SAP S/4HANA Cloud
1905 Release Update

Dr. Gerhard Welker, SAP
June 06, 2019

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Agenda

Welcome

ONE SAP S/4HANA & SAP S/4HANA Cloud Positioning

SAP S/4HANA Cloud for Manufacturing & Supply Chain

- **Core Processes**
- **Key Highlights**
- **1905 Release Highlights**

Where to go for more information?

Q & A

Gerhard Welker

SAP S/4HANA Product Management

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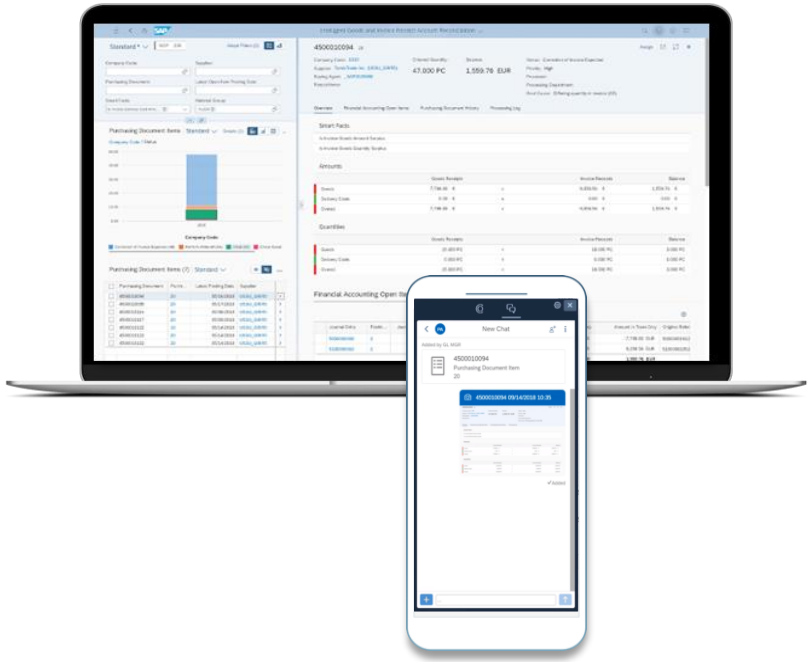
SAP S/4HANA and SAP S/4HANA Cloud

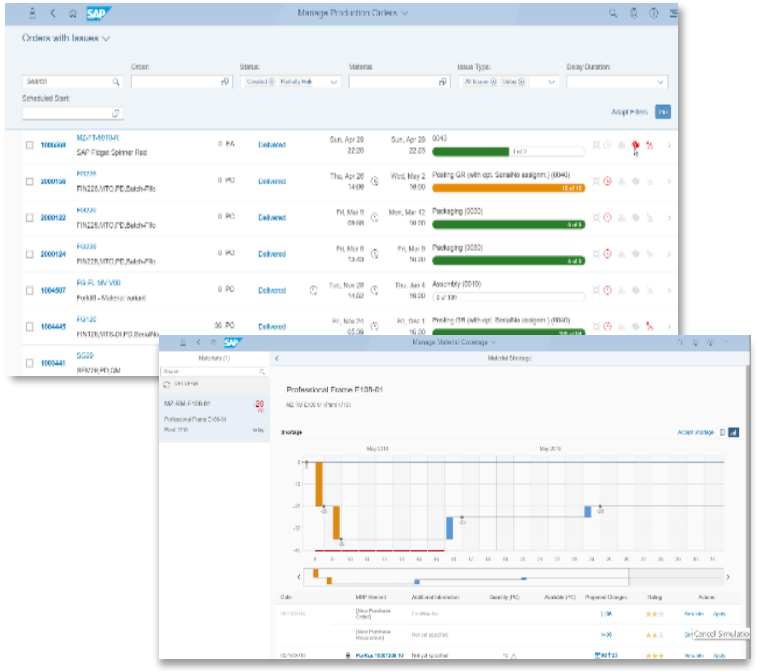
…will run your business different than before

On any Device, use role based cockpits with digital assistant



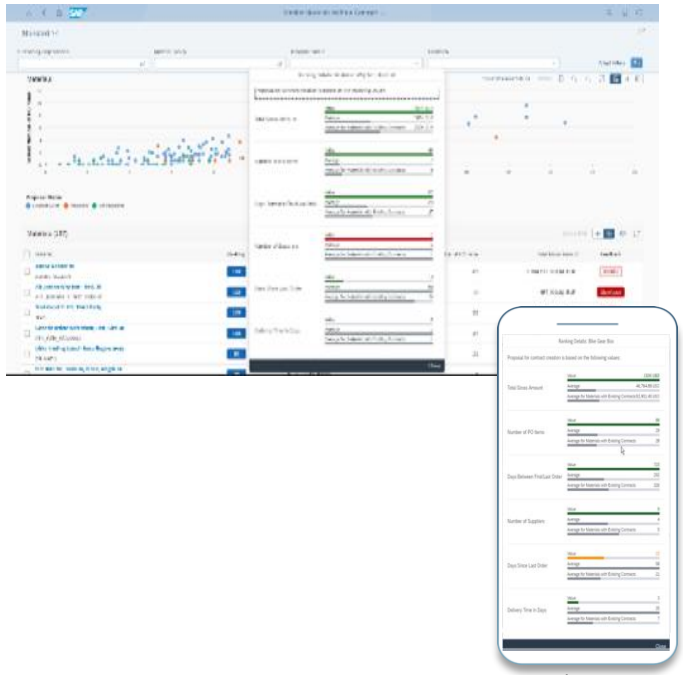
Watch out Finance

Embedded analytics for simulation, prediction & insight-to-action



Watch out Inventory

Machine learning for automated processing & decision support



Watch out Procure

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ONE SAP S/4HANA

SAP S/4HANA CLOUD

one codeline
choice of deployment

SAP S/4HANA

The most comprehensive, intelligent, and fully integrated Cloud ERP

Providing best practices for:

- PRODUCT ENGINEERING
- PROJECT CONTROL
- PRODUCT COMPLIANCE*
- ENTERPRISE PF. & PROJECT MGMT*
- PRODUCT LIFECYCLE MANAGEMENT*
- PRODUCTION PLANNING
- PRODUCTION OPERATIONS
- MANUFACTURING INSIGHTS
- QUALITY MANAGEMENT
- ORDER & CONTRACT MGMT.
- SUBSCRIPTION BILLING & REV. MGMT.*
- SOURCING AND CONTRACT MGMT
- OPERATIONAL PROCUREMENT & INVOICE MGMT
- CENTRAL PROCUREMENT
- PROCUREMENT ANALYTICS
- INVENTORY
- WAREHOUSING
- ORDER PROMISING
- SHIPPING & TRANSPORT
- FINANCIAL ACCOUNTING & CLOSE
- FINANCIAL OPERATIONS
- COST MANAGEMENT
- TREASURY*
- MAINTENANCE MGMT
- SERVICE OPERATIONS & PROCESSES

The most complete, intelligent, and flexible ERP

- R&D Engineering
- Manufacturing
- Sales & Revenue
- Sourcing & Procurement
- Supply Chain
- Finance
- Asset Mgmt.
- Service

Enabling in addition:

EXTENDED SCOPE, CONFIGURATION & INTEGRATION

- COMPLEX MANUFACTURING
- CONSTRAINT BASED PLANNING
- SALES PERFORMANCE MGMT
- SALES FORCE SUPPORT
- ADVANCED WAREHOUSING
- ADVANCED TRANSPORTATION
- ENTERPRISE RISK & COMPLIANCE
- ADVANCED FINANCIAL CLOSE
- COMMODITY MGMT
- ASSET OPERATIONS & MAINTENANCE
- ENVIRONMENT HEALTH & SAFETY
- SERVICE MASTER DATA MGMT.
- SERVICE PARTS MGMT.

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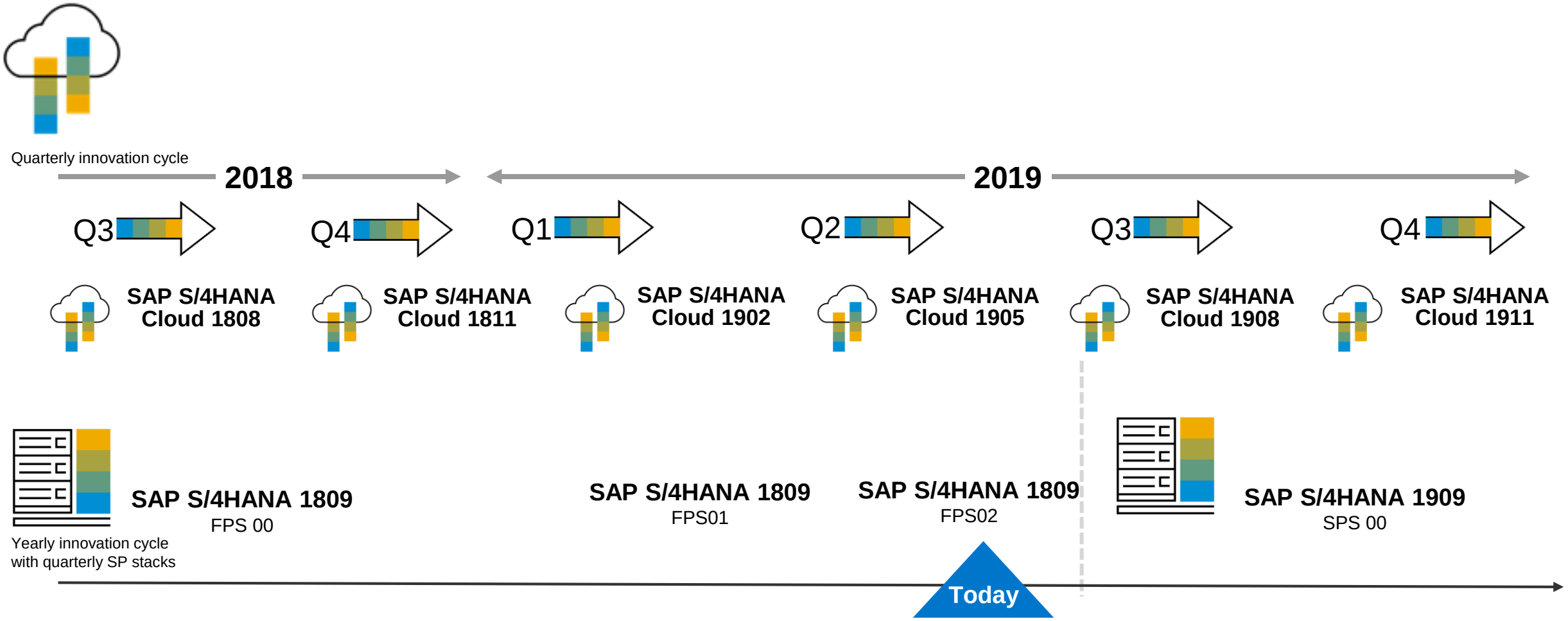
SAP S/4HANA Release Strategy

(2018–2019 and definition of deliveries)



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SAP S/4HANA Cloud for Manufacturing & Supply Chain

Core Processes

SAP S/4HANA Cloud for manufacturing industries

End 2 End Corporate ERP Processes

- ✓ Core ERP Processes
- ✓ Consistent in itself
- ✓ SAP Best Practices
- ✓ Balance between standardization and flexibility

Business core

Procure to Pay

- Procurement of materials and services
- Manage suppliers and spend

Plan to Product

- Engineering
- Forecast and Demand
- Production Planning (MRP)
- Production Execution

Repetitive Manufacturing | Make to stock | Make to Order

Order to Cash

- Sales Order and Contract Management
- Delivery and Billing

Variant Configuration | Inventory Management | Quality Management | Serial Number and Batch Management | Available to Promise

Core Finance

- SAP Ariba — Extend
- SAP Distributed Manufacturing - 3D Printing — Extend
- SAP Integrated Business Planning (IBP)* — Extend
- Interface to Warehouse Management — Extend
- SAP Manufacturing Execution (ME) — Extend
- SAP Success Factors — Business core
- SAP Fieldglass
- SAP Hybris Commerce — Extend
- SAP Cloud for Customer

* Roadmap Item

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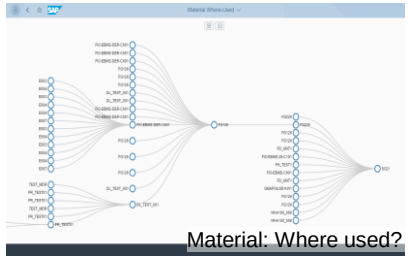
Legend: Business Area | Leading Scope BP ID# | Scope Variant BP ID# | Supporting Scope BP ID# | Integration Item BP ID#

SAP S/4HANA Cloud: Manufacturing Scope overview

PRODUCTION ENGINEERING

Change Manufacturing BOM

Mass change Manufacturing BOM



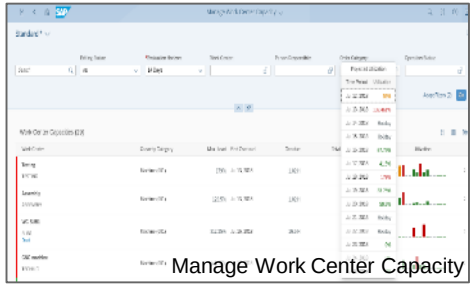
Material: Where used?

PRODUCTION PLANNING

Run Material Requirements Planning (MRP) to initiate Direct Procurement & Planned Production Orders. Plan & Evaluate Capacity.
Use Demand Driven MRP to analyze and optimize Stock strategically

Material Requirements Planning

Capacity Planning



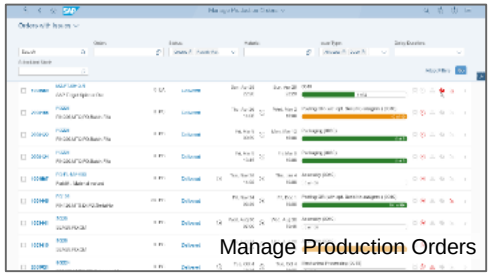
Manage Work Center Capacity

Demand Driven MRP*

PRODUCTION OPERATIONS

Run Manufacturing Operations in several industry variations & extensions, fully integrated with Supply Chain & Finance

Make to Stock Discrete



Manage Production Orders

Make to Stock Process

Make to Stock with Variant Config

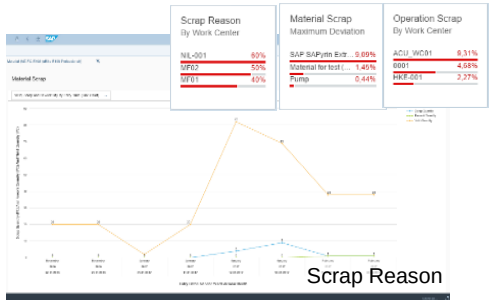
Make to Stock Repetitive

Make to Order Discrete

Make to Order with Variant Config

MANUFACTURING INSIGHTS

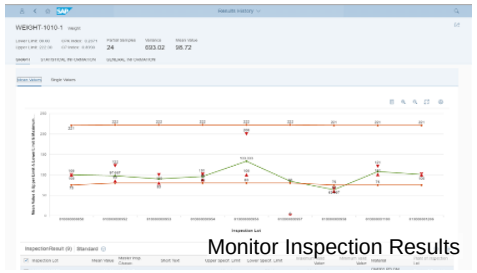
Use Embedded Analytics on Manufacturing relevant items, like Stock Overviews, MRP, Capacity and QM Lists & Dashboards



Scrap Reason

QUALITY MGMT.

Use Integrated Quality Management to plan Inspections, run checks and improve overall Manufacturing output.



Monitor Inspection Results

Process Enhancements

Batch Management	Subcontracting	Subsidiary to Headquarter	Rework Processing	Complementary Procurement Functions	Kanban Supply	

Integration scenarios

MES Integration**	SAP Analytics Cloud Manufacturing Analysis**

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Legend: Business Area | Leading Scope BP ID# | Scope Variant BP ID# | Supporting Scope BP ID# | Integration Item BP ID#

SAP S/4HANA Cloud: Manufacturing Scope in Detail

PRODUCTION PLANNING

update **Material Requirements Planning** J44

Create Plan Independent Requirements → Run MRP → Fix MRP Data issues → MRP Evaluation → MRP Key figures → Create & Evaluate Capacity

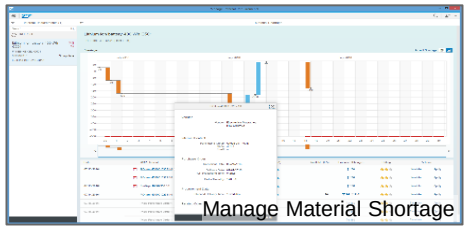
Demand Driven MRP* 1Y2, 2QI

Buffer Positioning

PRODUCTION ENGINEERING

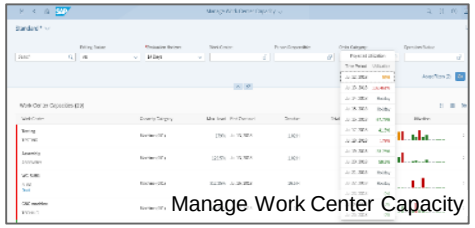
Mass Change Manufacturing Bill of Material for Production 3LP

Change Manufacturing Bill of Material for Production 3LO



Manage Material Shortage

update **Capacity Planning** 31L 3LQ



Manage Work Center Capacity

MANUFACTURING INSIGHTS

Manufacturing Analytics 2JD, 2QW

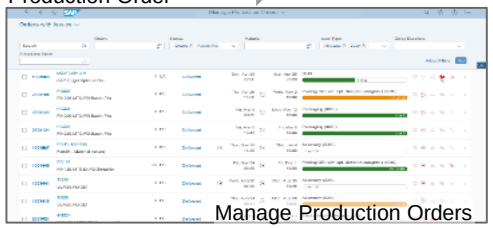
Report Scrap BJ5

Analytical Apps for QM 2V0

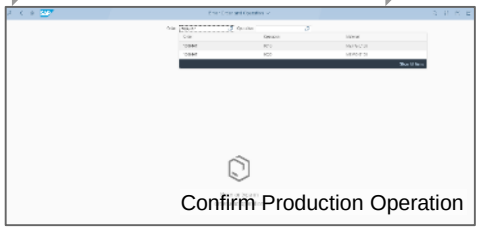
PRODUCTION OPERATIONS

Make to Stock Discrete BJ5

Convert Planned to Production Orders → Stage Material → Manage & Release Production Order → Pick Components → Confirm Operations → Goods Receipts → Output Mgmt. / Print Label



Manage Production Orders



Confirm Production Operation

Make to Stock Process w. Process Order*** BJ8

Make to Stock Process w. Production Order 2UG

Make to Stock with Variant Config 21D

Make to Stock Repetitive BJH

new **Make to Stock with Co- and By-Products - Process Manufacturing** 3L7

new **Make to Stock with Silo Material - Process Manufacturing** 3UL

Make to Order Discrete BJE, 1BM

update **Make to Order with Variant Config** 1YT

QUALITY MGMT.

