

TM Development Highlights

TM Product Management

CONFIDENTIAL



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SAP TM - On premise Roadmap

Planning only - subject to change

Rel.	9.1 2013	9.2 2014	9.3 2015	9.4 Planned	9.Y Future
	Rail Shippers	Truck for Shippers	Logistics Service Prov.	LSP / Shipper	Supply Chain Convergence
	<ul style="list-style-type: none"> • O2C for rail carriers & Q2P for rail shippers • Strategic freight management • T&L collaboration portal • Labor demand planning • SCE platform on HANA 	<ul style="list-style-type: none"> • Gantt chart planning • Empty Provisioning & Triangulation • Load optimization • Invoice submission & match pay via portal 	<ul style="list-style-type: none"> • Transit warehouse • Strategic freight management • ERP Integration Scheduling Agr. • Package building in load optimization • Manual Planning • Customs & security filing • Group Company Logistics • Charge Mgmt. 	<ul style="list-style-type: none"> • Transit Warehouse Enhancements • Manual Driver Planning • Planning & Optimisation Enhancements • Collaboration Portal enhancements e.g. Multiple Invoice Handling • Profitability for LSP • Realtime Analytics • SAP TM – Descartes GLN Integration 	<ul style="list-style-type: none"> • Retail Enhancements • E-Commerce • Integrated SC Planning & Exec. e.g. forecasting • Real-time strategic planning & simulation • Single File Handling • Customer Order Entry for LSPs • Purchase Order Management • Bulk Transportation Enhancements (TM) • Combined Linehaul Parcel Shipment

Transportation Management 9.4 (1/10)

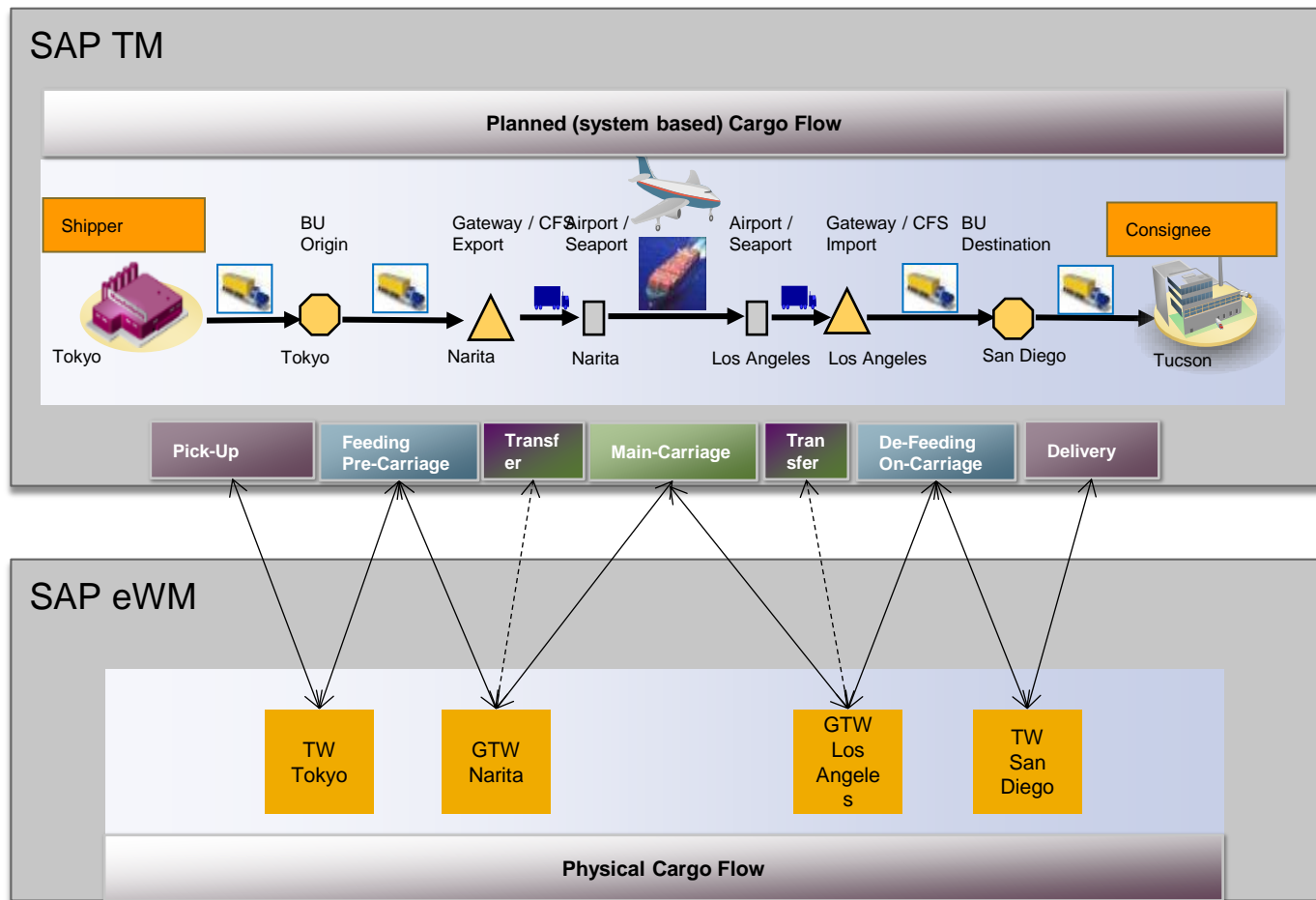
World-Class & Real-time



Transit Warehouse

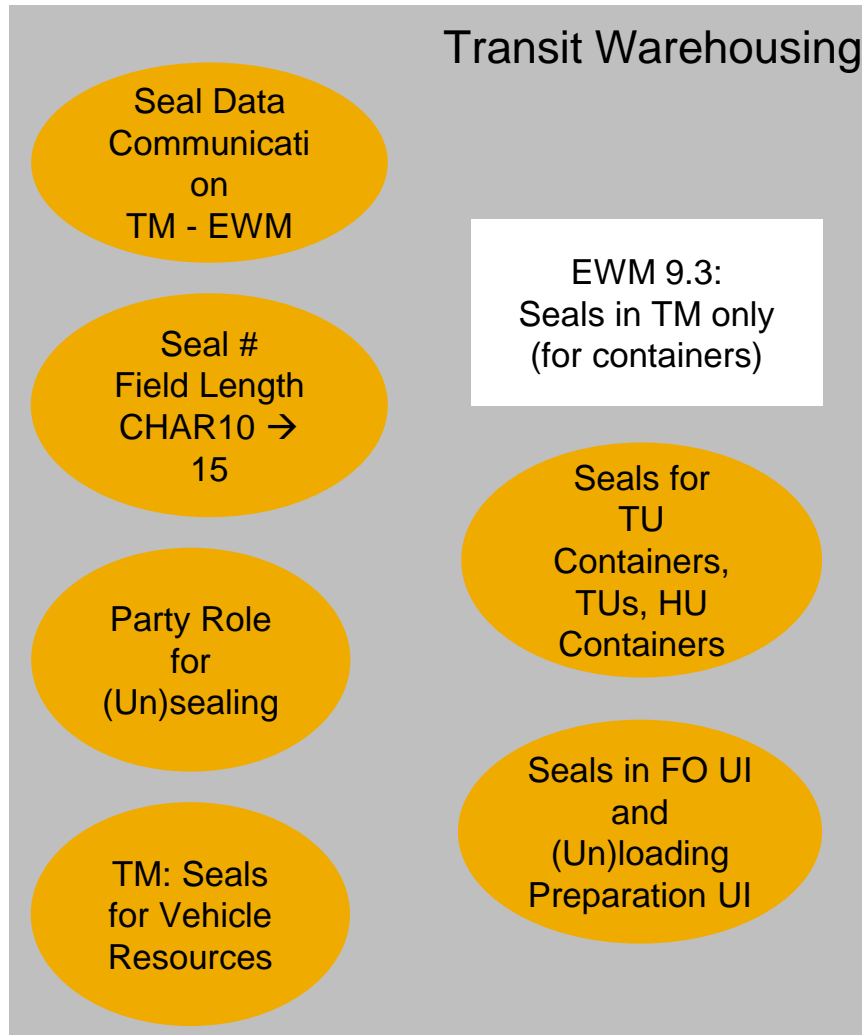
- Reversal Processes after EWM integration
- Late Cancellation of Freight Documents
- Propagation of changes from forwarding order to freight units
- Self Delivery Process
- Local split functionality (EWM – TM Integration)
- Dangerous Goods Handling in Transit Warehouse
- Seals
- Air Cargo Security

Transit Warehousing - Overview



Seals in 9.4 Scope

Planned for TW 9.4
Subject to change



Seals in 9.4

UI-Changes

Planned for TW 9.4
Subject to change

Seals in Transit Warehousing (new):

- Freight Order UI
- Loading/Unloading Preparation UI
- ‚Seals exist‘ displayed in list
- Popup to display or change seals (table)
- Seals get send to TM and update Freight Order

The screenshot shows the 'Seals' popup window in the SAP TU/Container Management interface. The popup contains a table with the following data:

Seal Number	Sealing Date	Sealing Time	Sealing Party R...	Unsealing Date	Unsealing Time	Unsealing Par...
MY_SEAL	07.09.2015	20:57:27	105	07.09.2015	20:58:06	101
HHJJ	07.09.2015	00:00:00	105	07.09.2015	20:57:50	101

Callout boxes highlight the following fields:

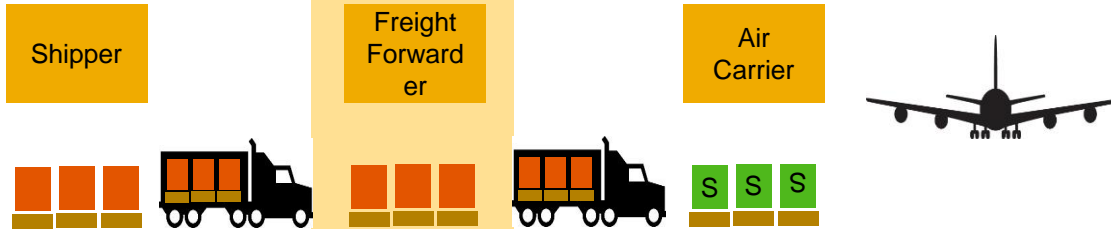
- Seal # field length CHAR 15
- Sealing date/time/party role
- Unsealing date/time/party role
- Settings for Default Party Role

Scope in 9.4

ACS in Transit Warehousing

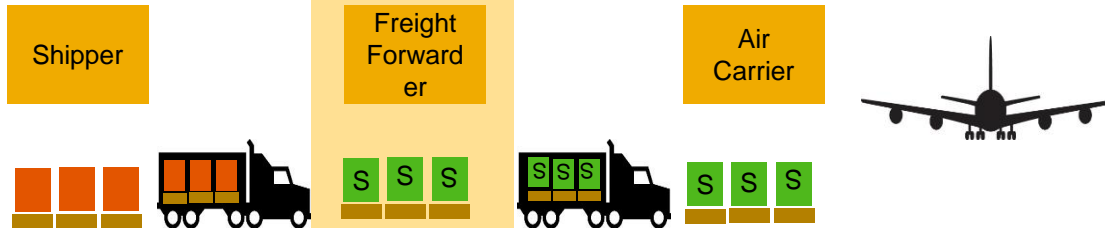
Planned for TW 9.4
Subject to change

1. Cargo made safe by air carrier



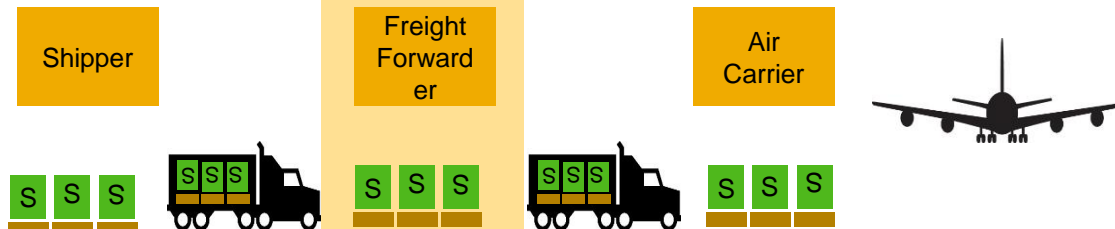
Supported in EWM 9.3

2. Cargo made safe by freight forwarder



New in EWM 9.4

3. Cargo made safe by shipper



ACS infos at transit HU level in EWM

Not Secure

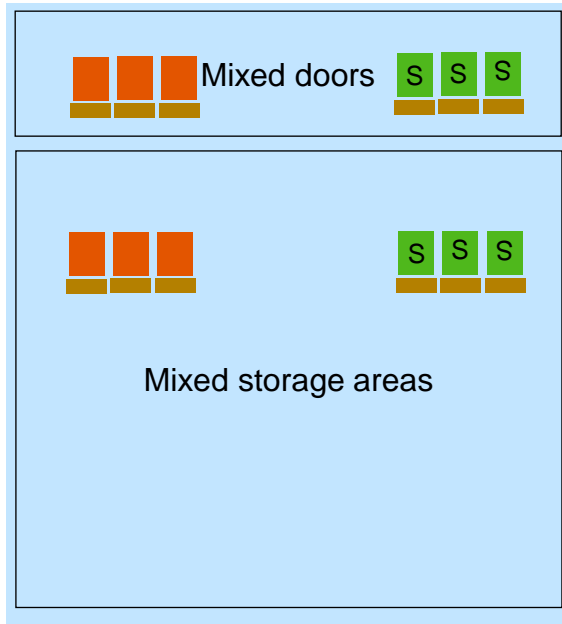
Secure

Transit Warehouse

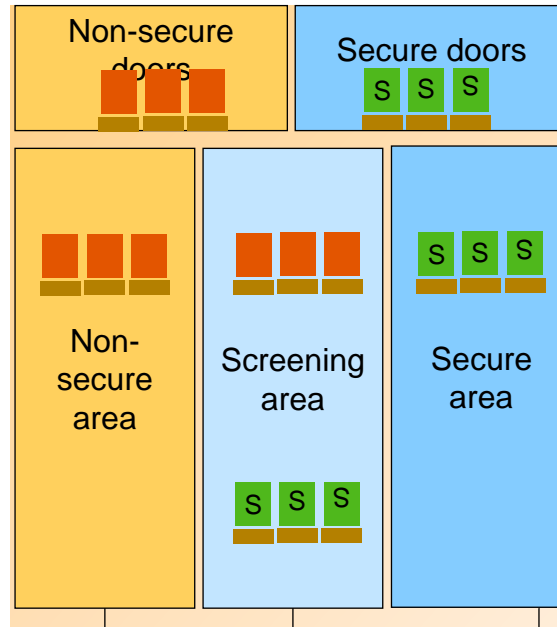
Some Options for Warehouse Layout

Planned for TW 9.4
Subject to change

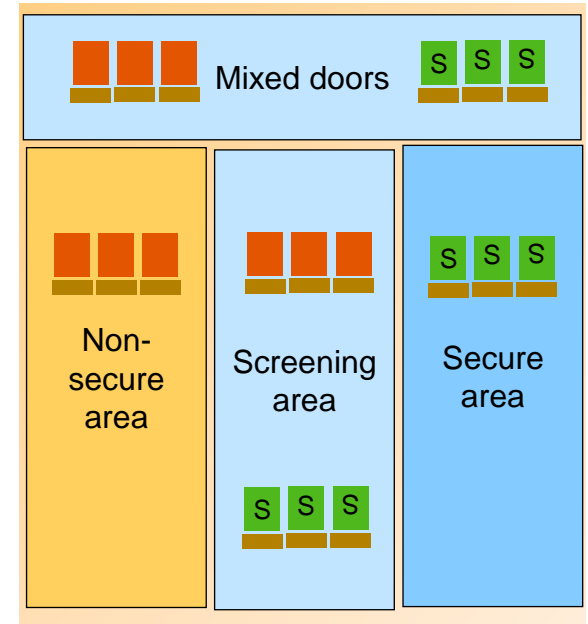
Whole warehouse = secure (→ mix)



