Transform your logistics processes with SAP Digital Logistics Solutions

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Agenda

Understand the S/4HANA logistics strategy

Get an overview of the new capabilities delivered in SAP’s transportation, warehouse and track & trace solutions

Discover what’s new on the SAP logistics network horizon

Which logistics solutions are right for my S/4HANA transformation?
Understand the S/4HANA logistics strategy
THE INTELLIGENT ENTERPRISE features 3 KEY COMPONENTS:
An Intelligent Suite delivers intelligence across value chains for every LoB

Integration | Business Objects | Master Data | Orchestration
25 Industries | All Countries

Out-of-the-box integration leveraging the SAP Cloud Platform, SAP Cloud Analytics with SAP HANA and SAP Data Hub

Best in class UX with consistent experience across the entire portfolio

Modular, making it easy to consume and cost-effective to operate

Easy to extend, allowing customers and partners to customize solutions quickly

Intelligence embedded in the applications making workflows smarter
# SAP S/4HANA 1809: Intelligent ERP

## Procurement
- **SAP Ariba**
  - Propose Mat. Group, contracts & cat items*
  - Cash discount at risk*
  - Predictive Contracts
  - Central Procurement*
  - Overview & Analytics

## Sales
- **SAP C/4HANA**
  - Delivery Performance*
  - Predictive Q2Order*
  - One Single Invoice
  - International Trade
  - Sales Force Support*
  - Sales Order Fulfillment

## Supply Chain
- **IBM**
  - Predictive Stock in Transit*
- **GTT**
  - Advanced ATP
- **LBN**
  - Embedded EWM
  - Embedded TM
- **Realtime Inventory**

## Manufacturing
- **DMI**
  - Prod Engineering & Ops
  - DDMRP*
  - Capacity Planning*
  - Det. Scheduling PPDS
  - QM Overview & Analytics
  - MRP live

## R&D
- **IPD**
  - Digital Content Process.*
  - Recipe Management
  - Multilevel Variant Configuration & Simul.*
  - Project & Portfolio Mgmt.
  - Commercial Projects

## Finance
- **SAP Concur**
  - New Customer Mgmt., Service Core Option
  - Multi-Channel Interaction Center
  - Quotation with Product Bundles*

## Service
- **SAP Fieldglass**
  - SAP C/4HANA

## Asset Mgmt.
- **AIN**
  - Maintenance Planning Overview*
  - New Geographical Enablement
  - Report & Repair Malfunction
  - Asset Mgmt. for resource scheduling

## Cross
- **Legal Content Mgmt.**
- **GDPR Tools**
- **Responsibility Mgmt.***
- **Co-Pilot as Digital Assistant**
- **SAP Cloud Platform**
- **SAP SuccessFactors**

## Industries
- **Key Industry function embedded inside** (e.g. Automotive, Consumer, Retail*, Mill...)
- **Re-architecture & improved functions** (e.g. Chemicals, A&D, Oil Gas, Utilities*...)
  - detailed restrictions...

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SAP S/4HANA 1809: Intelligent ERP Overview & Analytics
- Predictive Contracts
- One Single Invoice
- International Trade
- Sales Force Support*
- Sales Order Fulfillment

SAP Cloud Platform
- Key Industry function embedded inside
- Re-architecture & improved functions

#SAPMIMConf
SAP S/4HANA Enterprise Management: LoB Extensions Commercial & architectural concepts

Examples

- SAP Integrated Business Planning
- SAP Global Track and Trace
- SAP Transportation Management
- SAP Extended Warehouse Management

S/4HANA Enterprise Management

Core processes in addition to advanced embedded solutions
SAP S/4HANA: Complete, Consistent Choice

SAP S/4HANA’s code line, simplified data model, and modern user experience are consistent for both cloud and on premise. Designed for in-memory, SAP S/4HANA brings new business capability while simplifying the IT landscape.

Considerations for selecting the right SAP S/4HANA solution:
- Business functionality
- Regulatory, industry, and regional requirements
- Individualization options
- IT Strategy
- Innovation cycles
- Adoption/upgrade efforts
- TCO
- Commercial models
One SAP S/4HANA: the right solution for each customer situation

**SaaS Cloud ERP***
*According to Gartner Cloud Definition

**ERP in the Cloud**

**ERP OP**

**SAP S/4HANA Cloud**
Highly standardized, multi-tenant cloud services covering selected LoB- and industry scenarios and a comprehensive ERP scope

**Rapid innovation at the lowest TCO**

**SAP S/4HANA Cloud, single-tenant edition**
Standardization, TCO and scalability of the cloud combined with the full functional scope, extensibility and reach of the S/4HANA solution

**Cloud standardization at attractive TCO**

**SAP S/4HANA**
(Private cloud managed by SAP)
Individually sized infrastructure and application management services moving your system to the next generation

**Your SAP guided elevation to the public cloud**

**SAP S/4HANA**
(On-premise managed by cloud providers or customers)
Standardized next generation ERP solution that can be run and extended according to customers preferences