Update (1MR, 1MP, 2QN) Quality Management 1MR, 1MP, 1FM, 1E1, 2FA, 2F9, 2QN, 2QP

Integration scenarios

MES Integration** 1Y5, 2JN

SAC Manufacturing Analysis** 28S

Process Enhancements

Update (BMY) Subcontracting BMY, BJK

Subsidiary to Headquarter 21T

Rework Processing BJN, BJQ

Batch Mgmt. BLF

new Warehouse Kanban Supply to Prod. 3VT

update Kanban Supply 1E3

new PI- Inbound Storage Tank Mgmt. 3UK

Complementary Procure Functions 2TW

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SAP S/4HANA Cloud: Supply Chain Scope in Detail (1/2)

WAREHOUSING

update

Warehouse Outbound Processing 3BS

Warehouse Ad-hoc Goods Issue 3BT

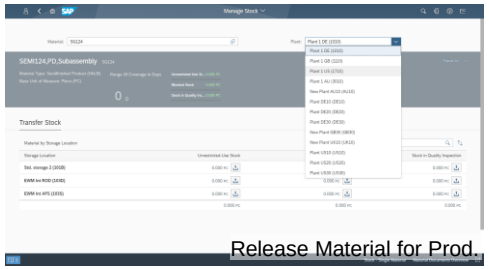
Assign Carrier (optional) → Create pick warehouse tasks, print picking lists → Confirm pick warehouse tasks → *Pack goods, print labels (optional)* → *Print loading instruction (optional)* → Post goods issue

new

Just-In-Time Supply to Customer from Stock 2EM

Warehouse Production Integration 3DV

Goods Issue for Production
- Release production order
- Material staging for production order



Release Material for Prod.

update

Third-Party WM System Integr. 1ZQ

Support integration scenarios for

Procurement (Delivery & Return) | Stock Transfers | Sales (Delivery & Return)

Third-Party WM System Integr. – Prod. Scen. 2RU

- PO processing for semi-finished goods **w/o auto. backflush**
- PO processing for semi-finished goods **with auto. backflush**

new

Warehouse Kanban Supply into Production 3VT

Warehouse Inbound Processing 3BR

Post goods receipt → Create putaway warehouse tasks, print putaway lists → Confirm warehouse tasks

Warehouse Internal Repacking 3BW

Pack stock | Repack stock | Unpack stock

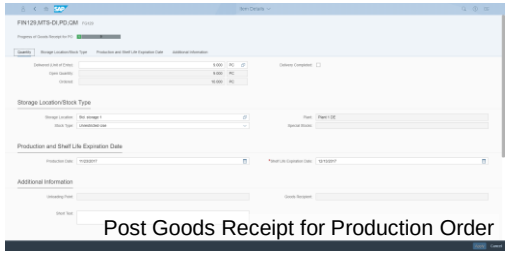
Quality Management in Warehousing 3M0

Create Inspection Lot → Create Warehouse Tasks → Confirm Warehouse Tasks → Record Inspection Results → Make Usage Decision

new

Resource Management in Warehousing 3W0

Goods Receipt from Production
- Create inbound delivery for production order
- Create handling units, print labels



Post Goods Receipt for Production Order

EWM Integration

Batch Management 2VN | Del.-Based Production Integr.2VM | Outbound Processing 2VK | Warehouse Stock Handling 2YL | Customer Returns 2VO | Inbound Processing 2VJ | Stock Transport Orders 2VL

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Legend: Business Area | Leading Scope BP ID# | Scope Variant BP ID# | Supporting Scope BP ID# | Integration Item BP ID#

SAP S/4HANA Cloud: Supply Chain Scope in Detail (2/2)

INVENTORY

Core Inventory Management BMC

Cross-Plant Transfer Posting 1P7

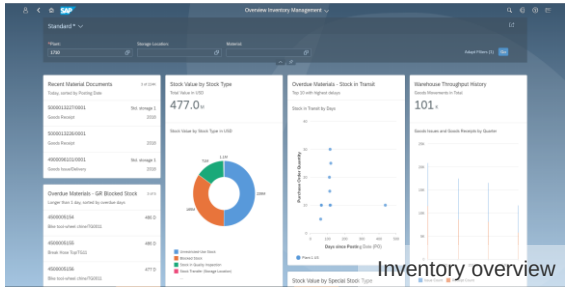
Stock Transfer with & without Delivery BME & BMH

Warehouse Posting Changes 3BU

Predictive Analytics Model Training: Stock in Transit 20N — new

Inventory Actions
- Stock Transfer in one or two steps
- Post Goods Receipt Without Reference
- Block & Unblock Material
- Scraping: Customer Returns and General Stock

Inventory Insights
- Stock Overview



Inventory overview

Inventory Count & Adjustment BML

Warehouse Physical Inventory 3BX

Inventory Actions
- Create physical inventory documents
- Print physical inventory documents
- Execute physical count or recount
- Enter physical count
- List and post physical count differences

Inventory Insights
- Physical Inventory Document Object Page
- Physical Inventory Analysis

Goods Movement Analysis

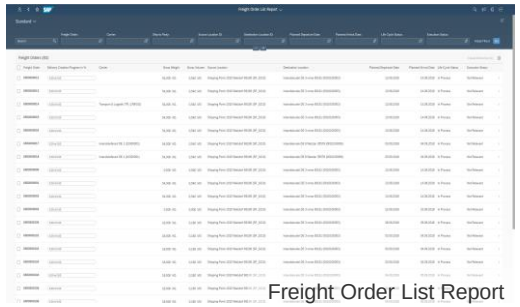
Batch Management BLF

Subcontracting BMY — update

SHIPPING & TRANSPORTATION

Order-based Transport. Consolidation 3EP

- Create/change SO for automatic freight unit creation/change
- Monitor freight unit
- **Transfer freight unit to decentral. TM system**
- **Receive freight order from decentral. TM system**
- Monitor freight order
- Trigger delivery creation from freight order



Freight Order List Report

ORDER PROMISING

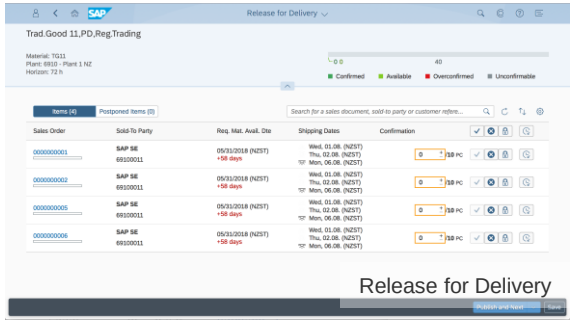
Basic ATP Processing 2LN

- Maintain, schedule, and monitor BOP run
- Run ATP check with product availability check within e.g. Sell from Stock after sales order creation

ADVANCED ORDER PROMISING

Adv. ATP Processing* 1JW

- Maintain product allocation and manage product allocation planning data
- Maintain, schedule, and monitor BOP run
- Run release for delivery to change SO confirmations before releasing to delivery
- Run advanced ATP check with product availability check and product allocation
- Perform alternative-based Confirmation (ABC) ATP



Release for Delivery

SAP Fiori Analytical Apps for Inventory and Warehouse Management BGG — update

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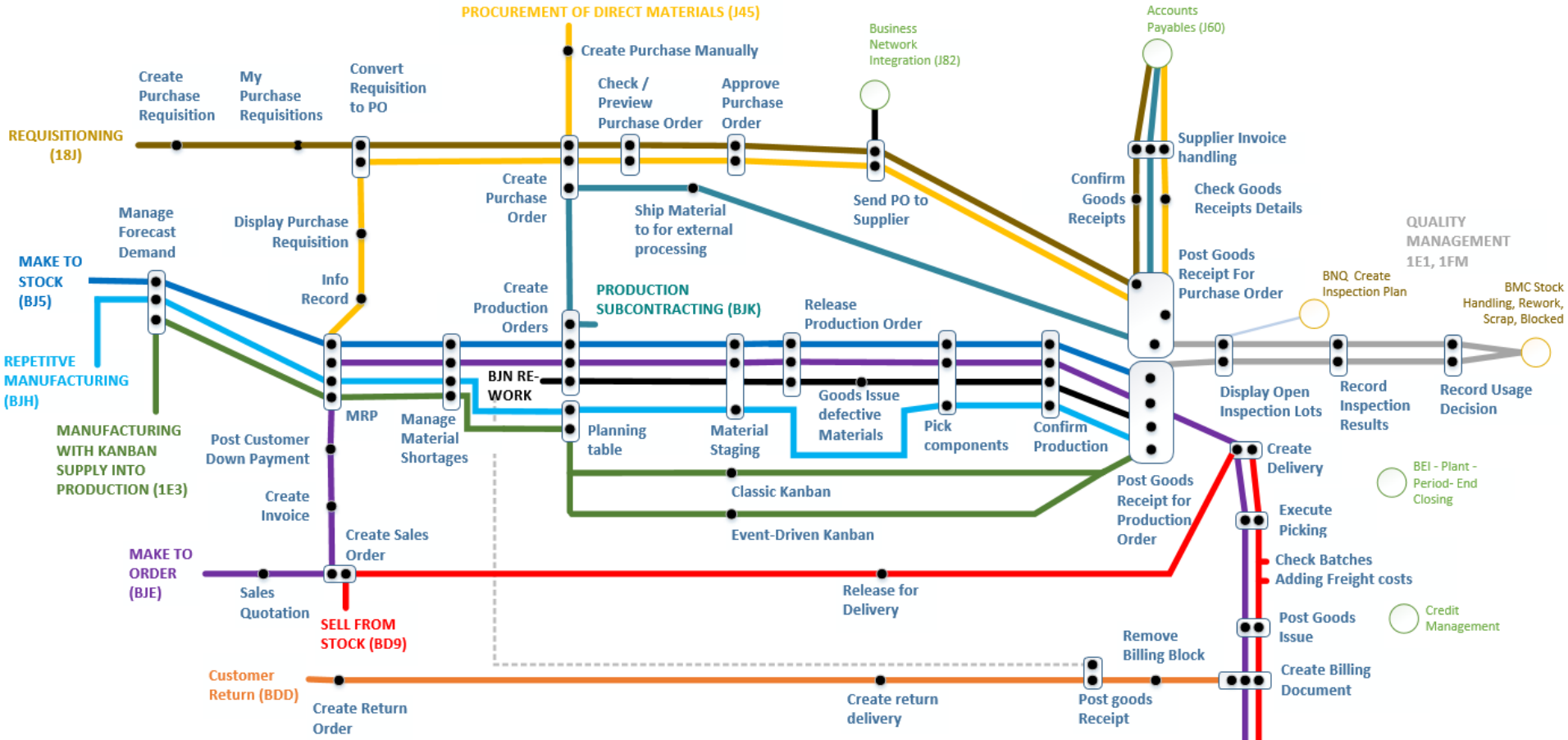
Core manufacturing processes with procurement and sales



- Procurement Direct material
- Production Subcontracting
- Requisitioning
- Make to Order
- Make to Stock
- Repetitive Manufacturing
- Quality Management (Procurement / Discrete Mfg)
- Sell from Stock
- Customer Return
- Rework Processing BJN
- KANBAN

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SAP S/4HANA Manufacturing: Fiori Apps

Exemplary view, most current list see Fiori Apps Library
Delta stickers reflect between 1902 and 1905

Inventory Analyst
- Inventory KPI Analysis
- Inventory KPI Analysis Reuse Library
- Stock Champion

Material Planner - External Procurement
- Create Planning File Entries
- Display MRP Key Figures
- Display MRP Master Data Issues
- Maintain PIRs UP 1905
- Manage Change Requests
- Manage PIRs
- Schedule MRP Runs

Production Operator / Production Engineer - Discrete Manufacturing
- Confirm Production Operation
- Reuse Library for Components in Worker UI
- Set Kanban Container Status

Production Planner
- Buffer Positioning
- Demand-Driven Replenishment
- Excess Component Consumption UP 1905
- Manage Buffer Levels UP 1905
- Manage External Requirements
- Manage Internal Requirements
- Manage Material Coverage
- Manage Production Orders or Process Orders
- Manage Work Center Capacity
- Mass Adjust Buffers
- Mass Maintenance of Products (DD)
- Material Scrap UP 1905
- Monitor Demand-Driven Replenishment
- Monitor External Requirements
- Monitor Internal Requirements
- Monitor Material Coverage - Net and Individual Segments
- Monitor Material Coverage - Net Segments (obsolete)
- Monitor Material Coverage - Net Segments (Version 2)
- Monitor Production Orders or Process Orders
- MRP Cockpit Reuse Component
- Operation Scrap UP 1905
- Planned Order Object Page
- Planner Overview
- Process Order Object Page
- Process MRP Simulations NEW 1905
- Process MRP Capacity Simulations NEW 1905
- Schedule MRP Simulation Creation NEW 1905
- Production Execution Duration UP 1905
- Production Order Object Page
- Resource Object Page
- Schedule Buffer Proposal Calculation
- Schedule Copy Total Forecast Runs
- Schedule Kanban JIT Call Output NEW 1905
- Schedule Lead Time Classification of Products (DD)
- Schedule Material Demand Forecast Runs
- Schedule Order Conversion Runs
- Schedule PIR Reorganizing Runs
- Schedule Product Classification (DD)
- Schedule Production UP 1905
- Work Center Object Page

Production Supervisor - Discrete Manufacturing
- Manage Production Operations
- Manage Production Orders
- Manufacturing Planning and Execution Common Reuse Library
- Manufacturing Planning and Execution Reuse Library for Popovers
- Production Order Confirmation Object Page
- Reuse Library for AoR UP 1905
- Schedule ATP Run for Production/Planned Orders
- Schedule Order Release Run
- Scrap Reason UP 1905
- Schedule Order Technical Completion Run

Production Supervisor - Process Manufacturing
- Process Order Confirmation Object Page
  (*business processes within Process Manaufacturing is primarily supported with Harmoized UI)*

Quality Engineer
- Characteristic Analytics
- Characteristic Detailed Analytics
- Manage Control Charts
- Manage Defects
- Manage Quality Info Records UP 1905
- Manage Quality Levels
- Manage Quality Tasks
- Manage Usage Decisions UP 1905
- Nonconformance Analytics
- Nonconformance Detailed Analytics
- Quality Engineer Overview UP 1905
- Quality Level History

Quality Manager
- Inspection Lot Analytics
- Inspection Lot Detailed Analytics

Quality Planner
- Display Quality Info Record for Procurement
- Display Sampling Procedure
- Manage Inspection Plans NEW 1905

Quality Technician
- Display Master Inspection Characteristic
- Inspection Lot (S/4HANA)
- Inspection Method (S/4HANA)
- Inspection Operation (S/4HANA)
- Inspection Point (S/4HANA)
- Manage Incoming Certificates
- Manage Inspection Lots
- Process Quality Tasks
- Quality Technician Overview
- Record Defects UP 1905
- Record Defects with SAP CoPilot
- Record Inspection Results UP 1905
- Record Inspection Results in Table Form
- Record Results for Inspection Points UP 1905
- Results History
- Reuse Result Recording Library
- Reuse Quick View Library

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SAP S/4HANA Supply Chain: Fiori Apps

Exemplary view, most current list see Fiori Apps Library
Delta stickers reflect between 1902 and 1905

Internal Sales Representative
- Assign Product to Product Allocation
- Configure Product Allocation
- Manage Product Allocation Planning Data
- Manage Product Allocation Sequences
- Monitor Product Allocation Characteristic Value Combinations
- Monitor Product Allocation Order Items
- Monitor Product Allocation Periods
- Product Allocation Overview

Inventory Analyst
- Inventory Analysis Overview UP 1905

Inventory Manager
- Dead Stock Analysis UP 1905
- Goods Movement Analysis
- Goods Movement Analysis (Accessible)
- Inventory Turnover Analysis
- Manage Batches
- Manage Stock
- Material Inventory Values - Balance Summary
- Material Inventory Values - Line Items
- Overview Inventory Management
- Physical Inventory Analysis UP 1905
- Physical Inventory Analysis (Accessible)
- Physical Inventory Document Overview
- Slow or Non-Moving Materials UP 1905
- Stock - Multiple Materials UP 1905
- Stock - Single Material

Order Fulfillment Manager
- Configure Alternative Control
- Configure BOP Segment
- Configure BOP Variant
- Configure Custom BOP Sorting UP 1905
- Configure Order Fulfillment Responsibilities UP 1905
- Configure Substitution Strategy UP 1905
- Monitor BOP Run UP 1905
- Schedule BOP Run
- Schedule Deletion of ATP Results Log

Order Fulfillment Specialist
- Release for Delivery UP 1905

Plant Manager
- Overview Plant Management

Receiving Specialist
- Expected Goods Receipt
- Inbound Delivery (S/4HANA)
- Schedule Goods Receipt for Inbound Deliveries
- Schedule Inbound Delivery Creation

Shipping Specialist
- Analyze Delivery Logs
- Analyze Delivery Performance - Shipped as Planned
- Create Delivery with Reference to Sales Order
- Create Delivery without a Reference (Quick Create)
- Create Outbound Deliveries - From Sales Orders
- Delivery Performance
- Manage Outbound Deliveries
- Outbound Delivery (S/4HANA)
- Pick Outbound Delivery UP 1905
- Returns Delivery (S/4HANA)
- Schedule Delivery Creation
- Schedule Goods Issue For Deliveries

Transportation Manager (Transportation Management)
- Create and Update TM Organizations from Enterprise Structure
- Freight Order List
- Freight Unit List
- Manage Freight Agreements
- Schedule Delivery Creation (Transportation Management)
- Schedule Location Creation for plants, shipping points, customers
- Schedule Location Update for plants, shipping points

Warehouse Clerk
- Material Documents Overview
- Material Master Reuse Component
- Overdue Materials - Goods Receipt Blocked Stock UP 1905
- Overdue Materials - Stock in Transit UP 1905
- Overview Inventory Processing
- Post Goods Receipt for Inbound Delivery
- Post Goods Receipt for Production Order
- Post Goods Receipt for Purchase Order
- Post Goods Receipt without Reference
- Transfer Stock - Cross-Plant
- Transfer Stock - In-Plant UP 1905

Warehouse Clerk (Extended Warehouse Management)
- Change Inbound Delivery
- Count Physical Inventory
- Reuse Lib for EWM
- Run Outbound Process – Deliveries

Warehouse Operative (Extended Warehouse Management)
- Pack Outbound Deliveries UP 1905
- Pack Warehouse Stock UP 1905
- Process Warehouse Tasks – Picking NEW 1905

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*Additional license - **Additional installation and license

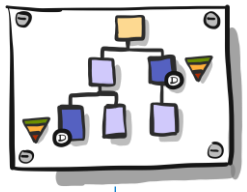
SAP S/4HANA Cloud for Manufacturing & Supply Chain

Key Highlights

SAP S/4HANA Cloud

Key highlights in Product Area Manufacturing / Supply Chain

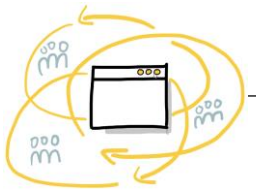
E2E core processes seamless integrated with Finance