Strict separation



Some mixed areas



Storage Type Customizing

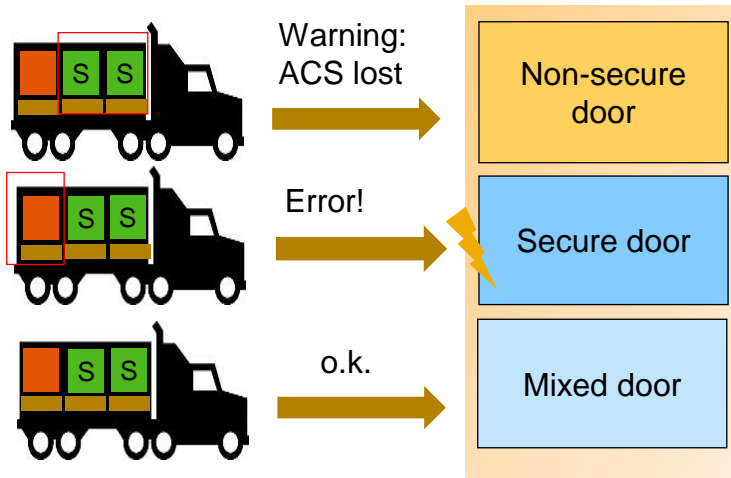
Single Vals		
I	Fix.Val.	Short Descript.
	=	Not Secure
	1	Secure and Not Secure
	2	Secure

Non Secure
Secure

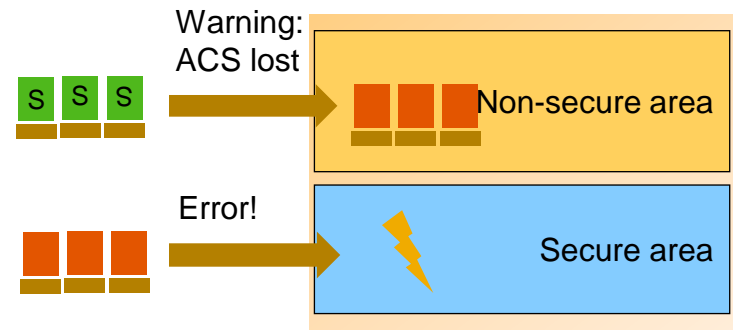
Checks in the Warehouse

Planned for TW 9.4
Subject to change

Assign & Dock at door



Receiving & Putaway

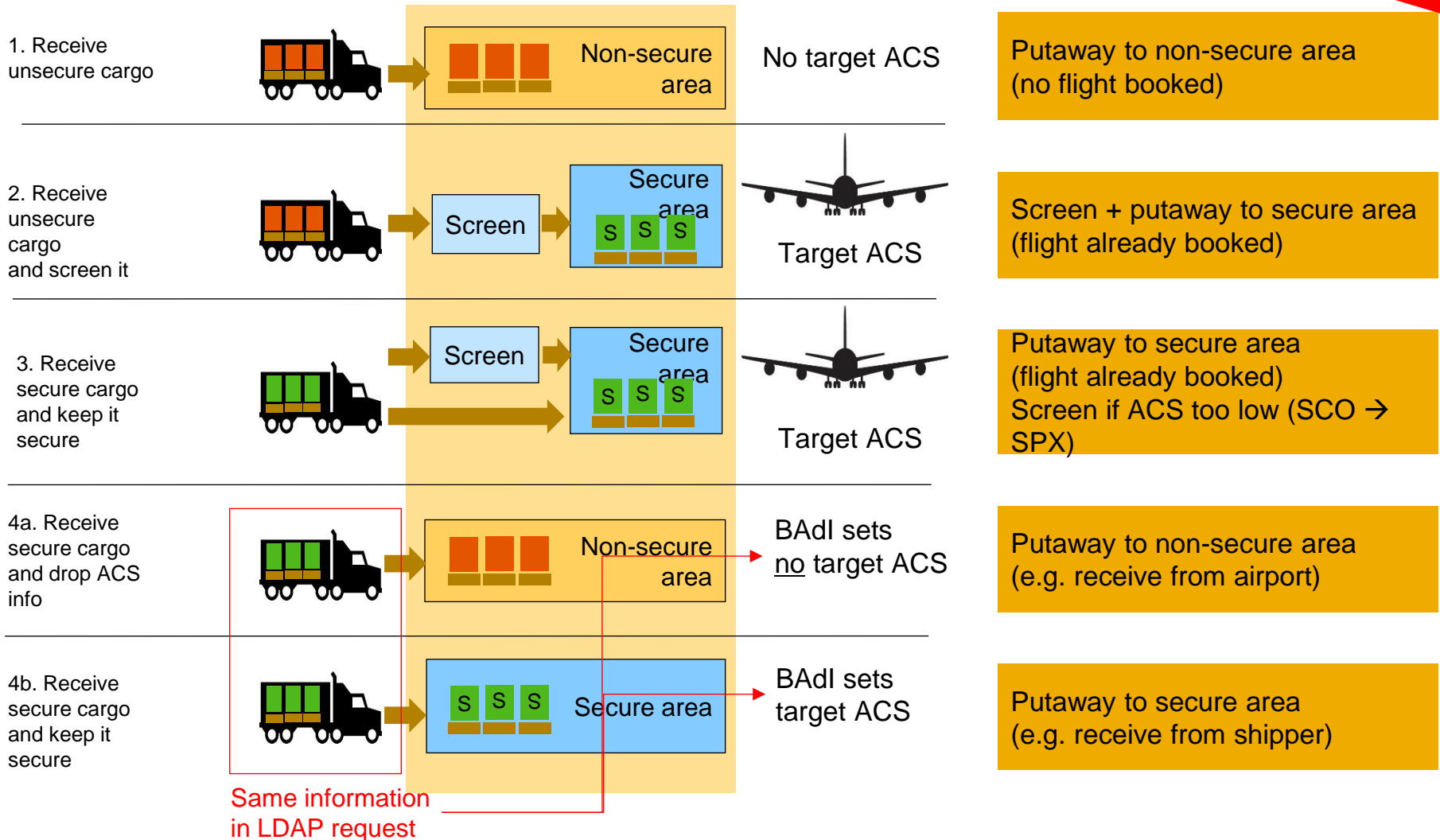


Loading



Inbound Processes

Planned for TW 9.4
Subject to change



Outbound Process (Export Gateway)

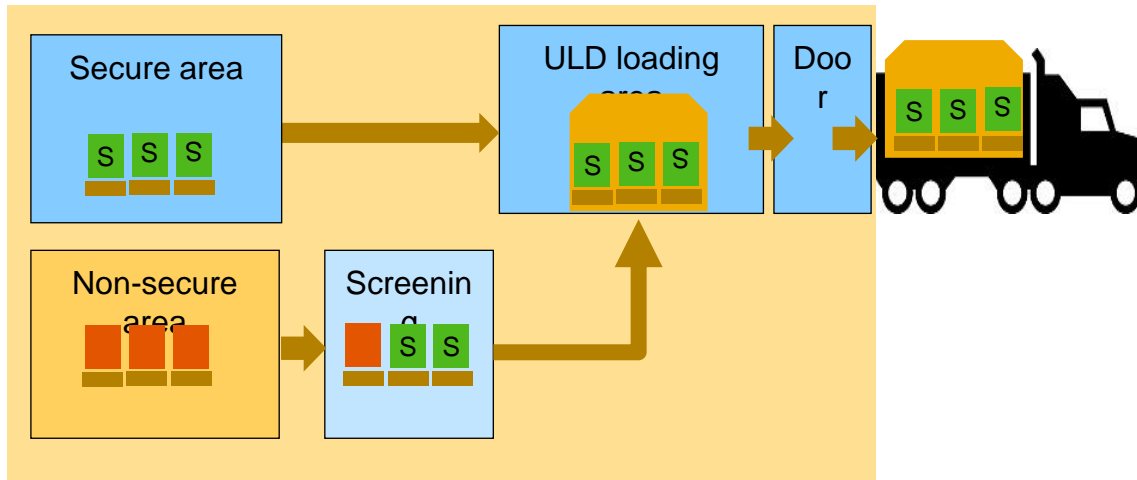
Planned for TW 9.4
Subject to change



Target ACS

1. Ship secure cargo

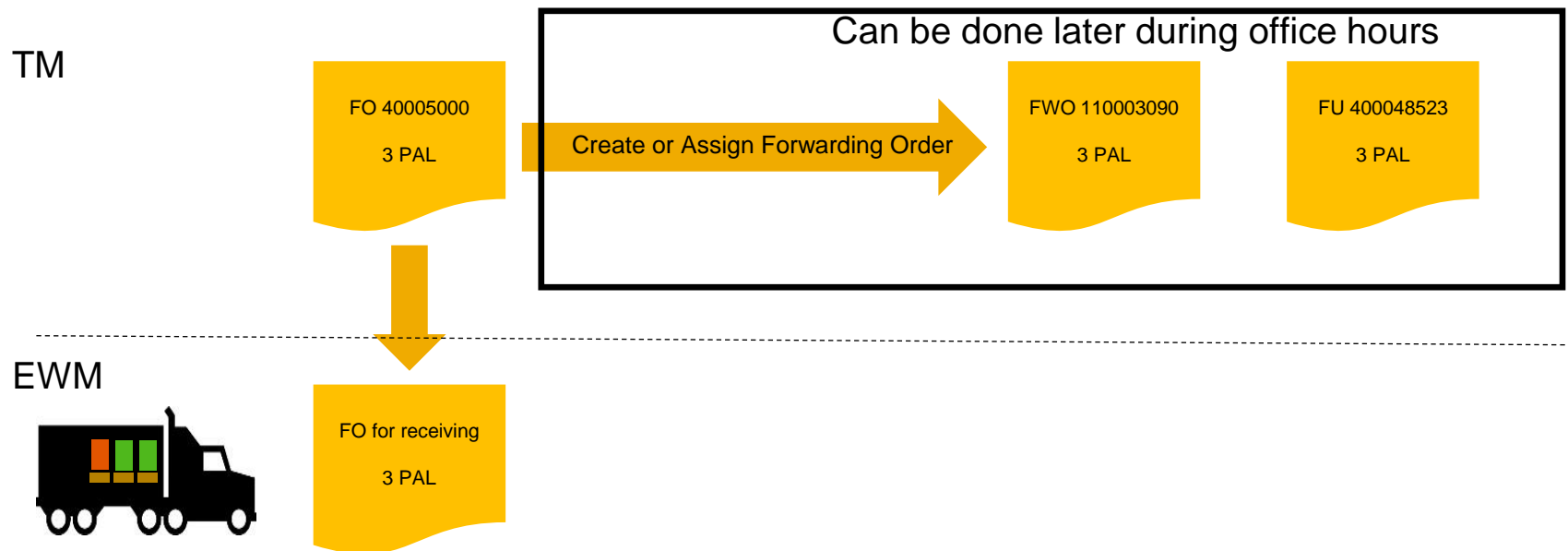
2. Screen non-secure cargo before loading onto ULD (or TU)



Self Delivery Process

Planned for TW 9.4
Subject to change

- ❑ If a truck arrives unexpectedly and no (EWM) Freight Order exists for this truck, the receiving clerk creates a new (self-delivery) freight order in TM to document the unexpected arrival of the truck
- ❑ The trucker hands over the bill of lading or CMR to the receiving clerk containing the information about the shipments/cargo that is supposed to be unloaded. The receiving clerk captures this information in the self-delivery freight order (or assigns the corresponding forwarding orders if already exist)



Self Delivery Process

Planned for TW 9.4
Subject to change

Display Self delivery Order 300021813

Save Cancel Edit Follow Up Set Status Set Item Status Cancel Document Page: Freight Order

General Data

General Information
Document Type: MKSD Self delivery Order
Description: Self delivery Order

Organizational Data
Purchasing Organization:
Purchasing Group:
Account No. with Carrier:

Cargo Information
Cargo Weight: 200 KG
Pieces: 3 EA

Location
Location: OAF-STA-IPTYO 6-23-15 Shiba, Minato-ku, / TOKY...
Date: 08.10.2015 22:00:00 CET

Transportation
Carrier: OAF-CR-03 Uchida Trucking / OTA-KU 102-0021
Means of Transport: OAF_TRUCK Truckload
Handling Execution Status: Not Determined
Transmission-to-EWM Status:

Cargo Management

Cargo Management
Change Hierarchy: Cargo Management Insert: (Choose Item Type) Insert Execution Status Cargo Receipt Status Create Adjust Subitems

Item Hierarchy	Item	Q...	Package Type	G... Weigh	G... Weigh UoM	G... Volum	G... Volum UoM	Shipper Description	Consignee Description	Unloading Location
Package 10	10	3	PAL	200	KG	2	M3	EA KAN XINSON CLOTH...	Dosena Inc. / Sedona A...	OAF-STA-IPTYO

Package 10
K Service Orders Forwarding Order Data

Source
Shipper: OAF-CU-01 KAN XINSON CLOTHING CO...
Source Location: OAF-CU-01
IATA Code (Source Location):
UNLOCODE (Source Location):
Original Pick-Up Date: 00:00:00 CET

Destination
Consignee: OAF-CO-01 Dosena Inc. / Sedona AZ 86336
Destination Location: OAF-CO-01
IATA Code (Destination Loc.):
UNLOCODE (Destination Loc.):
Latest Delivery Date: 09.10.2015 01:00:00 CET

Only a few data needs to be captured

➔ Afterwards the process in Transit Warehouse is steered in the same manner as for expected cargo

Change FWO during Execution

Planned for TW 9.4
Subject to change

- Changes in Forwarding Order are propagated to subsequent freight unit, freight order till cargo receipt

Initial Order from Customer

FWO 110003090
2 PAL
200 KG

FU 400048523
2 PAL
200 KG

FO 40005000
2 PAL
200 KG



Update from Customer

FWO 110003090
3 PAL
300 KG

FU 400048523
3 PAL
300 KG

FO 40005000
3 PAL
300 KG

- Goods Receipt on actuals

Support EWM Reversal Process

Planned for TW 9.4
Subject to change

- ❑ **Reverse Arrival from Checkpoint**
- ❑ **Reverse Receiving / Loading Completed (Update of Receiving / Loading Completed)**
- ❑ **Reverse Departure from Checkpoint**