**Next generation ERP system for on premise use**

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*According to Gartner Cloud Definition*
SAP Best Practices Explorer
Discover and Download SAP Best Practices Content

SAP Best Practices Explorer – The New Web Channel Experience to Search, Browse and Consume SAP Best Practices

Key Benefits

• Simple and Easy Navigation – Built using SAP UI5 technology, SAP Fiori like navigation
• Access via Tablet and Mobile Devices – Access the Best Practices content anytime anywhere
• Powerful Search Mechanism – In-app search/filter, search from popular search engines like Google, browse packages via catalog and A-Z index
• Quick access to accelerators based on user authorization – One click access to key accelerators, SAP Cloud Identity Management based authorization, download accelerators for offline usage

Access: https://rapid.sap.com/bp
SAP Digital Logistics
Our platform strategy for digital supply chain execution

**Functional**
Holistic and vertical

**Integrated**
Support for end-to-end processes

**Flexible**
Processes and deployment

**Connected**
Real-time insight and network communication

- **Warehouse Management**
- **Yard Logistics**
- **Transportation Management**
- **Global Track and Trace**
- **Logistics Business Network**
- **Connected Fleet**
- **SAP Leonardo Innovation Platform**

SAP HANA/SAP Cloud Platform
Transportation Management

Reduce costs by increasing asset utilization, freight consolidation, and routing optimization

Streamline the end-to-end process through holistic, multi-mode transportation management

Create end-to-end transportation visibility and improve service levels by creating full freight transparency

Support real-time, data-driven decision making for quicker business decisions and faster insights

Holistic Transportation Management: Comprehensive Process and Multimodal Coverage

- Shipping and freight-forwarding industries
- Large and midmarket enterprises
- Domestic and international transportation
- Inbound and outbound freight management
- Simple and complex high-volume operations
SAP Transportation Management – Overview

- Strategic Freight Management
- Order Management
- Transportation Planning
- Transportation Execution
- Freight Settlement
- Analytics and Collaboration
SAP Transportation Management – Strategic Freight Management

**Strategic Freight Management**

- Capture of freight rate and capacity data
- Tight integration with other SAP solutions
- Stakeholder notifications and business process adjustments
- What if analysis
- Real-time reporting and analysis

**Business Benefits**

- Improve freight agreement collaboration
- Increase efficiency
- Reduce firefighting costs

Order Management  ➔  Transportation Planning  ➔  Transportation Execution  ➔  Freight Settlement  ➔  Analytics and Collaboration
SAP Transportation Management – Order Management

Order Management

- Integration with order and delivery data in the SAP ERP application
- Order and booking management
- Personal work lists
- Schedule management

Business Benefits

- Improve the efficiency of order and process management
- Generate dynamically optimized routing proposals based on business rules
- Minimize freight costs
- Enhance customer service

Strategic Freight Management

Transportation Planning

Transportation Execution

Freight Settlement

Analytics and Collaboration
SAP Transportation Management – Transportation Planning

- Manual and automated planning and dispatching
- Routing, resource, and carrier selection
- Order tendering
- Dangerous goods management
- Planning of parcels

**Business Benefits**
- Improve resource utilization and carrier selection to reduce transportation costs
- Handle huge volumes of data thanks to automated planning processes
- Combine decentralized local business views to identify synergies
- Achieve on-time delivery
SAP Transportation Management – Transportation Execution

**Business Benefits**
- Improve cargo handling
- Achieve faster, more dynamic, and responsive logistics execution
- Reduce shipping costs with a streamlined process and maximized efficiency

**Transportation Execution**
- Extended warehouse integration for execution
- Logistics execution
- Execution monitoring and event tracking
- Capacity monitoring
- Transportation print documents
- Trade regulation compliance (using the SAP Global Trade Services application)
SAP Transportation Management – Freight Settlement

Business Benefits
- Achieve accurate transportation costing
- Integrate transportation management and billing
- Increase invoice accuracy

Freight Settlement
- Freight agreement management
- Charge and tariff management
- Integration with SAP ERP
- Transportation charge calculation
SAP Transportation Management – Analytics and Collaboration

Business Benefits
- Support real-time, data-driven decision making
- Gain in-depth business insights
- Reduce data complexity
- Enable efficient collaboration between logistics business partners

Analytics and Collaboration
- Dashboards for the SAP HANA platform
- Landed cost analysis
- Flexible reporting on business warehouse costs
- Collaboration portal to enable collaborative business processes between logistics partners
Learn how Steelcase consolidated and standardized numerous transportation planning processes and solutions across three regions by implementing the SAP Transportation Management application.

→ Watch the video here
SAP S/4HANA Cloud Transportation Management

SAP S/4HANA Cloud Transportation Management capabilities will enable Transportation order consolidation and planning, settlement with SAP Logistics Business Network integration, as well as Order-based integration with 3rd Party Logistics Providers.

