

# Manufacturing and Supply Chain and Asset Management in SAP S/4HANA Cloud 2002 Release Update

Dr. Gerhard Welker, SAP March 05, 2020

**PUBLIC** 



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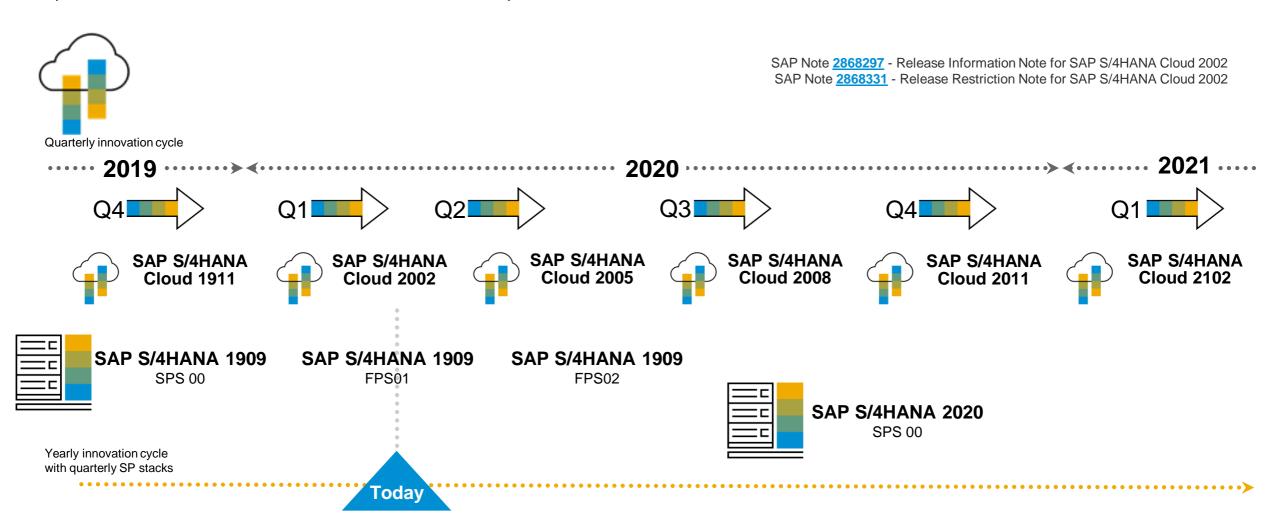
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### **SAP S/4HANA Release Strategy**

(2019–2021 and definition of deliveries)

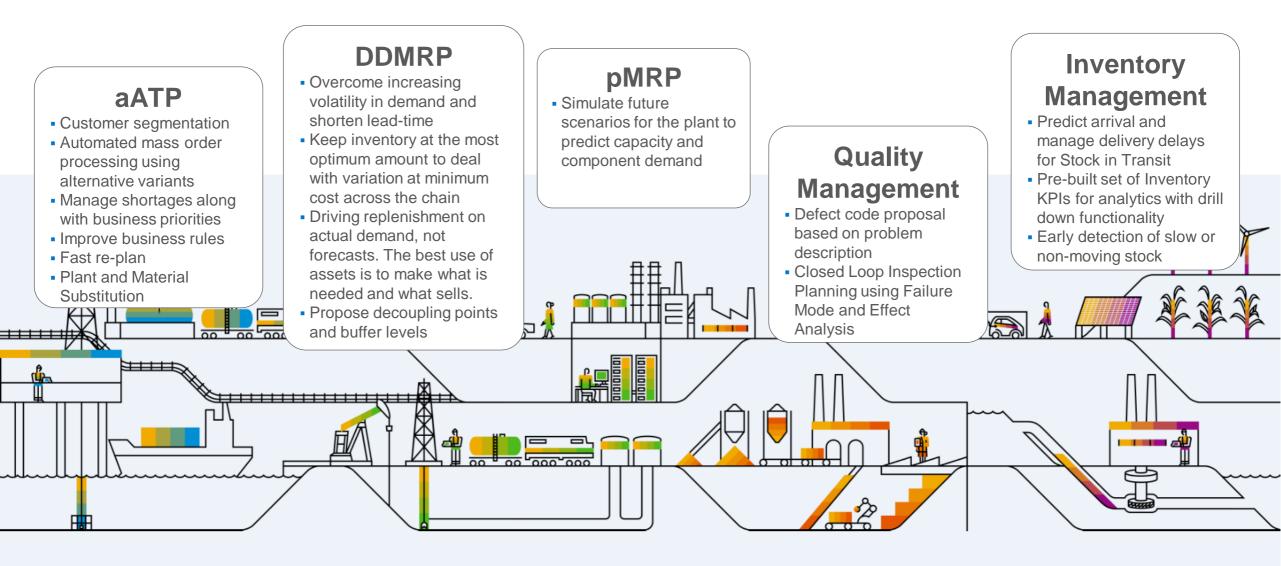


### **Agenda**

#### Manufacturing & Supply Chain & Asset Management in SAP S/4HANA Cloud 2002

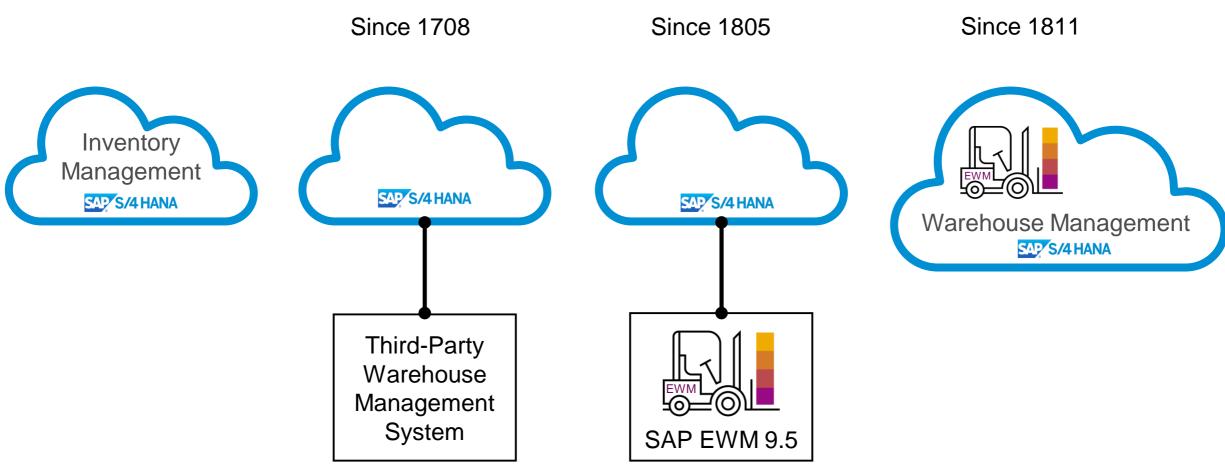
- Warehouse Management
  - Lean integration between production and warehouse managed on bin level
  - Serial Number Handling in Warehouse Management
  - Attachment Services in Warehouse Management
  - Reduce manual efforts by running warehouse task creation in the background
- Inventory Management Cycle counting as part of the physical inventory process
- Quality Management
  - Resolve internal problems by using the 8D methodology
  - Inspection results recording for serialized materials
- Production planning and execution
  - Predictive material and resource planning (pMRP)
  - Schedule Production
  - Manage Work Center Capacity
  - Reprocess failed material movements
- Resource Scheduling for Maintenance Planners

### Key Innovations in S/4HANA Manufacturing & Supply Chain

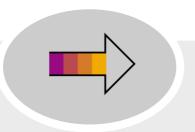


## Release Highlights Warehouse Management

## **SAP S/4HANA Cloud - Warehousing**



Scope in SAP S/4HANA Cloud 2002 Release



#### **Inbound Processing**

- ✓ From Supplier (with Quality Inspection)
- ✓ From Customer Returns (via other storage loc.)
  - From other Storage Location
    - ✓ From other DC / Plant
  - From Production (with Quality Inspection)
    - From Repetitive Manufacturing



#### **Internal Processes**

- ✓ Physical Inventory / Cycle Counting
  - ✓ Internal Repacking
  - Posting Changes
  - Internal Movements
  - Resource Management
    - Replenishment



#### **Outbound Processing**

- ✓ To Customer
- Return to Supplier
- Ad hoc Goods Issue
- To other Storage Location
  - ✓ To other DC / Plant
- To Production (Staging)
  - Kanban Supply