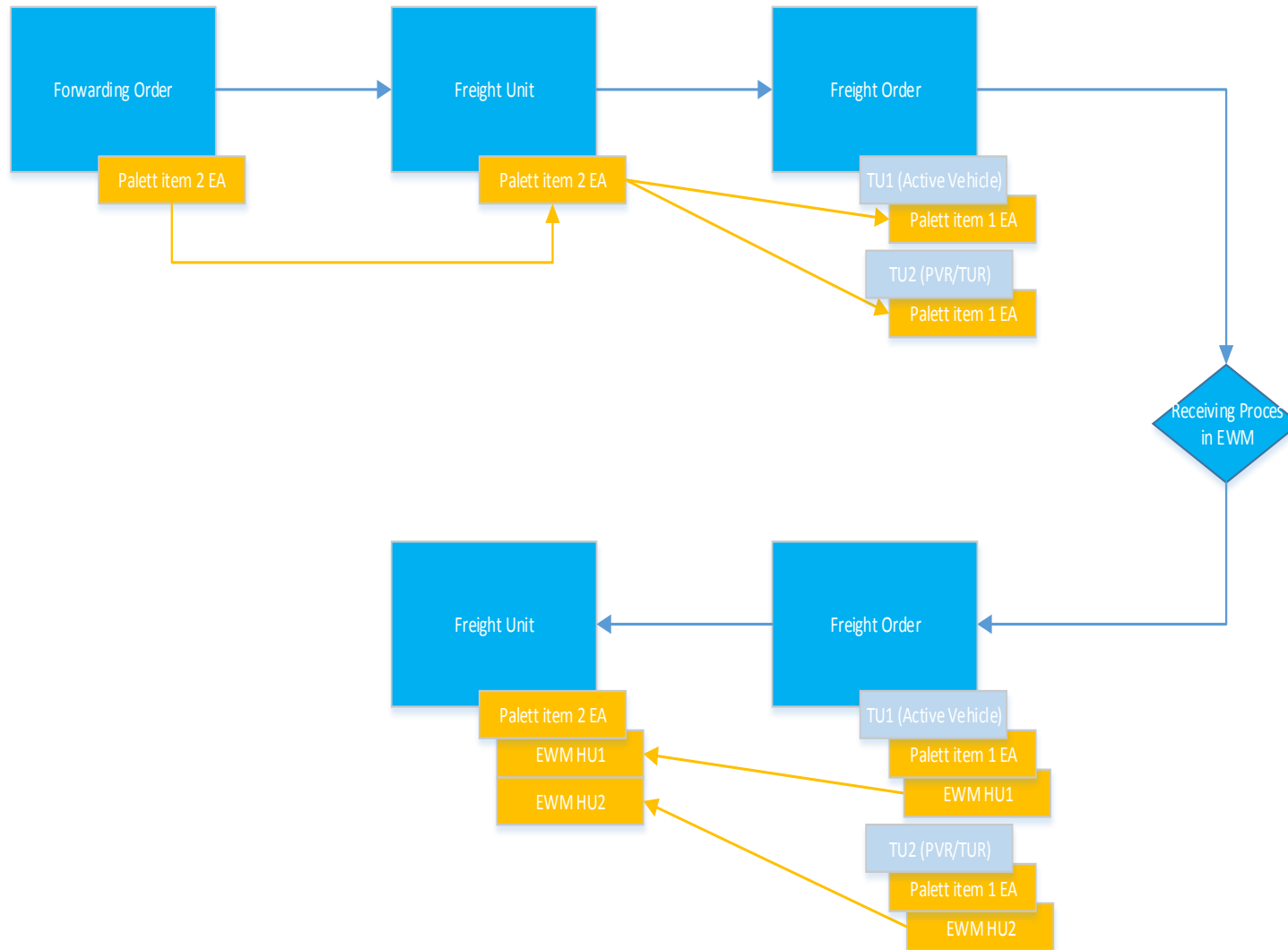
Local item split functionality

Planned for TW 9.4
Subject to change

- ❑ **Single items within a document (e.g. freight order) need to be split onto several transportation units e.g. Truck and Trailer Scenario**
- ❑ **The local item split can be triggered from TM side in the freight order cargo management UI**
- ❑ **In a transit warehouse outbound process the cargo split can also be triggered by EWM when HU's are splitted on different available TU's**

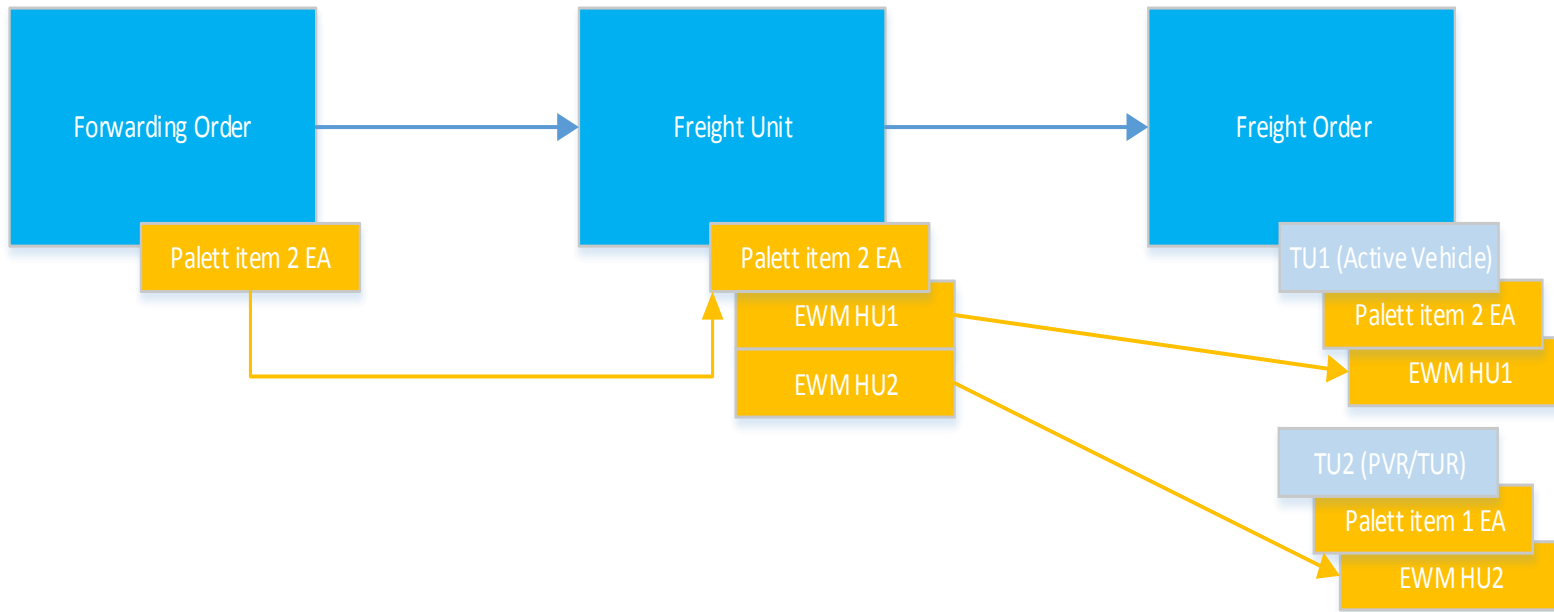
Local item split - inbound

Planned for TW 9.4
Subject to change



Local item split - outbound

Planned for TW 9.4
Subject to change



Dangerous Goods Handling

Planned for TW 9.4
Subject to change

❑ FWO without DG item, EWM detects that this item is DG

- ❑ On TM site a DG record should be created. DG information must be enhanced by necessary data input on TM site

❑ FWO with DG item, EWM detects that it is no DG

- ❑ Since the leading system concerning DG maintenance is TM. Deletion of DG information should not be performed on TM site automatically

❑ FWO with DG item, EWM detects that DG has to be update

- ❑ On TM site an additional DG record should be created. Existing DG records will not be deleted via messages from EWM. In this case eventually incorrect DG information should be deleted manually and the correct DG information should be maintained on TM site

❑ Repeated LDAP Notification for the same TM Document

- ❑ Inserts/Deletes/Updates of DG records which have been created via LDAP notification are allowed as long as DG record has not been maintained on TM side

Dangerous Goods Handling in Transit Warehouse

Planned for TW 9.4
Subject to change

Header Data Partner Location References **Content Information** Air Cargo Security

Dangerous Goods: ☒ More Information
Bonded Goods: ☐
High-Value Cargo: ☐
Not Stackable: ☐
Overdimensional Cargo: ☐

TUs/TU Containers

Create Item Copy Item

Item Number
10
20

HUs/HU Containers

Change HU Remove HU

HU Category: Handling
80000002
80000002
81000041

Change Item

Number of HUs: 1
Packaging Material: PALLET Pallet (for TW)
Transportation Unit: 300020903

Content Information

Dangerous Goods: ☒
Bonded Goods: ☐
High-Value Cargo: ☐
Not Stackable: ☐
Overdimensional Cargo: ☐

Partner Location

Shipper: OAF-CO-09 Sports Unlimited Inc.
Consignee: OAF-CO-04 Scottsdale Fireworks Inc.
Previous Transit Warehouse Location:
Next Unloading Location:
Final Transit Warehouse Location:

References

Forwarding Order Number:
Freight Order: 300020903
Freight Booking:
Document Number: 410000000208 20
Purchase Order Reference:
Sales Order Reference:
Invoice Reference:
Master Air Waybill:
House Air Waybill:
Master Bill of Lading:
House Bill of Lading:

Dangerous Goods

Insert Delete

DG Regulation	Class	Desc. of Dan...	ID Number Ty...	Ident. No. T...	ID number	Danger lab...	Danger Lab...	Dangerous...	Dangerous...	Dangerous...
ADR	3	Flammable liquids	UN	UN Number (...)	1088	3	Flammable li...	0.000	0.000	0.000

- DG data can be entered during receiving process in warehouse
- DG data send to TM to update the record







□ DG Data to be completed in TM

Details: Package 20

Package Details Dangerous Goods Notes Document References Customs Discrepancies Commodity Codes

Profile DG_BASIC_05

Print Version Export Detail View

Det...	DG Number Type	DG Number	Packing Group	Data Maintained
 UN		1966	III	✓
 UN		0004		✓
 UN		1993	III	✓
 UN		1993	III	✓
 UN		1994		!
 UN		1999		!

Details: Package 20

Package Details **Dangerous Goods** Notes Document References Customs Dis

Profile: DG_BASIC_05 Table View 6 of 6 Copy Record N

DG Record Identification

* DG Number Type: UN * DG Number: 1999 Packing Group: Variant ID: !

Common Data ADR CFR IATA_C IATA_P IMDG RID

Transportation Management 9.4 (2/10)

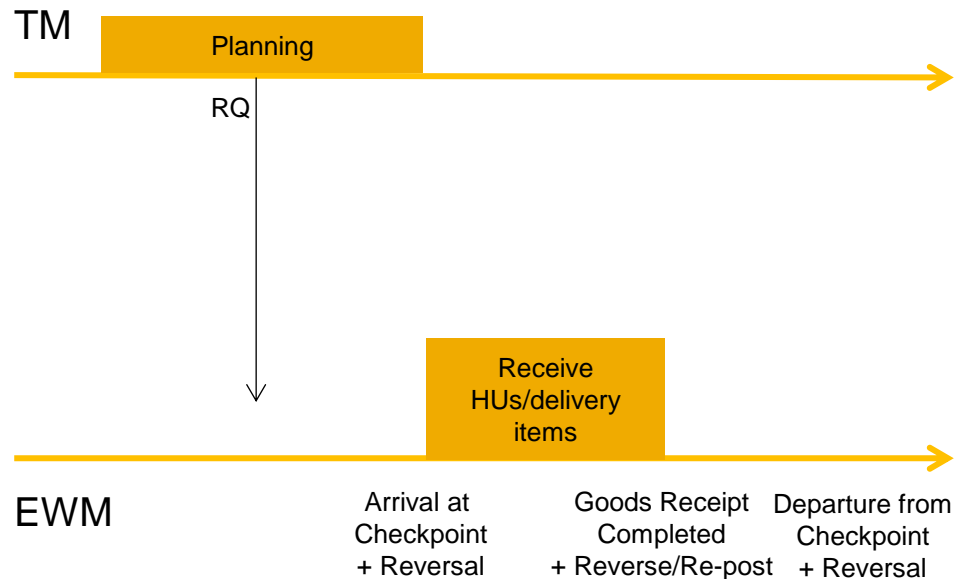
World-Class & Real-time



TM – EWM Integration

- Enhancements in Inbound Process for Shipper
- Enhancements in Outbound Process for Shipper

Inbound Process in EWM 9.1



No updates from TM (LDAP request):

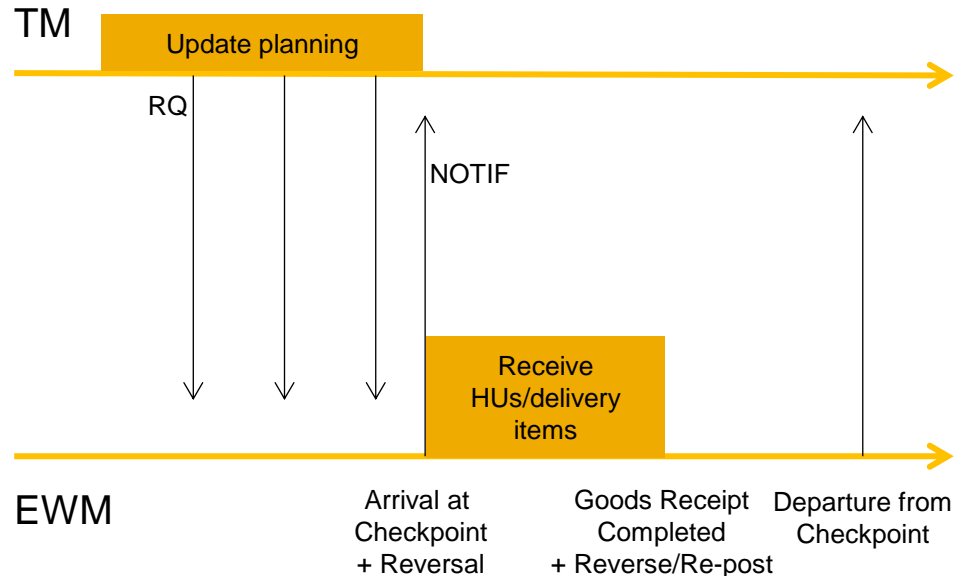
- Unique LDAP request

No LDAP notification from EWM:

- TM informed via ERP delivery update only

Updates in Inbound Process

Planned /Subject to change



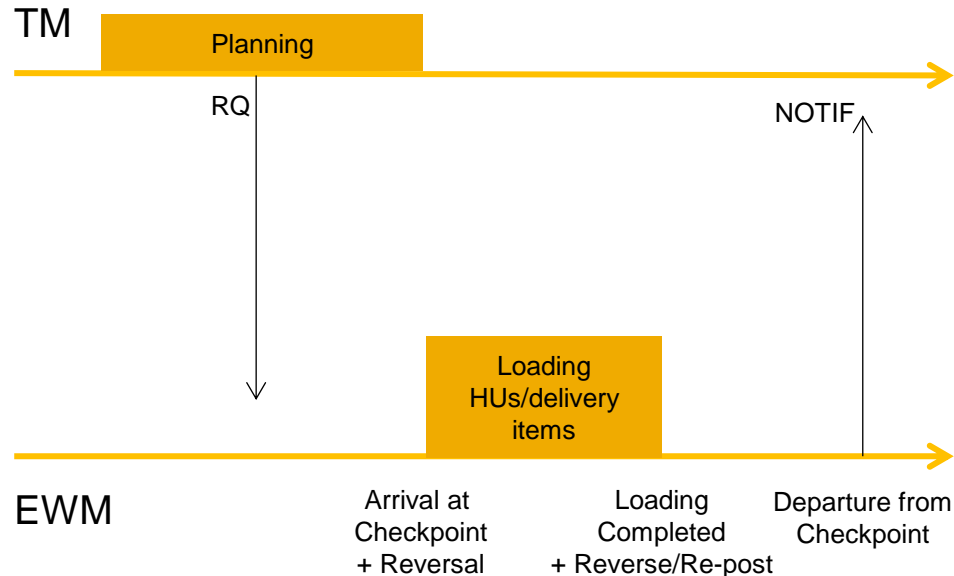
Updates from TM (LDAP request):

- Until arrival at checkpoint
- Changes to AVR/PVR
- Changes to delivery (item) assignments

Changes from EWM (LDAP notification):

- Notify arrival at checkpoint + reversal
- Notify departure from checkpoint
- **Reverse departure not allowed**
- Missing delivery item
- Changed delivery item quantity
- Addt. delivery item assignment in EWM (TPT=C)

Outbound Process in EWM 9.1



No Updates from TM (LDAP request):