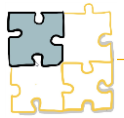
Demand Driven Manufacturing

Production execution integration

Integrated Warehouse management



Advanced Variant Configuration



Real time inventory management

Procure to Pay

- Procurement of materials and services
- Manage suppliers and spend

Plan to Product

- Engineering
- Forecast and Demand
- Production Planning (MRP)
- Production Execution
- Repetitive Manufacturing
- Make to stock
- Make to Order

Order to Cash

- Sales Order and Contract Management
- Delivery and Billing

Variant Configuration | Inventory Management | Quality Management | Serial Number and Batch Management | Available to Promise

Core Finance

- SAP Ariba — Extend
- SAP Distributed Manufacturing - 3D Printing — Extend
- SAP Integrated Business Planning (IBP)* — Extend
- Interface to Warehouse Management — Extend
- SAP Manufacturing Execution (ME) — Extend
- SAP Success Factors — Business core
- SAP Fieldglass
- SAP Hybris Commerce — Extend
- SAP Cloud for Customer

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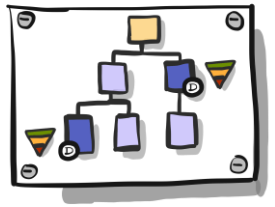
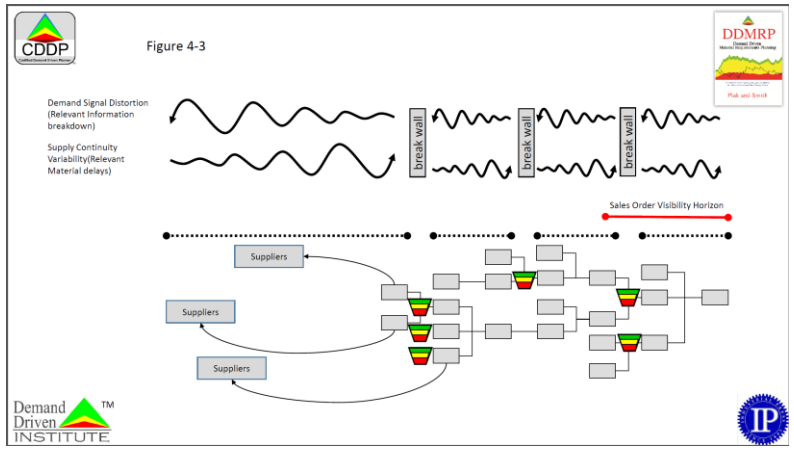
* Roadmap Item



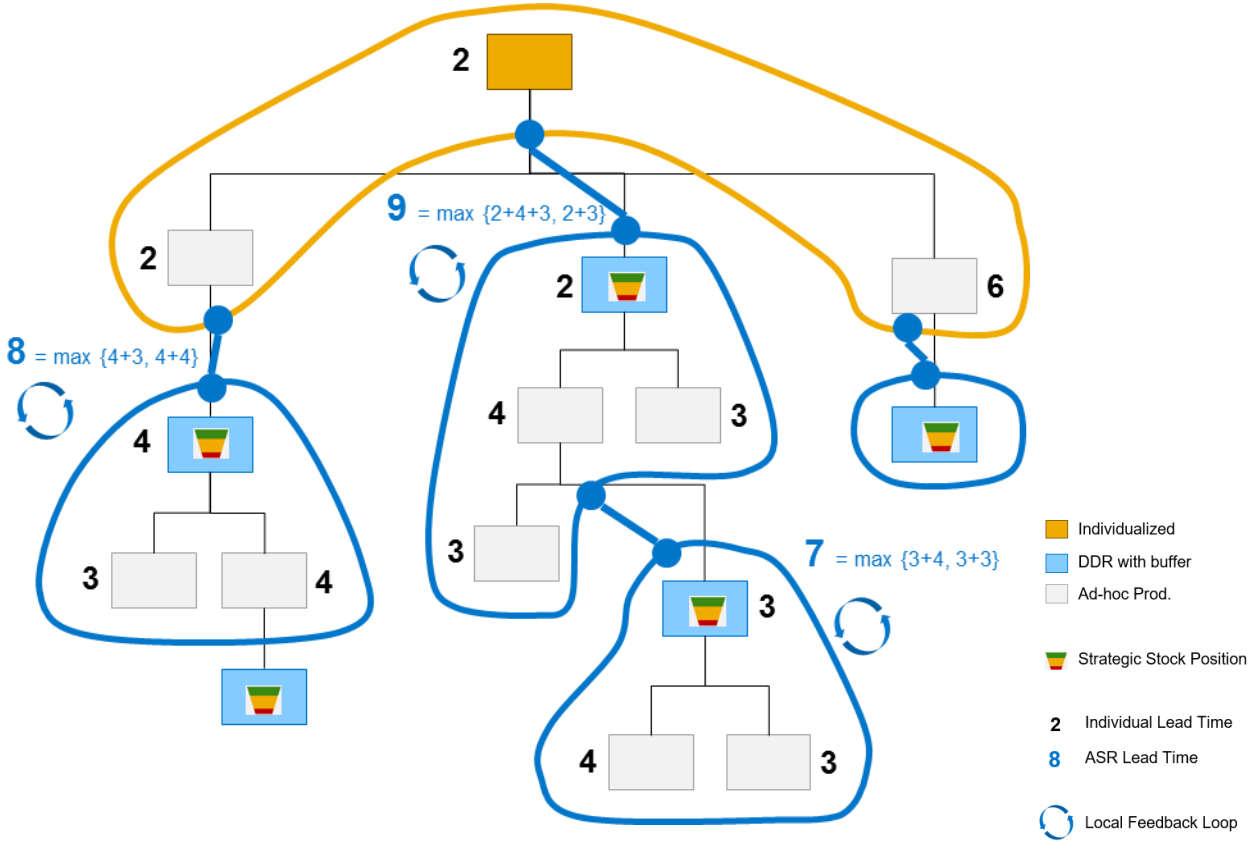
Demand Driven Manufacturing

Methodology driver: Demand Driven MRP
[Source: Ptak and Smith 2016]



- Permanently optimize the process flow rather than to plan the forecast
- Produce only for real demand not based on assumptions
- Work event-driven rather than plan-driven
- Empower teams to make local decisions instead of to follow a central plan

Highlighting “Decoupling”, “Buffer”, “Lead Times”
Breaking down the overall supply chain at the right spots



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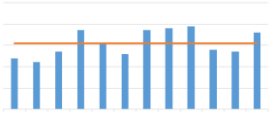
Demand Driven Replenishment

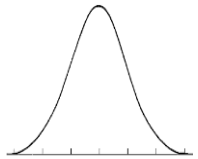
Process Flow



Average Daily Usage

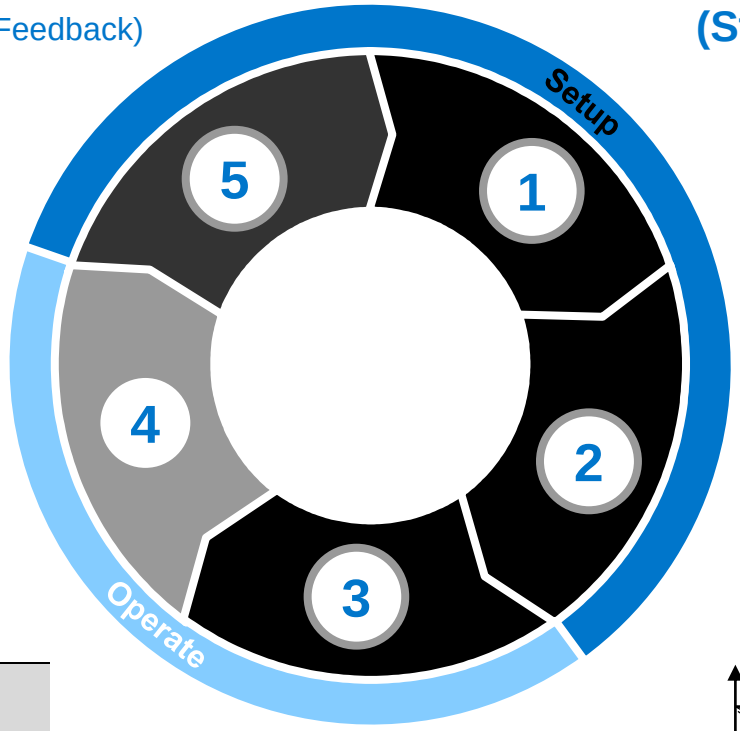
	A	B	C
X			
Y			
Z			

Classification

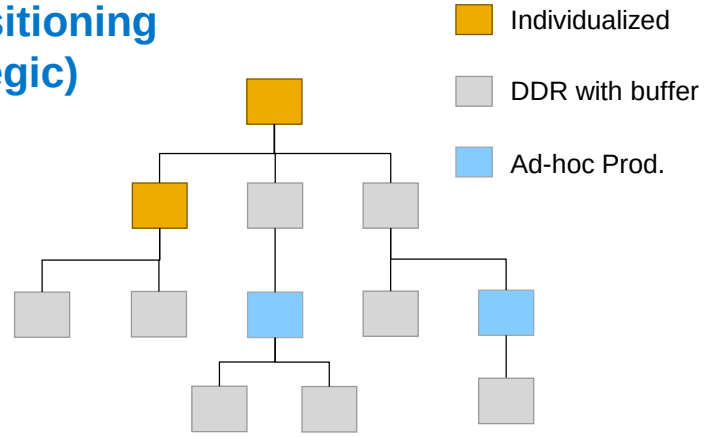


Lead Time

Analytics
(incl. Basis for Feedback)



Buffer Positioning (Strategic)

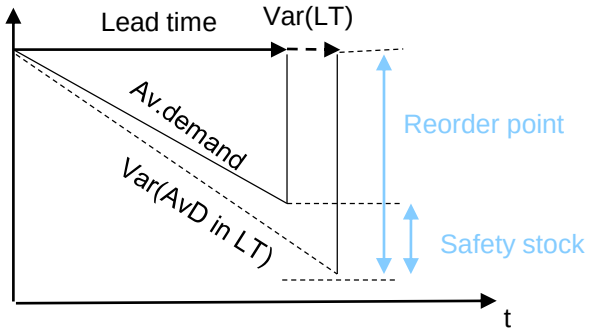


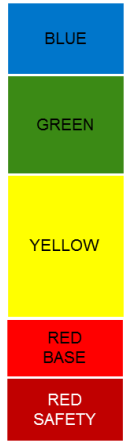
Replenishment Execution

Material	Stock/ Stock Level	Stock+ Ordered	Proposed order qty
FIO-NAV-0815	3	13	30
FIO-PST-1501	6	16	15
FIO-MST-3006	55	135	0
FIO-PRD-0807	22	56	0
FIO-NAV-0101	23	23	127
FIO-NAV-0404	44	44	26
FIO-MST-0821	25	25	0
FIO-PRD-0822	88	88	0

Replenishment Planning

Buffer Sizing (Operational)





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Key Trends and Requirements

Customer centricity

- Customer-driven change towards products that fit exact needs at competitive prices
- Individualized products are the main differentiator for winning in the global market

Serving the “Segment of One”

- From looking at mass customers to focusing on the single customer’s needs
- Produce for a lot size of one with high asset utilization and optimal set-up times

Efficient configuration of sales orders and more efficient modeling

Product complexity management focus on data quality, consistency, and agility

Business transparency for configurable products

Coordination and collaboration between sales and engineering

Simplified, Efficient organization and **process support** for engineer-to-order use cases

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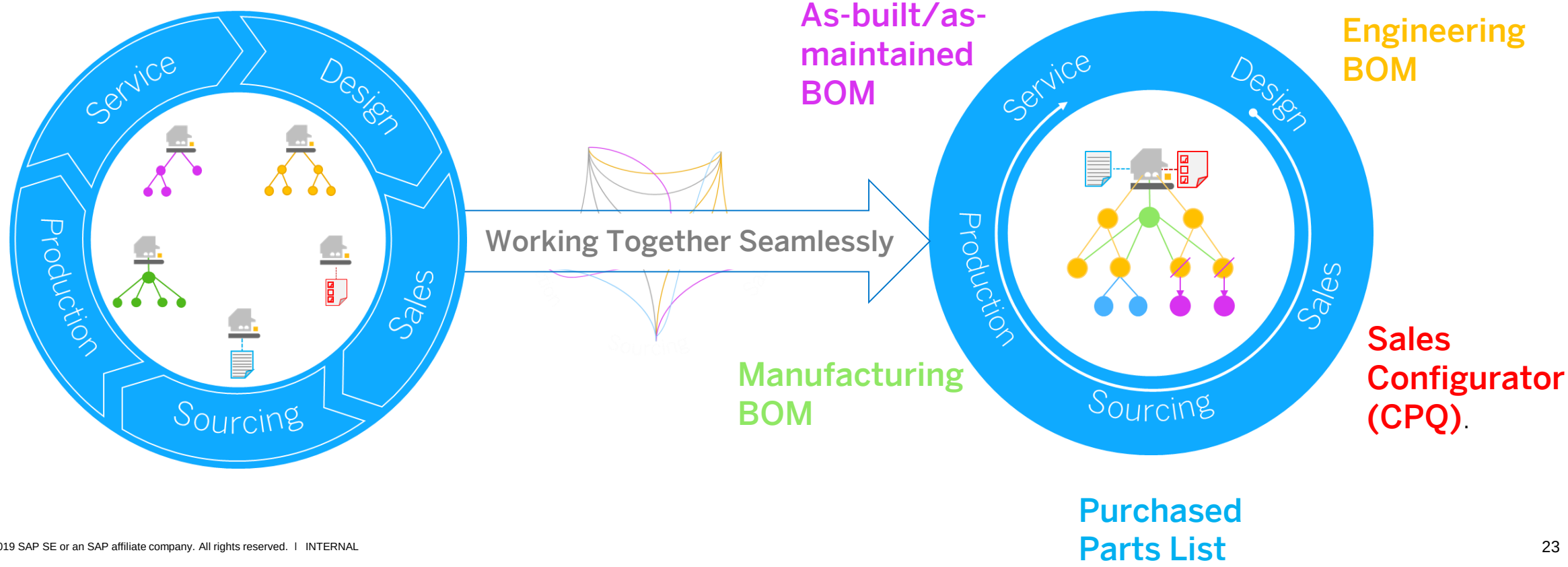
Advanced Variant Configuration

Increase Process Efficiency Throughout the Entire Life Cycle

Disconnected Value Chains and
Multiple Solution/Configuration Models

Seamless Collaboration on **One Common Solution/Configuration Model**



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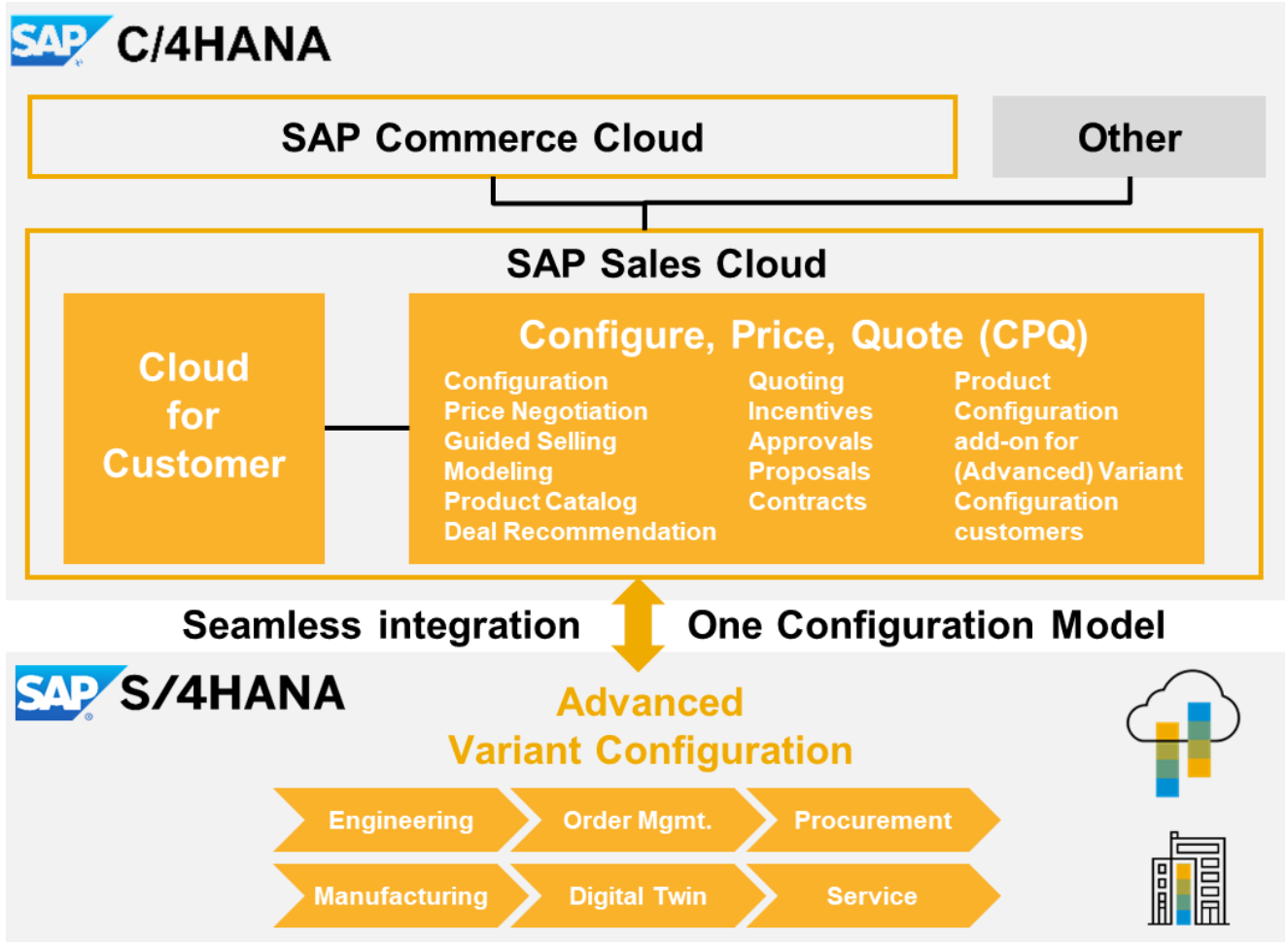
Variant configuration and Configure, Price, Quote cover the entire Digital Configuration Lifecycle