Benefits
✓ Enhance scope of SAP S/4HANA Cloud core processes with transportation management capabilities
✓ Order-based Transportation Consolidation
✓ Billing Transportation Costs to Customers
✓ Enable Carrier Settlement
✓ Settlement with Logistics Business Network
Cloud Use Cases - Evolution

Overall picture for S/4HANA CE with side by side S/4HANA TM

1811 – Order-based Transportation Consolidation

- Sales Order
- Transportation Demand
- Transportation Order
- Delivery
- 3rd party TM on project basis
- 3rd party TMS
- S/4HANA TM

1902 – Billing Transportation Costs to Customers

- Sales Order
- Transportation Demand
- Transportation Order
- Calculate
- Carrier Contract
- Rates
- Delivery
- 3rd party TM on project basis
- S/4HANA TM

1905 – Enable Carrier Settlement

- SO
- Transportation Demand
- Transportation Order
- Calculate
- Carrier Contract
- Rates
- Service PO
- Transportation Cost
- Invoice Verification
- Delivery
- FI/CO
- 3rd party TMS
- S/4HANA TM
- Carrier Invoice
- TM Private Option

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T.A. Cook Conference Prague Oct 2018
SAP S/4HANA Cloud Transportation Management

1908 – Transportation Order Consolidation & Planning in Public Cloud and Logistics Business Network (LBN) Enablement

1911 – Transportation Order Consolidation & Planning in Public Cloud and Settlement with LBN integration

Plan only – subject to change

T.A. Cook Conference Prague Oct 2018
Consolidation of the transportation demands is solely done within S/4HANA CE considering the available capacity and other constraints.

Tendering and subcontracting is executed through the integration with LBN (Logistics Business Network).

Advantages:
- Public Cloud Transportation Management offering
- No additional external system necessary
The invoice verification process is executed within LBN including receiving and processing of the carrier invoice

Advantages:

- Less settlement disputes by verification of settlement data within LBN
Transportation Management in SAP S/4HANA Cloud
Product road map overview – key innovations

<table>
<thead>
<tr>
<th>Date</th>
<th>Innovation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 Q4</td>
<td>- Order based Transportation Consolidation</td>
</tr>
<tr>
<td></td>
<td>- Update of delivery and trigger of goods issue</td>
</tr>
<tr>
<td>2019 Q1</td>
<td>- Billing Transportation Costs to Customers</td>
</tr>
<tr>
<td></td>
<td>- Enablement of carrier settlement</td>
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1. This is the current state of planning and may be changed by SAP at any time without notice.

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# Transportation Management in SAP S/4HANA Cloud
Product road map overview – key innovations

<table>
<thead>
<tr>
<th>1908 – Planned Q3/2019&lt;sup&gt;1,2&lt;/sup&gt;</th>
<th>1911 – Planned Q4/2019&lt;sup&gt;1,2&lt;/sup&gt;</th>
<th>Planned 2020&lt;sup&gt;1,2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S/4HANA CE 1908</strong></td>
<td><strong>S/4HANA CE 1911</strong></td>
<td><strong>S/4HANA CE 2020</strong></td>
</tr>
<tr>
<td>• Transportation order consolidation and planning in public cloud and SAP Logistics Business Network enablement</td>
<td>• Transportation order consolidation and planning in public cloud and settlement with SAP Logistics Business Network integration</td>
<td>• Integration of advanced available to promise (aATP) for sales-order scheduling</td>
</tr>
<tr>
<td>• TM - EWM Integration in S/4HANA CE 1908</td>
<td>• Order-based integration with 3rd Party Logistics Provider</td>
<td>• Enhanced Cloud connectivity thru SAP Logistics Business Network, e.g. for Parcel with label print</td>
</tr>
<tr>
<td></td>
<td>• Parcel Carrier connectivity</td>
<td>• Blockchain and Machine Learning in the Cloud</td>
</tr>
</tbody>
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**Notes:**
1. Potential data protection and privacy features include simplified deletion of personal data, reporting of personal data to an identified data subject, restricted access to personal data, masking of personal data, read access logging to special categories of personal data, change logging of personal data, and consent management mechanisms.
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Warehouse Management

- Accelerate fulfillment by optimizing inbound and outbound processing
- Deliver shipments on-time by coordinating picking, packing, staging and loading operations
- Automate warehouses by integrating material handling equipment and data collection devices
- Reduce shipping times by cross-docking and increase service by value-added services and returns handling
SAP Extended Warehouse Management – Overview

Inbound Processing
Storage and Operations
Outbound Processing

Analytics • Transit warehousing • Labor management • Cross-docking • Compliance
Native technologies • Implementation tools
SAP Extended Warehouse Management – Inbound Processing

Inbound Processing
- Transportation unit processing
- Goods receipt management and optimization
- Inbound quality management
- Internal routing

Business Benefits
- Optimize use of manpower
- Facilitate cross-docking
- Streamline receiving and dock management
- Optimize inventory placement in the warehouse with flexible put-away strategies
- Improve inbound inventory visibility
SAP Extended Warehouse Management – Storage and Operations