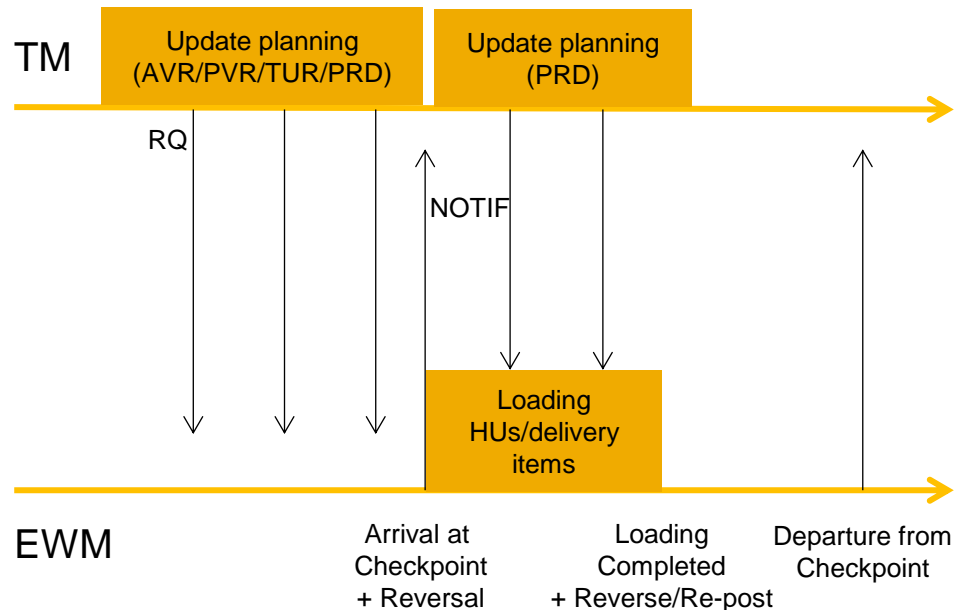
- Unique LDAP Request

Unique LDAP notification at check-out:

- Reverse departure not allowed
- Missing delivery item
- Changed delivery item quantity
- Additional delivery item assign in EWM (TPT=C)

Updates in Outbound Process

Planned / Subject to change



Updates from TM (LDAP request):

- Changes to AVR/PVR until arrival
- Changes to delivery (item) assignments until loading completion (after that: XI message error)
- XI message error if assignment deleted for item that is already (partially) loaded

Changes from EWM (LDAP notification):

- Notify arrival at checkpoint + reversal
- **No notification of loading completed**
- Notify depart. from checkpoint
- **Reverse departure not allowed**
- Missing delivery item
- Changed delivery item quantity
- Addt. delivery item assignment in EWM (TPT=C)

Transportation Management 9.4 (3/10)


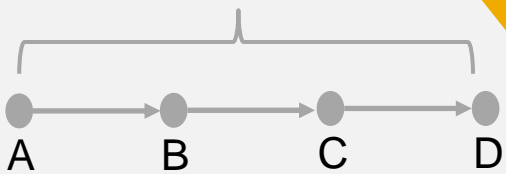
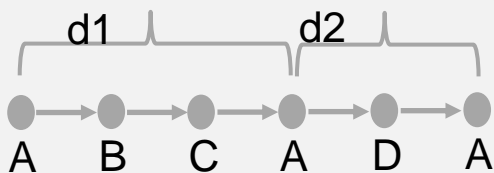
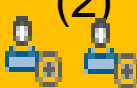
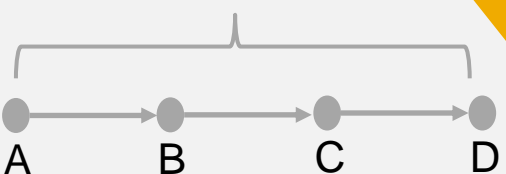
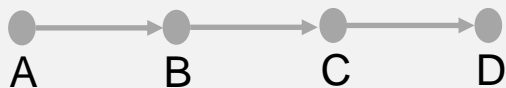
World-Class & Real-time



Planning and Optimization

- Manual Driver Planning
- Enhancements for Manual Planning
- Automatic Planning
- Package Building

Manual Driver Planning – Scenario Overview

<div>Assignment type</div> <div>Number of required drivers</div>	Freight Order	Stage
Single Driver 	<p>Driver d1</p>  <p>80%</p>	<p>Driver d1 Driver d2</p>  <p>5%</p>
Driver Team (2) 	<p>Driver d1 & d2</p>  <p>15%</p>	<p>We have not yet met any customer needing this.</p> <p>0%</p>
No Driver	<p>No driver assignment</p> 	

Manual Driver Planning – Selected Features (1/2)

Planning

Profiles & selection criteria allow selection of drivers (with context determination)

Cockpit (incl. Gantt chart) shows drivers in list & hierarchy

Define number of required drivers (single, team, none)

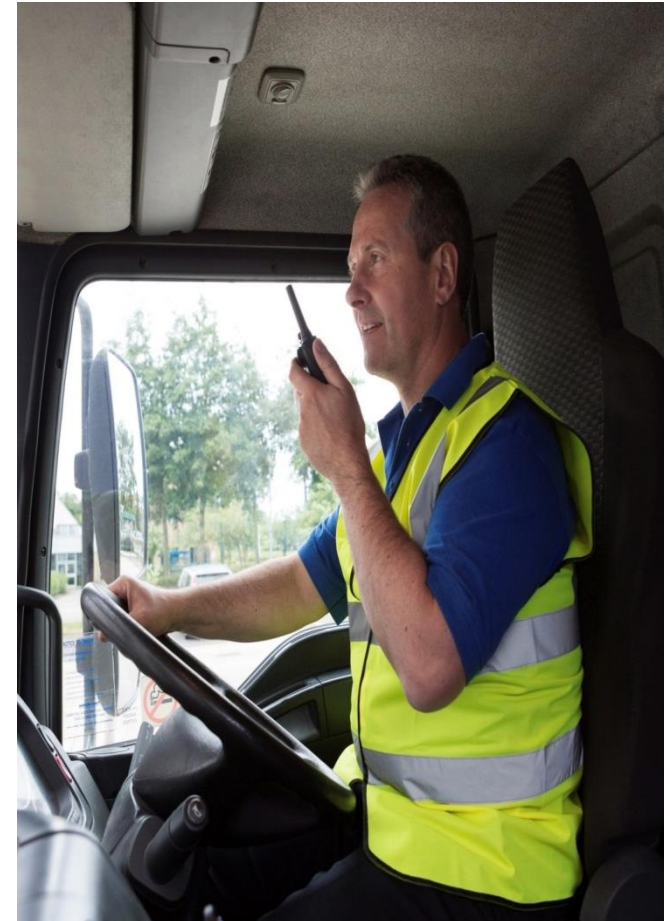
Define assignment type (freight order vs. stage)

Assign / un-assign driver to / from freight order (stages)

Truck resource has one default driver

Each new freight order for the truck inherits the default driver

Changing the default driver does not change freight



Manual Driver Planning – Selected Features (2/2)

Properties of driver

Offered qualifications

Home location → select for planning, sort & filter in cockpit

Org unit → select for planning, sort & filter in cockpit

Last planned location & availability time → sort & filter in cockpit

Absences (e.g. sickness, vacation) → shown in Gantt chart

Calendar for non-working times → shown in Gantt chart



Manual Planning – Map (1/2)

Map customizing

Define labels, tooltips, colors, icons

Show demands as source / destination / arc
(can be switched in planning session)

Page layout

Refers to map customizing and defines b

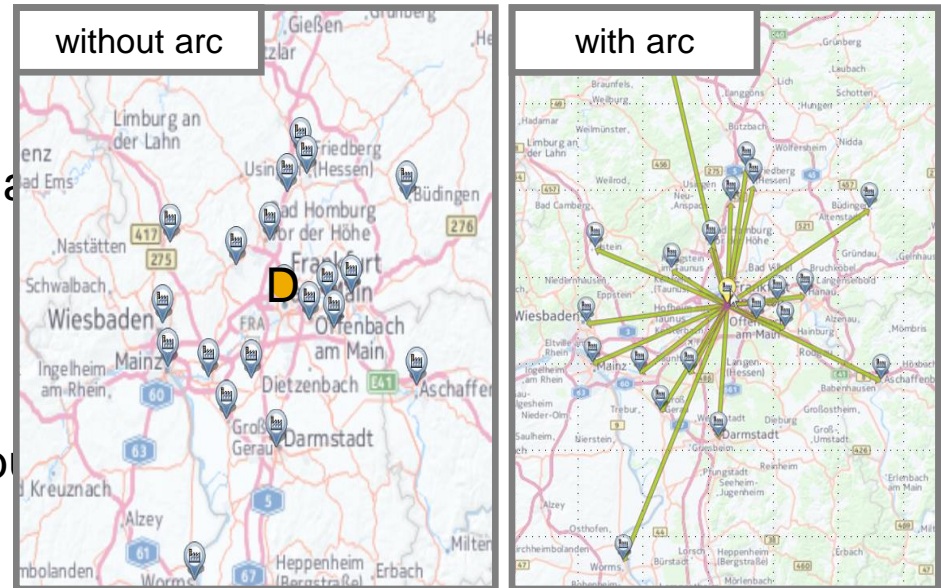
Planning

Create capacity document for selected demands & resources

Insert stop into capacity document stage

Un-assign stops from capacity documents

Optimize one freight order with vehicle scheduling & routing optimizer



Manual Planning – Map (2/2)

Interplay with lists / trees / Gantt charts

Push selected objects automatically to

Action column to show / hide object or

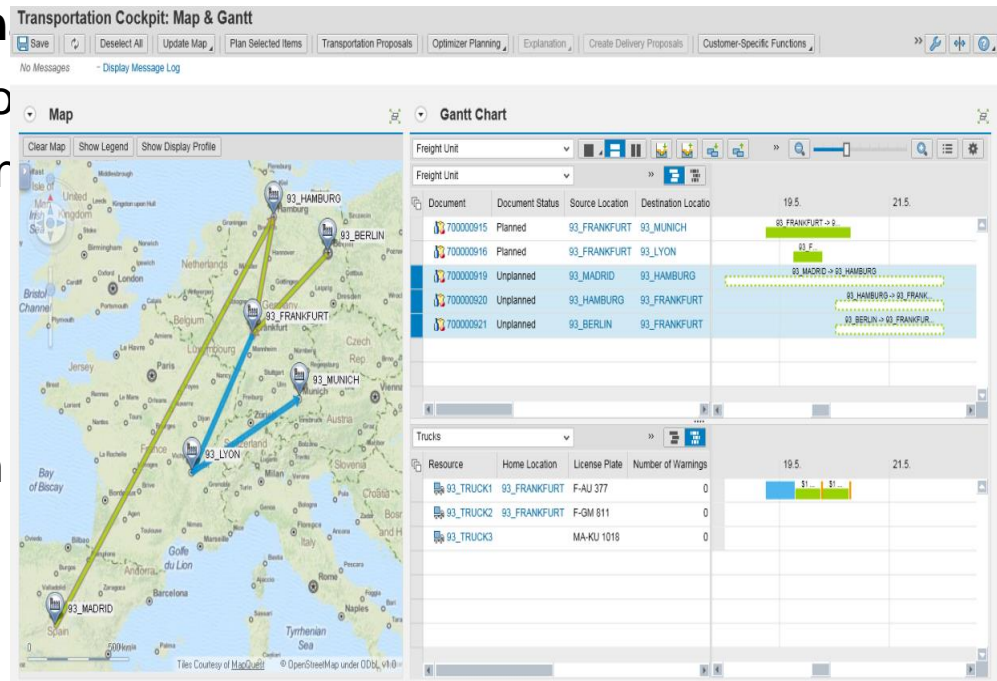
Show map color legend in any list

Miscellaneous

Auto-focus on selected documents on

Cluster demands geographically
(depending on zoom level)

Display aggregated information
(total weight, ...) for selected objects

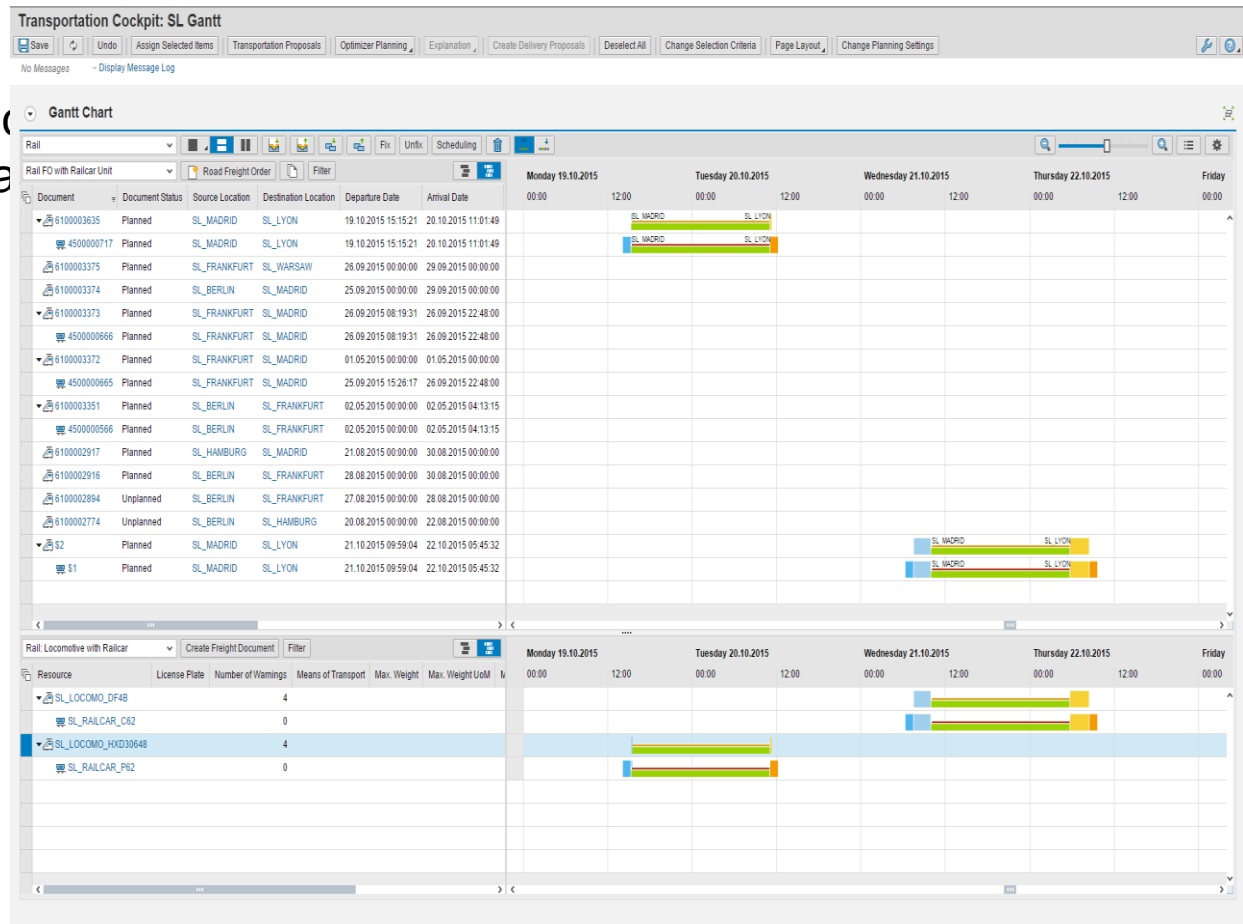


Manual Planning – Gantt Chart (1/5)