#### **Batch Managed Products / Serial Numbers / Handling Units**

**Best Practice Processes** 

12

Warehouse Structure

6+4

Mass Data Migration

5

Self-Service Configuration UIs

19

Roles/ Catalogs/Tiles

2/12/39

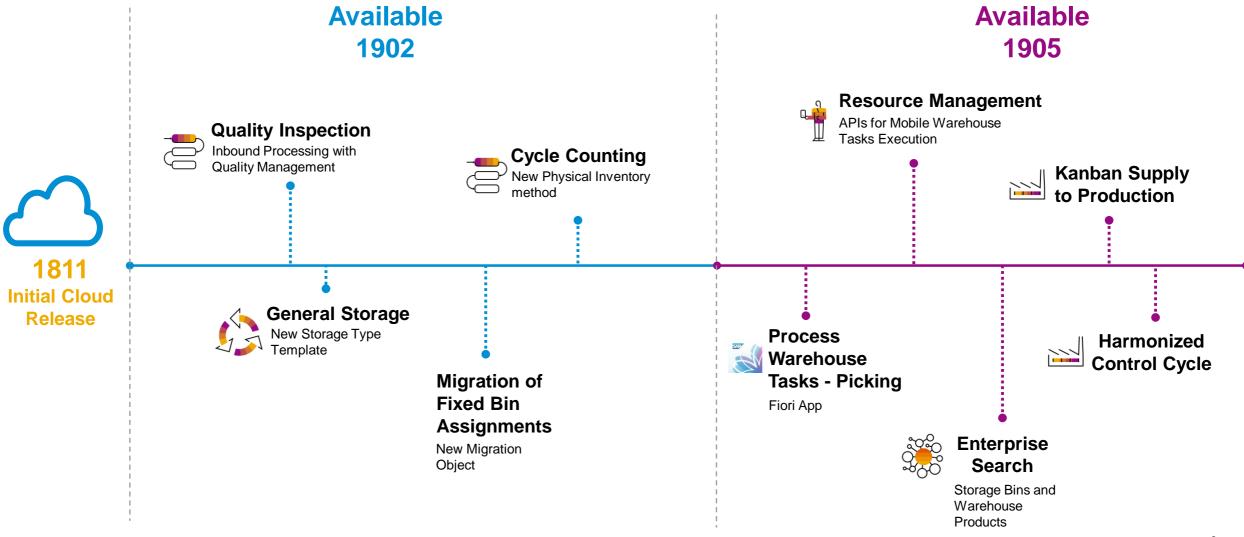
**APIs** 

Output Management

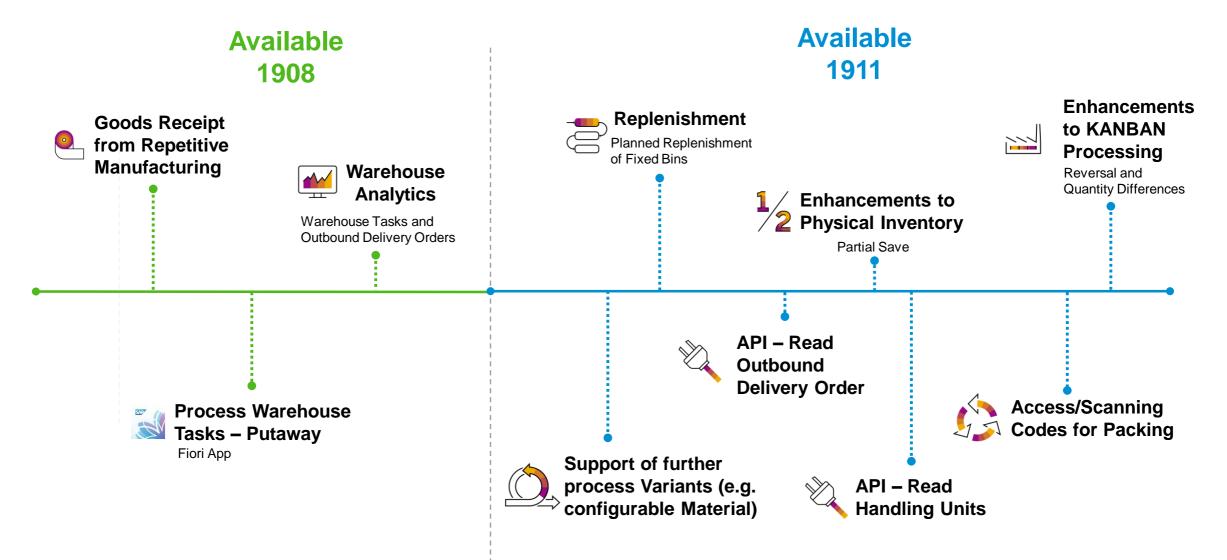
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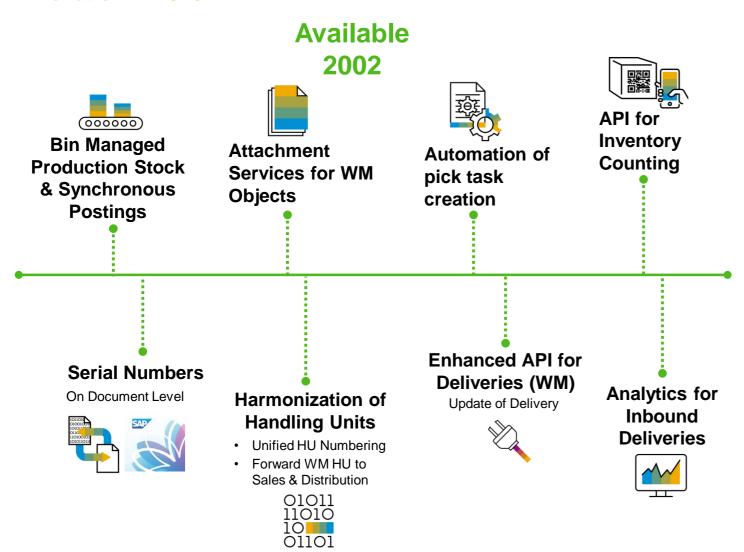
**Innovation in 2019** 



**Innovation in 2019** 



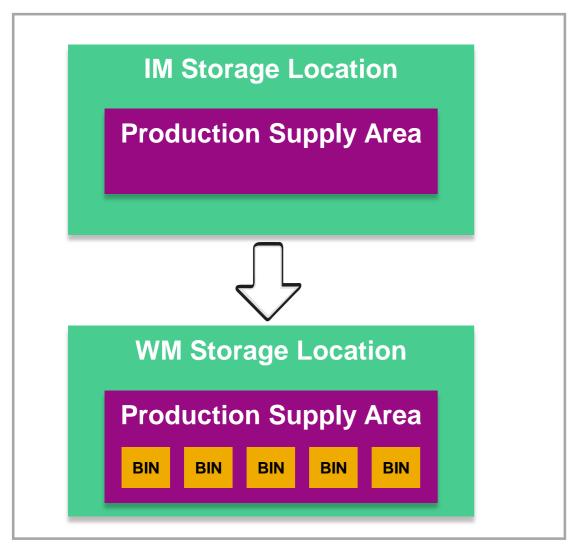
**Innovation in 2020** 



**Best Practice Processes** 

ID	Scope Item Title	Initial Release
3BR	Warehouse Inbound Processing	SAP S/4HANA Cloud 1811
3BS	Warehouse Outbound Processing	SAP S/4HANA Cloud 1811
3BX	Warehouse Physical Inventory	SAP S/4HANA Cloud 1811
3DV	Warehouse Production Integration	SAP S/4HANA Cloud 1811
3BT	Warehouse Ad Hoc Goods Issue	SAP S/4HANA Cloud 1811
3BU	Warehouse Posting Changes	SAP S/4HANA Cloud 1811
3BW	Warehouse Internal Repacking	SAP S/4HANA Cloud 1811
3M0	Quality Management in Warehousing	SAP S/4HANA Cloud 1902
3VT	Warehouse Kanban Supply into Production	SAP S/4HANA Cloud 1905
3W0	Resource Management in Warehousing	SAP S/4HANA Cloud 1905
41U	Warehouse Goods Receipt from Repetitive Manufacturing	SAP S/4HANA Cloud 1908
4A2	Replenishment in Warehousing	SAP S/4HANA Cloud 1911

**Bin Managed Production Stock** 



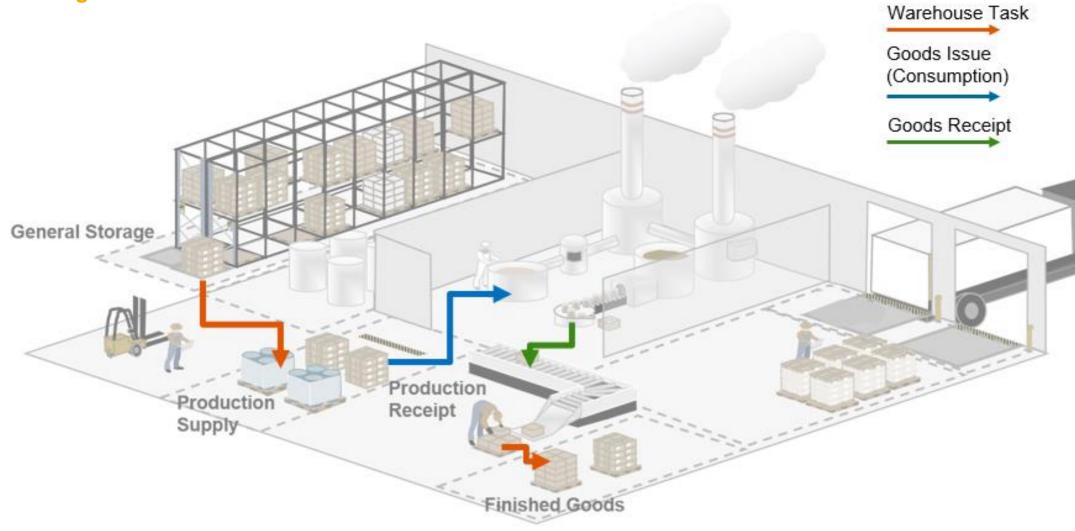
I want to have a lean integration between production and warehousing



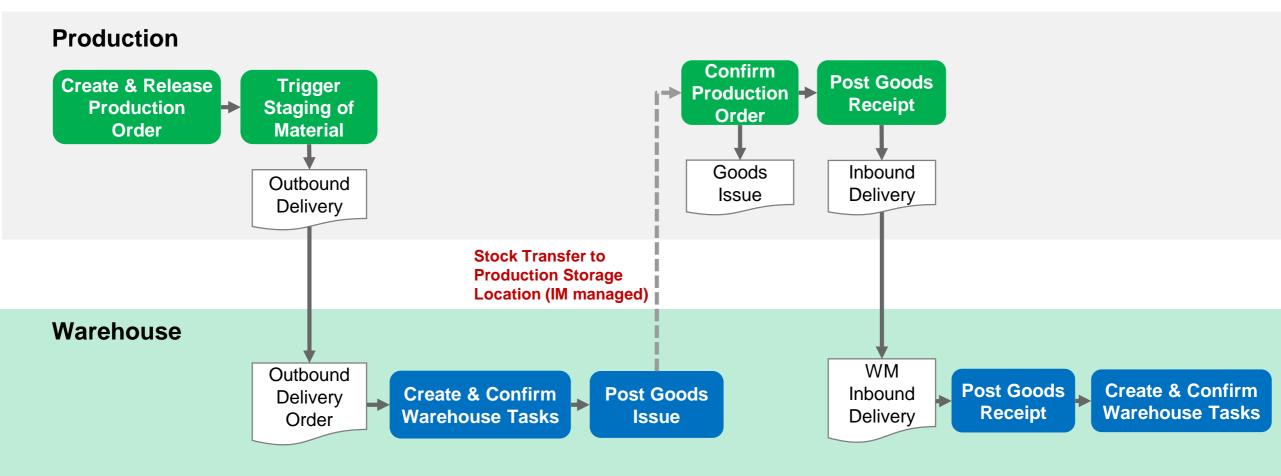
I want to increase my stock transparency in production