Inbound Processing

- Physical inventory
- Slotting
- Replenishment and rearrangement
- Kit-to-stock management
- Value-added services
- Transit warehouse
- Warehouse billing

Outbound Processing

Business Benefits
- Track every unit to the lowest level of detail
- Manage inventory balances on an ongoing basis
- Reduce effort for annual physical counts
- Eliminate inefficient movement and redundant effort
- Improve facility utilization
SAP Extended Warehouse Management – Outbound Processing

**Business Benefits**
- Increase inventory accuracy and availability
- Reduce picking, shipping, and billing errors
- Raise customer service levels through high efficiency and accuracy
- Shorten order turnaround times
- Take advantage of cross-docking opportunities

Outbound Processing
- Outbound planning, including route, wave, and bin planning
- Picking optimization, packing, staging, and load management
Solution Details SAP EWM
A complete offering resulting from solid, continuous investment

**Inbound Processing**
- ASN data receiving, validation
- Transportation unit mgmt.
- Goods receipt
- Putaway bin determination
- Internal routing
- Deconsolidation
- Putaway
- Returns / reverse logistics

**Storage & Operations**
- Rearrangement
- Slotting
- Inventory counts / record accuracy
- Replenishment
- Scrapping
- Kit-to stock
- Warehouse Billing
- Stock consolidation

**Outbound Processing**
- Order deployment
- Route determination
- Transportation unit mgmt.
- Wave management
- Picking bin determination
- Warehouse order creation
- Picking, packing, staging
- Loading & goods

**CORE PROCESSES**
- ASN data receiving, validation
- Transportation unit mgmt.
- Goods receipt
- Putaway bin determination
- Internal routing
- Deconsolidation
- Putaway
- Returns / reverse logistics

**OUTBOUND PROCESSES**
- Order deployment
- Route determination
- Transportation unit mgmt.
- Wave management
- Picking bin determination
- Warehouse order creation
- Picking, packing, staging
- Loading & goods

**CROSS**
- Transportation cross docking
- Pick from goods receipt/push deployment
- Yard management
- Shipping Cockpit

**SUPPORTING AREAS**
- Warehouse Monitor
- RF / RFID enablement
- Quality inspection
- Import / export integration
- EH&S integration

- Migration tools
- Pick by Voice
- Pallet building algorithm
- Seamless pallet tracking

- Packaging specification
- Batch management
- Serial numbers
- Catch weight
- Material Flow System
- Warehouse cockpit
- Dock Appointment Scheduling
- Integration with SAP TM via ERP
- Direct TM – EWM Integration

- Graphical warehouse layout
- Transp. integration (LES)
- Claims & Returns
- ERP transportation integration
- Multiple EAN
- Cartonization
- Rapid deployment package
- KPIs, Performance dashboard
- Retail enhancements

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#SAPMMConf
Types of Warehouses for SAP EWM

**Production Warehouse**
- Raw-material handling
- Integration of quality management
- Production supply
- Receipt from production
- Staging and consumption

**Distribution Center**
- Complex process and high volume
- High degree of automation
- Wave management
- Slotting and rearrangement
- Replenishment

**Service Parts Warehouse**
- Low to very high complexity
- Kitting and value-added service
- High volatility
- Serial numbering
- Heterogeneous product range

**Cross-Dock or Transit Warehouse**
- Regional hubs, gateways, and container freight station
- Air and ocean freight handling
- Unit-load device and container handling
- Receive from and send to airport or seaport (drayage)
Leading-Edge Warehouse Technology Integration

- Mobile devices
- RFID scanners
- Pick by voice
- Augmented reality
- Pagers and phones
- Label printers
- Scales

- Conveyors
- Lifts
- Cranes
- Robots
- Picking systems
- Manufacturing execution systems
- Automated storage and retrieval system (ASRS)
- Automatic guided vehicle (AGV)
SAP Extended Warehouse Management (SAP EWM)

Functional
- Continuous core improvement for SCE
- New industry capabilities

Integration
- Enhanced SCE platform integration
- Enhanced integration with SAP S/4HANA

Deployment
- SAP EWM in SAP S/4HANA
- SAP EWM with SAP ECC
- Cloud solution

IoT
- Next-generation automation
- Enhanced device and asset connectivity

SAP Extended Warehouse Management (SAP EWM)
SAP S/4HANA Cloud Warehouse Management

SAP S/4HANA Cloud Warehouse Management capabilities enable you to manage stock on storage bin level for a better visibility and control in your warehouse and with a tight integration to your business processes.