Rail planning

Show rail freight order, railcar unit, locomotive resource and railcar resource

Planning with drag & drop



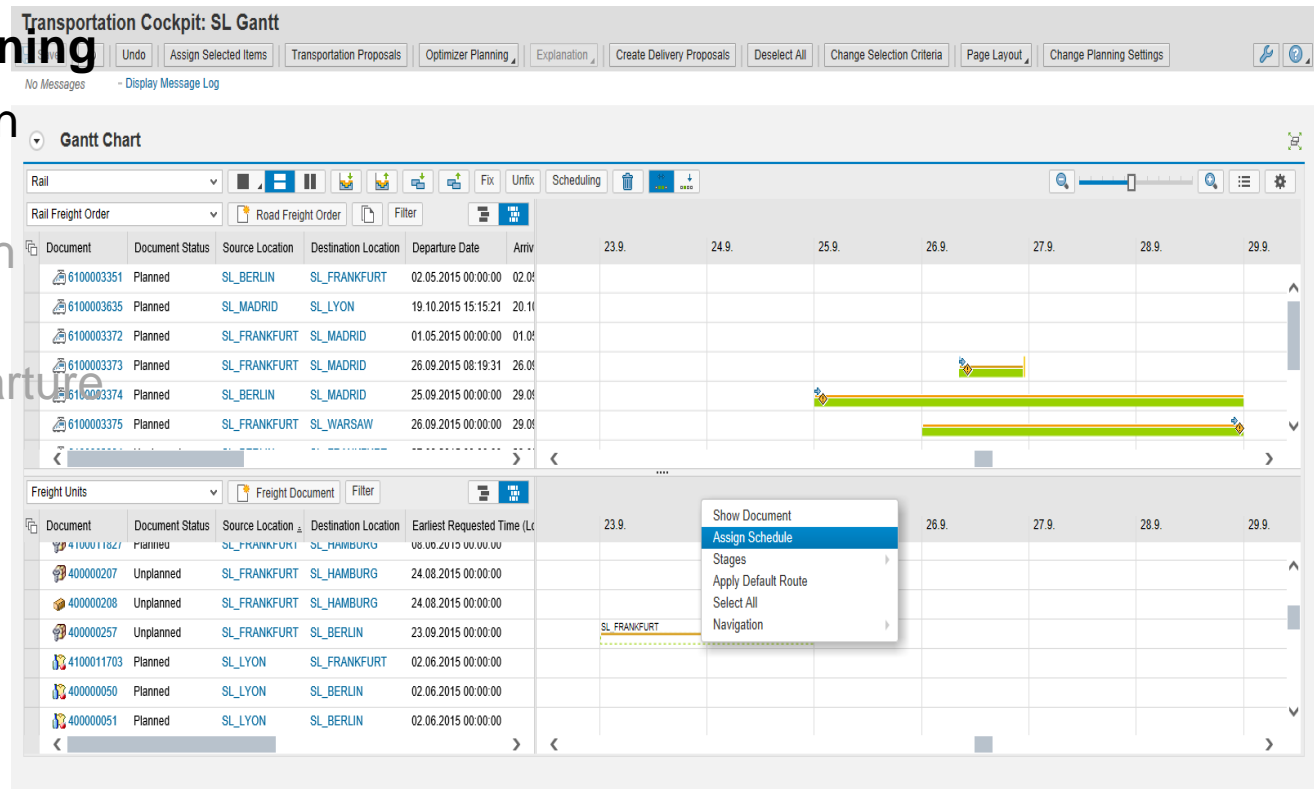
Manual Planning – Gantt Chart (2/5)

Schedule-based planning

Context menu to assign schedule

Define schedule search criteria

Choose schedule departure



Schedule-based planning

Define schedule search criteria

Choose schedule department



Manual Planning – Gantt Chart (4/5)

Schedule-based planning

Context menu to assign
schedule

Define schedule search
criteria

Choose schedule departure

Select Schedule Departure

Saved Searches:

Search Criteria

Source Location	is	SL_FRANKFURT
Destination Location	is	SL_BERLIN
Departure Date from Source Location	is later than or on	16.09.2015
Arrival Date at Destination Location	is later than or on	16.09.2015
Carrier	is	
Schedule	is	
Schedule Used as Template	is	

☒ Maximum Number of Results: 100

Search Reset to Default Save Search As:

View: Ling's schedule score

Schedules	Selected	Source Location	Departure Date	Departure Time	Destination Location	Arrival Date	Arrival Time	Schedule
18.09.2015 00:00:00 CET	<input type="checkbox"/>	SL_FRANKFURT	18.09.2015	00:00:00	SL_BERLIN	18.09.2015	00:00:00	2000091
21.09.2015 00:00:00 CET	<input type="checkbox"/>	SL_FRANKFURT	21.09.2015	00:00:00	SL_BERLIN	21.09.2015	00:00:00	2000091
23.09.2015 00:00:00 CET	<input type="checkbox"/>	SL_FRANKFURT	23.09.2015	00:00:00	SL_BERLIN	23.09.2015	00:00:00	2000091
25.09.2015 00:00:00 CET	<input checked="" type="checkbox"/>	SL_FRANKFURT	25.09.2015	00:00:00	SL_BERLIN	25.09.2015	00:00:00	2000091
28.09.2015 00:00:00 CET	<input type="checkbox"/>	SL_FRANKFURT	28.09.2015	00:00:00	SL_BERLIN	28.09.2015	00:00:00	2000091
30.09.2015 00:00:00 CET	<input type="checkbox"/>	SL_FRANKFURT	30.09.2015	00:00:00	SL_BERLIN	30.09.2015	00:00:00	2000091

OK Cancel

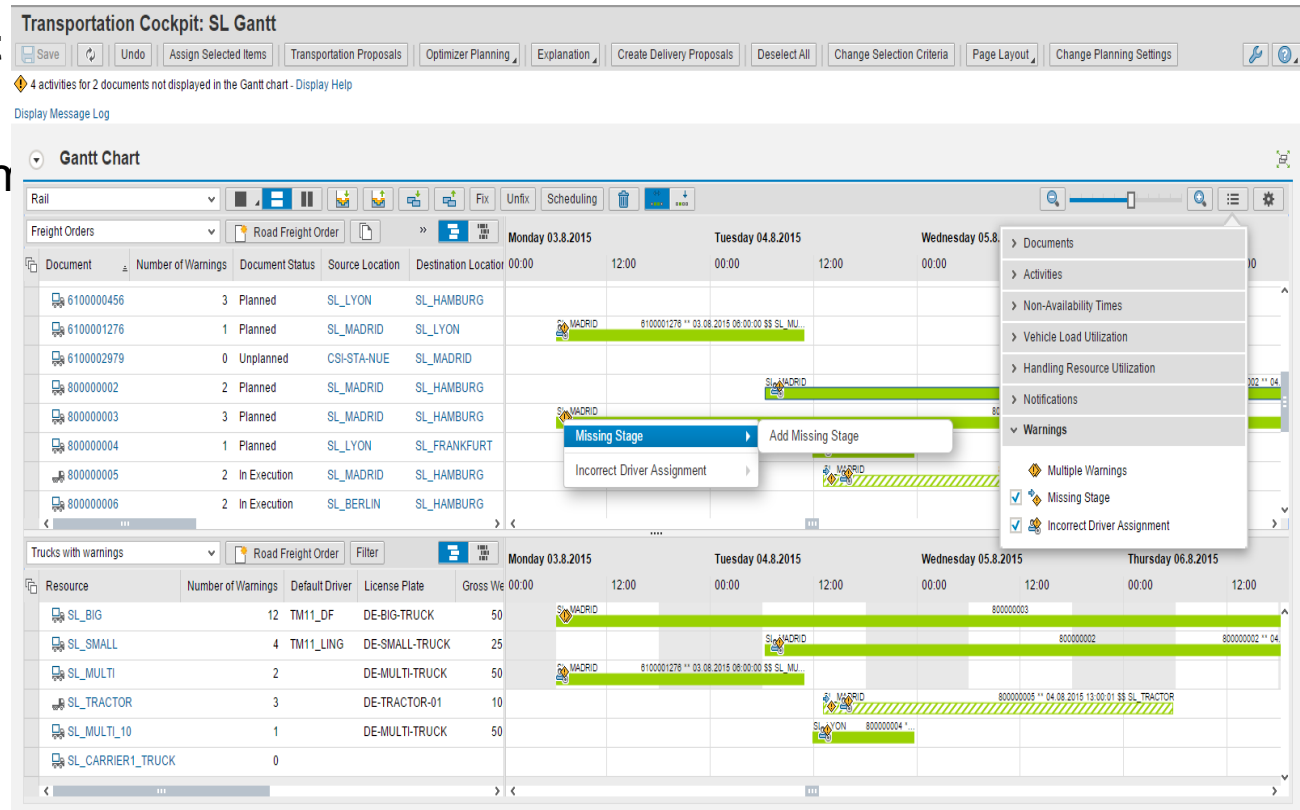
Manual Planning – Gantt Chart (5/5)

Warning management

One new warning type
(incorrect driver assignment)

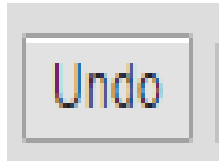
Multiple warnings icon

Context menu to solve
warnings



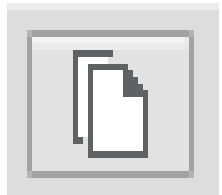
Manual Planning – Usability Improvements

Undo button



Automatic accept of carrier selection optimizer result

Quick multiple copies of one capacity document



Manual planning

Create multiple capacity documents for selected resource and demands

Create multiple capacity documents, one per selected demand

Efficient maintenance

Edit dates & times, carrier, resource, means of transport in capacity document lists and hierarchies

Mass maintenance of one date & time for selected capacity documents

Manual Planning – More Information

Hyperlinks for all objects in the cockpit

Quick views for all objects in the cockpit

All master data and documents

Customer is able to enhance / change content of quick

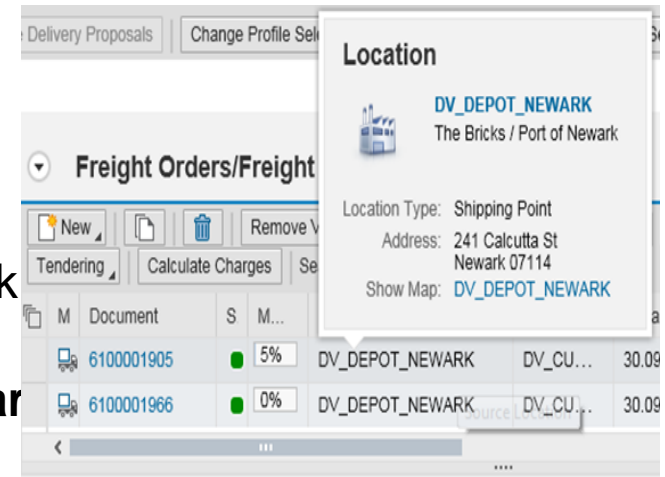
Show distance & duration in freight unit list / hierar

**Show aggregated information for selected documents
in one list / hierarchy**

E.g. total weight and volume, etc.

Week day as separate field

Enable selection, filtering, etc.



The screenshot shows the 'Freight Unit Stages (50)' table. The table has the following columns: Freight Unit, PL..., Loading Location, Unloading Location, Gross Weight, and Gross Weig... (Volume). The table contains 10 rows of data, with the last 3 rows highlighted in blue. A summary row at the bottom shows the total for 3 selected rows.

Freight Unit	PL...	Loading Location	Unloading Location	Gross Weight	Gross Weig...
4100071859		LPD_HAMBURG_PORT	LPD_BERLIN_HUB	2.160.000	KG
4100071862		LPD_HAMBURG_PORT	LPD_LEIPZIG_HUB	2.310.000	KG
4100071867		LPD_HAMBURG_PORT	LPD_FRANKFURT_HUB	2.445.000	KG
4100071868		LPD_HAMBURG_PORT	LPD_FRANKFURT_HUB	2.550.000	KG
4100071925		LPD_LOS_ANGELES_PORT	LPD_DALLAS_HUB	1.780.000	KG
4100071929		LPD_LOS_ANGELES_PORT	LPD_DALLAS_HUB	1.950.000	KG
4100071930		LPD_LOS_ANGELES_PORT	LPD_DALLAS_HUB	1.950.000	KG
4100071932		LPD_LOS_ANGELES_PORT	LPD_CHICAGO_HUB	960.000	KG
4100094665		LPD_LOS_ANGELES_PORT	LPD_DALLAS_HUB	910.000	KG
3 selected rows				Σ 5.680.000	KG
				Σ 40.510.050	KG

Automatic Planning – Vehicle Scheduling and Routing Optimizer

Pickup and delivery stop limit

Planning cost settings define the number of pickup stops and the number of delivery stops

Minimum load utilization

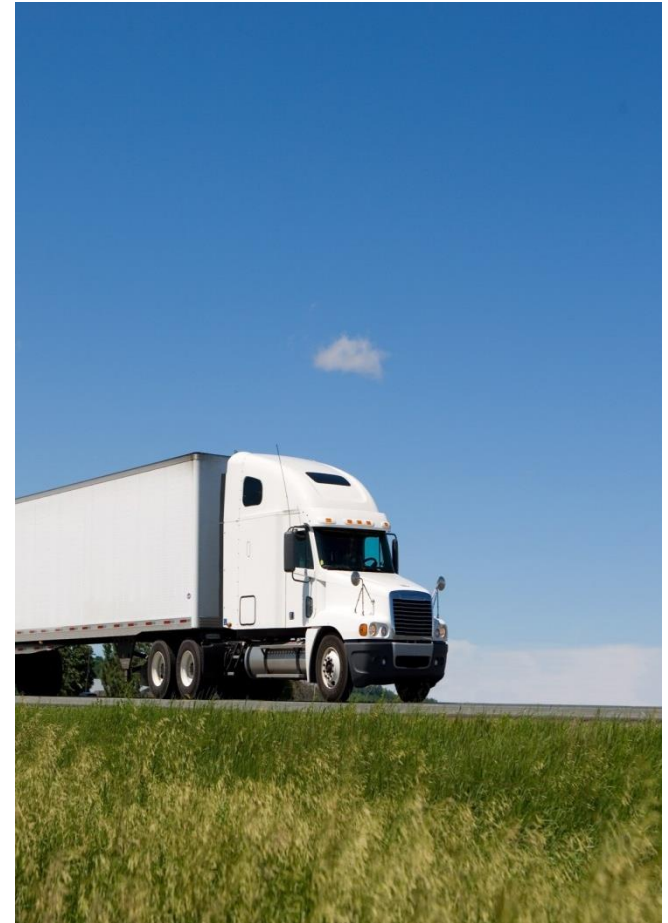
Planning cost settings define the percentage (e.g. 70%)

At least one load dimension has to meet the percentage

You can control whether freight documents below the percentage are kept or deleted after the optimizer run

Fixed cost per used vehicle instance

Minimize number of required resources (in addition to the number of freight documents)



Package Building – Overview

Freestyle mixed package building

Consolidate any product quantities until volume limit is reached

Package can consist of complete layers with freestyle packed products on top of it

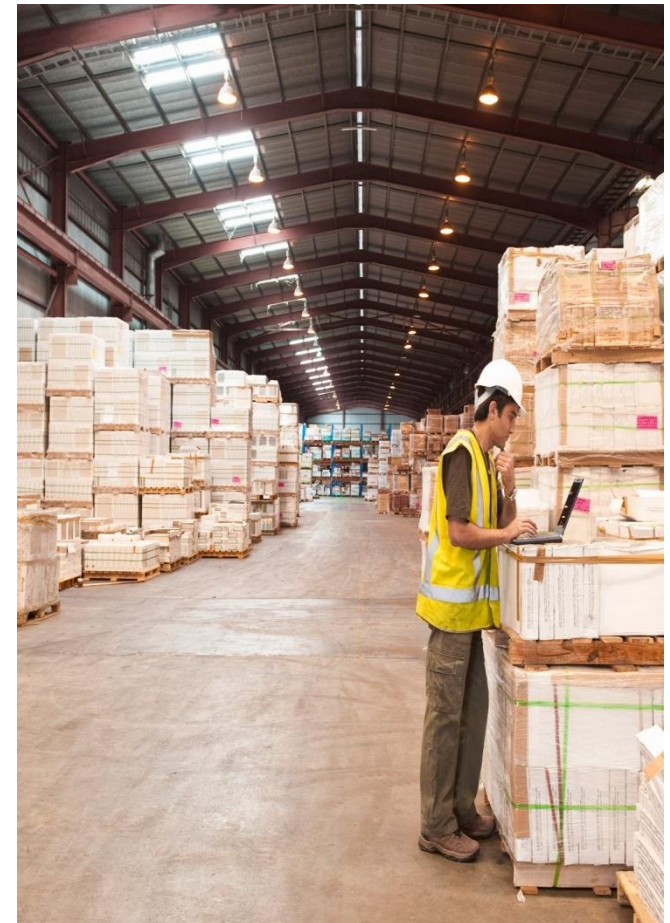
Additional constraints

Height limit for mixed packages (i.e. don't use the height defined for full product packages)

