SAP S/4HANA Cloud
1905 Release Update
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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
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
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

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

Machine learning for automated processing & decision support
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
- INVENTORY
- WAREHOUSING
- ORDER PROMISING
- SHIPPING & TRANSPORT
- FINANCIAL ACCOUNTING & CLOSE
- FINANCIAL OPERATIONS
- COST MANAGEMENT
- MAINTENANCE MGMT
- SERVICE OPERATIONS & PROCESSES

The most complete, intelligent, and flexible ERP

Enabling in addition:

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

SAP S/4HANA CLOUD

one codeline
choice of deployment

SAP S/4HANA

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SAP S/4HANA Release Strategy
(2018–2019 and definition of deliveries)

Quarterly innovation cycle

2018
Q3 → Q4 → Q1 → Q2

SAP S/4HANA Cloud 1808
SAP S/4HANA Cloud 1811
SAP S/4HANA Cloud 1902
SAP S/4HANA Cloud 1905

Yearly innovation cycle with quarterly SP stacks

SAP S/4HANA 1809 FPS 00
SAP S/4HANA 1809 FPS 01
SAP S/4HANA 1809 FPS 02
SAP S/4HANA 1909 SPS 00

Today

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Agenda

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Where to go for more information?

Q & A
SAP S/4HANA Cloud for Manufacturing & Supply Chain

Core Processes
SAP S/4HANA Cloud for manufacturing industries
End 2 End Corporate ERP Processes

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

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
- SAP Distributed Manufacturing - 3D Printing
- SAP Integrated Business Planning (IBP)*
- Interface to Warehouse Management
- SAP Manufacturing Execution (ME)
- SAP Success Factors
- SAP Fieldglass
- SAP Hybris Commerce

* Roadmap Item

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SAP S/4HANA Cloud: Manufacturing Scope overview

**PRODUCTION ENGINEERING**
- Change Manufacturing BOM
- Mass change Manufacturing BOM

**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.

**PRODUCTION OPERATIONS**
- Run Manufacturing Operations in several industry variations & extensions, fully integrated with Supply Chain & Finance.

**MANUFACTURING INSIGHTS**
- Use Embedded Analytics on Manufacturing relevant items, like Stock Overviews, MRP, Capacity and QM Lists & Dashboards.

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

**Process Enhancements**
- Batch Management
- Subcontracting
- Subsidiary to Headquarters
- Rework Processing
- Complementary Procurement Functions
- Kanban Supply
- MES Integration**
- SAP Analytics Cloud Manufacturing Analysis**

**Integration scenarios**

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SAP S/4HANA Cloud: Manufacturing Scope in Detail

**Production Planning**
- Material Requirements Planning
  - Create Plan Independent Requirements
  - Run MRP
- Demand Driven MRP
  - Buffer Positioning

**Production Engineering**
- Mass Change Manufacturing Bill of Material for Production
  - Change Manufacturing Bill of Material for Production
- Fix MRP Data issues
- MRP Evaluation
- MRP Key figures
- Manage Material Shortage

**Capacity Planning**
- Create & Evaluate Capacity
- Manage Work Center Capacity

**Manufacturing Insights**
- Manufacturing Analytics
  - SAC Manufacturing Analysis
- Inventory Management
  - Kanban Supply to Prod.
- Quality Management

**Quality Mgmt.**
- Warehouse Kanban Supply to Prod.
- PI Inbound Storage
- Complementary Procure Functions

**Production Operations**
- Make to Stock Discrete
  - Convert Planned to Production Orders
- Make to Stock Process w. Process Order
  - Manage Material Shortage
- Make to Stock with Variant Config
  - Manage Production Orders
- Make to Stock Repetitive
  - Update
- Make to Stock with Co- and By-Products - Process Manufacturing
  - Manage & Release Production Order
  - Pick Components
- Make to Order Discrete
  - Update
- Make to Order with Variant Config

**Integration scenarios**
- MES Integration
- SAC Manufacturing Analysis
- Subcontracting
  - Update (BYM)
  - Subsidiary to Headquarters
- Rework Processing
  - Batch Mgmt.
- Kanban Supply
  - PI Inbound Storage
- Tank Mgmt.
- Complementary Procure Functions