Benefits

✓ Enhance scope of SAP S/4HANA Cloud core processes with warehouse management capabilities
✓ Control and record all movements of goods in the warehouse – from goods receipt to issue
✓ Manage your stock on storage bin level and increase visibility and control in warehouse processes
✓ Map your entire warehouse complex in the system down to storage bin level
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

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

Handling Units in Warehouse Management
Batch Management
SAP S/4HANA Cloud Warehouse Management

Future Outlook

1811 – Planned¹²

Future Innovation Topics¹²

Planned with Software Product:
SAP S/4HANA Cloud (Q4 2018)

- Inbound Processes
- Outbound Processes
- Internal Processes (Physical Inventory, Internal Movements, Posting Changes, etc.)
- Storage Bin Management

Planned with Software Product:
SAP S/4HANA Cloud (Q1 2019)

- QM in GR-process from external
- QM in GR-process from production
- Enhancements to existing FIORI Apps for Processing Inbound or Outbound deliveries
- Additional Configuration Options
- Cycle Counting

Planned with Software Product:
SAP S/4HANA Cloud (Q2 2019)

- Support of Kanban scenarios in production supply
- Integrated control-cycle maintenance for production and warehouse functions
- APIs to enable partners and customers to integrate with warehouse task processing
- Integrated postings between inventory management and warehouse management for production related material postings
- Additional Configuration Options

Focus: Basic Warehouse Management Scope

Focus: Quality Management Integration + Flexibility

Focus: Interfaces for mobile Apps + Production Integration Enhancements

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What’s new on the SAP logistics network horizon
Yard and Hub Logistics

Streamline planning, execution and settlement of yard tasks with full integration into backend processes.

Increase visibility by capturing and monitoring of location for transportation units in the yard.

Reduce waiting times by supporting check-in and check-out as well as yard movements.

Access mobile work environment and the IoT to make fast decisions.
Sense and Respond to Logistics Insights

Track and Trace

- Provide real-time insights to relevant stakeholders to their business and compliance needs
- Capture business events across the extended business network environment by connecting to the IoT
- Ensure tracking of processes, materials, products and assets with scalable performance and throughput
- Streamline business partner collaboration by easy on- and off-boarding
SAP Global Track and Trace
Common visibility needs

**Sales order fulfillment**

Ensure on-time, in-full delivery to customers by surveying all relevant milestones to increase customer satisfaction.

**Procurement**

Get granular, real-time purchase order status information from your business partner ecosystem to avoid costly fire-fighting.

**Goods and assets in-transit**

Track goods that are in transit and keep track of assets/returnables as they move along the entire supply chain to reduce operational costs.

**Product lifecycle**

Set up a repository for your finished products and track downstream distribution or even after-sales events to offer advanced customer service.

offer traceability at the required level of granularity
SAP Global Track and Trace
Provide the right information to the right users at the right time

Personalized launchpad

Tracking details

Notifications

Embedded in collaboration workspace
e.g. SAP Leonardo IoT Bridge
Gain real-time visibility into orders, deliveries and shipments

Business benefit

- Ensure customer satisfaction through timely sales order fulfillment (in-time, in-full)
- Avoid costly firefighting for inbound goods movements.

Highlights

- Real-time visibility across all involved parties in the supply and fulfillment network
- Integration into ERP backend systems
- Configurable processes, milestones, attributes
- Configurable rules for automated exception detection and alerting
- Geo map visualization

SAP Global Track and Trace: Business Process Tracking
Sense and Respond to Logistics Insights
Logistics Business Network

Connect and collaborate with many supply chain stakeholders through logistics services and content

Run business processes seamlessly through tight integration with backend logistics

Collaborate reliably in the n-tier network through digitized standards

Reach faster to connected partners by easy on- and off-boarding to network of networks

* Currently in incubation mode
Sense and Respond to Logistics Insights
Connected Fleet

Broaden fleet transparency by collecting, mapping, storing and analyzing telematics and sensor data

Increase uptime and better utilization by digitizing moving assets insight across the business

Reduce emissions of vehicles by integrating, operationalizing and optimizing planning processes

Create new business models to increase customer intimacy and open new revenue opportunities

Vehicle Insights
SAP Logistics Business Network*
A cloud-based collaboration platform for logistics

- **Onboard once** – collaborate with many
- **Allow different stakeholders** to consume logistics **content & services**
- **Tight integration** with backend logistics business processes
- **Initial release**: freight tendering & subcontracting integrated with SAP Transportation Management
- **Initial focus**: shipper – carrier

Robust, scalable cloud service with global coverage
A secure network to connect multiple business partners for inter-company collaboration

Portal for standardized content relating to logistics collaboration

* incubation product, which is not yet general available
SAP Logistics Business Network
Mission: Allow joint business for companies involved in logistics

**Discover**
- New trading partners and communities*
- New business opportunities*

**Connect**
- Logistics partners anytime, anywhere
- Any device, back-end system and level of technical ability

**Collaborate**
- Comprehensive set of inter-company collaboration processes
- Multi-modal*, global and seamless

**Gain Insights**
- Analytics and benchmarking*
- Real-time alerts and notifications*
SAP Logistics Business Network Partnering*
Extend the Reach & Accelerate Innovation – by Leveraging Established Partner Services

SAP Logistics Business Network
GLOBAL | MULTI-MODE | END-TO-END*

- Carriers
- Digital freight forwarders
- Mode-specific / regional networks
- B2B integration
- Instant pricing & subcontracting
- Visibility networks
- Real-time ETA & geo tracking
- Partner content & applications

Multi-network & partner collaboration for end-to-end shipment processes

* as per roadmap
Which logistics solutions are right for my S/4HANA transformation?
SAP S/4HANA for extended warehouse management

Key Capabilities

SAP EWM embedded in SAP S/4HANA as additional deployment option for our customers, small & midsize & production warehouses to provide customers with flexible deployment options to run all kinds of warehouses within a single SAP solution.