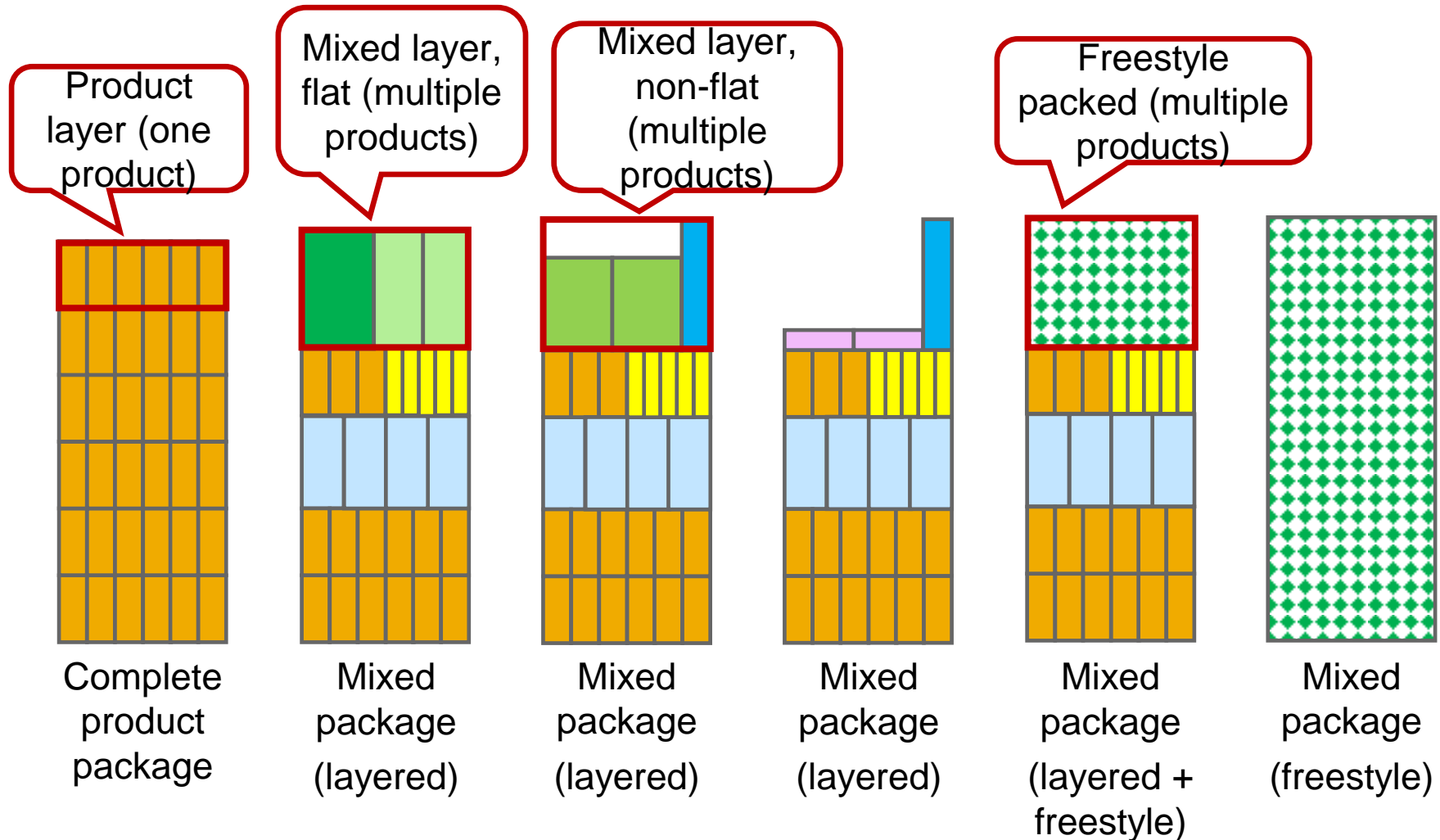
Limit on number of products on a mixed package

Limit on number of products in a mixed layer

Product must not be contained in a mixed layer



Package Building – Examples (Side View)



Transportation Management 9.4 (4/10)

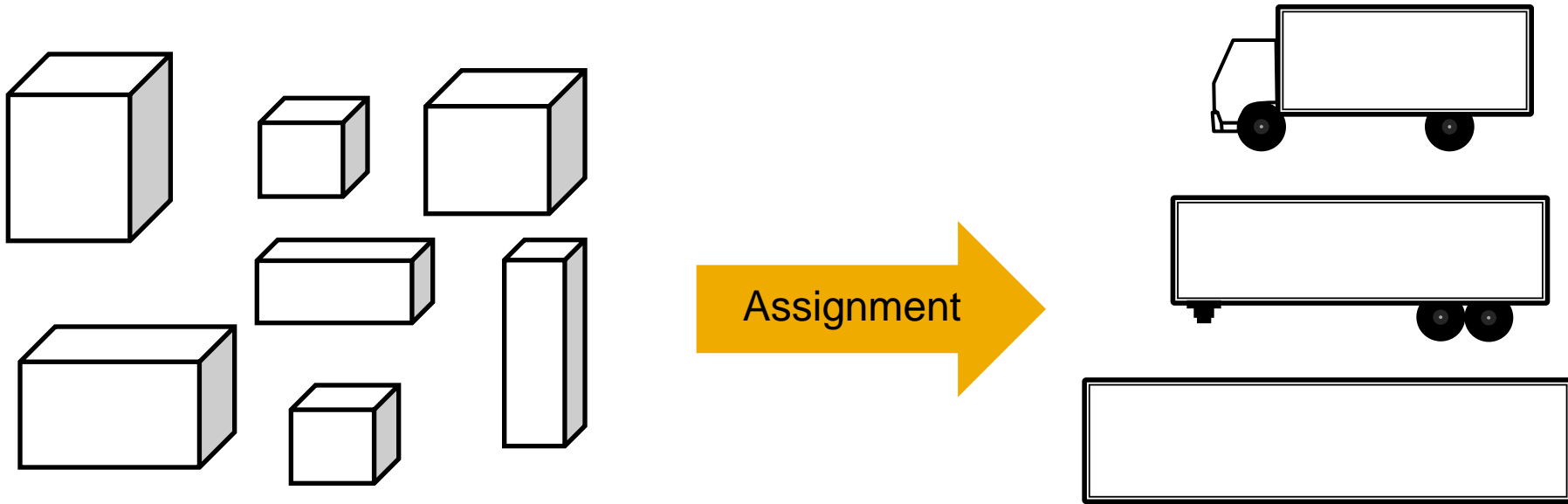
World-Class & Real-time



Load Consolidation

- Enhancements to Load Consolidation

Load Consolidation in SAP TM



Set of Freight Units (Transportation Demand):

- Volume, weight, other load dimensions
- e.g. pallets, boxes

Alternative Resource Types:

- Max. volume, max. weight, other load dimensions
- e.g. vehicle resources, containers

Load Consolidation offers:

- **Optimizer-based, automated assignment of a given set of freight units to resource types**
- **Determination of the number of resources to be ordered / to be used**
- **Focus on planning the main route where no routing decision has to be made**

Scenario (continued)

Load Consolidation supports:

- **Alternative resource types (e.g. 20ft, 40ft, 40ft High Cube Container)**
 - Limitation of the maximal number of available instances possible
- **Minimization of total costs**
 - Based on defined fixed cost for usage of one resource type instance
- **Capacity Check based on given load dimensions (e.g. weight and volume)**

Scenario (continued)

Load Consolidation supports:

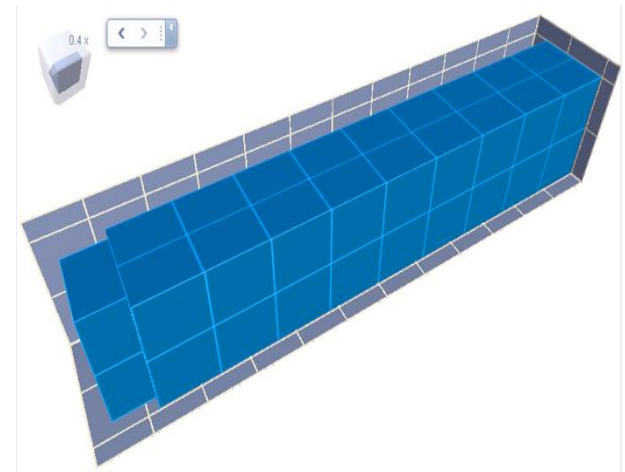
- **Incompatibility Freight Unit \Leftrightarrow Resource Type (e.g. temperature condition)**
- **Incompatibility Freight Unit \Leftrightarrow Freight Unit (e.g. dangerous goods)**

Scenario (continued)

Load Consolidation offers:

- **Detailed Capacity Check**

- Considering detailed pallet dimensions and loading space
- Considering stackability of pallets
- Providing an exact load plan (as in SAP TM Load Planning)

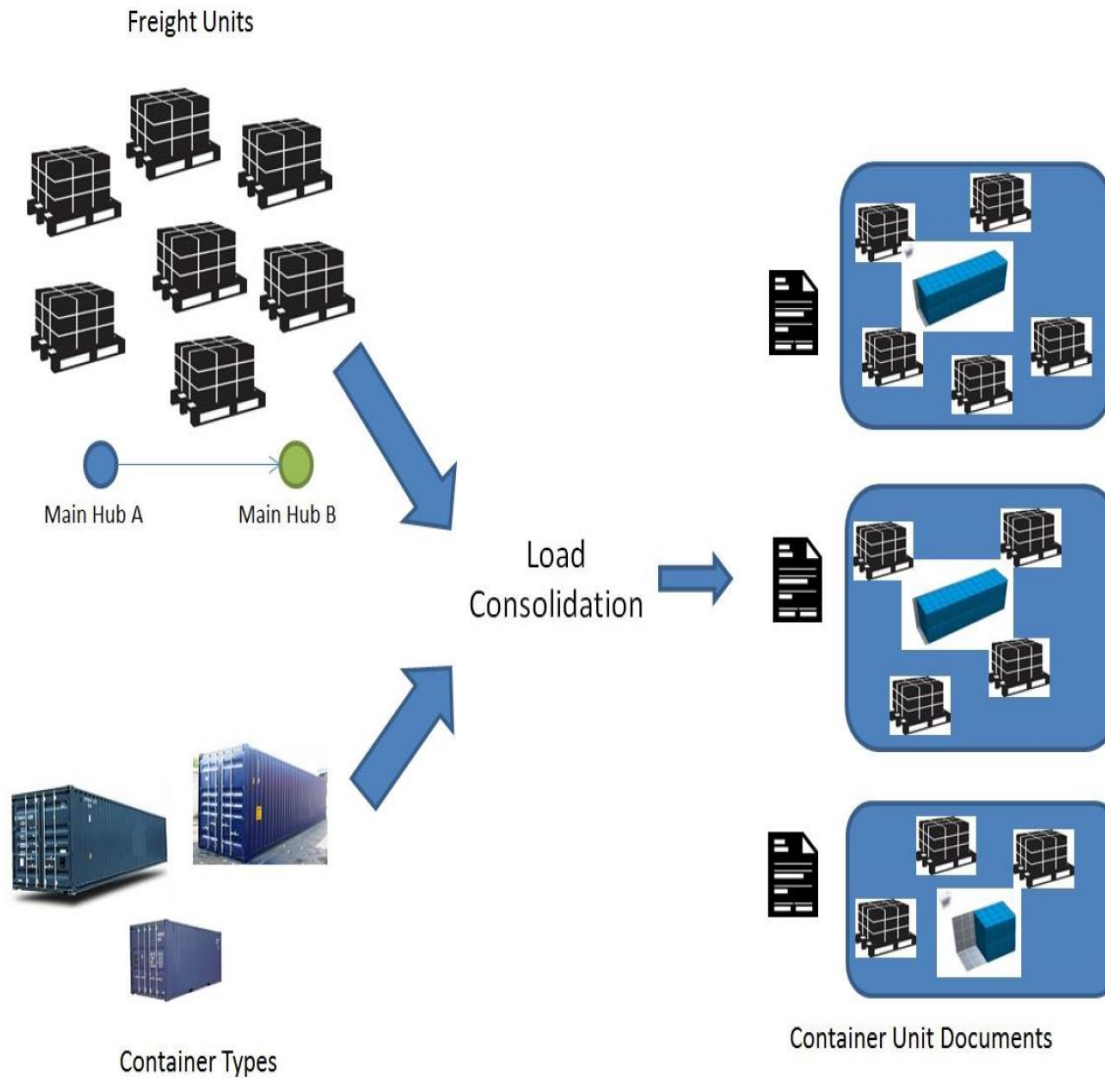


Scenario (continued)

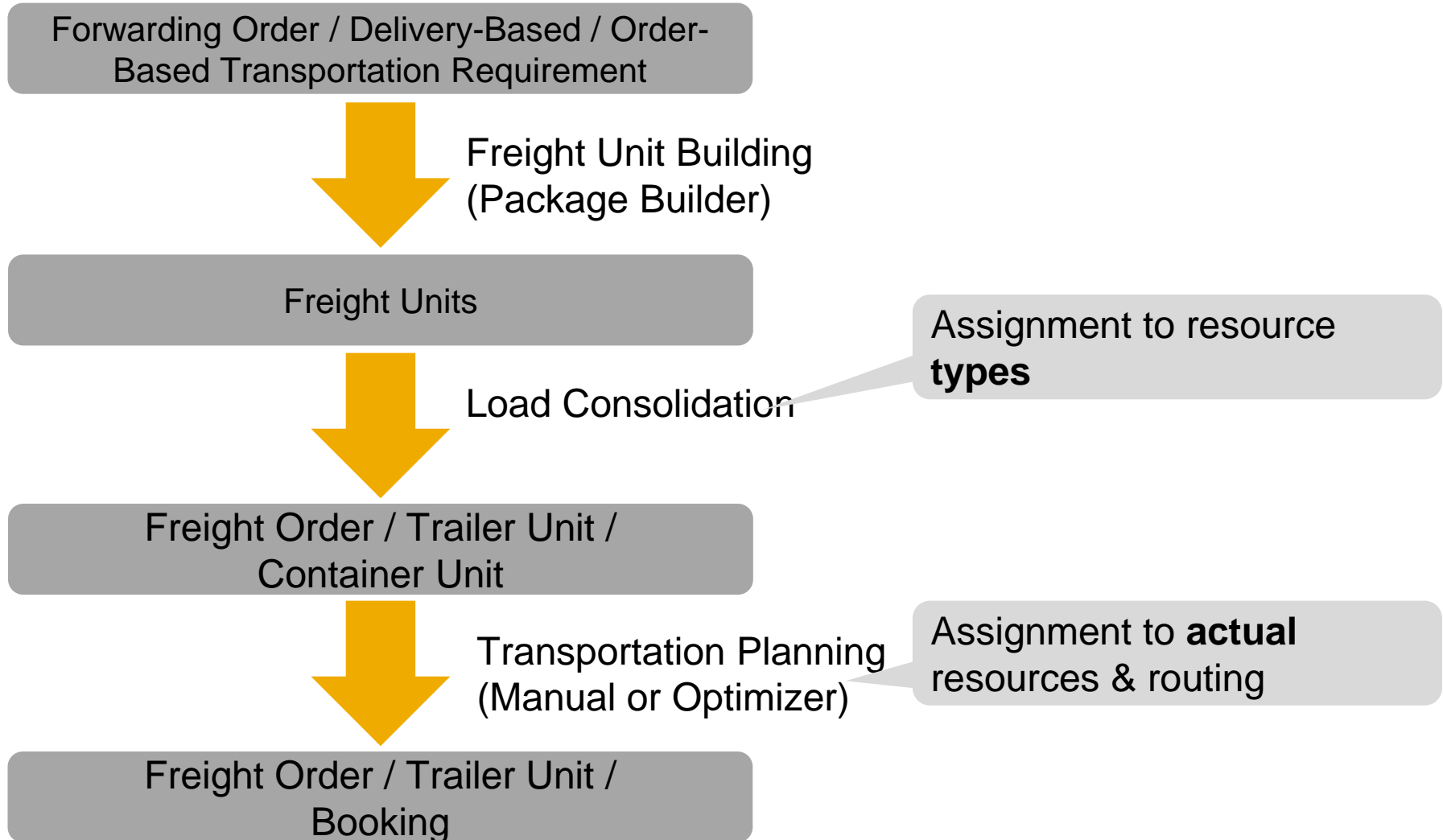
Based on the freight documents created by Load Consolidation, in the next planning step the TM Optimizer will