I want to reduce manual steps in my production integration process

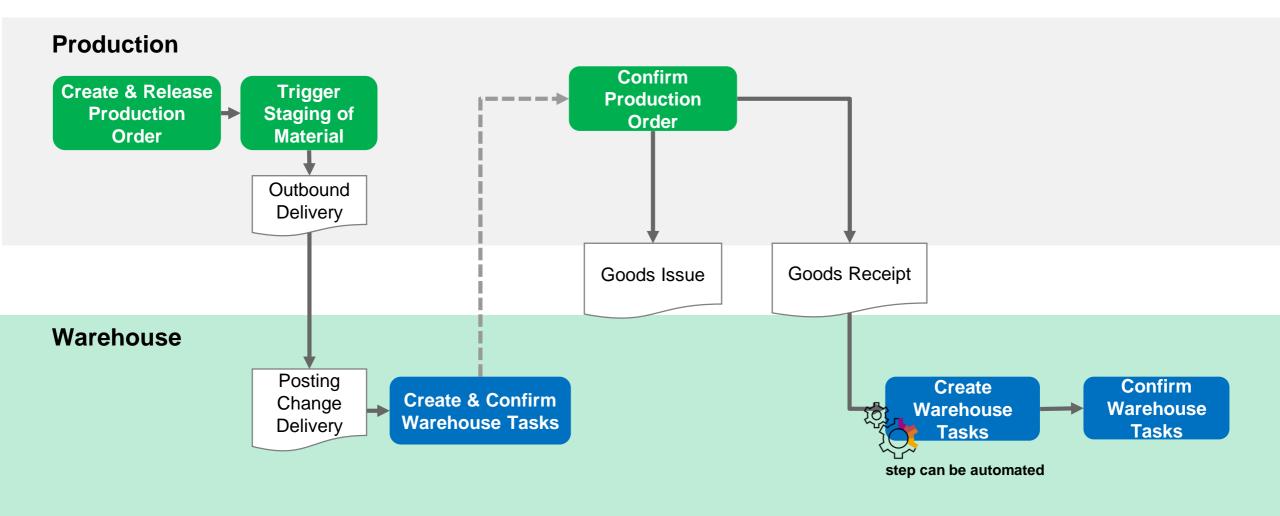
**Bin Managed Production Stock** 



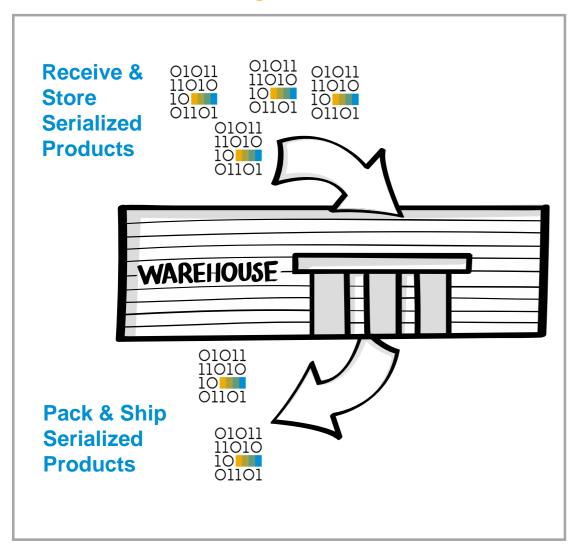
**Bin Managed Production Stock – Process with IM-Managed PSA** 



Bin Managed Production Stock – Process with WM-Managed PSA



**Serial Number Handling on Document Level - Process** 



I want to store serialized products in my warehouse



I want to know which customer received which serial numbers!

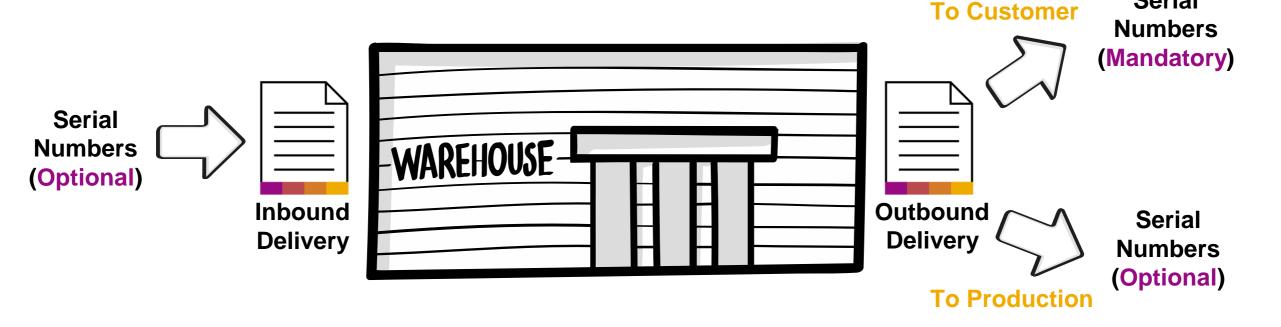
I want a lean solution for serial number handling in my warehouse

**Serial Number Handling on Document Level - Process** 

# Inbound Processing

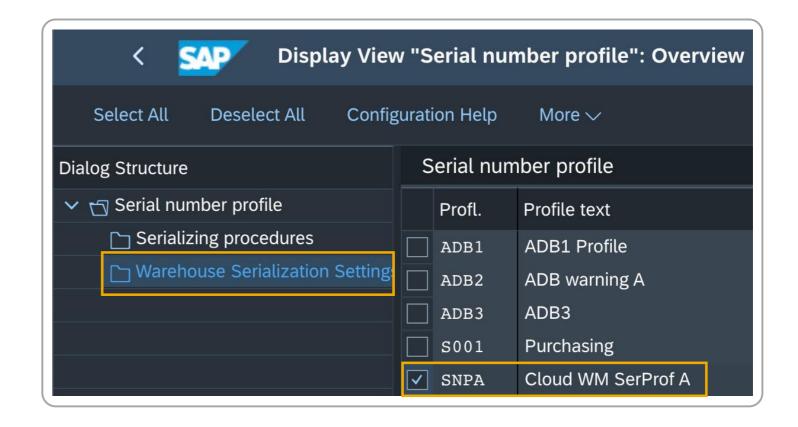
# **Outbound Processing**

Serial



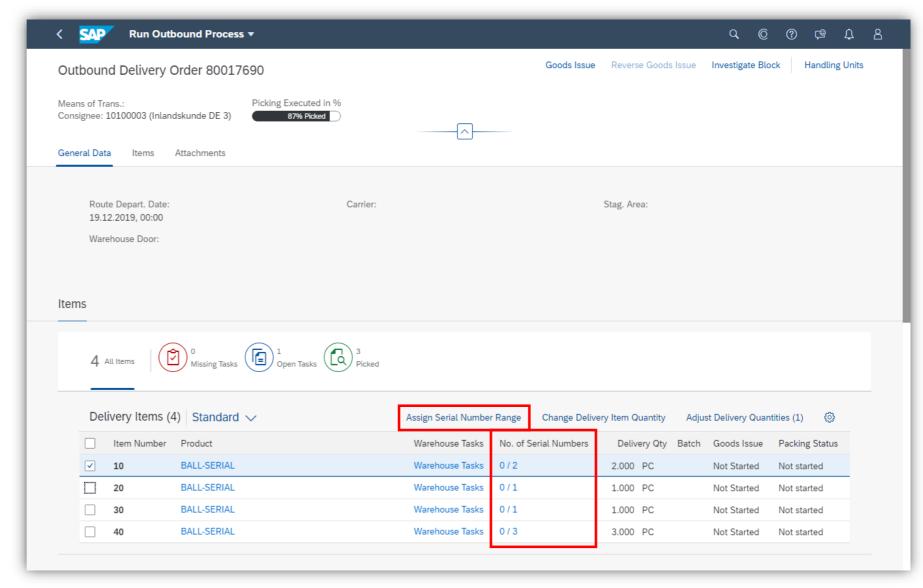
**Serial Number Handling on Document Level - Configuration** 

- SSCUI Determine Serial Number Profiles: New node for warehouse serialization settings available
- New standard Serial
   Number Profile for
   Warehouse Management is shipped with best practices content
- MMSL Serial Number
   Procedure is relevant for warehouse management

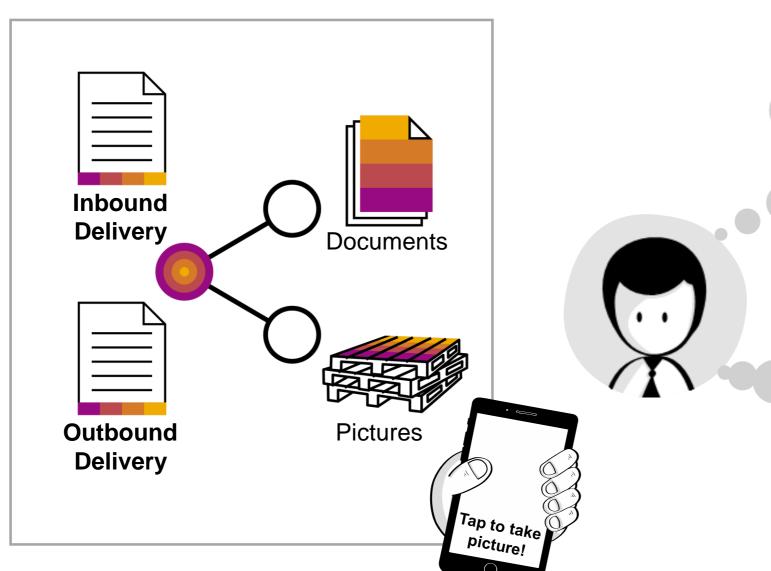


### Serial Number Handling in Warehouse Management

- Improve serial number capabilities for cloud warehouse management
- Visibility: See which customers received which serial numbers
- Integration: Handle serialized products in receiving and shipping processes
- Efficiency: Only enter serial numbers when they arrive at or leave the warehouse