- Inventory management optimization (e.g. slotting)
- Inbound process optimization (e.g. deconsolidation)
- Outbound process optimization (e.g. waves)
- Yard management (e.g. transportation unit–handling and dock appointment scheduling)
- Labor management
- Value added services
- Kitting
- Cross-docking
- Warehouse billing
Basic Warehousing within SAP S/4HANA

Basic Warehousing

- Defined collection of business processes relevant for basic warehousing within SAP S/4HANA Enterprise Management
- The processes can be implemented using SAP S/4HANA (as of Release 1511) with LE-WM and used until end of life of the Comaptibility Scope
- These processes can also be implemented with selected functions of SAP S/4HANA EWM – as of S/4HANA 1610
- Both technical applications can be used independently of each other on the same S/4HANA database instance
- They have no data exchange / integration
- Longterm, the collection of basic warehousing processes will only be realized by using selected functions of SAP S/4 HANA EWM

2269324 - Compatibility Scope Matrix for SAP S/4HANA, on-premise edition

This is the current state of planning and may be changed by SAP at any time.
Basic Warehouse Management within SAP S/4HANA

Basic Warehouse Management

- Inventory Management
- Inbound Processing
- Outbound Processing
- Internal Warehouse Movements
- Physical Inventory
- Reporting

Licensed with S/4HANA Enterprise Management and using the embedded deployment option

This is the current state of planning and may be changed by SAP at any time.
Extended Warehouse Management within SAP S/4HANA

SAP S/4HANA Supply Chain for Extended Warehouse Management

- Provide best-of-breed warehouse functionality (based on SAP EWM) in SAP S/4HANA
- Almost all advanced warehousing processes (available with classic EWM) can be implemented with **SAP S/4HANA EWM** – Available as of S/4HANA 1610

This is the current state of planning and may be changed by SAP at any time.
Extended Warehouse Management within SAP S/4HANA

SAP S/4HANA Supply Chain for Extended Warehouse Management
- Inventory Management Optimization (e.g. Slotting)
- Inbound Process Optimization (e.g. Deconsolidation)
- Outbound Process Optimization (e.g. Wave Management)
- Material Flow System (MFS)
- Yard Management (e.g., TU Handling, DAS)
- Labor Management
- Cross Docking
- Value Added Services (VAS)
- Warehouse Billing
- Kitting
- Dock Appointment Scheduling (DAS)
- Slotting
- Cartonization planning
- TM Integration (to classic SAP TM; roadmap for S/4 TM)
- IDOC Integration to third-party MFS systems
- Embedded Core Data Service based Analytics

Licensed as Extended Warehouse Management and using embedded or decentral deployment options

This is the current state of planning and may be changed by SAP at any time.
Basic Warehouse Management

Today: Warehouse management functionality (LE-WM) of the SAP ERP application:

- Part of compatibility scope for SAP S/4HANA (see SAP Note 2269324)

Since 1610: Simplified SAP EWM available

Advanced Warehouse Management

Decentral SAP EWM integrated with SAP S/4HANA
- High-volume warehouses
- Independent operations
- Use with a material flow system (MFS)

Embedded SAP EWM in SAP S/4HANA
- Small and midsize warehouses
- Production warehouses
- New deployment option
Extended Warehouse Management

Deployment options: on premise

**Business Suite decentral SAP EWM**

- High-volume warehouses
- Independent operations
- Use with a material flow system (MFS)

**SAP EWM, embedded in S/4HANA**

- Small and midsize warehouses
- Production warehouses
- Reduced redundancy

**SAP S/4HANA decentral EWM**

- High-volume warehouses
- Independent operations
- Use with a material flow system (MFS)
- Use SAP S/4HANA technology

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Extended Warehouse Management

Deployment options: cloud

**SAP S/4HANA EWM Cloud**, Single Tenant Edition

- Full Extended Warehouse Management
- License via monthly subscription
- Limited customization and no modifications
- SAP manages upgrades and new releases

**SAP S/4HANA Cloud WM**

- Public cloud solution
- License via monthly subscription
- Limited customization and no modifications
- SAP manages upgrades and new releases

**SAP S/4HANA EWM Cloud**, Single Tenant Edition

- Provide tight system and process integration to S/4HANA Enterprise Management
- Reduce redundancy
- Use SAP S/4HANA technology
SAP S/4HANA for transportation management