- **Focus on routing decision**
- **Assign the containers to vehicles, bookings etc.**

Load Consolidation Process Flow



Load Consolidation Process Flow



Transportation Management 9.4 (5/10)

World-Class & Real-time



TM Collaboration Portal

- Freight Order for Confirmation
- Subsequent Carrier Invoices
- Credit Memo Creation
- Multiple Invoicing Carriers
- Freight Agreement Award Confirmation
- Freight Agreement Rate Changes
- Multi Term Search (search field in TM Portal)

Freight Order for Confirmation



Shipper (NWBC)

Create freight order in TM and assign Carrier

Display Collaboration Portal FO 6100001353

General Data Business Partner Items Stages Location

General Information

Document Type: Collaboration Portal FO Carrier: CP_CAR

Description: Collaboration P

Transportation: G1 Road

Means of Transport: 0001 Truck

Schedule:

Resource Capacity

Vehicle:

Registration C...: K0

Weight: M

Volume: M

Trailer:

Registration C...:

Cargo Information

Cargo Weight: 9,000.00 K0

Cargo Volume: 10 M

Quantity: 1 E

Maximum Util...: 0% Check

Source

Location: CP_SHA 1001 Chemal... Location: CP_NAN 36 Xuamw R...

Departure Date: 11.11.20 01 UTC+8 Arrival Date: 30.11.20 01 UTC+8

Transportation

Executing Car...: ...

Regulated Age...:

Communicatio...:

Service Level:

Total Distance: 241,934 KM

Total Duration: 496.02

First Activity: 11.11.2018 00:00:00 UTC+8

Last Activity: 30.11.2015 00:00:00 UTC+8

Number of Vis...: 2

Loading Stops: 1

Unloading St...: 1

Organizational Data

Purchasing Or...: 500076 CP Invoice Se...

Purchasing Or...:

Planning and ...:

Planning and ...:

Person Respo...:

Account No. W...:

Destination



Carrier (Collaboration Portal)

SAP SAP Transportation Management collaboration portal - Demo User: Sabine Hamiescher Settings

HOME FREIGHT ORDER MANAGEMENT FREIGHT SETTLEMENT FREIGHT AGREEMENT MANAGEMENT

Freight Requests for Quotation Freight Quotations **Freight Orders for Confirmation** Freight Orders for Execution

Confirm Reject Quick Filter: For Confirmation Confirmed Closed All View: Search:

Status	Freight Order	Confirmation Status	Lifecycle Status	Start Date/Time	Source Location	Destination Location	Number of Stops
	61000000021999	No Confirmation Yet	In Process	June 23, 2016 12:30 PM CET	CPM Steel Pittsburgh Pennsylvania United States	Automotive, Inc. - Warehouse 1 Toronto Ontario Canada	2

Number of Documents: 1 Last Refresh: Oct 14, 2015, 11:06:34 AM

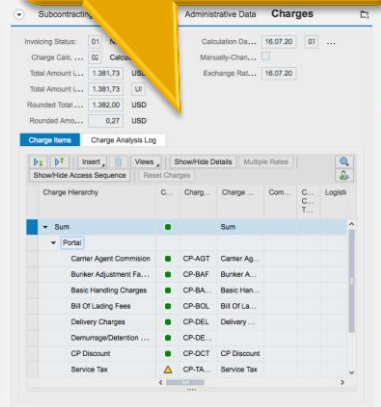
Carriers see this freight order in their work list and can confirm or reject this freight order

Subsequent Carrier Invoices



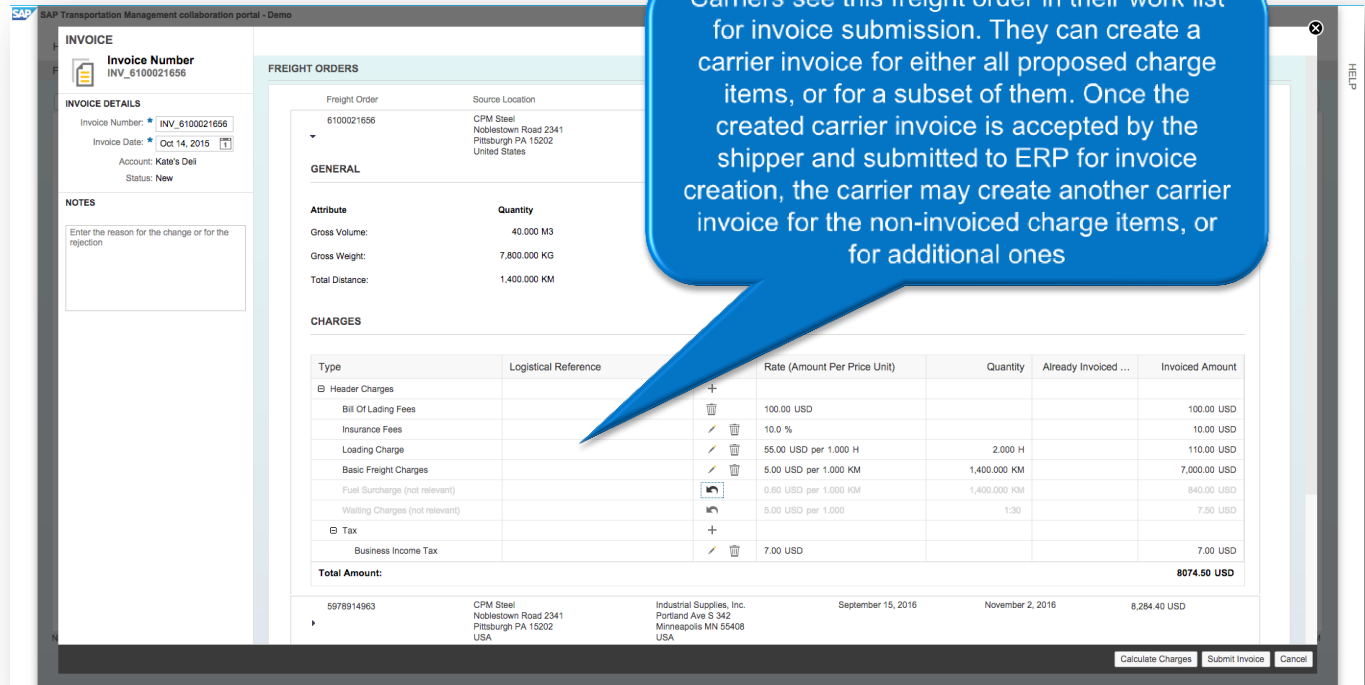
Shipper (NWBC)

Calculate Charges in freight order and transfer the freight settlement document to ERP for accruals



Carrier (Collaboration Portal)

Carriers see this freight order in their work list for invoice submission. They can create a carrier invoice for either all proposed charge items, or for a subset of them. Once the created carrier invoice is accepted by the shipper and submitted to ERP for invoice creation, the carrier may create another carrier invoice for the non-invoiced charge items, or for additional ones



Credit Memo Creation



Shipper (NWBC)

Calculate Charges in freight order and transfer the freight settlement document to ERP for accruals



Carrier (Collaboration Portal)

Carriers see this freight order in their work list for invoice submission and create invoice(s) for this freight order

Carriers find accepted carrier invoices in their work list. They can select an accepted carrier invoice and create a credit memo to cancel it. Once this has been accepted by the shipper, they can create a new invoice for the freight order, and view created credit memos in their work list.

SAP Transportation Management collaboration portal - Demo

User: Sabine Hantescher Settings

HOME FREIGHT ORDER MANAGEMENT FREIGHT SETTLEMENT FREIGHT AGREEMENT MANAGEMENT

Freight Orders for Self-Billing Freight Orders for Invoice Submission Invoices Credit Memos

Accept Create Credit Memo Quick Filter: Submitted For Approval **Accepted** Rejected Canceled All View: [Icon]

Status	Account	Invoice	Invoice Date	Gross Amount
[Icon]	US CARRS	18728110	December 26, 2016	4,619.00 USD
[Icon]	Kate's Deli	18728112	December 4, 2016	7,000.00 USD

Multiple Invoicing Carriers



Shipper (NWBC)

Create freight order in TM and assign multiple carriers: one as the main carrier and additional ones as Additional Agreement Parties

Display Collaboration Portal FO 6100001

General Data Business Partner Items Stage

General Information

Document Type: Collaboration Portal FO

Description: Collaboration P

Transportation: 01 Road

Means of Trans: 0001 Truck

Schedule:

Resource Capacity

Vehicle:

Registration C...:

Weight: 2

Volume: 1

Trailer:

Cargo Information

Cargo Weight: 9 000.00

Cargo Volume: 10

Quantity: 1

Maximum UBL: 0%

Source

Location: CP_SIA 1001 Cheshu...

Departure Date: 11.11.20

Destination

Location: CP_NAN 36 Xuameu R...

Arrival Date: 30.11.20



Carrier (Collaboration Portal)

All carriers see this freight order in their work lists. Only their share of charges are displayed to each of them, and they may create invoices only for their own relevant share of charges

SAP SAP Transportation Management collaboration portal - Demo

HOME FREIGHT ORDER MANAGEMENT FREIGHT SETTLEMENT FREIGHT AGREEMENT MANAGEMENT

Freight Orders for Self-Billing : Freight Orders for Invoice Submission : Invoices Credit Memos

Create Invoice Quick Filter: Not Invoiced In Dispute Partially Invoiced Completely Invoiced All View:

Status	Freight Order	Source Location	Destination Location			
⑤	6000000999	Dallas Business Co. John Carpenter Free Road 8001 Dallas 51020, Texas United States	East Rail Company 7th Avenue 881 New York 10604, State of New York United States			
⑤	6000066999	Dallas Business Co. John Carpenter Free Road 8001 Dallas 51020, Texas United States	East Rail Company 7th Avenue 881 New York 10604, State of New York United States	September 12, 2016	October 16, 2016	9,140.00 USD
⑤	6100021656	CPM Steel Nobletown Road 2341 Pittsburgh PA 15202 United States	Industrial Supplies, Inc. Portland Ave S 342 Minneapolis MN 55408 United States	August 13, 2016	September 13, 2016	8,074.50 USD
⑤	5978914963	CPM Steel Nobletown Road 2341 Pittsburgh PA 15202 USA	Industrial Supplies, Inc. Portland Ave S 342 Minneapolis MN 55408 USA	September 15, 2016	November 2, 2016	6,284.40 USD
⑤	5978914965	CPM Steel Nobletown Road 2341 Pittsburgh PA 15202 USA	Industrial Supplies, Inc. Portland Ave S 342 Minneapolis MN 55408 USA	September 15, 2016	November 2, 2016	7,943.00 USD

Number of Documents: 5

Last Refresh: Oct 14, 2016, 12:17:03 PM

Freight Agreement Award Confirmation



Shipper (NWBC)

Create Freight Agreement RFQ in TM and publish it to carriers



Carrier (Collaboration Portal)

Display Freight Agreement RFQ 1000000005017

Save Cancel Edit Check Submit

General Data Attachments Notes Administrative Data Change Documents

Basic Data

RFQ: 1000000005017
Description: CP Sample data
RFQ Version: 0
Negotiation Round: 1
RFQQuot... Published
Archiving... Not Archived
Reference... 1000000006003

Details

Time Zone: CE Central ...
RFQ Valid From: 01.01.201
RFQ Valid To: 31.10.201
Response Des... 31.10.201
Carrier RFI Profile: 0000
Agreement Val... 01.11.201
Agreement Val... 31.12.201
Document Curre...
Dimensional Wel...
RFQ/Quotation T... C... <CPRP>
Calc. Sheet Tem...
Accepted By:
Accepted On:

SAP Transportation Management collaboration portal - Demo

FREIGHT AGREEMENT RFQ DETAILS

RFQ 46000003649

FREIGHT AGREEMENT RFQ DETAILS

Description: Standard Agreement North America
RFQ Response September 13, 2016
Deadline: at 12:50 AM PST
Status: Open
Valid From: October 13, 2016
Valid To: March 13, 2017
Negotiation Round: 1

NOTES

Mrs. Jane Rowley; August 3, 2016 at 12:50 AM PST:
This agreement is for North America including Mexico

Mrs. Jane Rowley; August 4, 2016 at 3:14 AM PST:
Please consider the validity!

Freight Agreement RFQ Documents

Type	File Name	Last Changed By	Last Changed On
Legal Requirements.pdf	Legal_Requirements.pdf	Mrs. Jane Rowley	July 5, 2016 at 5:12 AM PST
Bid Structure.xlsx	Bid_structure.xlsx	Mrs. Jane Rowley	July 5, 2016 at 5:13 AM PST
Calculation.xls	Calculation.xls	Mr. Bob Trucker	August 2, 2016 at 6:19 AM PST
RFQ Response.xlsx	RFQ_response.xlsx	Mr. Bob Trucker	September 4, 2016 at 5:13 AM PST

Browse... Upload

Number of Documents: 2

Carriers find this Freight Agreement RFQ in their work lists. They can download the bid structure, provide their response data and upload this with their response.

Once the shipper has awarded this response, the carriers see their RFQs for award confirmation in their work list. They can view the awarded business shares and can confirm or reject the proposed capacities. Once this is completed, the shipper creates a Freight Agreement based on the carrier's confirmation.

Freight Agreement Rate Changes



Shipper (NWBC)

Create Freight Agreement in TM

Display Freight Agreement SH_HEADER

Save Cancel Edit Check

Business Context Viewer

General Data Business Partner Notes Attachments Administrative Data

Basic Data

Agreement: SH_HEADER
Description: Sabine's Header Level Agreement
Agreement Work...: 0
External Referen...:
Business Partner...:
Agreement Status: Released
Archiving Status: Not Archived

Details

Reference Agree...: SH_STAGE
Time Zone: CE Central E...
Valid-F...: 29.09.2011
Valid-T...: 29.09.2021
Agreement Priority:
Agreement Type: S... Sabine's...
Document Curre...: EU European Euro
Dimensional Wei...:
Exclusion Rule:
Calc. Sheet Tem...: SH_HEAD

Involved Parties

Ordering Party:
Business Partner...:
Ordering Party H...:
Controlled: ☒
External Freight ...:

General Terms

Shipping Type: ☐
Main Transportat...:
Traffic Direction:
Contract Basic:

Organizational Unit: 50002584
Party Name: Sabine's Purch. Org f...
Built-in Partner: CP_CA... Sabine's Portal C...