**Attachment Services – Motivation** 

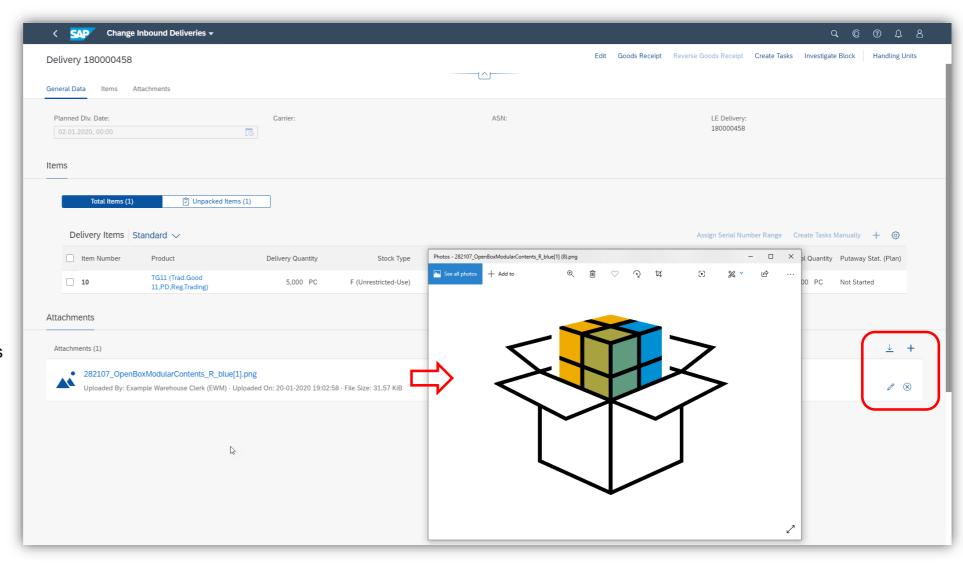


Why can't we just take a picture to prove that we loaded the cargo properly?

We need visual proof that delivery items were packed/staged/lo aded correctly!

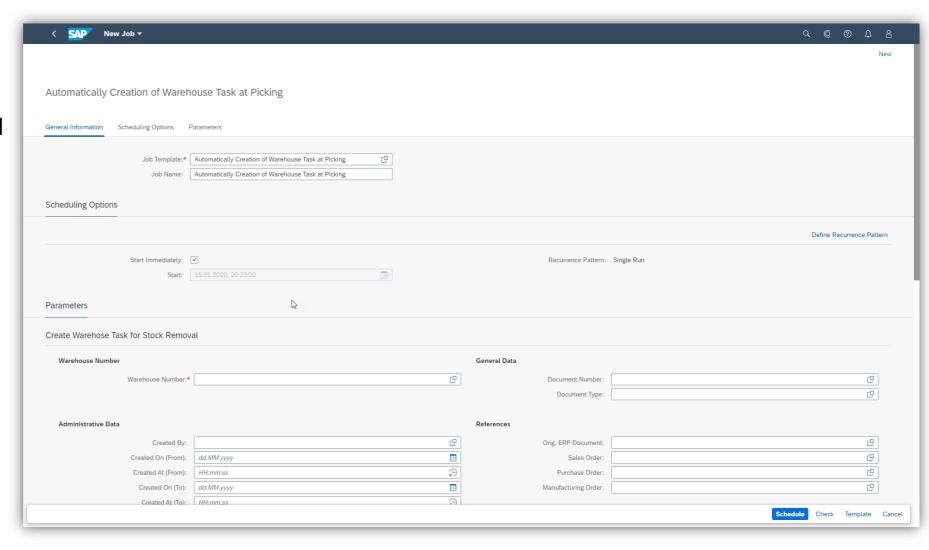
### **Attachment services in Warehouse Management**

- Enable connection of all kinds of media to business documents as additional information
- Improve traceability as related documents from externals can be attached to cloud business objects in warehouse management
- Create, read, update or delete attachments using the SAP Fiori apps
  - Change Inbound Deliveries
  - Run Outbound Process

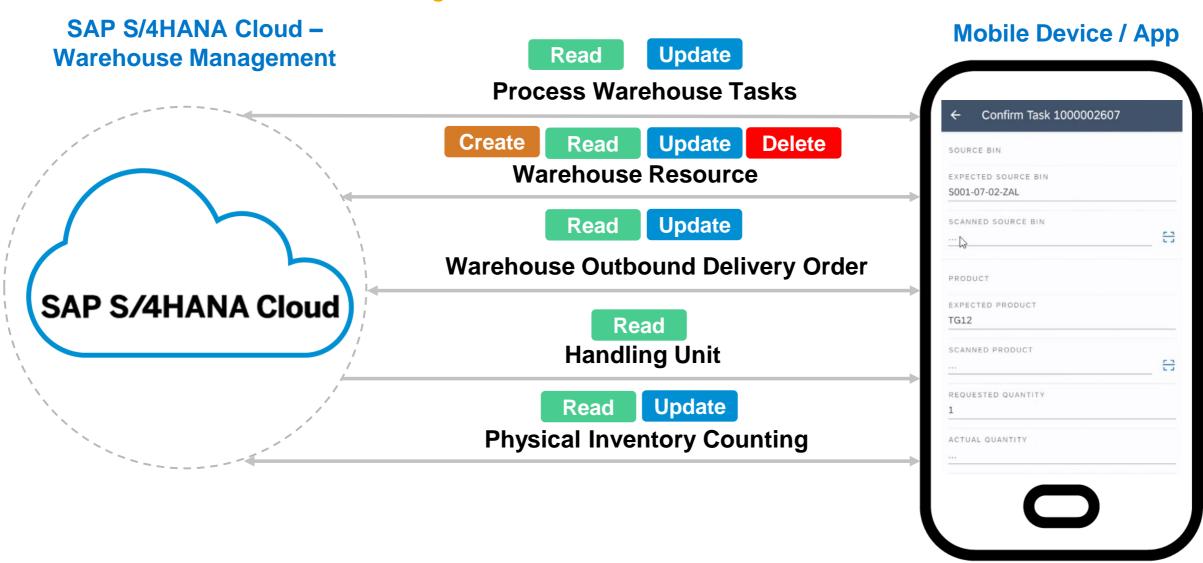


### Reduce manual efforts by running warehouse task creation in the background

- Reduced manual effort by running warehouse task creation in the background
- Create pick warehouse tasks automatically in the background with defined time intervals
- Creation of single run or recurring background warehouse task creation jobs



**Overview of APIs in the Warehouse Management area** 

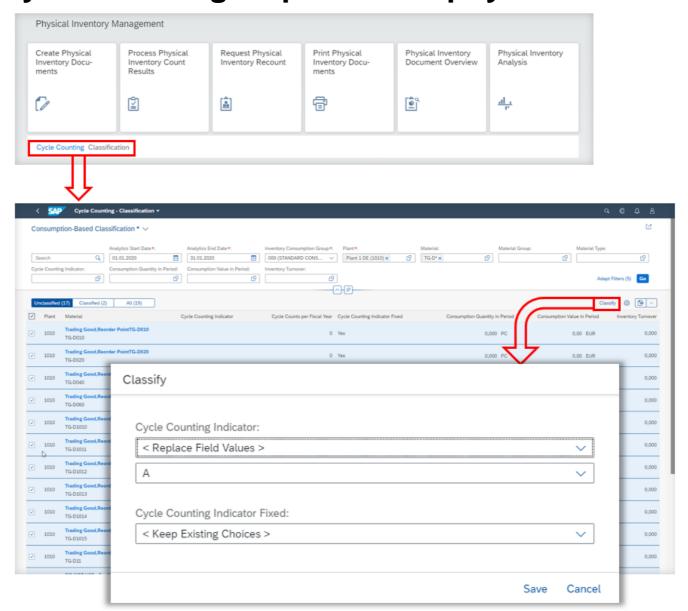


# Release Highlights Inventory Management

Inventory Management: Cycle counting as part of the physical inventory

process

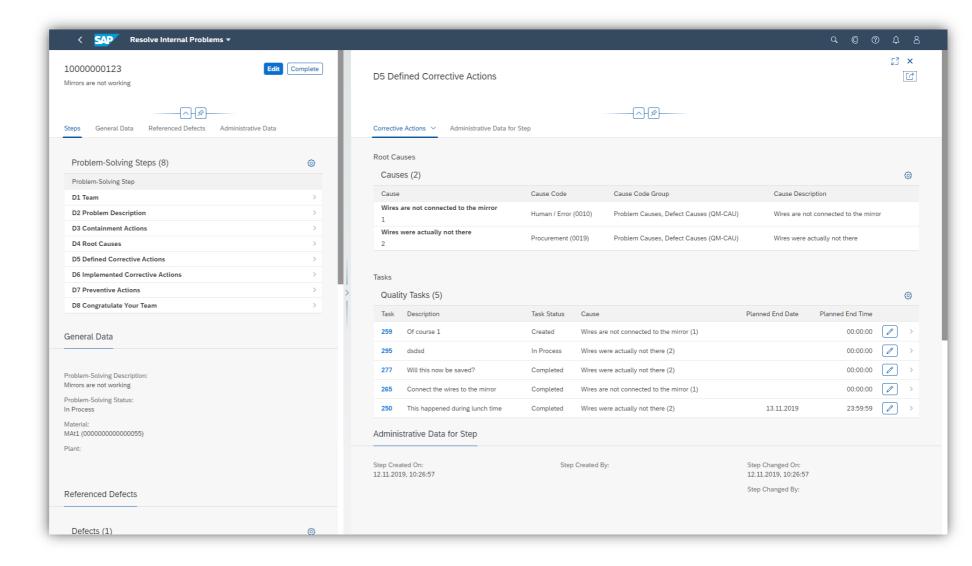
- Improve operational efficiency by classifying materials for cycle counting as part of the physical inventory process
- Increase inventory accuracy; for instance, because fast movers can be counted more often
- Manage classifications for materials in stock based on the cycle-counting settings maintained in the self-service configuration UI "Cycle Counting"