Key Capabilities

SAP S/4HANA Supply Chain for Transportation Management provides best-of-breed transportation functionality (based on SAP Transportation Management) within SAP S/4HANA, including comprehensive process and multimodal coverage as a holistic Transportation Management Solution

- Large and midmarket enterprises
- Domestic and international transportation
- Inbound and outbound freight management
- Simple and complex high-volume operations covering
  - Order management
  - Planning
  - Freight execution
  - Freight costing
  - Analytics and reporting

- Capacity and Demand Planning
- Order Management & Freight Planning
- Freight Execution and Monitoring
- Freight Settlement

Tracking and Reporting

- Freight Order/Freight Bookings
- Freight Order/Freight Bookings
- Freight Order/Freight Bookings
- Freight Order/Freight Bookings

- Capacity/Load Planning
- Order Management & Freight Planning
- Freight Execution
- Freight Settling

- Capacity/Load Planning
- Order Management & Freight Planning
- Freight Execution
- Freight Settling

- Capacity/Load Planning
- Order Management & Freight Planning
- Freight Execution
- Freight Settling

- Capacity/Load Planning
- Order Management & Freight Planning
- Freight Execution
- Freight Settling
Basic Shipping within SAP S/4HANA

Basic Shipping

- Defined collection of business processes relevant for shipping within SAP S/4HANA Enterprise Management

- The processes can be implemented with SAP S/4HANA Release 1511 with LE-TRA and used until end of life of the Compatibility Scope

- These processes can also be implemented with selected functions of SAP S/4HANA TM – As of S/4HANA 1709

- Both technical Applications can be used independently of each other on the same S/4HANA database instance

- They have no data exchange / integration within the shipping process

- Longterm, the collection of basic shipping processes will only be realized by using selected functions of SAP S/4 HANA TM

2269324 - Compatibility Scope Matrix for SAP S/4HANA, on-premise edition

This is the current state of planning and may be changed by SAP at any time.
Transportation Management within SAP S/4HANA

SAP S/4HANA Supply Chain for Transportation Management

- Provide best-of-breed transportation functionality (based on the most recent SAP Transportation Management release) in SAP S/4HANA
- It is planned that all main shipper processes can be implemented with SAP S/4HANA TM – Available as of S/4HANA 1709

This is the current state of planning and may be changed by SAP at any time.
Basic Shipping within SAP S/4HANA

- Basic Transportation Network (except: Trade Lanes, Allocations, Business Shares, Resources)
- Freight Agreements
- Charge Management
  (except e.g. Air specific charges, event based shares, consolidated charge calculation)
- Separated Inbound / Outbound Freight Order / Booking Management
  (Delivery based)
- Basic Transportation Planning (POWLs / manual FU Selection)
- Transportation Execution without Event Management
- Freight Settlement Management
- Basic Agency Billing
- Direct Tendering for Service Agents (Subcontracting)
- Dangerous Goods Management
  (except TM specific enhancements)
- TM Output Management
- BW Analytics

Note: All new developed features in S/4HANA TM after Release 1709 will not be part of Basic Shipping

This is the current state of planning and may be changed by SAP at any time.
SAP S/4HANA Supply Chain for Transportation Management

- Harmonized Master Data and Customizing
- Strategic Freight Management
- Service Product Catalog / Service Order Management
- Forwarding Management / Settlement
- Combined Inbound / Stock Transfer / Outbound Transportation Process
- Planning:
  - Order and Delivery Based Planning Process
  - Transportation Cockpit
  - Vehicle Scheduling Routing Optimization
  - Transportation Proposal
  - Automated Carrier Selection / Carrier Ranking List
  - Load Optimization/ Load Consolidation / Load Planning (3D Visualisation)
  - Package Building
  - Professional Tendering Management
- Driver Management
- Advanced Charge Calculation
- Carrier / Service Billing
- Group Logistics Management (Future Topic)
- Harmonized Transportation Scheduling (Future Topic)
- SAP EWM integration (via services)
- Integration into Supply Chain Logistics
- Integration into Financials
- Integration into Yard Logistics (CD)
- Incorporated Tendering Management
- Event Management (use for Transportation Events)
- Embedded Analytics via CDS Views

This is the current state of planning and may be changed by SAP at any time.
Transportation management in SAP S/4HANA by scope: basic and advanced

**Basic**

**Basic Shipping**
part of SAP S/4HANA Enterprise Management and using the embedded deployment option

- For shipper industries only
- Create, plan and manually monitor freight orders
- Transportation demand planning based on deliveries (late in the overall process)
- Create freight orders with grouped inbound or outbound deliveries
- Manual and rule-based planning
- Subcontracting
- Basic charge calculation and freight settlement