C/4HANA Configure, Price, Quote

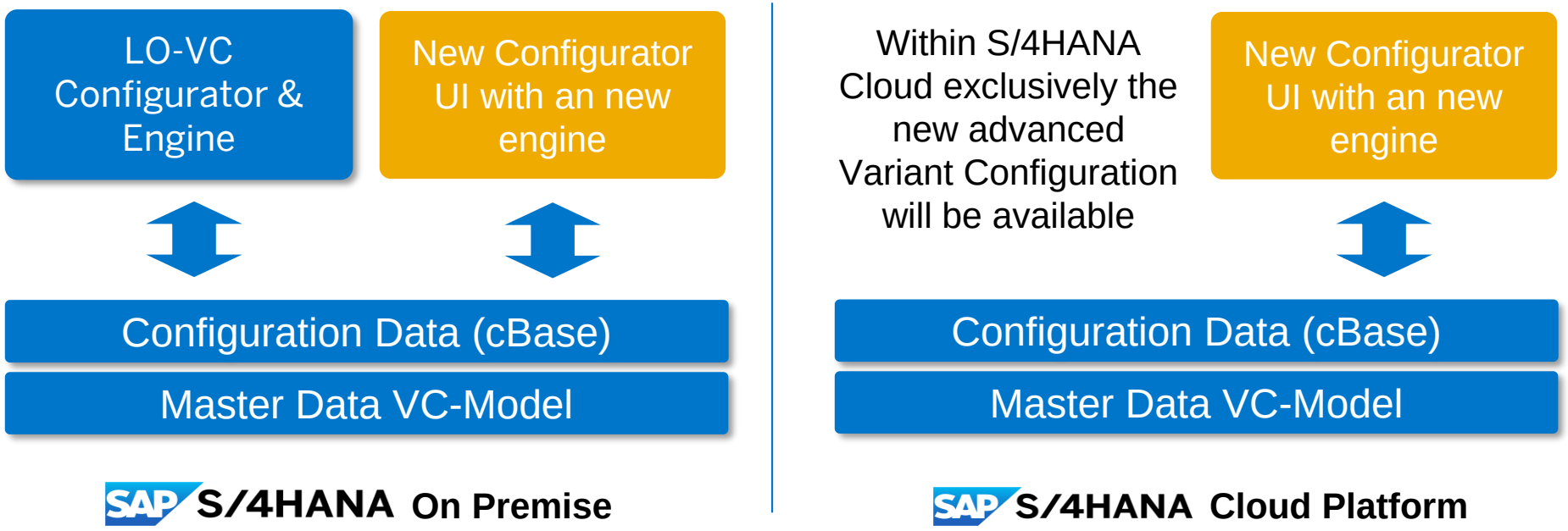
- Consistent Process between Frontend and Backend
- Continue to use your VC configuration models
- Consistent configuration in all channels
- Automatic handover to manufacturing in SAP ERP and SAP S/4HANA
- Faster GTM strategy - modeling in CPQ

S/4HANA for Advanced Variant Configuration

- Enhanced capabilities to define, develop, sell, manufacture, and maintain configurable products
- Efficient configuration of sales orders with modern Fiori UX
- More efficient modeling including new simulation environment
- Analytics for configuration and classification data, embedded in S/4HANA, or in SAP Analytics Cloud

LO-VC vs. Advanced Variant Configurator

Co-Existence of both solutions



- The variant configuration will be available within SAP S/4HANA on premise and Cloud
- Immediately usage of known mature variant configuration LO-VC within S/4HANA on premise
- In parallel SAP is building the new advanced Variant Configuration using the same foundation

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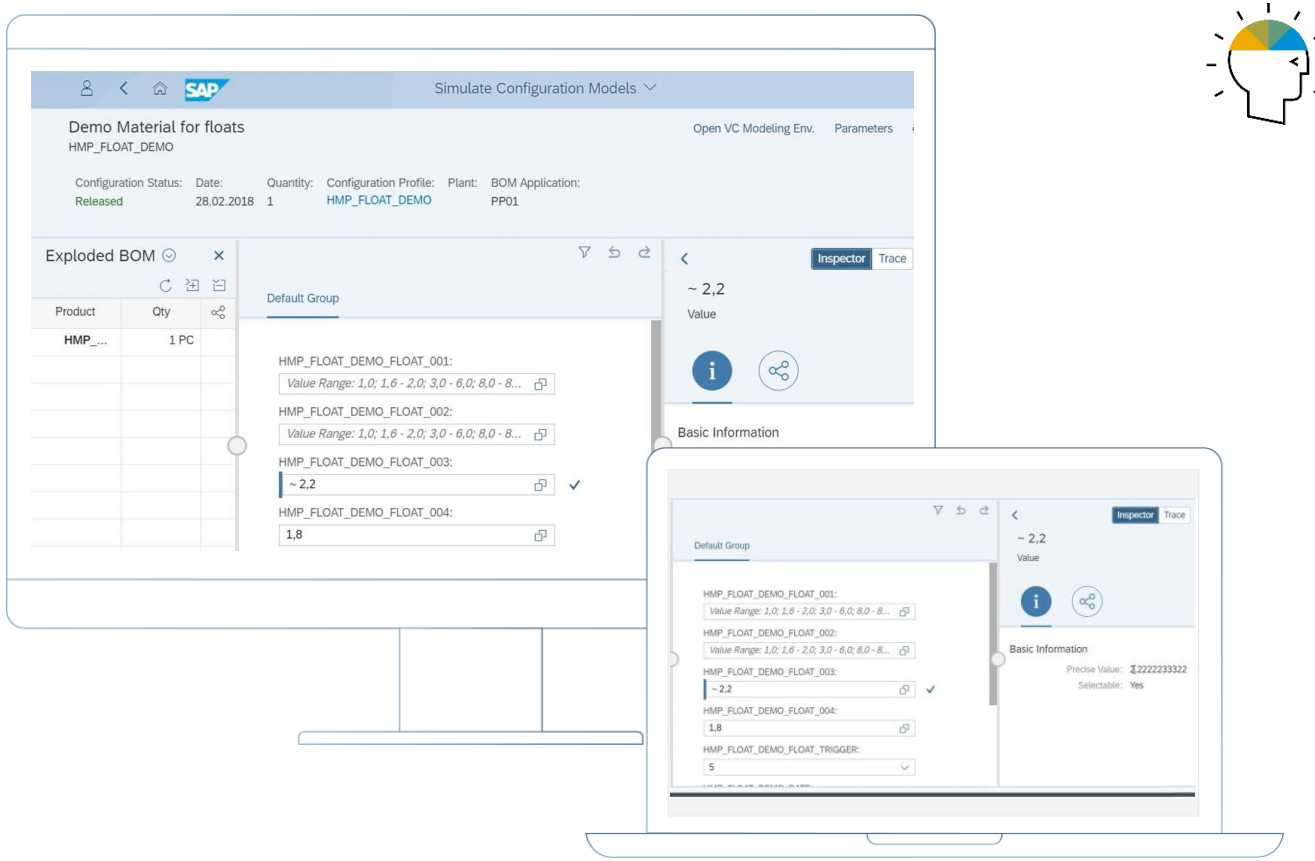
High precision handling of numeric characteristics

Higher precision of numeric values to improve product configuration accuracy



New Capabilities:

- Completely new engine for numeric characteristics
- Distinguish between integer and float characteristics
  - no decimal places for integers
  - mixing integers and floats in dependencies
  - mixed restrictions and conditions
- Improved rounding behavior for float characteristics
- Display of both rounded and precise float value
- Represents all master data values exactly
  - Support of decimal floating point arithmetic standard IEEE'754-2008
  - Example

    0.1 + 0.2 = 0.3 (decimal floating point arithmetic)

    vs.

    0.1 + 0.2 = 0.30000000000000004 (binary arithmetic)

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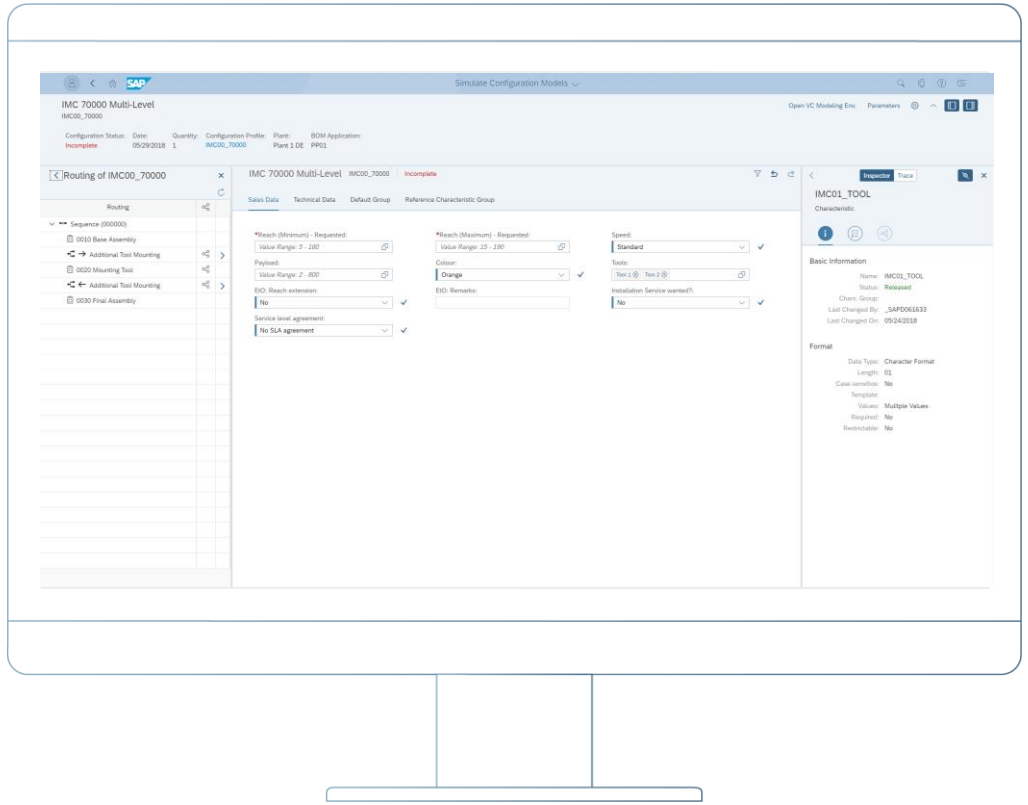
Simulation Environment – Integration of routing

Simulation Environment

Improve quality for complex products and product changes by high-efficient simulation of the routing via different options



New Capabilities:

- Integration of routing with simulation environment
- Structured overview of alternative and parallel sequences
- Visualization of relationship between BOM and routing
- Routing details are visible in trace and inspector

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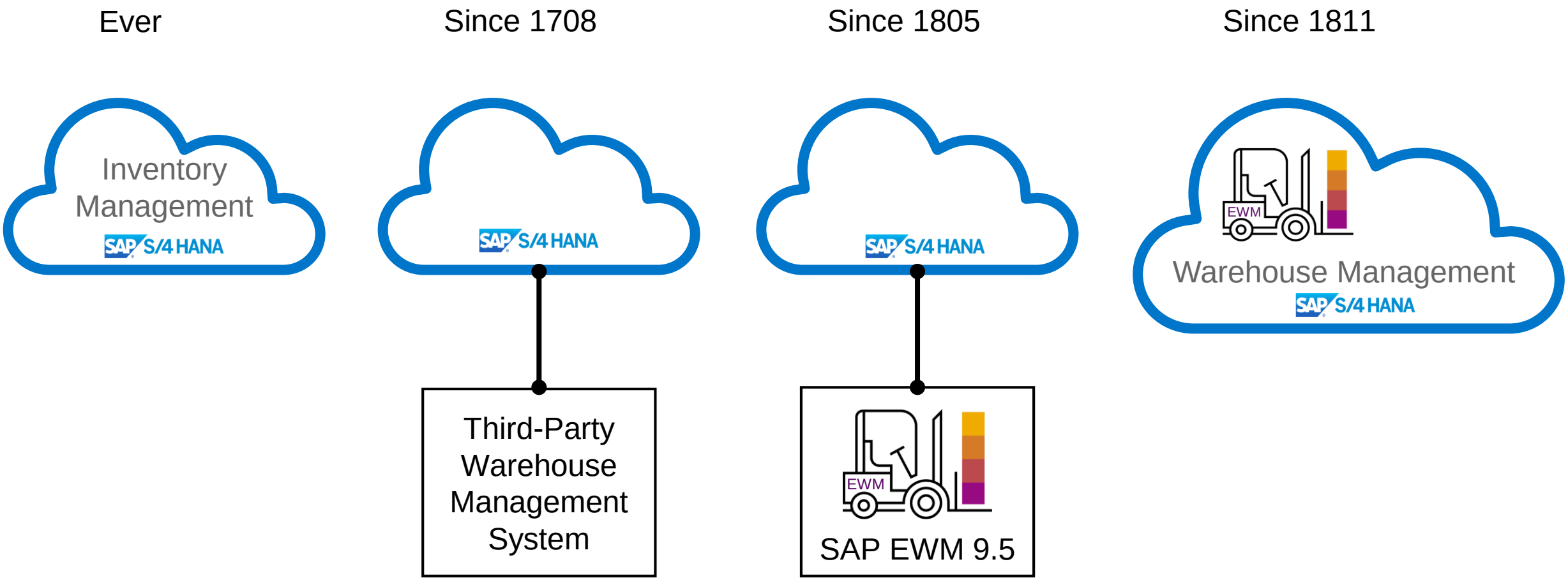
SAP S/4HANA Cloud - Warehousing



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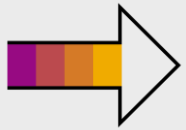
SAP S/4HANA Cloud Warehouse Management

High Level Scope

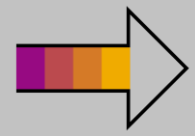


Inbound Processing

- ✓ Inbound from Supplier
- ✓ Inbound from Customer Returns (via other storage loc.)
- ✓ Inbound from other Storage Location
- ✓ Inbound from other DC / Plant
- ✓ Inbound from Production

Internal Processes

- ✓ Physical Inventory
- ✓ Internal Repacking
- ✓ Posting Changes (triggered by WM or ERP)
- ✓ Internal Movements



Outbound Processing

- ✓ Outbound to Customer
- ✓ Return to Supplier
- ✓ Ad Hoc Goods Issue
- ✓ Outbound to other Storage Location
- ✓ Ship-to to other DC / Plant
- ✓ Outbound to Production (Staging)
- ✓ Outbound triggered by Goods Movement Posting

Handling Units in Warehouse Management

Batch Management

Warehouse Structure | Best Practice Processes | Data Migration | Self-Service Configuration UIs | Fiori Business Catalogs / Roles / Apps | Master Data Maintenance | Output Management

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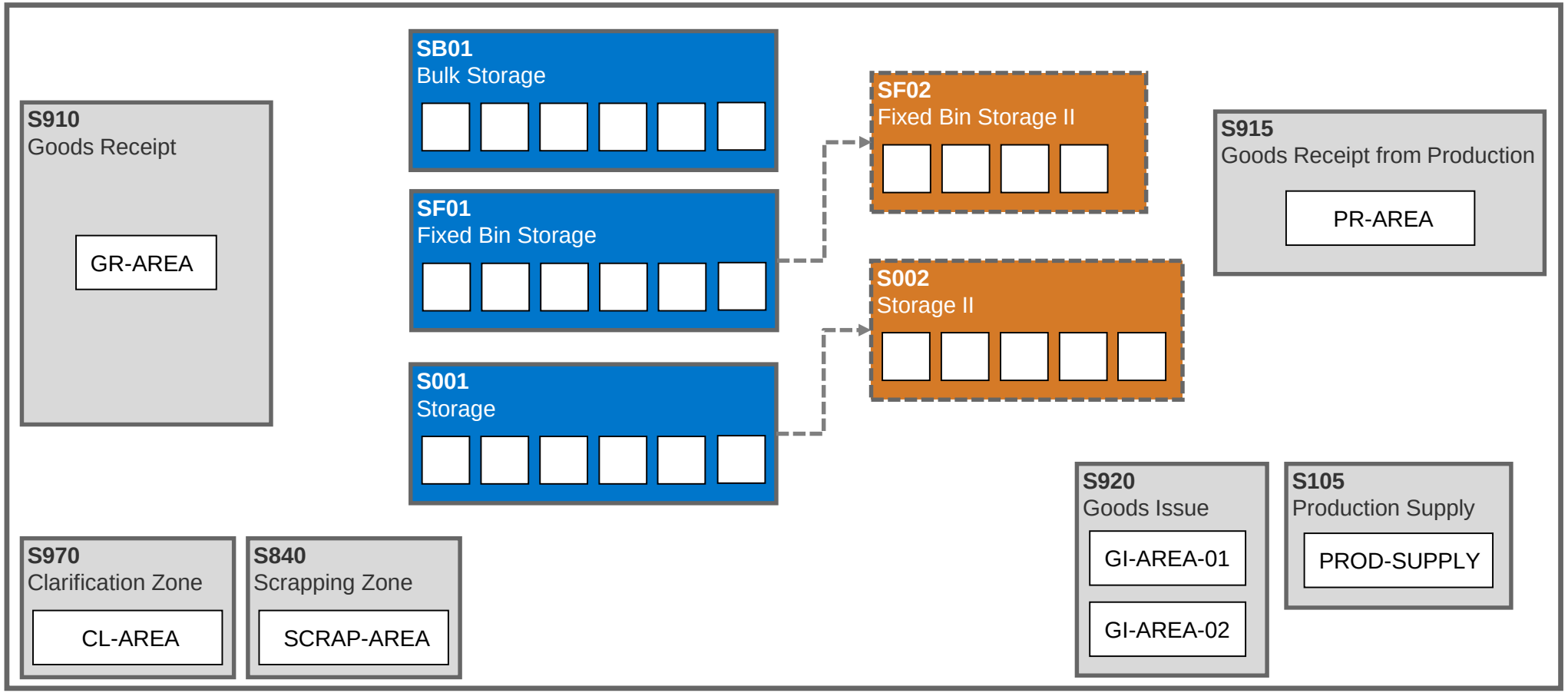
SAP S/4HANA Cloud Warehouse Management

Template Warehouse Structure - Enhancement



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SAP S/4HANA Cloud for Manufacturing and Supply Chain

1905 Release Highlights

SAP S/4HANA Cloud 1905

Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

Manufacturing

Production Operations

Production Planning

Quality Management

R&D / Engineering

Enterprise Portfolio and Project Management

Product Compliance

Product Lifecycle Management

Project Control

Supply Chain

Advanced Order Promising

Inventory

Warehousing

Transportation

Asset Management

Maintenance Management

Nonconformance Management (2QN)

Industry-specific capabilities

Professional Services

Controlling and Accounting

Projects and Engagements

Resource Management

Service-Centric Billing

Real-time foundation

Database and Data Management

Enterprise Information Management

Application Platform and Infrastructure

Foundation

Line of Business / Industry / Technology

Business Area

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Quality Management

Efficient defect recording with code recognition based on text supported by machine learning capabilities

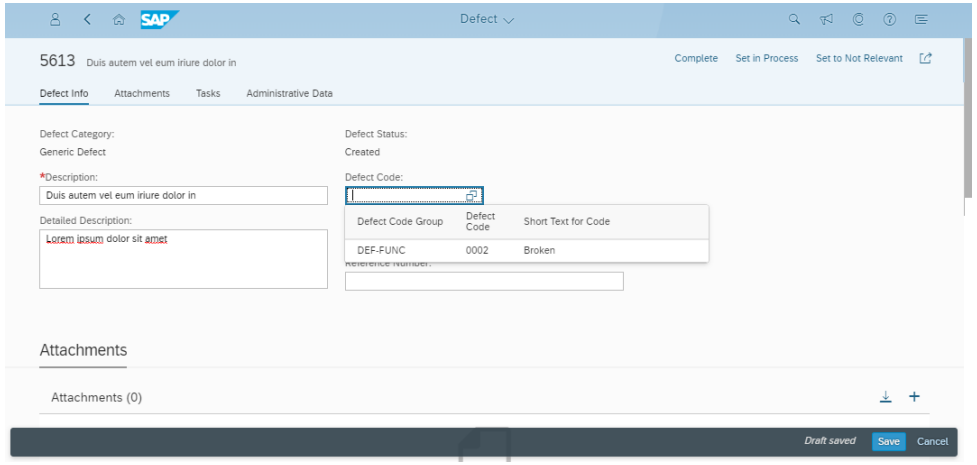
With the Fiori app Record Defect, the quality technician can effectively record defects with high data quality due to the system proposes the best matching defect codes automatically based on the entered description text using a predictive analytics model.