# Release Highlights Quality Management

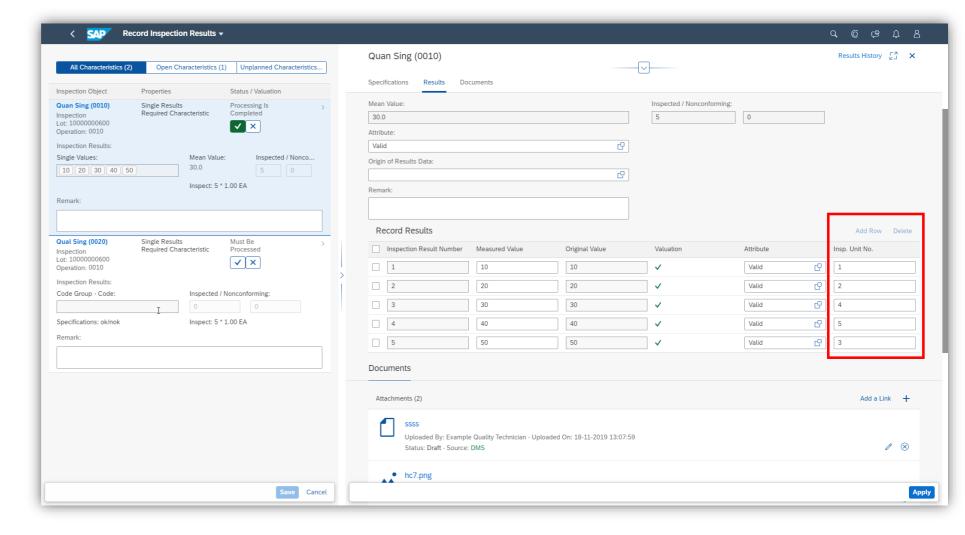
### Quality Management: Resolve internal problems by using the 8D methodology

- Consistent and standardized handling of problems by using the 8D methodology and its predefined process steps
- Achieve transparency on all processes related to the issue
- Identify, correct, and eliminate recurring problems
- Create the problemsolving process with reference to a defect



### Quality Management: Inspection results recording for serialized materials

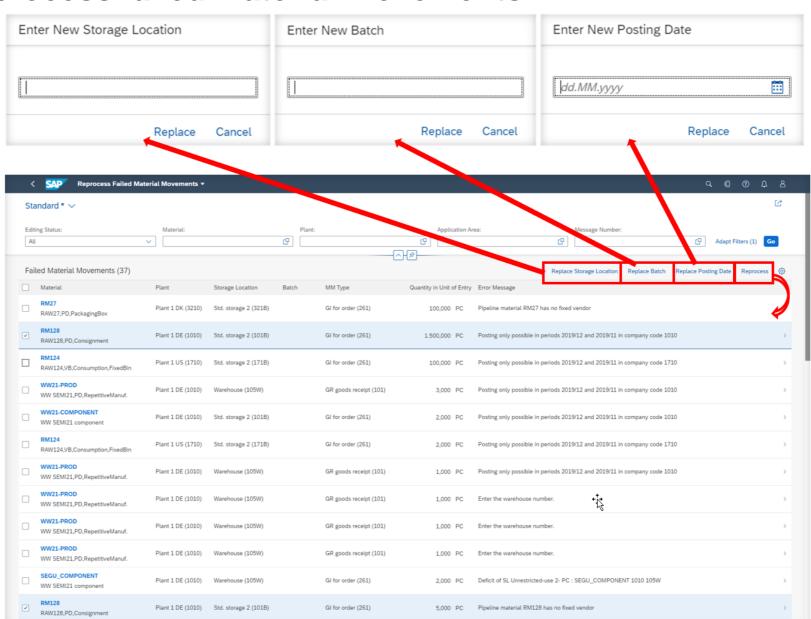
- Record the results for characteristics flexibly and effectively in inspection lots for both serialized and non-serialized materials
- Results recording for characteristics with single results in an inspection lot with a serialized material is done on the result details page



# Release Highlights Production Planning and Execution

### SAP Fiori app to reprocess failed material movements

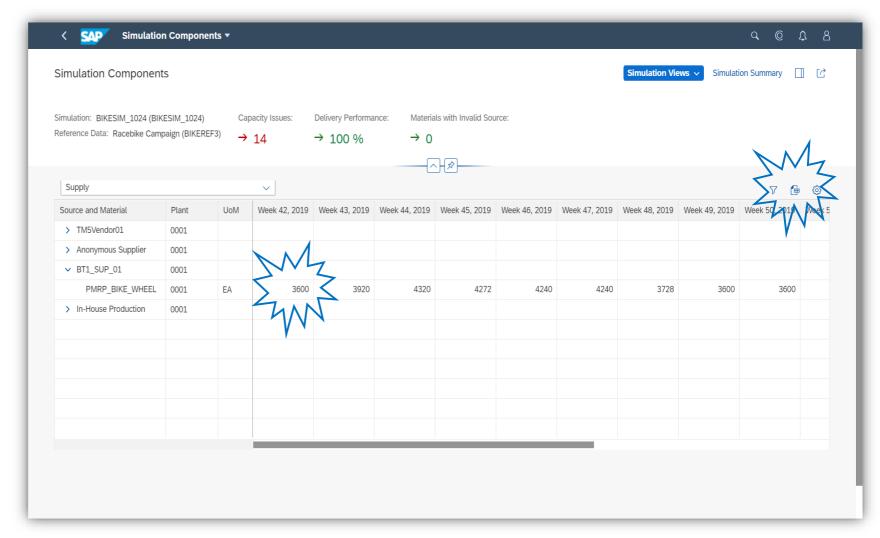
- List of unsuccessful materials movements along with the related error messages
- Identify why the material movements failed
- Replace the storage location, batch, posting date
- Reprocess failed material movements



### Enhancements for predictive material and resource planning (pMRP)

Manage component forecasts for suppliers

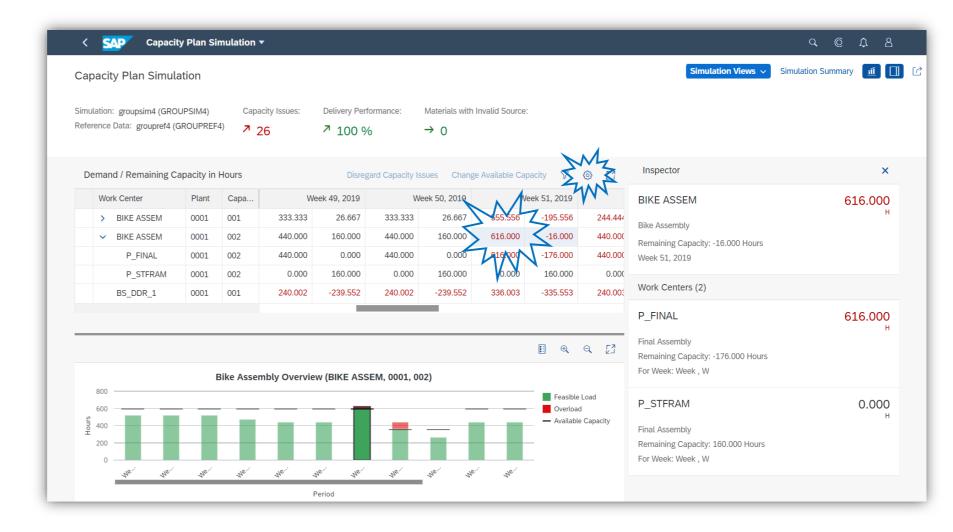
- The Simulation
   Components view lists all material components of a simulation
- Switch between the Materials and the Supply perspectives
- Review Planned component consumption based on simulated changes
- Export to Excel to share forecast with stakeholders