Legend:
- Business Area
- Leading Scope
- Scope
- Supporting Scope
- Integration Item

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

WAREHOUSING

Warehouse Outbound Processing 3BS

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

Warehouse Ad-hoc Goods Issue 3BT

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

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

Warehouse Inbound Processing 3BR

- 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

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

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

Support integration scenarios for
- Procurement (Delivery & Return)
- Stock Transfers (Delivery & Return)
- Sales (Delivery & Return)

Third-Party WM System Integr. 1ZQ

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

Warehouse Kanban Supply into Production 3VT

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

Resource Management in Warehousing 3W0
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 **2ON**

**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**
- Physical Inventory Document Object Page
- Physical Inventory Analysis

**SHIPPING & TRANSPORTATION**
- Inventory Count & Adjustment **BML**
  - Warehouse Physical Inventory **3BX**
- 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

**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

**Legend**
- Business Area Leading Scope BP ID#
- Scope Variant BP ID#
- Supporting Scope BP ID#
- Integration Item BP ID#

**SAP Fiori Analytical Apps for Inventory and Warehouse Management** **BGG**

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Core manufacturing processes with procurement and sales
SAP S/4HANA Manufacturing: Fiori Apps

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 PIIRs UP 1905
- Manage Change Requests
- Manage PIIRs
- 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
- 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 PIIR 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 Manufacturing is primarily supported with Harmozied 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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Exemplary view, most current list see Fiori Apps Library
Delta stickers reflect between 1902 and 1905
SAP S/4HANA Supply Chain: Fiori Apps

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

Inventory Manager
- Dead Stock Analysis
- 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
- Physical Inventory Analysis (Accessible)
- Physical Inventory Document Overview
- Slow or Non-Moving Materials
- Stock - Multiple Materials
- Stock - Single Material

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

Order Fulfillment Specialist
- Release for Delivery

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
- 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
- Overdue Materials - Stock in Transit
- 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

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
- Pack Warehouse Stock
- Process Warehouse Tasks – Picking

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

Warehouse Operative (Extended Warehouse Management)
- Pack Outbound Deliveries
- Pack Warehouse Stock
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Exemplary view, most current list see Fiori Apps Library
Delta stickers reflect between 1902 and 1905
SAP S/4HANA Cloud for Manufacturing & Supply Chain

Key Highlights
Key highlights in Product Area Manufacturing / Supply Chain

- E2E core processes seamlessly integrated with Finance
- Demand Driven Manufacturing
- Production execution integration
- Integrated Warehouse management

**Procure to Pay**
- Procurement of materials and services
- Manage suppliers and spend

**Plan to Product**
- Engineering
- Forecast and Demand
- Production and Planning (MRP)
- Production Execution

**Order to Cash**
- Sales Order and Contract Management
- Delivery and Billing

**Core Finance**
- Variant Configuration
- Inventory Management
- Quality Management
- Serial Number and Batch Management
- Available to Promise

**Advanced Variant Configuration**

**Real time inventory management**

*Roadmap Item*
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
Demand Driven Replenishment

Process Flow

Analytics (incl. Basis for Feedback)

Buffer Positioning (Strategic)

Replenishment Planning

Replenishment Execution

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<th>Lead time Var(LT)</th>
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<tr>
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</tbody>
</table>
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
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

As-built/as-maintained BOM

Engineering BOM

Sales Configurator (CPQ)

Purchased Parts List

Working Together Seamlessly

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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

Planned Innovations
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
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)
  - \(0.1 + 0.2 = 0.30000000000000004\) (binary arithmetic)
Simulation Environment – Integration of routing

**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
SAP S/4HANA Cloud - Warehousing

Ever

Inventory Management

Since 1708

Third-Party Warehouse Management System

Since 1805

SAP EWM 9.5

Since 1811

Warehouse Management

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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