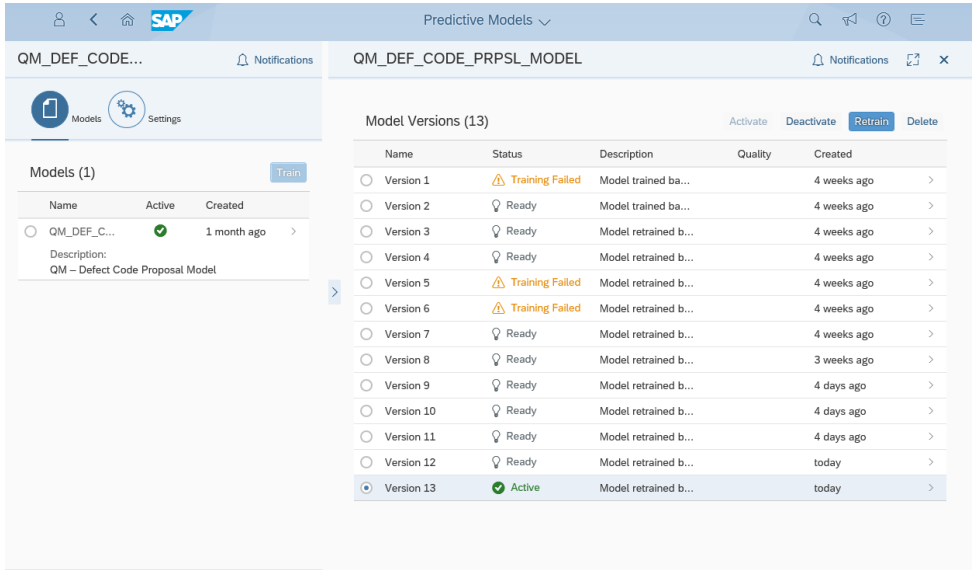
Value Proposition

- Defect handling supported by machine learning perfectly supports the quality technician in his daily work
- The quality technician can use a Fiori App to record defects. With a mobile device he can enter a text to describe the defect. Based on text the Fiori App proposes a defect code which can be assigned to the defect record.
- The proposal of defect codes increases the data quality of all recorded defects. This is important for regular evaluations in order to detect defect frequency and trigger improvement activities.

Capabilities

- Record defective parts or products by a quality technician for example during production
- The defect has to be documented by entering a text and selecting a defect code
- The system proposes the best matching defect codes automatically based on text using a predictive analytics model
- The codes are the basis for later evaluations





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SAP S/4HANA Cloud 1905

Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

Manufacturing

Production Operations

Production Planning

Quality Management

R&D / Engineering

Enterprise Portfolio and Project Management

Product Engineering

Product Lifecycle Management

Project Control

Supply Chain

Advanced Order Promising

Order Promising

Warehousing

Transportation

Asset Management

Maintenance Management

Material Requirements Planning (J44)

Industry-specific capabilities

Professional Services

Controlling and Accounting

Projects and Engagements

Resource Management

Service-Centric Billing

Real-time foundation

Database and Data Management

Enterprise Information Management

Application Platform and Infrastructure

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Line of Business / Industry / Technology

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Production Planning

Avoid excess stock with situation handling (MRP Material Exception)

With this feature you can use situation handling in the Manage Material Coverage app to bring important issues to the users' attention. Example: In case of a sales order gets cancelled, it is possible to identify the related MRP Elements such as production order or purchase order that may already have been created to fulfill the ‘cancelled’ requirement.

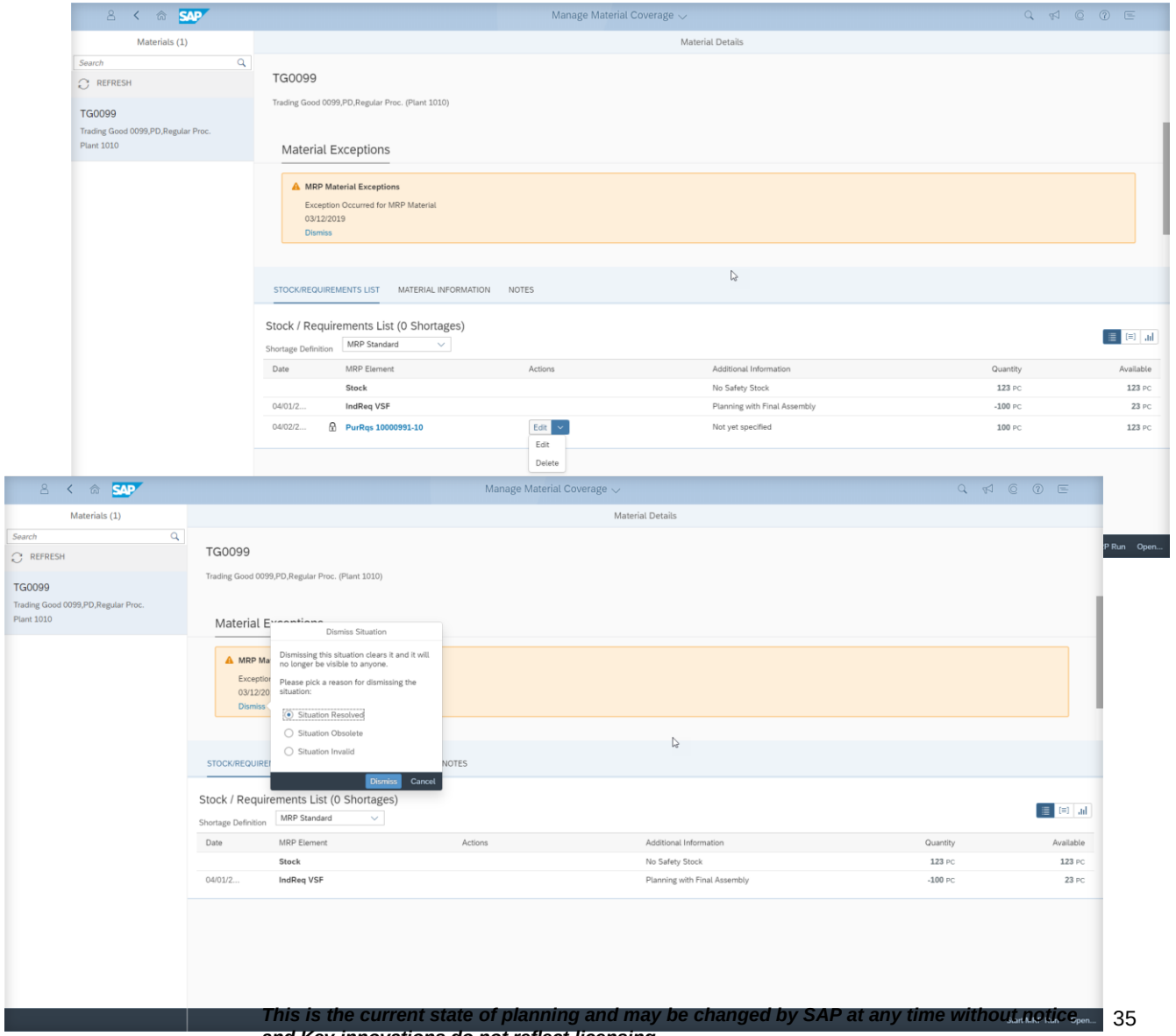
Value Proposition

- Situation Handling for Material Coverage
- Detect unnecessary supply elements

Capabilities

The following MRP Situations will be detected

- No requirements for a receipt element exist. To avoid unnecessary warehouse stock, the element should be reversed.
- The planned available stock exceeds the maximum stock as specified.
- The actual stock and the receipt elements exceed the requirements in the individual segment such as make-to-order planning, individual project planning, direct production or direct procurement.
- SAP Note 2733550



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SAP S/4HANA Cloud 1905

Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

Industry-specific capabilities

Manufacturing

Production Operations

Production Planning

Quality Management

R&D / Engineering

Product Compliance

Product Engineering

Product Lifecycle Management

Project Control

Supply Chain

Inventory

Order Promising

Warehousing

Transportation

Asset Management

Professional Services

Warehouse Kanban Supply into Production (3VT)
Resource Management in WM (3W0) – *new in 1905!*

Quality Management in WM (3M0)
Warehouse Inbound Processing (3BR)
Warehouse Outbound Processing (3BS)
Warehouse Physical Inventory (3BX)
Warehouse Production Integration (3DV)
Warehouse Ad Hoc Goods Issue (3BT)
Warehouse Posting Changes (3BU)
Warehouse Internal Repacking (3BW)

Real-time foundation

Database and Data Management

Enterprise Information Management

Application Platform and Infrastructure

Foundation

Line of Business / Industry / Technology

Business Area

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Warehouse Management

Accelerated and Simplified production supply with harmonized control cycle and integrated KANBAN processing

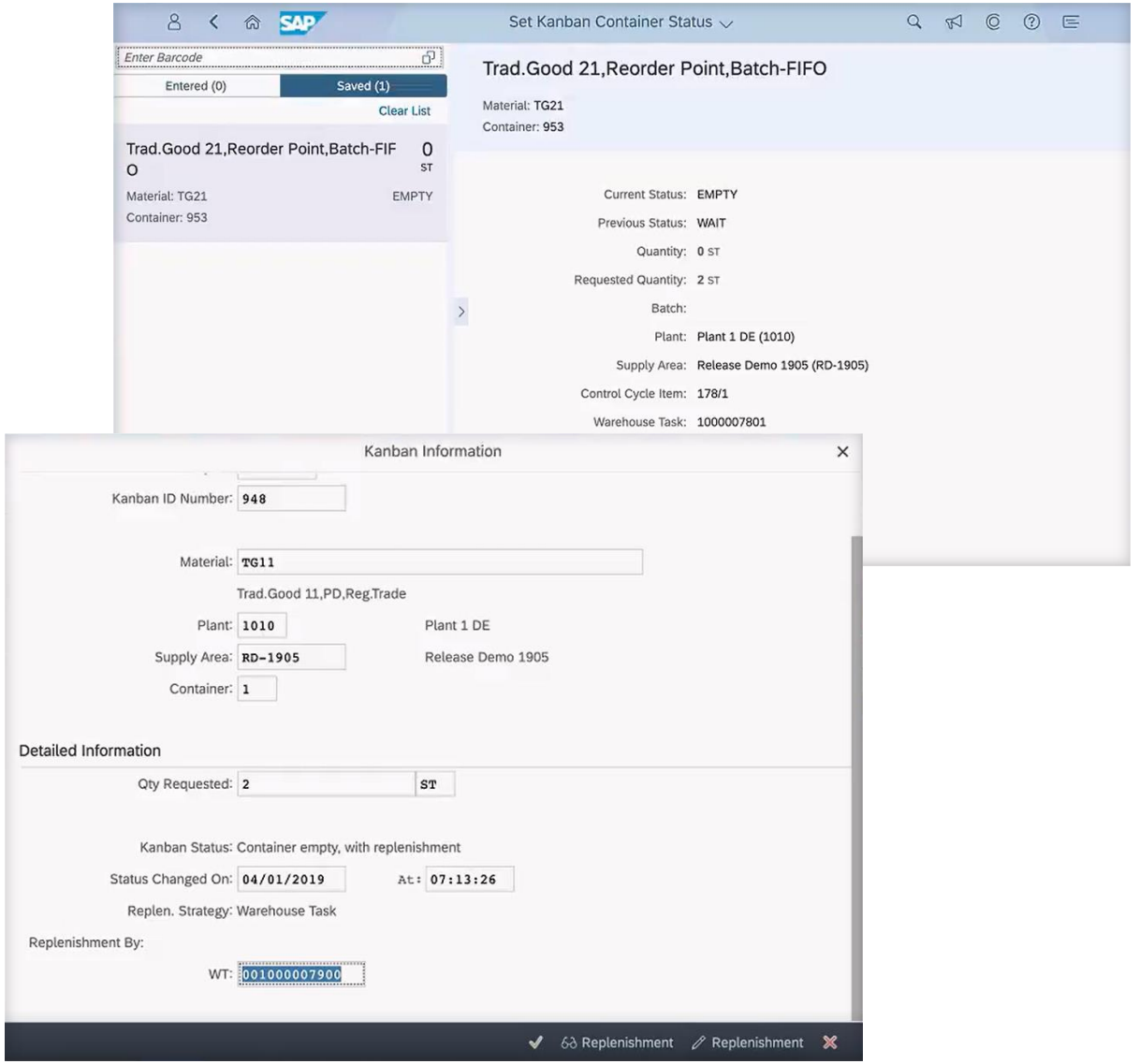
In Kanban, a new stock transfer replenishment strategy has been created, which enables direct warehouse task creation in Warehouse Management. The tight integration between warehousing and production reduces the total manufacturing costs by supporting lean execution principles based on standardized pull processes.

Value Proposition

- Immediate visibility of Kanban replenishment requests in Warehouse Management
- Smoother manufacturing flow
- Flexibility in production
- Reduce inventory carrying cost
- Better-managed inventory levels

Capabilities

- Support Kanban scenarios in production supply in conjunction with Warehouse Management as supply source
- Integrated control-cycle maintenance for production and warehouse functions



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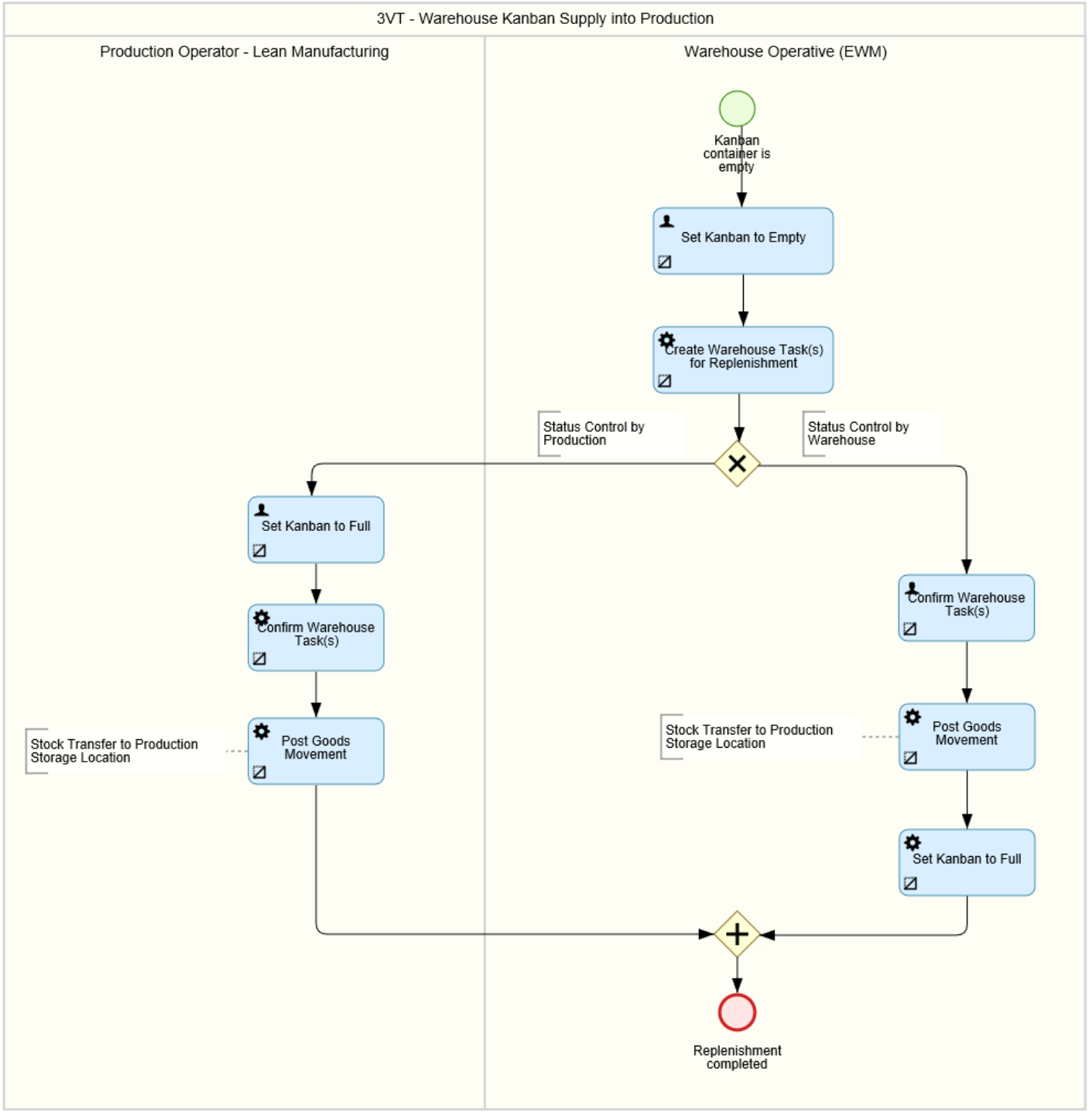
Warehouse Management

Warehouse Kanban Supply into Production (3VT)

- When a kanban container status is set to "Empty", the Warehouse Management task is created.
- The warehouse task can be confirmed in two possible ways:
  - ➢User confirms the warehouse task - the system sets the kanban container to "Full".
  - ➢User sets the kanban container to "Full" - the system confirms the warehouse task