### Enhancements for predictive material and resource planning (pMRP)

Aggregated capacity plan for work center groups

- Choose to group the capacity plan
- Review the aggregated remaining capacity

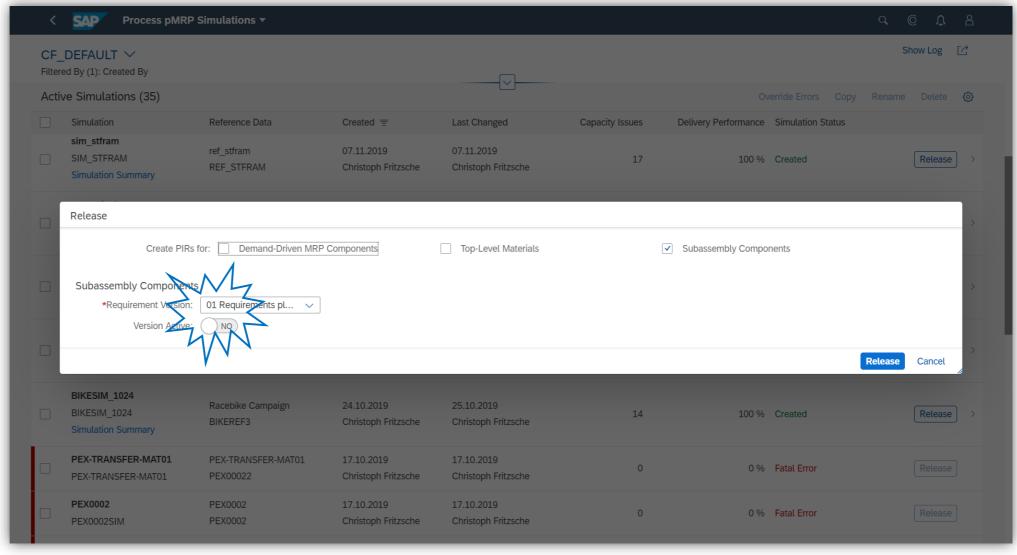


### Enhancements for predictive material and resource planning (pMRP)

Transfer Component Forecast (PIRs) for subassembly planning

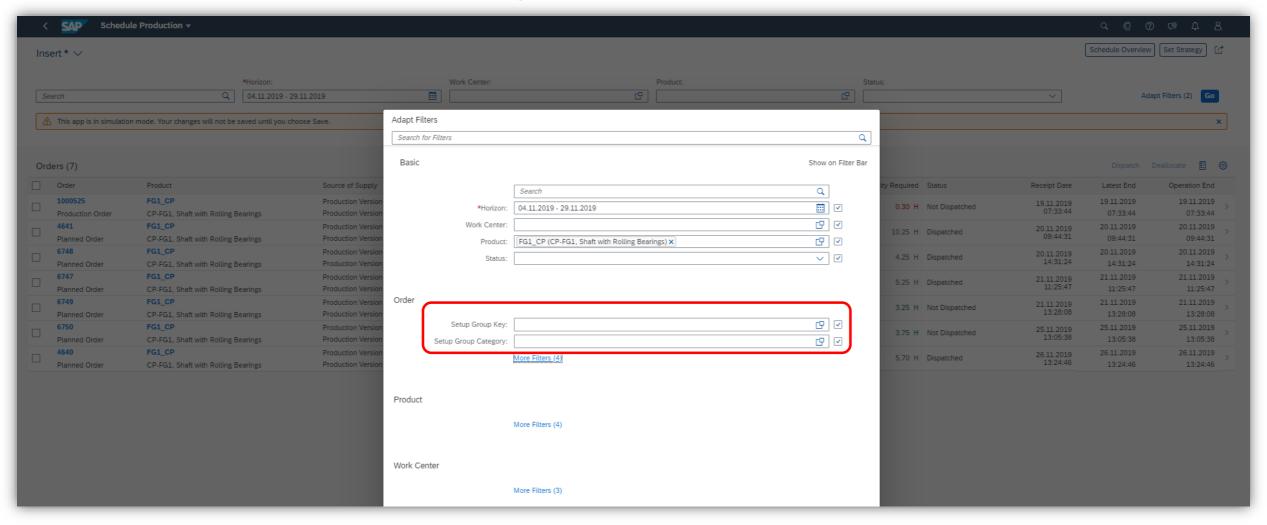
Choose PIR

 version to
 decide if they
 are considered
 for operative
 MRP



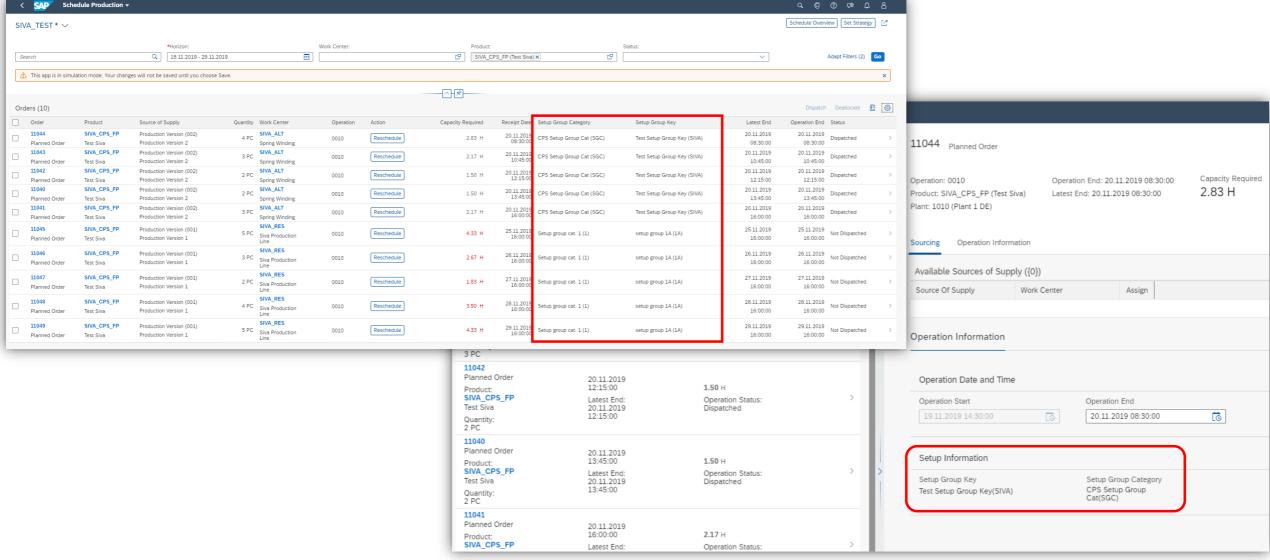
### **Enhancements for Schedule Production**

New Filters: Setup Group Key and Category



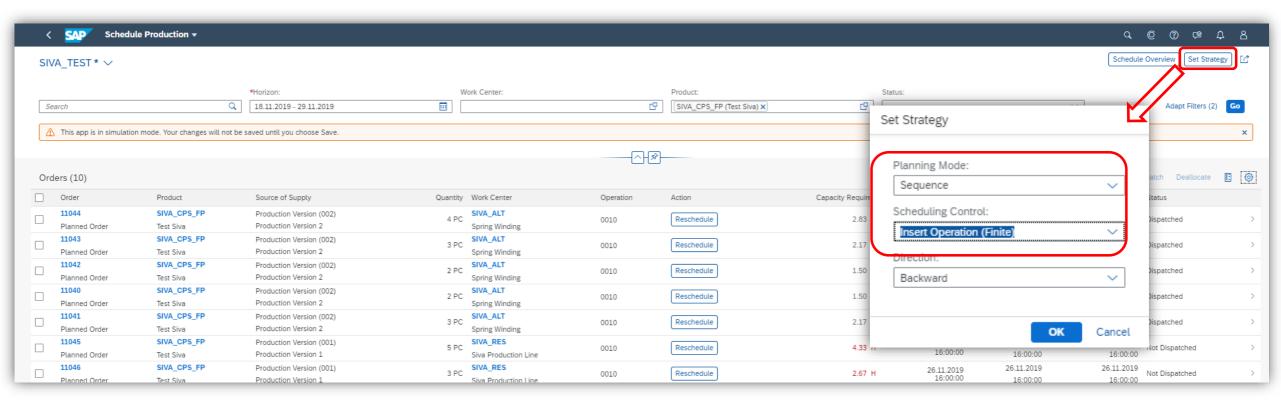
### **Enhancements for Schedule Production**

**Setup Group Information** 



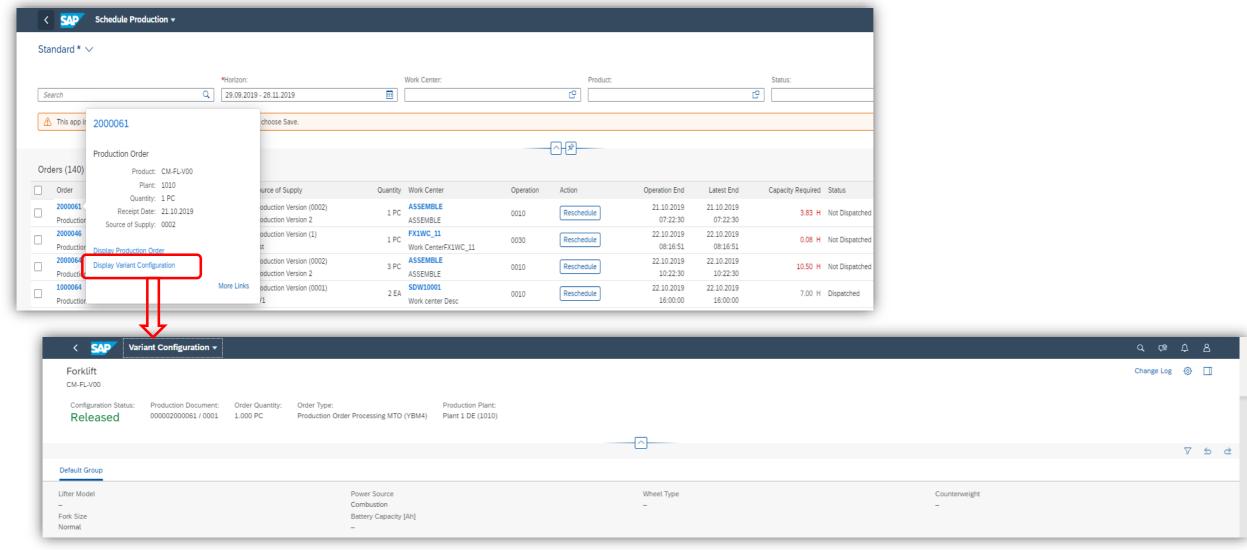
#### **Enhancements for Schedule Production**

#### **Insert Operation**



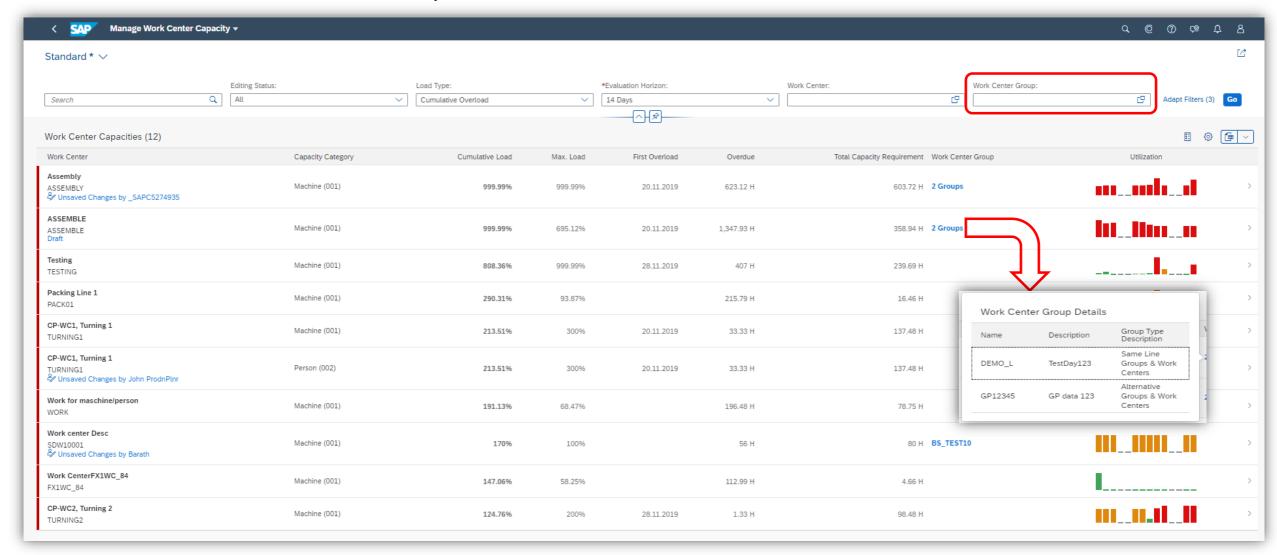
#### **Enhancements for Schedule Production**