- **S910** Goods Receipt
  - GR-AREA
- **S970** Clarification Zone
  - CL-AREA
- **S840** Scrapping Zone
  - SCRAP-AREA
- **SB01** Bulk Storage
- **SF01** Fixed Bin Storage
- **S001** Storage
- **SF02** Fixed Bin Storage II
- **S002** Storage II
- **S915** Goods Receipt from Production
  - PR-AREA
- **S920** Goods Issue
  - GI-AREA-01
  - GI-AREA-02
- **S105** Production Supply
  - PROD-SUPPLY
- **S840** Scrapping Zone
  - SCRAP-AREA
- **Copy of Template Storage Type**
- **Customer Enhancement**
- **Master Data**
  - Storage Bin
- **Best Practices Customizing**
  - Template Storage Type
  - Predefined Storage Type

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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

Supply Chain
- Product Lifecycle Management
- Project Control

Asset Management
- Advanced Order Promising
- Inventory

Maintenance Management
- Warehousing
- Transportation

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

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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
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

Real-time foundation

Database and Data Management
- Enterprise Information Management

Application Platform and Infrastructure
- Foundation

Industry-specific capabilities

Professional Services
- Projects and Engagements

Controlling and Accounting
- Resource Management

Service-Centric Billing

Line of Business / Industry / Technology

Business Area

Material Requirements Planning (J44)
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

Manufacturing
- Production Operations
  - Production Planning
  - Quality Management
    - Product Lifecycle Management
    - Project Control

R&D / Engineering
- Product Compliance
- Product Engineering
- Product Lifecycle Management

Supply Chain
- Inventory
- Order Promising
- Warehousing
- Transportation

Asset Management

Professional Services

Controlling and Accounting
- Asset Management
- Maintenance Management

Manufacturing
- Production Planning
- Quality Management
- Production Operations

Resource Management
- Supply Chain
- Professional Services

Controlling and Accounting
- Asset Management
- Maintenance Management

Industry-specific capabilities

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

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
Application Platform and Infrastructure

Enterprise Information Management
Foundation

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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
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.

Warehouse Management

Warehouse Kanban Supply into Production (3VT)
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
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
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
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
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.
Runtime – Mobile Services

- Deploy the app via standard Mobile Services commands from WebIDE

- Lifecycle: the mobile client application **automatically** receives any application updates
### MDK Prototype on iOS

#### Warehouse Task List

<table>
<thead>
<tr>
<th>Task Nr.</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000008903</td>
<td>17</td>
</tr>
<tr>
<td>1000009604</td>
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<td>1000008003</td>
<td>7</td>
</tr>
<tr>
<td>1000009107</td>
<td>7</td>
</tr>
</tbody>
</table>

#### Overview

**Task Number**: 1000009107

**Warehouse Order**: 2000013103

**Warehouse Number**: B200

**Source Bin**: MG01-01-07-D

**Product**: PROD-M01

**Quantity**: 7

**Destination Bin**: STAGE-002

**Scan Source Bin**
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
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 Engineering
- Product Lifecycle Management
- Project Control

Supply Chain
- Advanced Order Promising
- Order Promising
- Warehousing
- Transportation

Asset Management

Maintenance Management

Industry-specific capabilities

Professional Services
- Resource Management
- Service-Centric Billing

Controlling and Accounting

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
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.
SAP S/4HANA Cloud 1902
Business Area in Line of Business / Industry / Technology

Product- and Asset-centric capabilities

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- Production Planning
- Quality Management

R&D / Engineering
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- Product Engineering
- Product Lifecycle Management
- Project Control

Supply Chain
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- Order Promising
- Warehousing
- Transportation

Asset Management
- Maintenance Management

Controlling and Accounting

Professional Services

Real-time foundation

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Foundation

Industry-specific capabilities

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

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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.
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
Road maps

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

- SAP S/4HANA
- SAP S/4HANA Cloud
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.
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
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**

Engage

- **SAP S/4HANA Cloud Customer Community**
  - Exclusive for existing customers & partners looking for deeper product knowledge and expertise

- **SAP Community**
- **SAP Help Portal**

Improve

- **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**

Learn more about digital learning opportunities
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

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