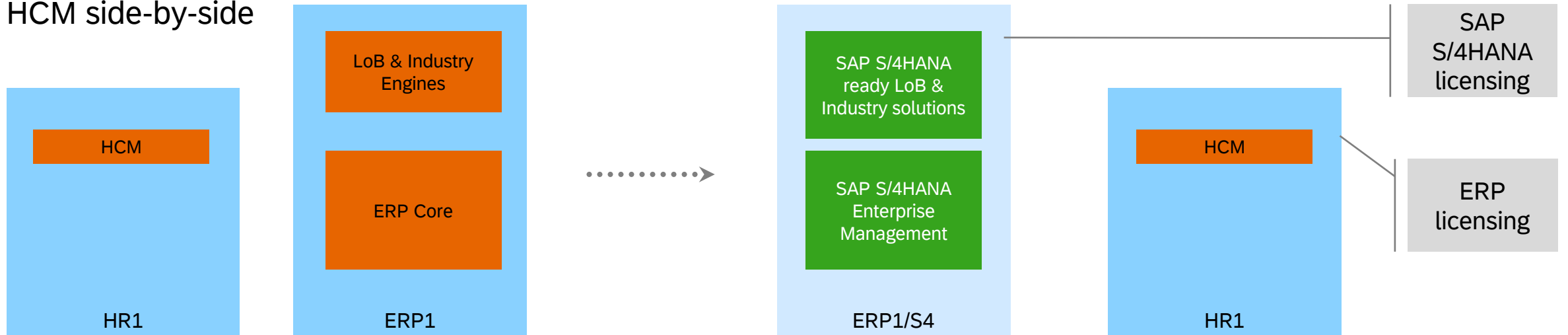


SAP S/4HANA On-premise: Compatibility Pack Example

HCM on-stack



HCM side-by-side



SAP S/4HANA Compatibility Packs: Selective Extension of Compatibility Pack Usage Rights

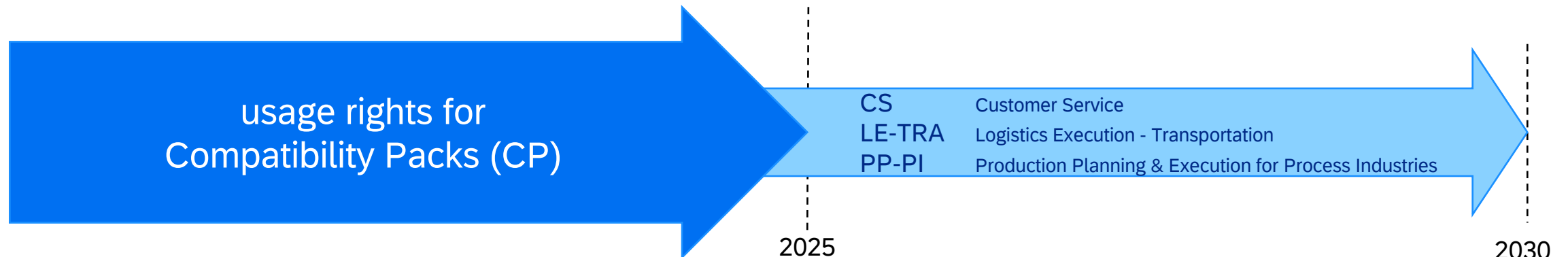
SAP grants a **timely restricted usage** right for specific classic solution functionalities in the context of SAP S/4HANA. These term licenses are limited to the end of **2025**, and are defined by the **compatibility scope**. SAP intends to provide new go-to functionalities for all compatibility scope 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](#)

Call to Action for SAP S/4HANA Customers: compatibility packs

Thursday, September 27
@10:00 CEST



Michael Deller

Senior Director Solution Management
SAP S/4HANA Cloud



Roland Hamm

Product Manager SAP S/4HANA
private cloud

SAP S/4HANA Cloud Private Edition: [Product Tour \(sap.com\)](https://www.sap.com)

SAP

Products Services and Support Learning Community Partner About | Explore SAP | Search | User | Flag

... / Enterprise Resource Planning (ERP) / SAP S/4HANA Cloud, private edition

Product Tour

SAP S/4HANA Cloud, private edition Product Tour

Rise into the Future Learn what's new and what's next in ERP for your company's future in the cloud. Watch the on-demand

Overview

Finance

Procurement

Manufacturing

Improve the management of manufacturing-relevant master data — such as product master, BoMs, routings, recipes, and work centers — on a single dashboard.

Step 1 of 4

Sales

Asset Management

SAP Snapshot

Apps Search in: "Apps"

1

Snapshot Revision: 1 PIP Data Prep. Status: Successful
Snapshot Type: Engineering Snapshot Change Rec. Prep. Status: Successful
Material: Bracket_Pump (0600-100-001-01) Proposed Effective Date:
Plant: D130 A&D Plant (D130)

Engineering BOM Assigned Change Records

Standard Display Engineering BOM Prepare MBOM Creation 3D Visual Details

Material	Plant
Bracket_Pump (0600-100-001-01) Alternative BOM: 1 BOM Usage: Engineering/Design Versioned (E) BOM Version: 0001 BOM Version Status: Released (99)	D130 A&D Plant (D130)
Fastener_X190_32 (0600-100-001-06) Alternative BOM: 1 BOM Usage: Engineering/Design Versioned (E) BOM Version: 0001 BOM Version Status: Released (99)	D130 A&D Plant (D130)

3D Visual Details