Advanced Variant Configuration (AVC) integration



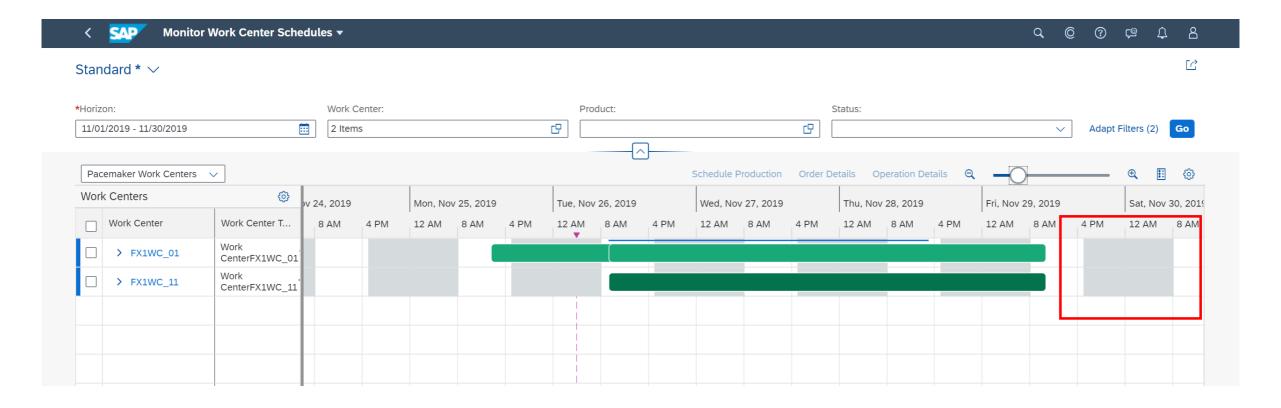
## **Enhancement for Manage Work Center Capacity**

New Filter for Work Center Group + Reschedule Button



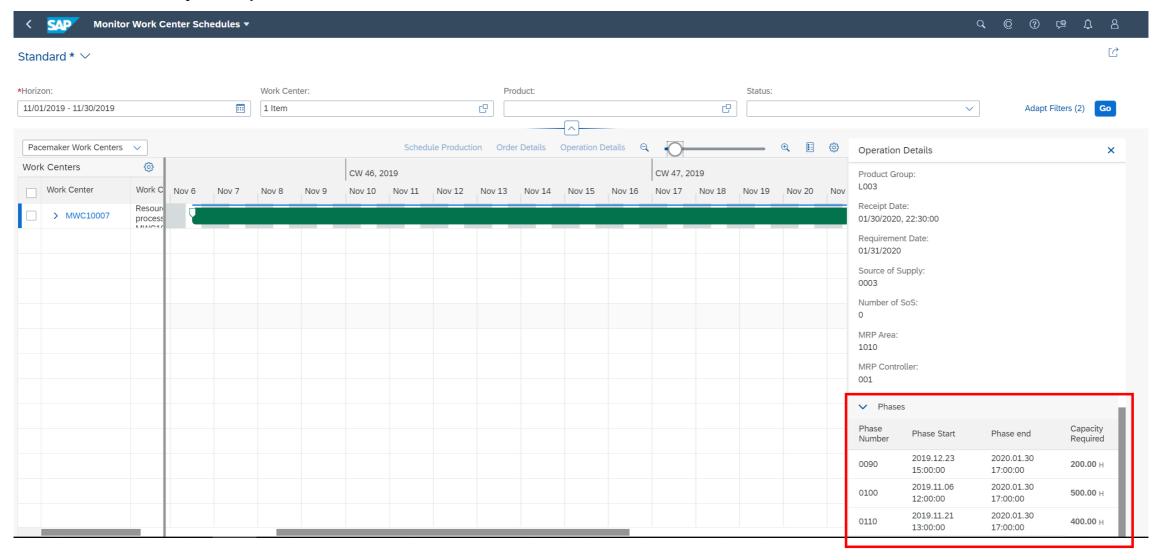
#### **Enhancement for Monitor Work Center Schedules**

#### Non working time



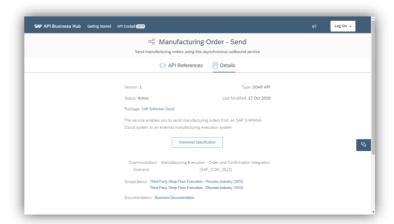
#### **Enhancement for Monitor Work Center Schedules**

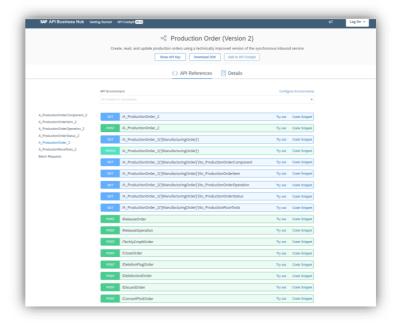
Process Industry – Operation Detail



### **Production Execution: Integation**

- SOAP API <u>Manufacturing Order Send</u> enhanced to handle characteristics, long texts, operation status, additional fields like MaterialsCoProduct, DebitCreditCode, InventorySpecialStockType
- ODATA API <u>Production Order (Version 2)</u>
   This API is the successor of the deprecated API <u>Production Order (Deprecated)</u>. Note: Some improvements in version 2 are incompatible changes compared to version 1.
- OData service based Read API for Master Recipe
- OData service based Read API for Production Routing



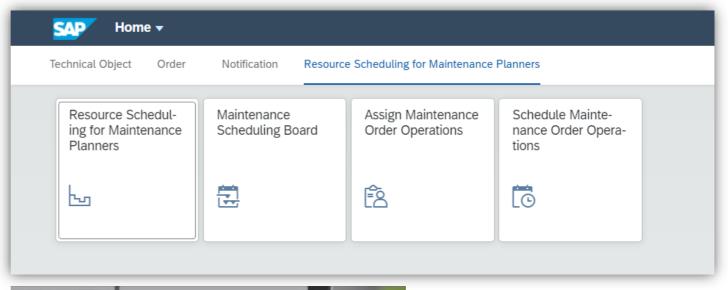


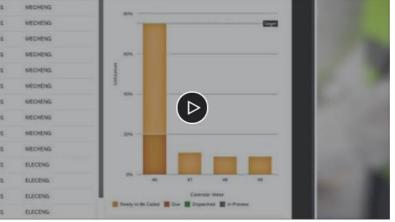
# Release Highlights Asset Management

## **SAP S/4HANA Cloud for Asset Management**

#### **Resource Scheduling for Maintenance Planners**

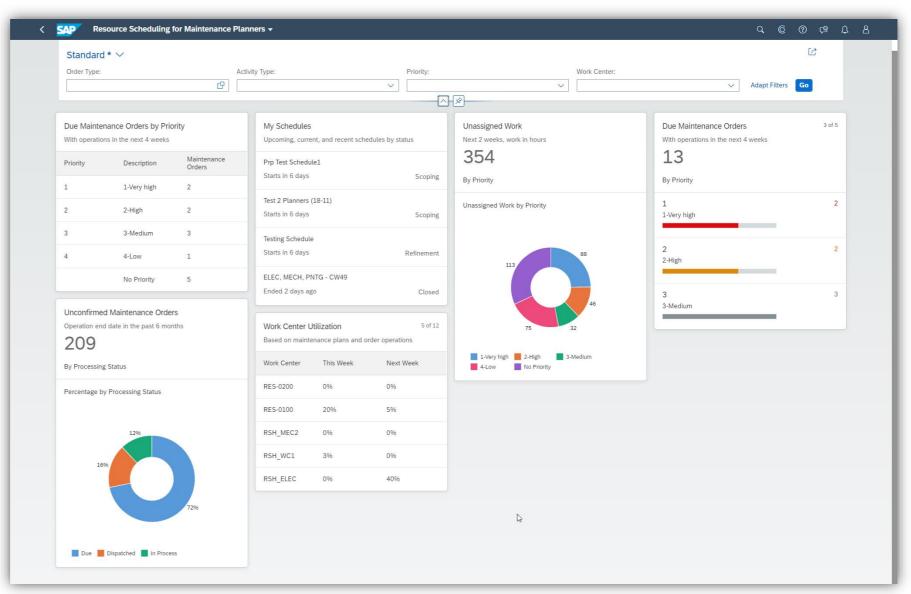
- New SAP Best Practices scope item <u>43R</u>
- Added value to Asset Management
- Maintenance Scheduling
- Simulations and Versioning
- Collaboration