**Advanced**

**Advanced Transportation Management**
licensed separately and using embedded or decentral deployment options

- Shipping and freight-forwarding industries
- Holistic end-to-end transportation management
- Early transportation demand planning based on orders
- Plan combined inbound and outbound transportation demand
- Optimized transportation planning
- Peer-to-peer / broadcast tendering
- Advanced charge calculation and freight settlement
- Dispute management *(planned)*
- Support real-time analytics
- Strategic freight management
Transportation Management
Deployment options: on premise

**Business Suite decentral SAP TM**
- Manage group logistics (internal LSPs)
- Supporting LSPs and freight forwarders
- Run conglomerates and acquisitions

**SAP TM, embedded in S/4HANA**
- Provide tight system and process integration to S/4HANA Enterprise Management
- Reduce redundancy
- Use SAP S/4HANA technology

**SAP S/4HANA decentral TM**
- Manage group logistics (internal LSPs)
- Supporting LSPs and freight forwarders
- Run conglomerates and acquisitions
- Use SAP S/4HANA technology

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Transportation Management
Deployment options: cloud

SAP S/4HANA Cloud TM, Single Tenant Edition

• Full Transportation Management
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SAP S/4HANA Cloud TM

• Full S/4HANA Transportation Management
• License via monthly subscription
• Limited customization and no modifications
• SAP manages upgrades and new releases

• Public cloud solution
• License via monthly subscription
• Limited customization and no modifications
• SAP manages upgrades and new releases
Supply Chain Execution Solution Architecture transition (Short-Term)

Example transition to S/4HANA Digital Logistics solutions

SD → Universal Journal (GL, CO-PA, FI-AR, FI-AP, FI-AA …)

FI-CA

EWM (Basic WH) → SD

TM → EWM

EM

SCE Platform

MM

PM

QM
Supply Chain Execution Solution Architecture Transition (short-term)

**Example transition to S/4HANA Digital Logistics solutions**

- **SD**
  - Use S/4 EWM for smaller warehouses (e.g., Project warehouses) that require basic warehouse functionality. Leverage S/4 Best Practices to create copies for each warehouse instance.
  - Use basis to create own templates with master data for quick warehouse setup.
  - Take advantage of simpler setup, direct ERP (S/4) integration, integration to EWM (national/regional WHs), etc.

- **EWM**
  - Migrate TM instance from SCE Platform to S/4 TM to take advantage of simpler setup (S/4 Best Practices), sharing of master data, optimized processes with core applications in long run (e.g., IBP, aATP, EWM).

- **EM**
  - Continue to deploy SAP EM on same server until ready to move to GTT.

- **TM**
  - Use S/4 EWM for smaller warehouses (e.g., Project warehouses) that require basic warehouse functionality. Leverage S/4 Best Practices to create copies for each warehouse instance.
  - Use basis to create own templates with master data for quick warehouse setup.
  - Take advantage of simpler setup, direct ERP (S/4) integration, integration to EWM (national/regional WHs), etc.

- **FI-CA**
  - Universal Journal (GL, CO-PA, FI-AR, FI-AP, FI-AA ...)

- **FI**
  - CA

- **EWM Basic WH**

- **SCE Platform**

- **PP**

- **QM**

- **EMS**

- **PM**

- **MM**
Supply Chain Execution Solution Architecture Transition (Long-Term)

Example transition to S/4HANA Digital Logistics solutions

Replace EM with Global Track & Trace to Capture and share track & trace information globally across multiple business partners in a supply chain network over multiple tiers. Include participants in the network that do not operate a track & trace solution on their own. Scale up with regards to performance and throughput and only pay for what you really need using cloud subscription model.

Use Logistics Business Network to enable collaboration between suppliers, customers and logistic partners by integrating logistics processes (e.g., tendering, invoicing, subcontracting, etc.), leveraging flexible onboarding of business partners into the network.

Leverage IoT for real-time insights into your extended supply chain – multi-tier, end-to-end.

Use S/4 EWM for smaller warehouses (e.g., Project warehouses) that require basic warehouse functionality. Leverage S/4 Best Practices to create copies for each warehouse instance.

Take advantage of simpler setup, direct ERP (S/4) integration, integration to EWM (national/regional WHs), etc.

Migrate TM instance from SCE Platform to S/4 TM to take advantage of simpler setup (S/4 Best Practices), sharing of master data, optimized processes with core applications in long run (e.g., IBP, aATP, EWM).

Use S/4 EWM for smaller warehouses (e.g., Project warehouses) that require basic warehouse functionality. Leverage S/4 Best Practices to create copies for each warehouse instance.

- Basis to create own templates with master data for quick warehouse setup.
- Take advantage of simpler setup, direct ERP (S/4) integration, integration to EWM (national/regional WHs), etc.

Integration between Supply Chain Planning and Execution planned for future releases.

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Easy to Learn More

- **Transportation Management** and
- **Warehouse Management** on sap.com
- **Digital Logistics and Order Fulfillment with SAP Software Compendium**

Get an overview of value collateral, customer success stories, business transformation studies, solution videos, brochures, and press articles on SAP’s offerings for supply chain execution.
Thank you.

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