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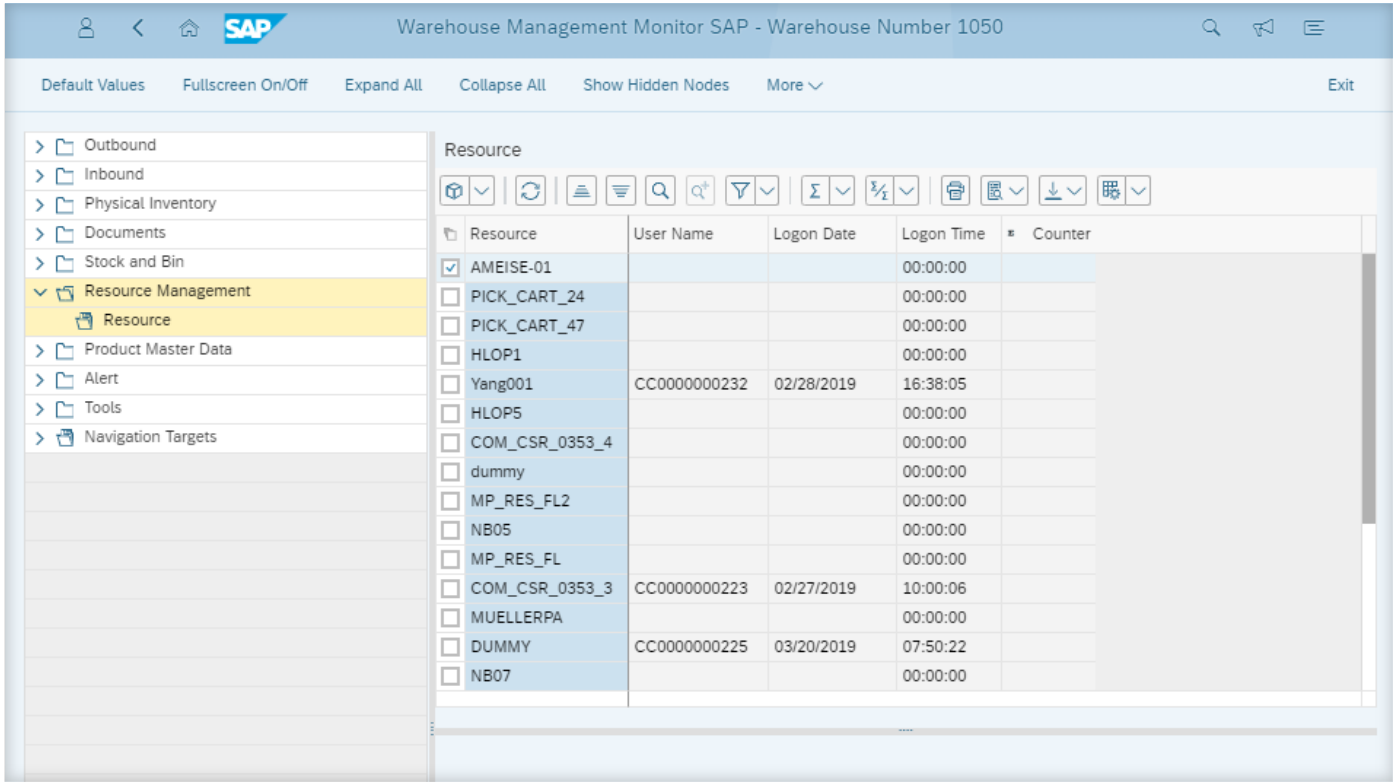
Warehouse Management

Improve efficiency of Mobile execution with new APIs for Warehousing activities

The new scope item *Resource Management in Warehousing (3W0)* allows you to leverage interfaces (APIs) for the development of customer-specific apps for warehouse task processing on mobile devices. In addition, it enables you to manage your warehouse resources, such as a user or equipment that executes work in the warehouse. A resource is mandatory to process warehouse orders and tasks with the APIs.



Value Proposition

- Increase the efficiency of warehouse processes
- Enable customers to manage warehouse resources
- Optimize workload for a dedicated warehouse resource
- Reduce additional work caused by paperwork

Capabilities

- Use Resource Management for mobile warehouse execution
- Integrate with mobile warehouse task processing
- Implement customer-specific apps for mobile warehouse execution for instance via the SAP Mobile Development Kit

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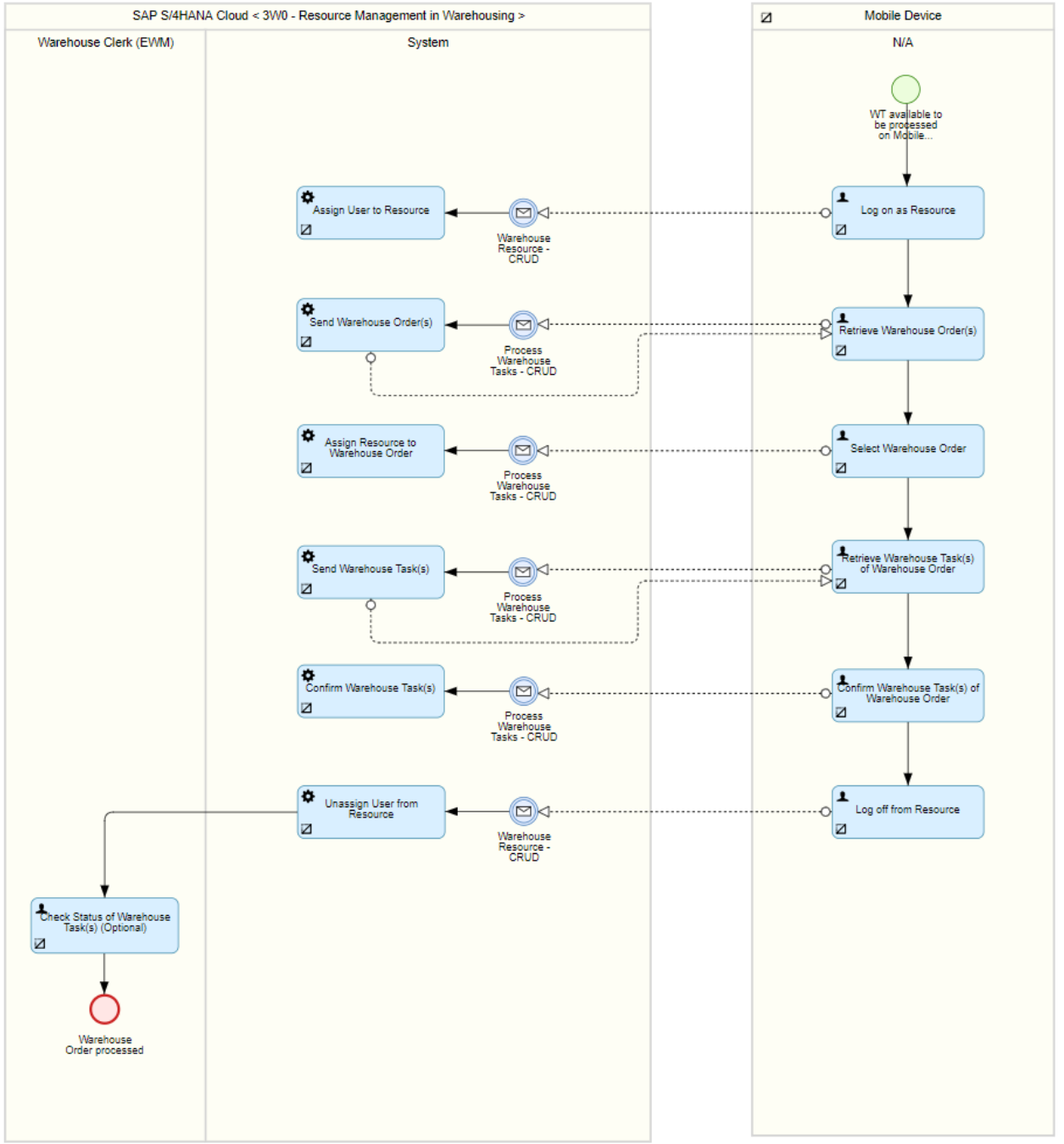
Warehouse Management

Resource Management in Warehousing (3W0)

- Leverage interfaces (APIs) for the development of customer-specific apps for warehouse task processing on mobile devices
- APIs enabling users to:
  - ➢ Process warehouse orders and warehouse tasks
  - ➢ Block warehouse orders and prevent concurrent processing by different warehouse workers



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This is the current state of planning and may be changed by SAP at any time without notice and Key innovations do not reflect licensing

Warehouse Management

Our direction

Open warehouse management with published APIs to allow partners and customer to consume warehousing data on any device

Goal for S/4HANA Cloud 1905

- Published API for Warehouse Order / Warehouse Task processing
- Published API for Resource Management related functions

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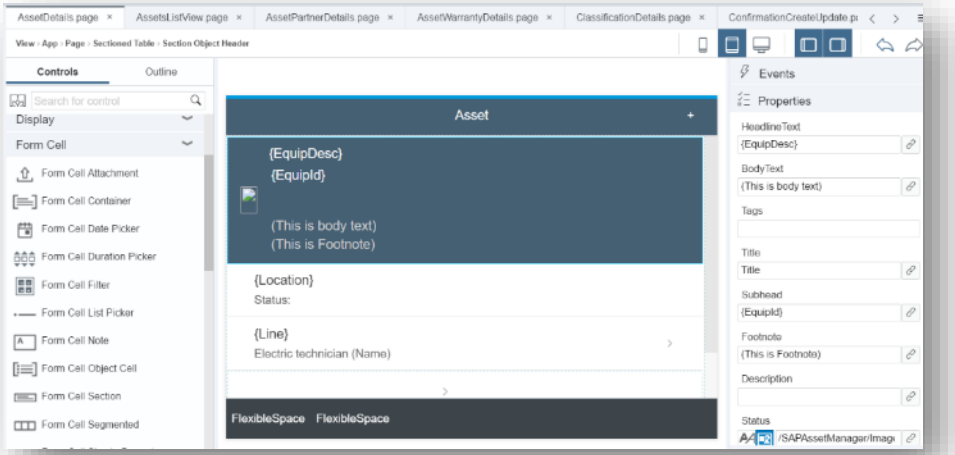
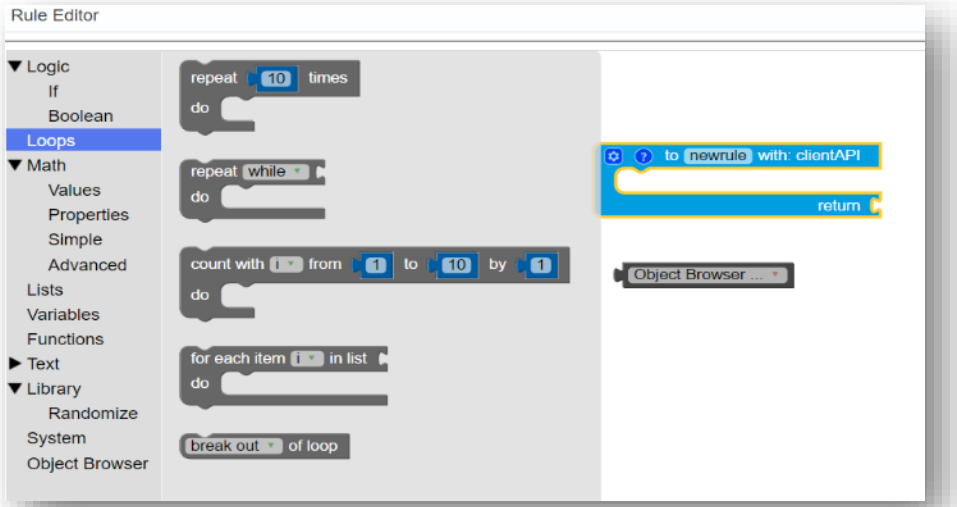
SAP Mobile Development Kit

What is it?

- SAP Cloud Platform Mobile Services includes a new Mobile development kit.
- Empowers developers to build and customize rich, native extensible mobile applications
- It simplifies the app lifecycle management.
- Creates native apps (SAP Asset Manager is an example)
- Video Tutorial





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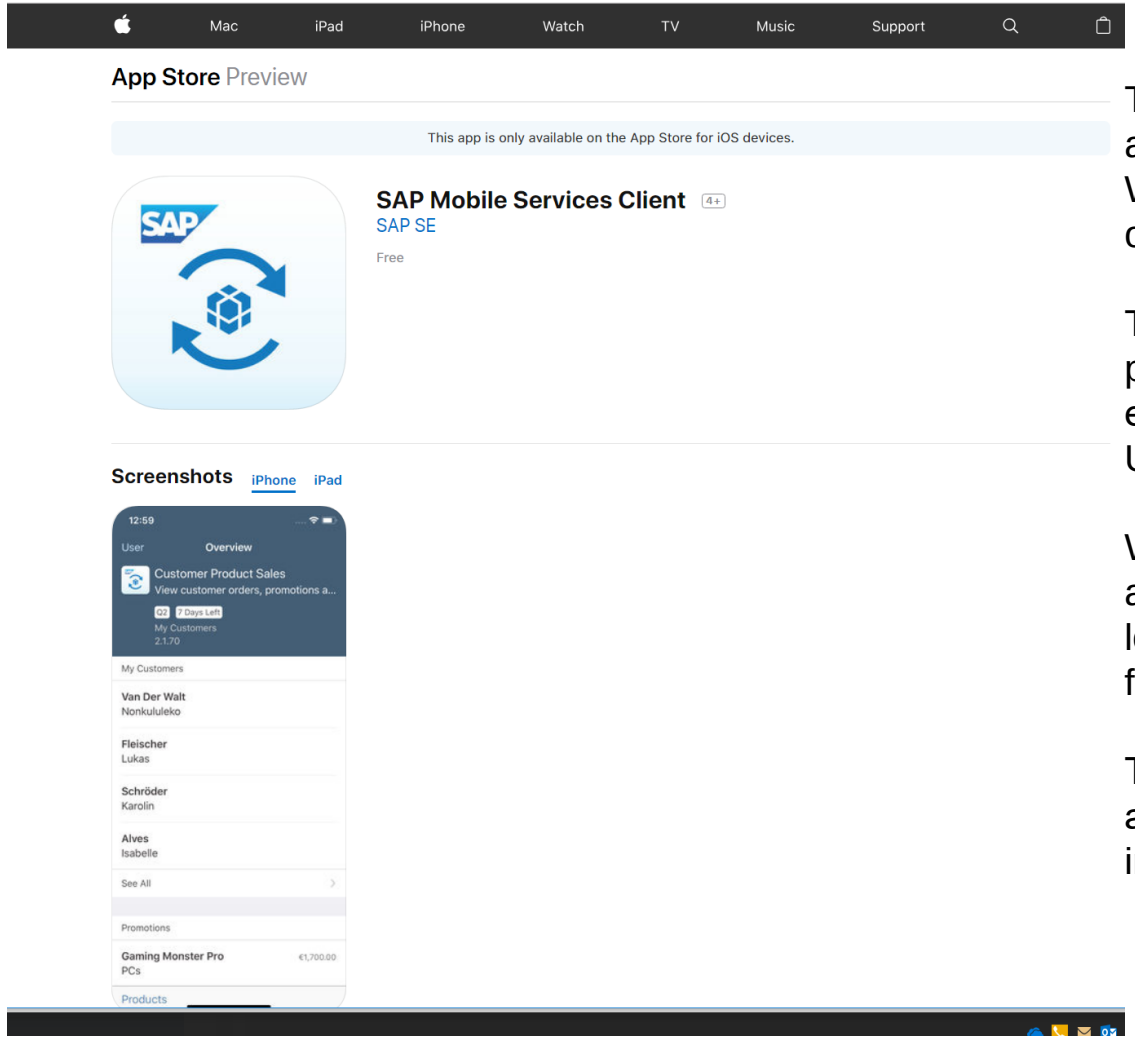
SAP Mobile Services Client App



The SAP Mobile Services Client is a native iOS application that gets its UI and business logic from JSON metadata. The metadata is defined in a WebIDE-based editor. It's provided to the client using the App Update service of Cloud Platform mobile services.

The client connects to mobile services with an endpoint URL among other properties which are provided by the user. These properties are usually embedded in a custom URL which is sent to the user’s email. The custom URL must start with "sapmobilesvcs://".

When the client connects to mobile services, it receives the app metadata and connects to one or more OData services. OData can be securely stored locally so that it's available offline. The UI is implemented with the SAP Fiori framework.

This app is “generic” in that no application definitions or data come with the app. It’s only usable if the user connects securely to a mobile services instance.

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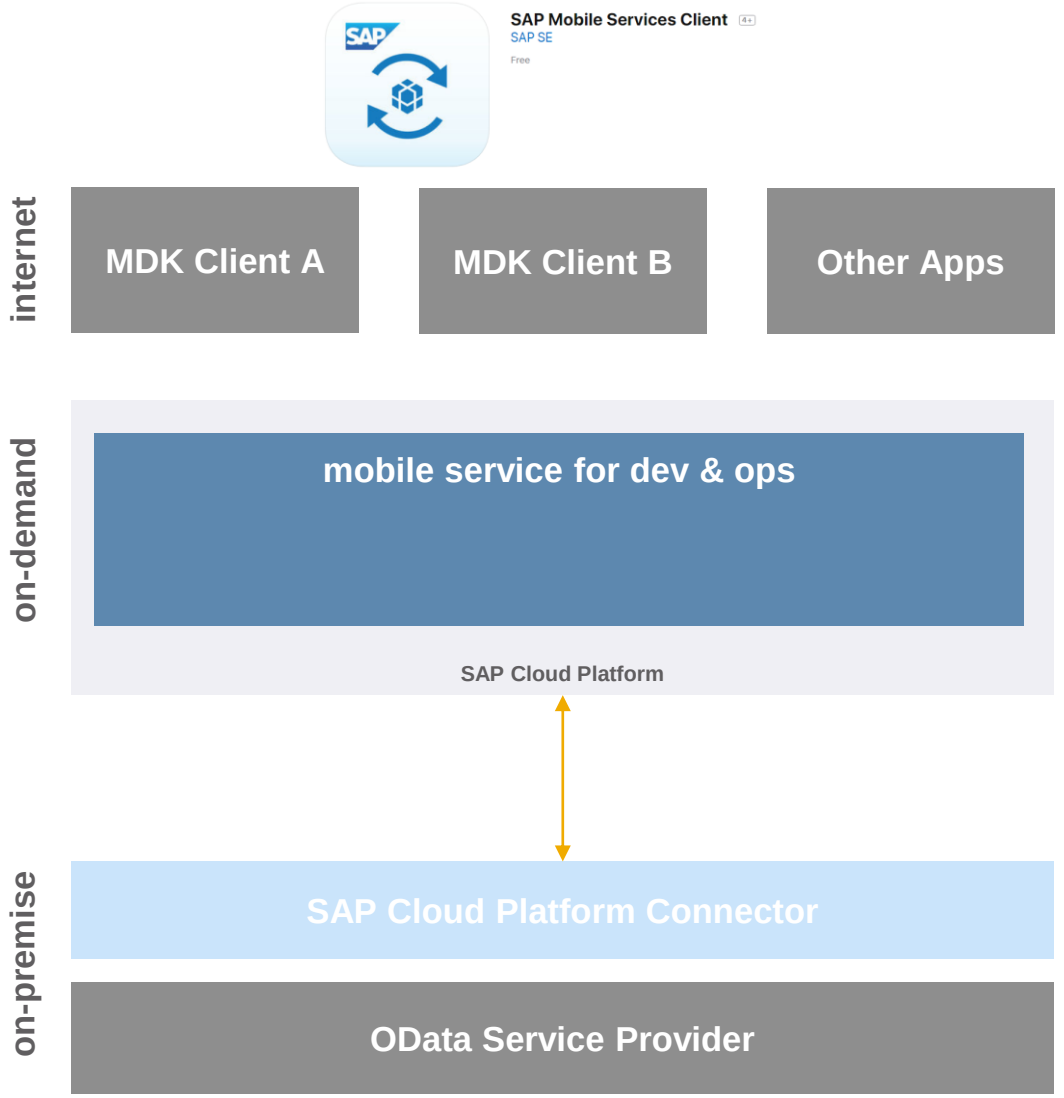
Runtime – Mobile Services