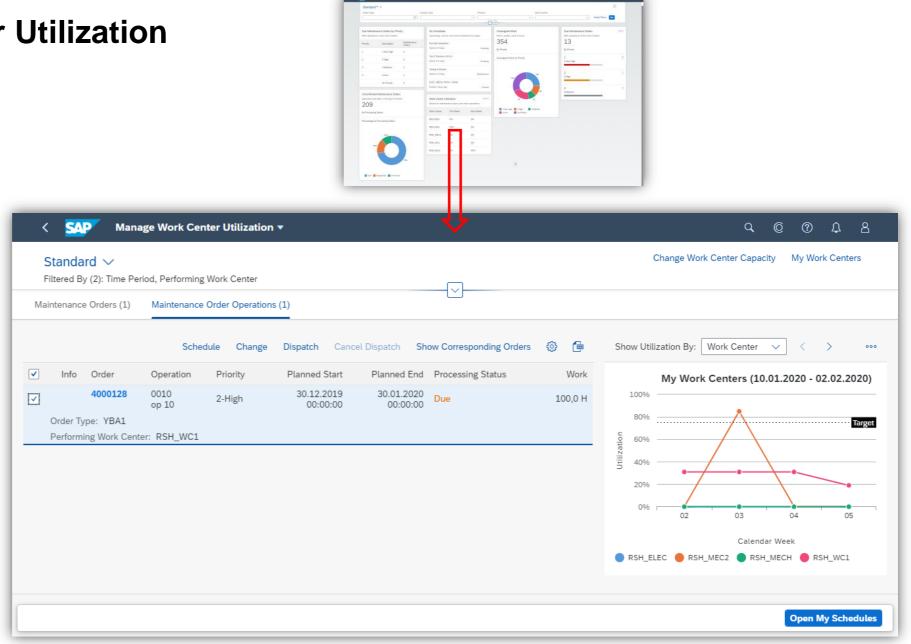
### **Resource Scheduling for Maintenance Planners**

- Overview of important KPIs like due maintenance orders, schedules and work center utilization in real time at a glance
- Monitor important KPIs for your work centers
- Navigation into transactional data



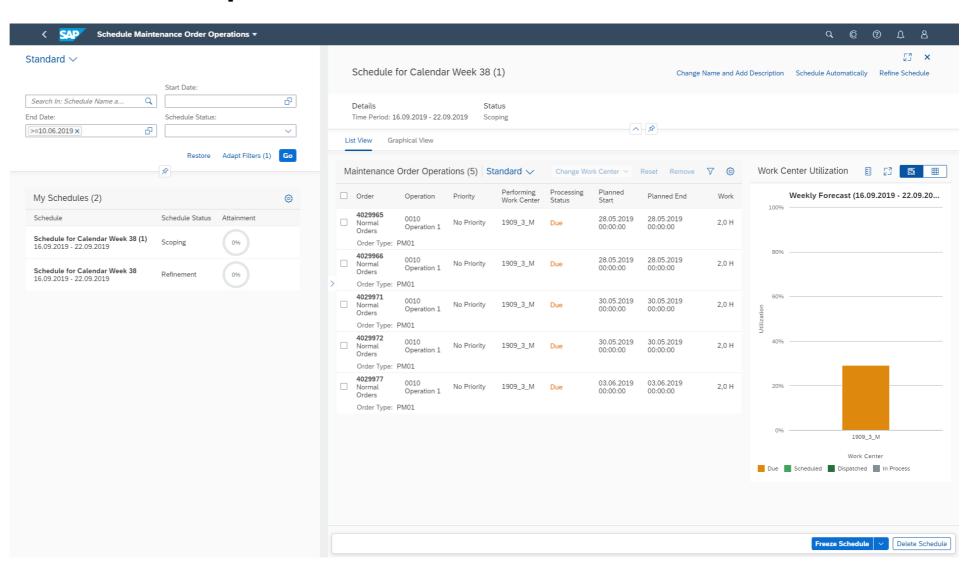
## **Manage Work Center Utilization**

- Analyze and manage the utilization of your work centers
- Visualize utilization based on various attributes, such as work center, processing status, priority, or order type
- Navigate to orders, technical objects, and functional location data
- Dispatch order operations



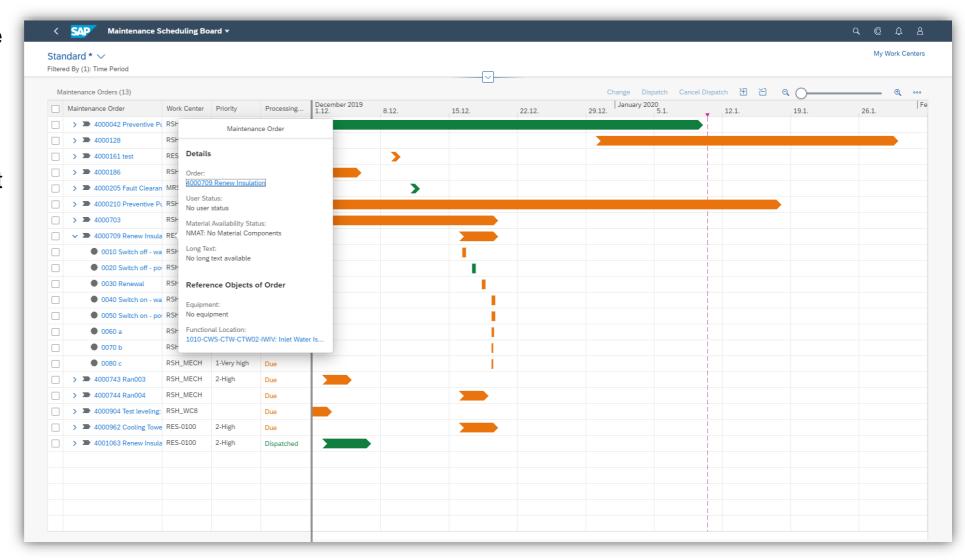
### **Schedule Maintenance Order Operations**

- Set up schedules for the maintenance order operations
- Monitor and review schedule execution
- Level work center utilization
- Use a graphical view to identify scheduling conflicts



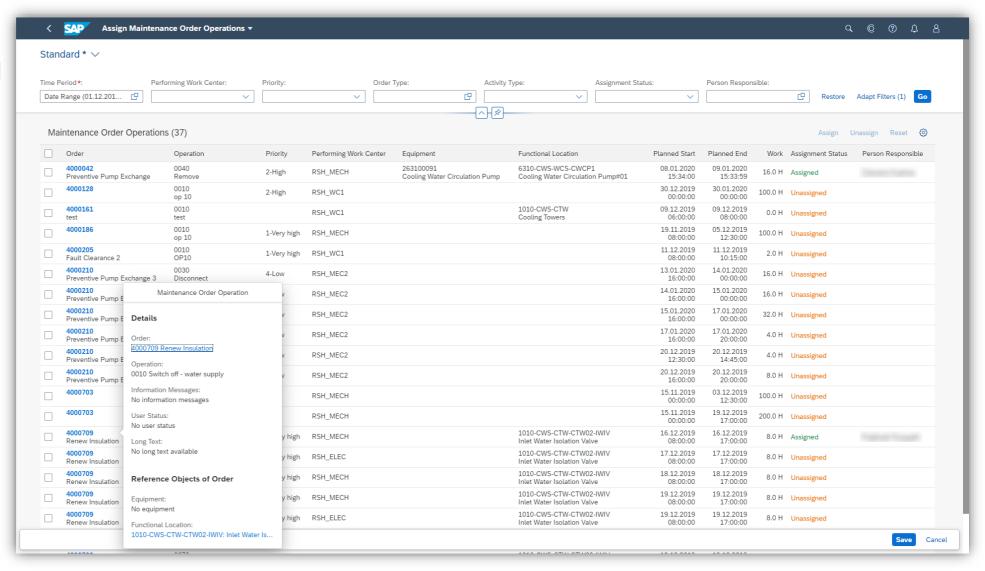
## **Maintenance Scheduling Board**

- Visualize on a timeline the maintenance orders, order operations, and suboperations in your work centers via Gantt chart
- View relationships between order operations and relationship violations
- Dispatch order operations and suboperations
- Navigate to orders, equipment, and functional location



### **Assign Maintenance Order Operations**

- Manage the personal responsibility of maintenance order operation
- Assign maintenance order operations to a person responsible
- Change or delete assignments



#### SAP S/4HANA Cloud 2002

#### Localization

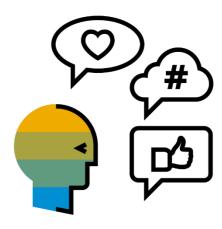
#### 43 Countries \*\*



Australia, Austria, Belgium, Brazil, Canada, China, Czechia, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico (partial scope), Netherlands, New Zealand, Norway, Philippines, Poland, Portugal Romania, Russia, Saudi Arabia, Singapore, Slovakia, South Africa, Spain, South Korea, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, United Kingdom, United States

More Information available on Country Versions: Release Information & Restriction Note: 2785449

#### 25 languages



Arabic, Chinese (simplified), Chinese (traditional), Czech, Danish, Dutch, English, Finnish, French, German, Hungarian, Italian. Japanese, Korean, Malay, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Slovak, Swedish, Thai, Turkish

<sup>\*\*</sup> Localized country versions might not include all available solution scope. Please select your country version in the SAP Best Practices Explorer to see the available solution scope for a specific country. For localization specific features please see the SAP Help Portal for SAP S/4HANA Cloud and navigate to Product Assistance and Country-Specific Functions

## **Preparing for 2002: Next Steps**



- Sign up to watch other 2002 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 <u>SAP S/4HANA Cloud Release Info</u>
- View <u>upgrade schedule for SAP S/4HANA Cloud</u>
- View <u>SAP service level agreement</u>
- Read about <u>upgrade specific frequently asked</u> <u>questions</u>

#### Where to go for more information?



Learn



**Engage** 



**Implement** 

#### SAP S/4HANA Cloud Release Info

Latest release highlights including videos and blogs



**Learning Journeys** 

**Learning Room** 

**Stay Current Program** 

## SAP S/4HANA Cloud Community

Ask questions, share experiences, and build your knowledge of our next generation business suite



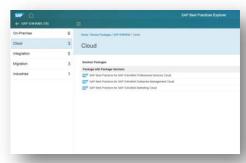
**SAP Help Portal** 

Join the SAP S/4HANA Movement

New Podcast
"Inside SAP S/4HANA"

## **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** 





#### Contact information:

#### **Gerhard Welker**

SAP S/4HANA Product Management – Manufacturing & Supply Chain & Asset Management

@GerhardWelker LinkedIn

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