- Deploy the app via standard Mobile Services commands from WebIDE
- Lifecycle: the mobile client application **automatically** receives any application updates



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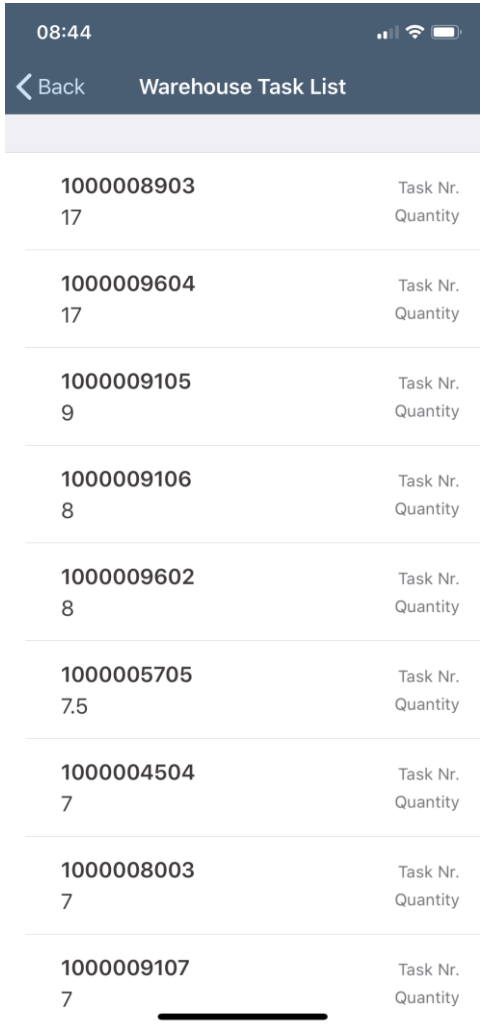
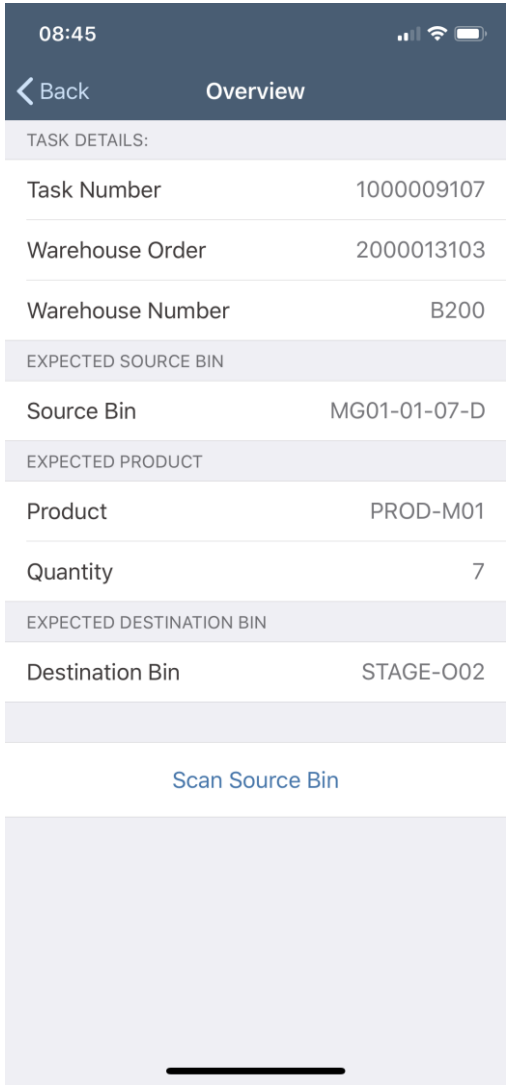
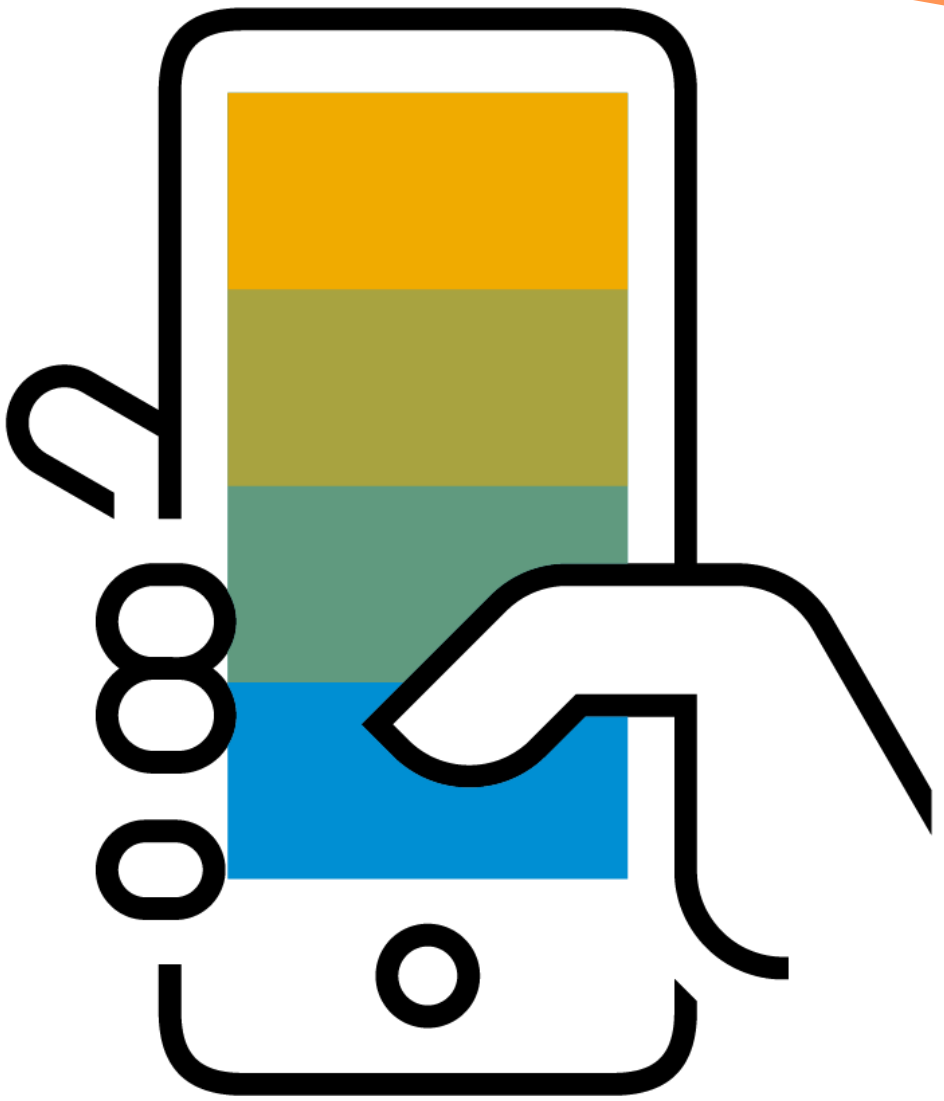
MDK Prototype on iOS

SAP LABS PREVIEW







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SAP S/4HANA Cloud for Manufacturing & Supply Chain

Improve warehouse operative efficiency with new SAP Fiori app “Process Warehouse Tasks - Picking”

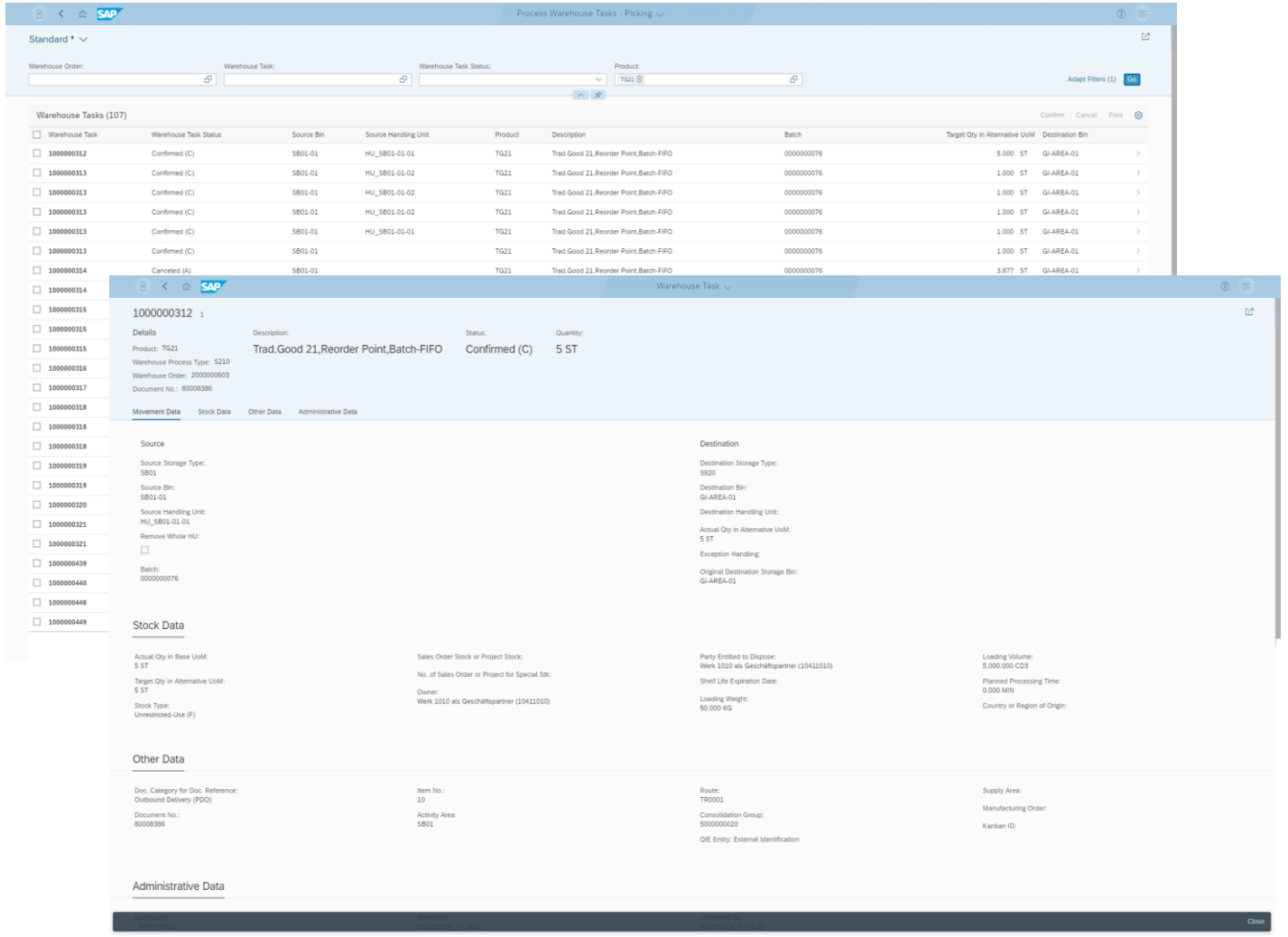
The new SAP Fiori app *Process Warehouse Tasks – Picking* enables the warehouse operative to easily view, print and confirm open picking tasks also on mobile devices.

Value Proposition

- Improve usability and productivity of warehouse picker

Capabilities

- Confirm open picking warehouse task
- Confirm picking task with exceptions
- Print open picking task
- View details of open picking warehouse task
- Navigate to product master FIORI app



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SAP S/4HANA Cloud 1905

Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

Industry-specific capabilities

Manufacturing

Production Operations

Production Planning

Quality Management

R&D / Engineering

Enterprise Portfolio and Project Management

Product Compliance

Product Engineering

Product Lifecycle Management

Project Control

Supply Chain

Advanced Order Promising

Inventory

Order Promising

Warehousing

Transportation

Asset Management

Maintenance Management

Professional Services

Controlling and Accounting

Resource Management

Service-Centric Billing

Core Inventory Management (BMC)

Real-time foundation

Database and Data Management

Enterprise Information Management

Application Platform and Infrastructure

Foundation

Line of Business / Industry / Technology

Business Area

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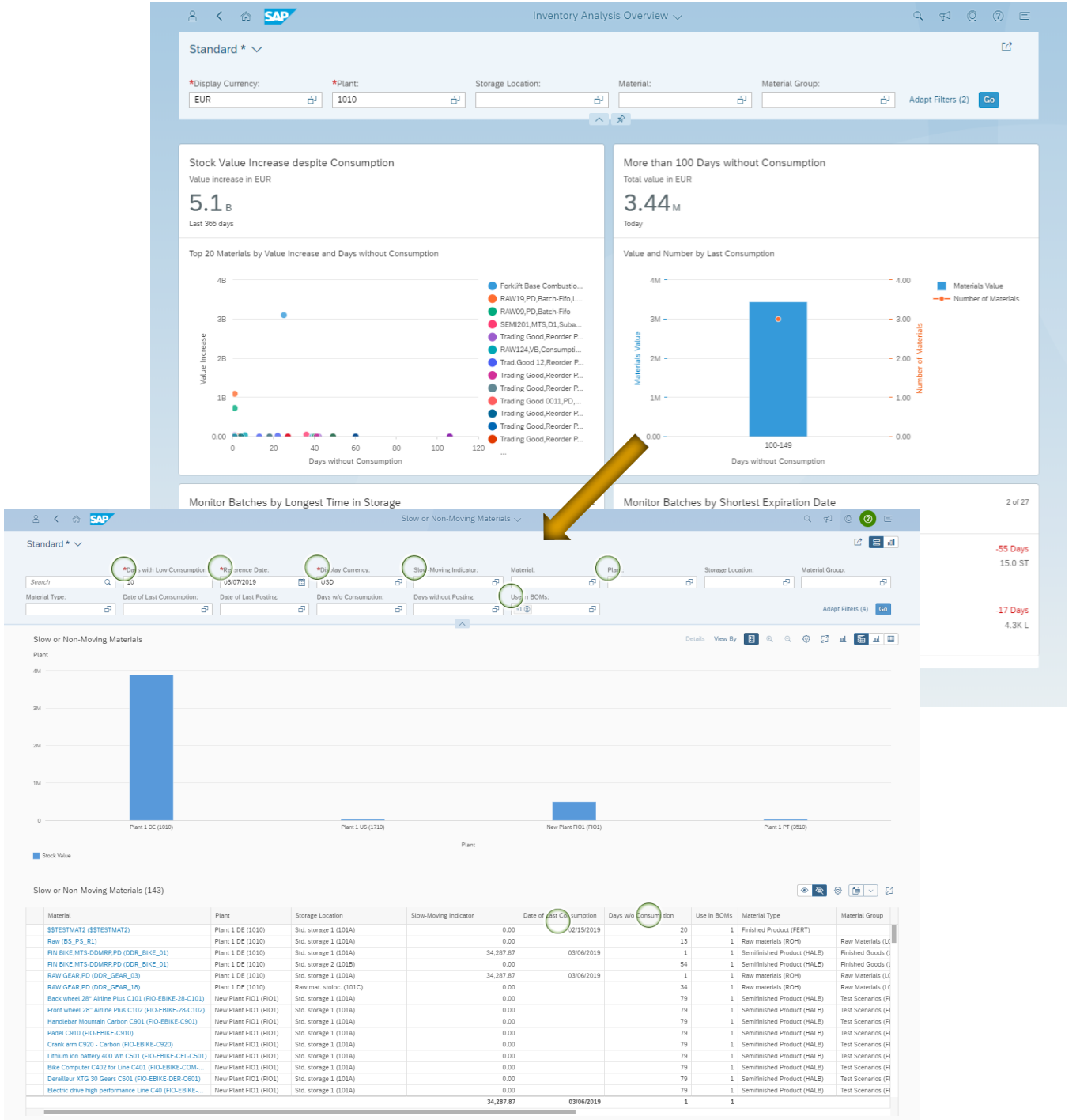
Inventory Management
Slow or Non-Moving Materials

The Slow-Moving Indicator enables you to determine slow-moving materials based on the consumption to stock ratio. The slow-moving indicator is an indicator for a slow-moving material.

This indicator is defined as the total consumption quantity for the analysis period divided by the product of stock quantity on the reference date and multiplied with the period length in number of days. By taking time and percentage into account, the result is normalized and thus makes different analysis periods comparable.

- Monitor materials without consumption (Slow-Moving Indicator = 0)
- A slow-moving indicator = 100 means that 100 % of the current stock will be consumed within one year.



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SAP S/4HANA Cloud 1902

Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

Industry-specific capabilities

Manufacturing

Production Operations

Production Planning

Quality Management

R&D / Engineering

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Product Lifecycle Management

Project Control

Supply Chain

Advanced Order Promising

Inventory

Order Promising

Warehousing

Transportation

Asset Management

Maintenance Management

Professional Services

Controlling and Accounting

Service-Centric Billing

SAP Fiori Analytical Apps for Inventory and Warehouse Management (BGG)

Real-time foundation

Database and Data Management

Enterprise Information Management

Application Platform and Infrastructure

Foundation

Line of Business / Industry / Technology

Business Area

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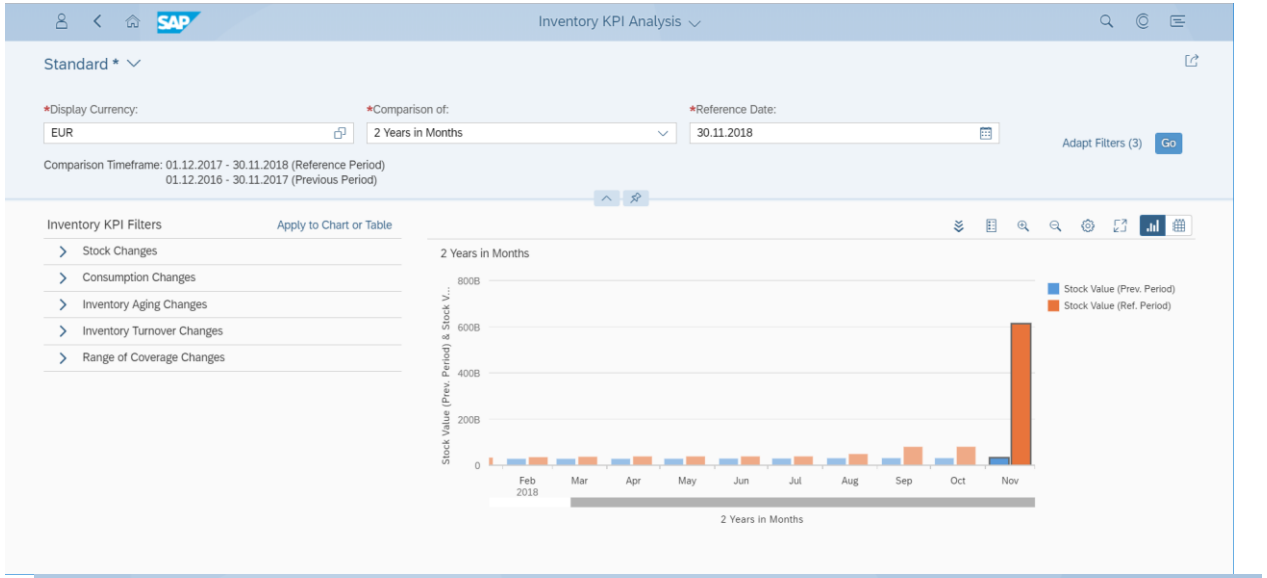
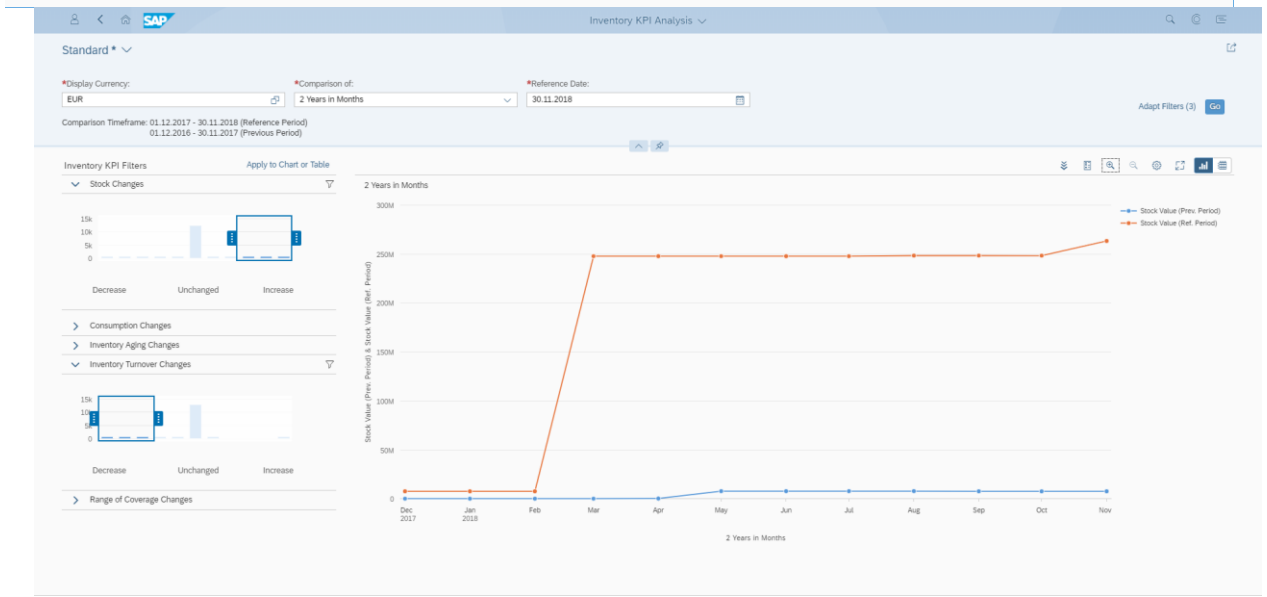
Manufacturing & Supply Chain

Inventory KPI Analysis

- Ensure inventory accuracy by checking inventory values as time series for comparable periods
- Identify potential outliers that could affect the fixed capital situation
- Display time series as a chart or a table with further drill-down functionality
- Filter for outliers and display only these particular stocks
- The app offers 5 KPI filters that display potential outliers in a frequency distribution chart for e. g. Stock Changes, Consumption Changes etc.





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Agenda

Welcome

ONE SAP S/4HANA & SAP S/4HANA Cloud Positioning

SAP S/4HANA Cloud for Manufacturing & Supply Chain

- **Core Processes**
- **Key Highlights**
- **1905 Release Highlights**

Where to go for more information?

Q & A

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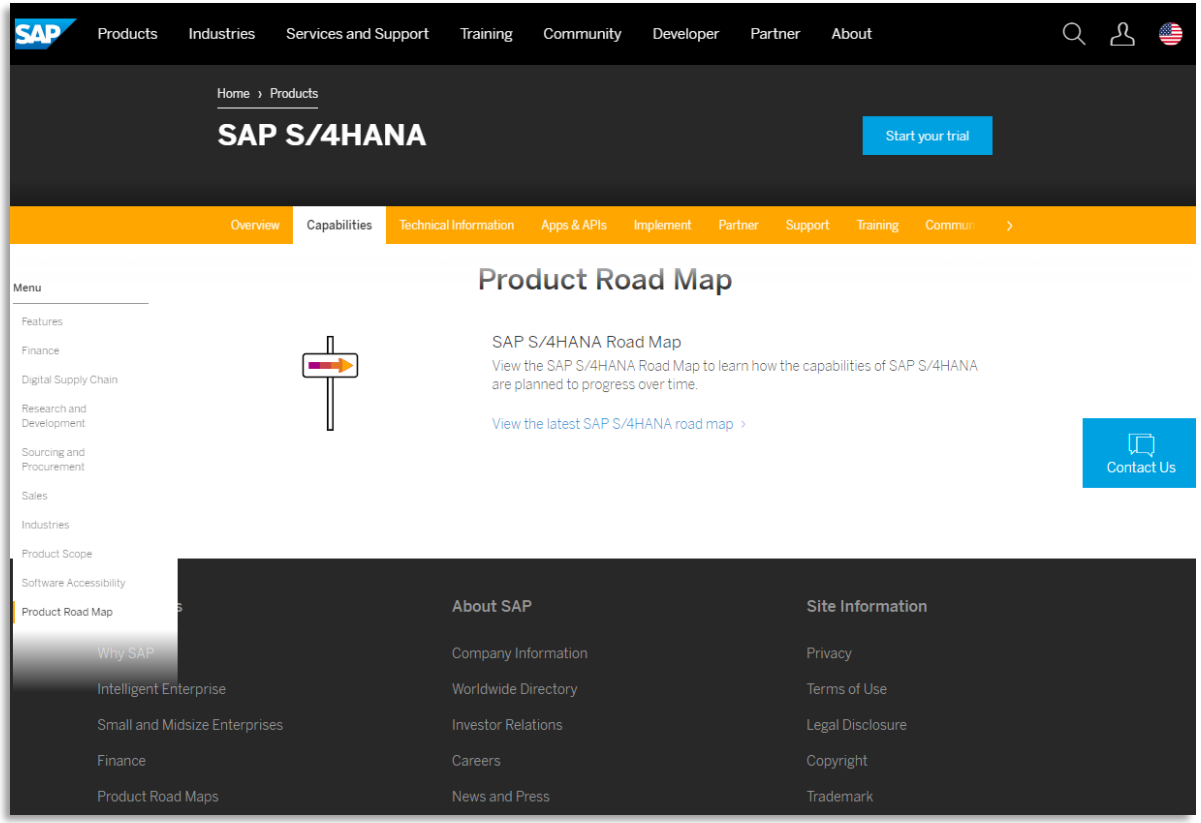
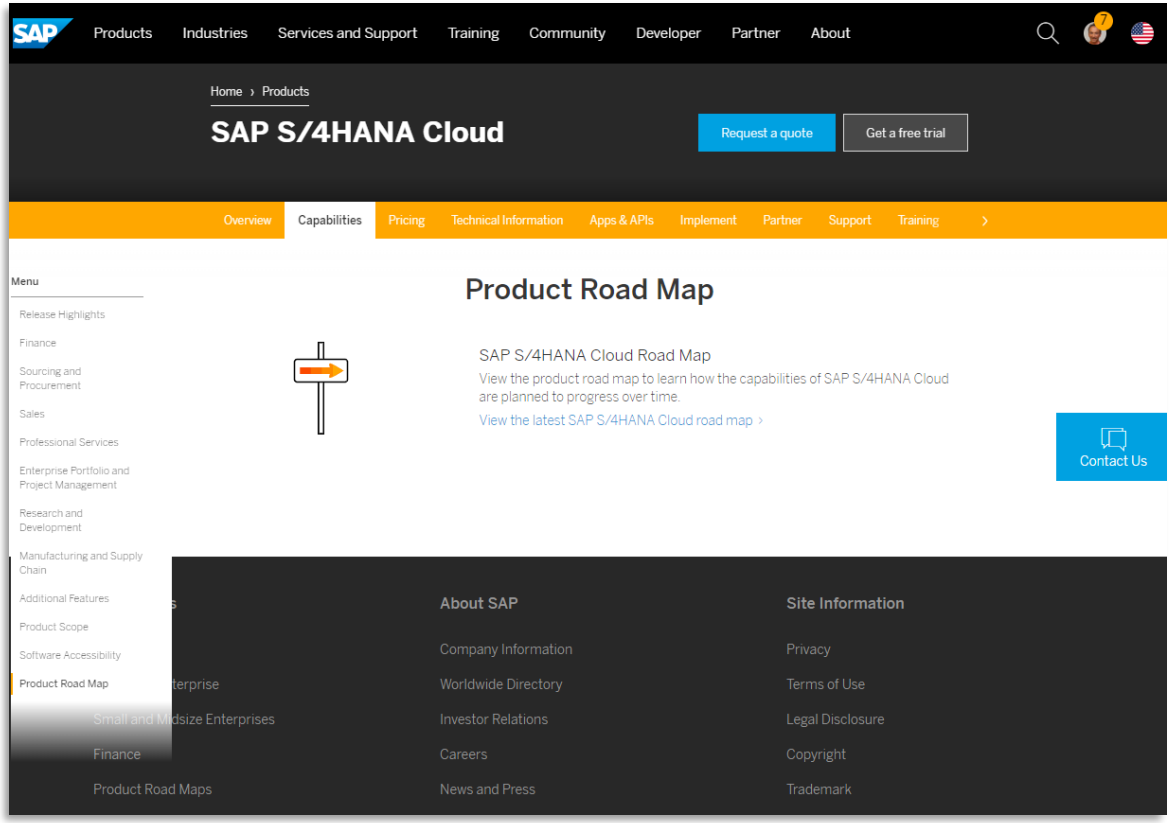
Road maps

Related product road maps available on sap.com/roadmaps:

- SAP S/4HANA



- SAP S/4HANA Cloud



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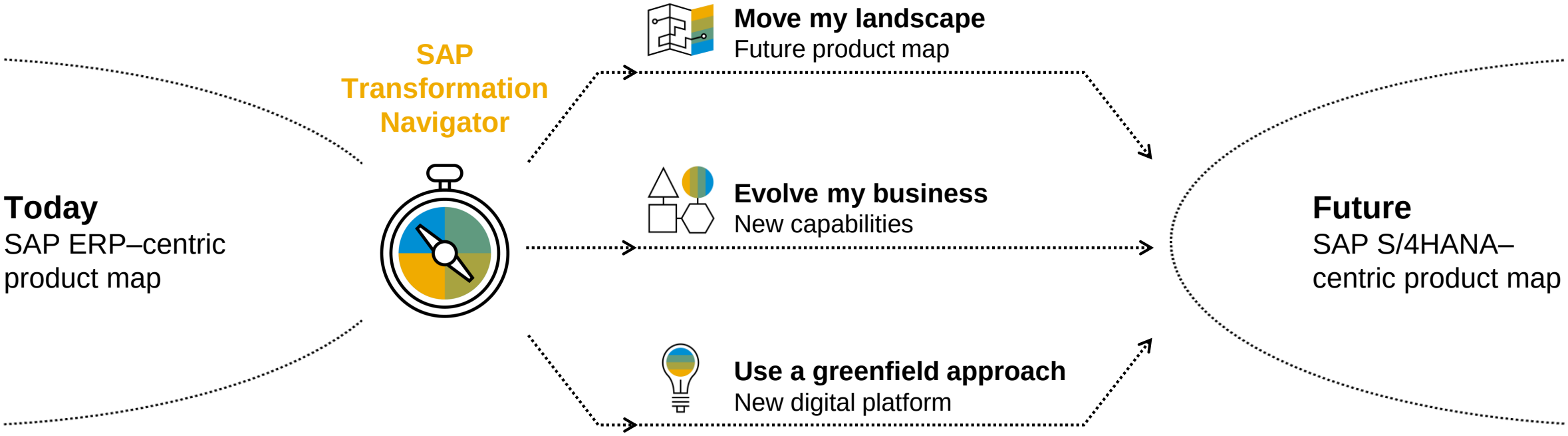
SAP Transformation Navigator

Supporting your digital transformation



SAP Transformation Navigator provides you with clear guidance to chart the Intelligent Enterprise:

- Based on your currently used products, this free self-service produces an individualized report highlighting business value, detailing integration to SAP S/4HANA and other cloud products, and explaining transformation services and license information.
- With the new time-slider feature, you can even identify the best point in time to engage in your journey to becoming an intelligent enterprise.
- Discover the tool and your transformation path at https://support.sap.com/stn.

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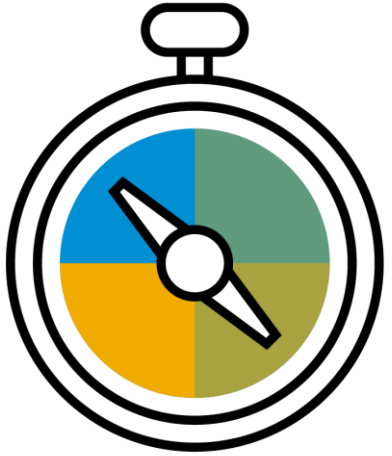
Preparing for 1905: Next Steps

- Continue the conversation and get answers to your questions in the SAP S/4HANA Cloud Customer Community
- Sign up to watch other 1905 early release webinars live or on demand
- Listen to our on demand webinar on how to get prepared for your quarterly release upgrade



- View latest SAP S/4HANA Cloud Release Info
- View upgrade schedule for SAP S/4HANA Cloud
- View SAP service level agreement
- Read about upgrade specific frequently asked questions

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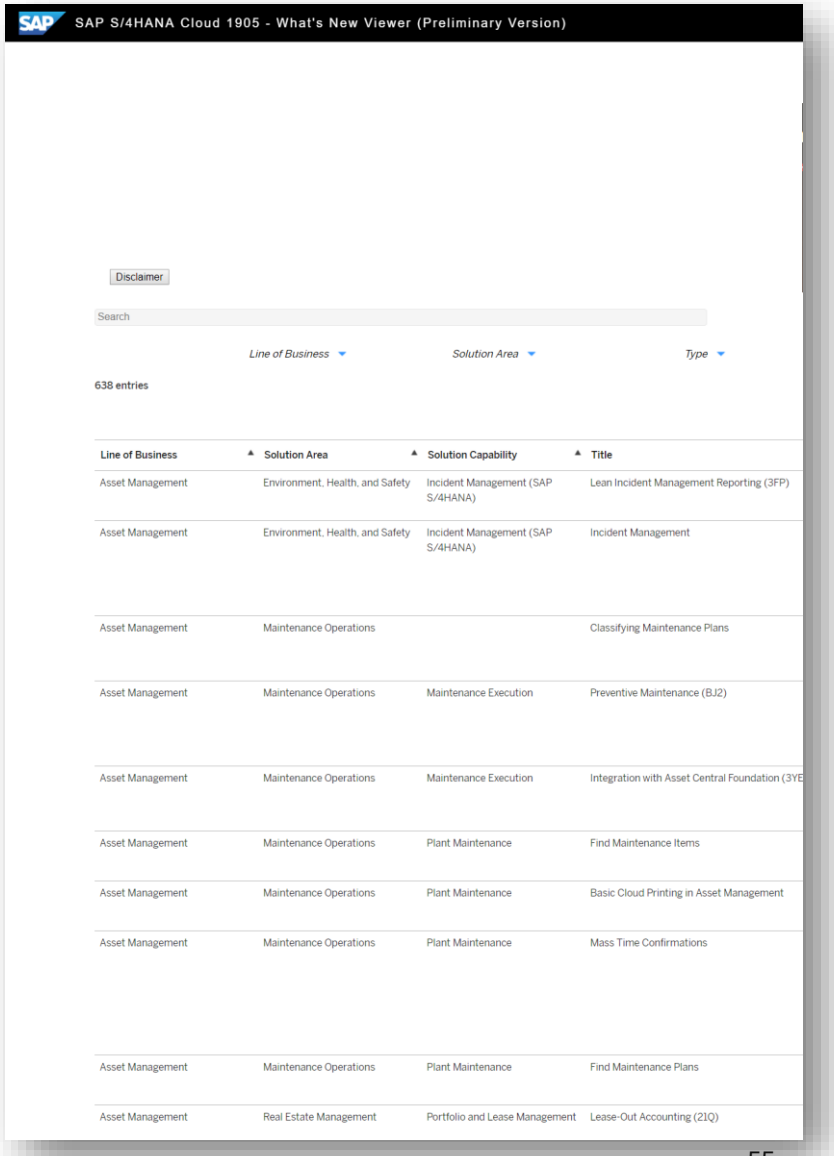
SAP S/4HANA Cloud 1905: Preliminary What's New available

☞ You can find the *Preliminary What's New document for SAP S/4HANA Cloud 1905* on the current Help Portal page of

SAP S/4HANA Cloud 1905.



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Where to go for more information?

Learn

SAP S/4HANA Cloud Release Info

Latest release highlights including videos and blogs

Learning Journeys

Learning Room

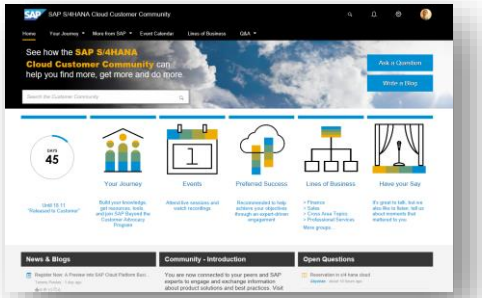
Stay Current Program

Learn more about digital learning opportunities

Engage

SAP S/4HANA Cloud Customer Community

Exclusive for existing customers & partners looking for deeper product knowledge and expertise



SAP Community

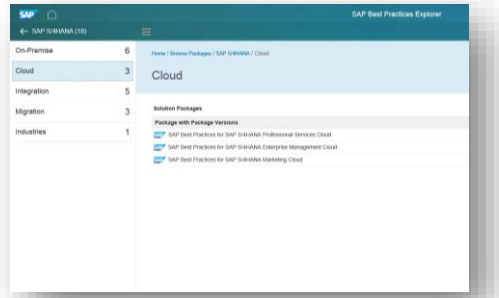
SAP Help Portal

Join the SAP S/4HANA Movement

Implement

Best Practices Explorer

Benefit from predefined business processes & search, browse and consume SAP Best Practices



SAP Transformation Navigator

Roadmap Viewer

SAP S/4HANA Cloud Trial

Thank you.

Dr. Gerhard Welker
SAP S/4HANA Product Management & Co-Innovation

[SAP S/4HANA Cloud for Manufacturing & Supply Chain – The Link Collection]
[SAP S/4HANA Cloud for Asset Management – The Link Collection]

Follow us via @SAP and #S4HANA, or myself via @GerhardWelker and LinkedIn

SAP S/4HANA Product Jam Group

THE BEST RUN SAP

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