Carrier (Collaboration Portal)

SAP SAP Transportation Management collaboration portal - Demo

User: Sabine Harniescher Settings

HOME FREIGHT ORDER MANAGEMENT FREIGHT SETTLEMENT FREIGHT AGREEMENT MANAGEMENT

Freight Agreement RFQs Freight Agreements

Quick Filter: Expired Current Future All View: [List Icon]

Search:

Status	Freight Agreement	Description	Agreement Validity
🕒	FAG_TLA_3458	Agreement with TLA Deliveries	From September 27, 2015 To September 13, 2018
🕒	FA_SHORT_TERM_MONTH	Temporary contract for October 2014	From September 22, 2015 To August 11, 2017
🕒	FA_YEARS	Long term agreement for the general transportation service	From February 21, 2015 To August 11, 2022

Number of Documents: 3

Last Refresh: Oct 14, 2015, 1:41:17 PM

Carriers can request rate changes for an existing freight agreement. If the shipper agrees, the carriers may submit changed rates through the collaboration portal. Once the shipper has agreed to the changes, the carriers can view the updated version of the freight agreement in their work list.

Transportation Management 9.4 (6/10)

World-Class & Real-time



Profitability per Forwarding Order

- Plan vs. Expected Cost
FWO Profitability calculation via Batch to enable profitability calculation based with every change in the execution which is relevant for freight cost or revenue update changes
- Enhanced Logic to capture the Profitability for–Export/Import FWO , Service Order Costs, Drayage Order Costs
- Cost Distribution in TM Service Order

Transportation Management 9.4 (7/10)

World-Class & Real-time



Strategic Freight Procurement

- Possibility of Freight Agreement updating with the same rate tables with a new validity record (instead of a new rate table)
- Enable the post award process prior to contract
 - sending of awards to carriers for confirmation
 - Follow up process post carrier acceptance/rejection
- Rate change impact
- Collaboration Portal Integration for Award Confirmation

Transportation Management 9.4 (8/10)

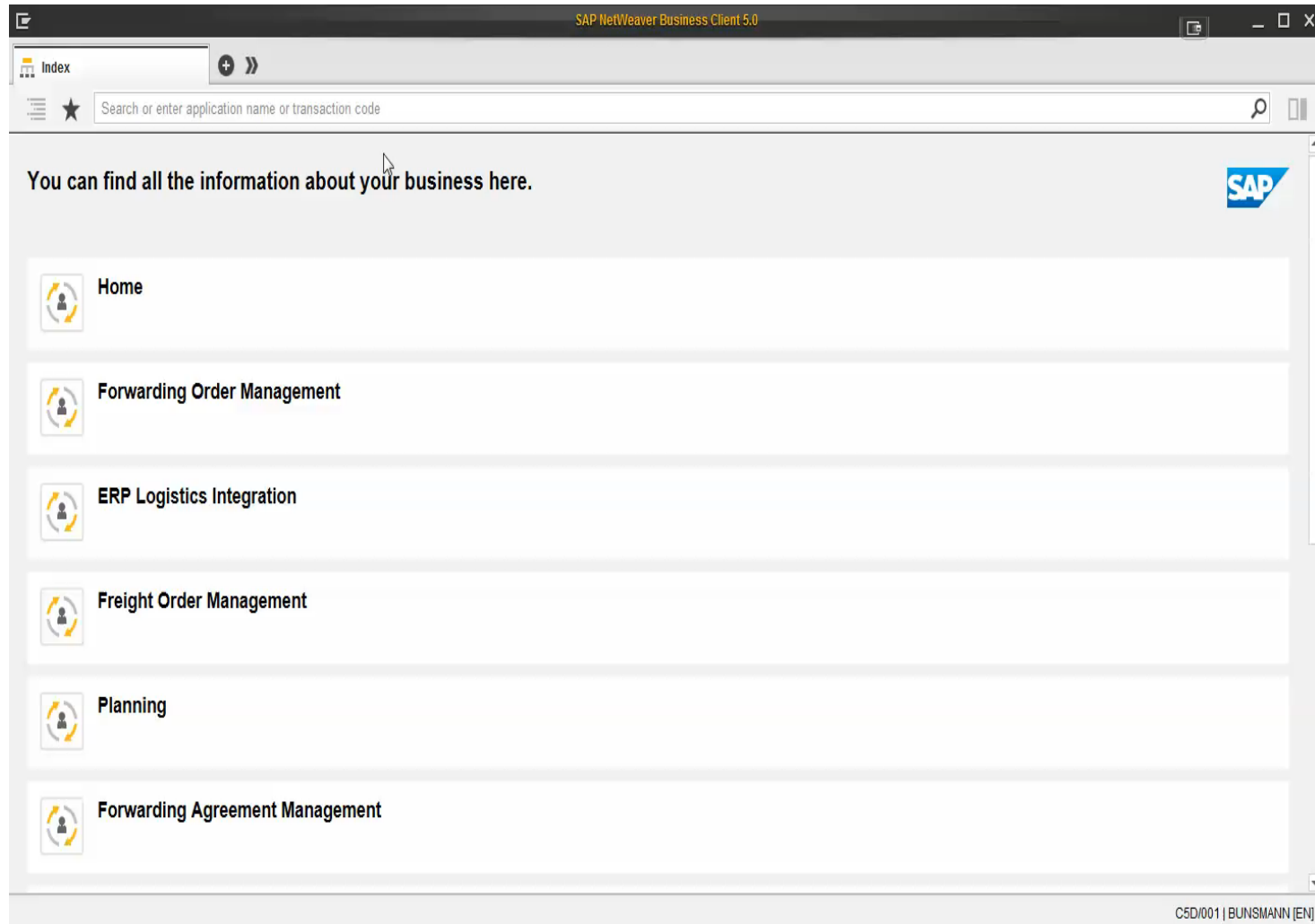
World-Class & Real-time



Collected TM Enhancements

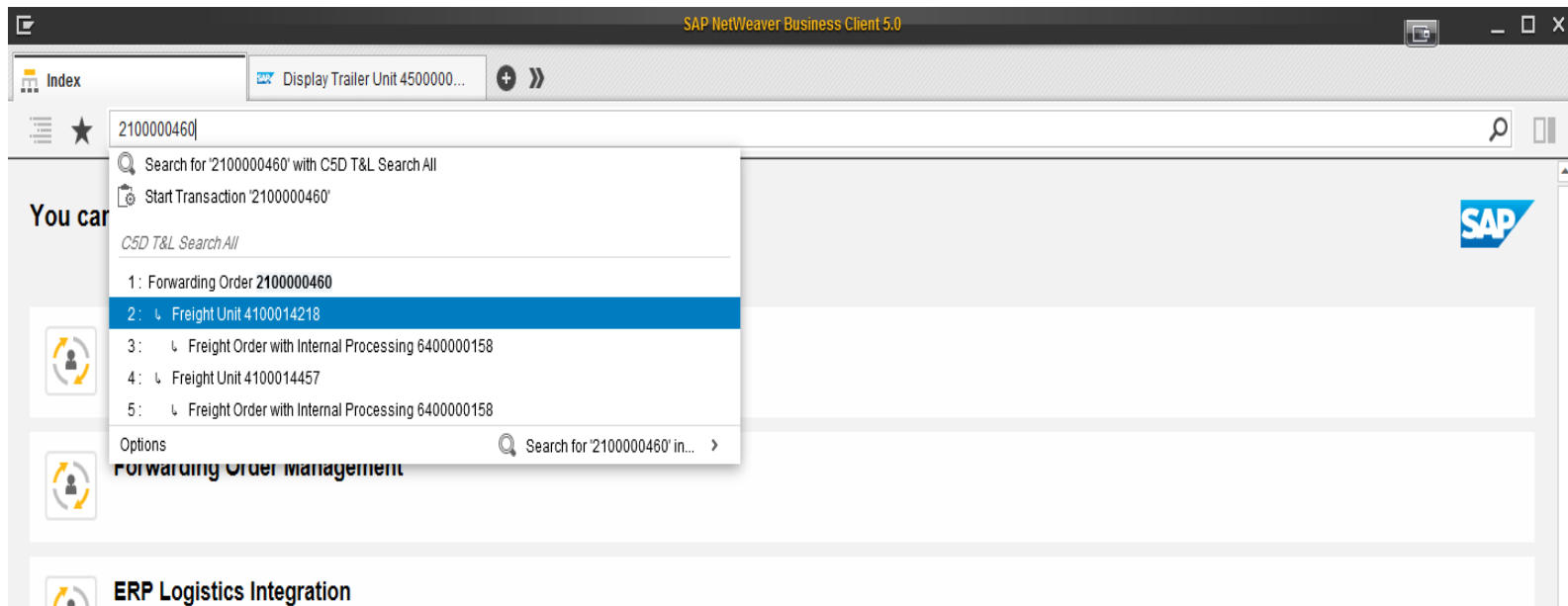
- Search Engine for TM

NWBC Search Bar used for Quick Search



TM Search

- Search for an ID of your TM document
- Search for secondary ID's, e. g. Buyer's Reference Number for Forwarding Orders
- Document Flow is displayed in the result list



Transportation Management 9.4 (9/10)

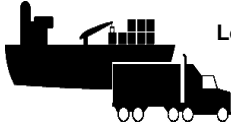






World-Class & Real-time



SAP TM – Descartes GLN Integration

- Air and Ocean Freight Booking incl. Execution
Send booking request to carrier and receive booking confirmation
Booking cancellation
Execution messages to carrier (electronic Air Waybill; shipping instructions for ocean)

Positioning of SAP and Descartes solutions

	 Logistics Service providers	 Shipper
Customs Declarations & Security Filings	 SAP TM Export/Import Forwarding Order integrated with Descartes GLN using Descartes customs and security filing solutions via GLN 	 SAP TM Freight Order integrated with SAP GTS for export + transit customs declarations
Exchange Booking & Execution status with carrier	 SAP TM Freight Booking integrated with Descartes GLN	 SAP TM Freight Booking integrated with Descartes GLN
Export Compliance (sanctioned parties/embargo list)	SAP TM Forwarding Quotation/Order integrated with SAP GTS (Sanctioned parties/embargo content available from Descartes)	SAP TM Freight Order/Booking integrated with SAP GTS (Sanctioned parties/embargo content available from Descartes)

Transportation Management 9.4 (10/10)

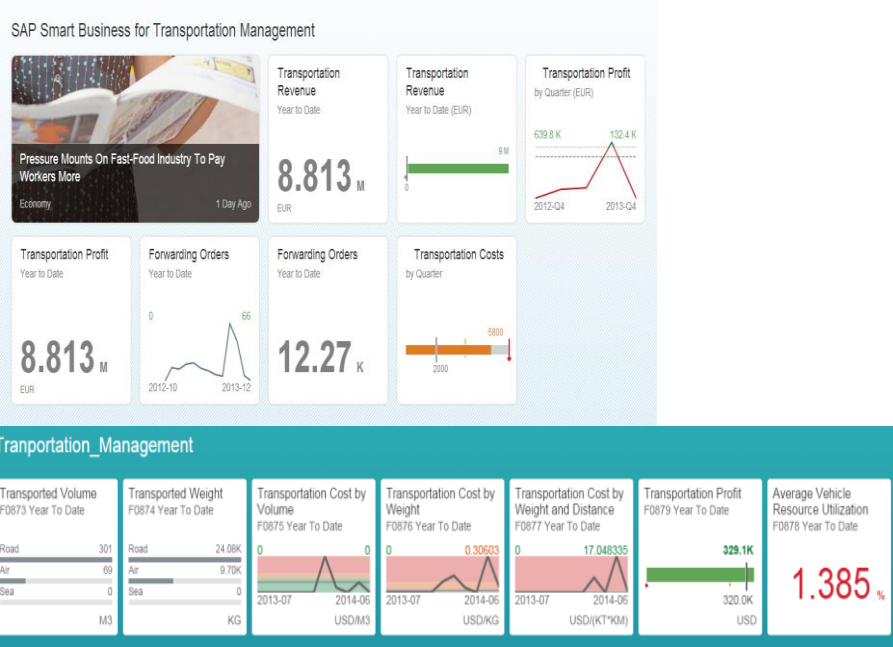
World-Class & Real-time



Real-time analytics for SAP Transportation Management

- Realtime Analytics based on Core Data Service (CDS) views which are fully integrated into TM backend application (later in 2016)
- SAP HANA Live for TM 2.0 (TM 9.3 upwards)
Changes to the data structure after refactoring has been adjusted for Analytics
- New SAP Smart Business Content for TM planned in Q1 / 2016 (Analytical Fiori Apps)
- Prototype based on new Overview Pages (OVP) technology

SAP HANA Live for Transportation Management



Description

- Supports the transportation manager in the identification and valuation of his operational business and provides cost and revenue based information in real time.

Capabilities

- Real-time analysis of forwarding and freight orders as well as ERP order and delivery based transportation requests, costs, revenues, utilization, discrepancies and dangerous goods and other important key figures
- Drill-down and insight-to-action capabilities
- Collaboration via e-mail and SAP JAM
- Virtual data model providing a harmonized data access to transportation management analytical data

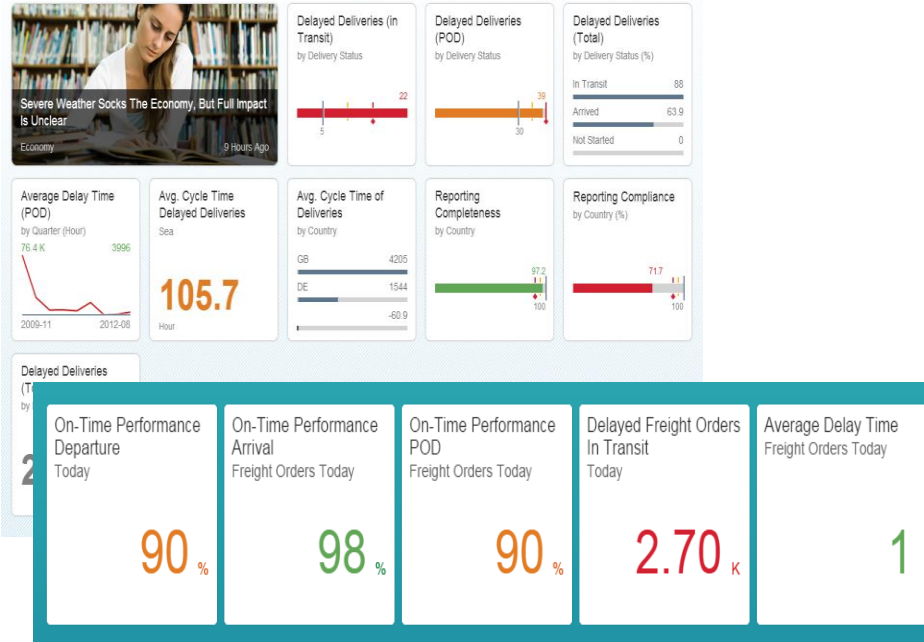
Key performance indicators

- Transportation Cost
- Transportation Cost by Volume
- Transportation Cost by Weight
- Transportation Cost by Weight and Distance
- Transportation Revenue
- Transportation Profit
- Transportation Requirements
- Forwarding Orders

- Freight Orders
- Transportation Discrepancies
- Average Utilization
- Average Vehicle Resource Utilization
- Dangerous Goods
- Transported Volume
- Transported Weight

SAP HANA Live for Event Management

Event Management



Description

- SAP Smart Business for event management is a collection providing an overview of the most important key performance indicators for a transportation manager. It allows the transportation manager to monitor the operational transportation business based on the latest reported events

Capabilities

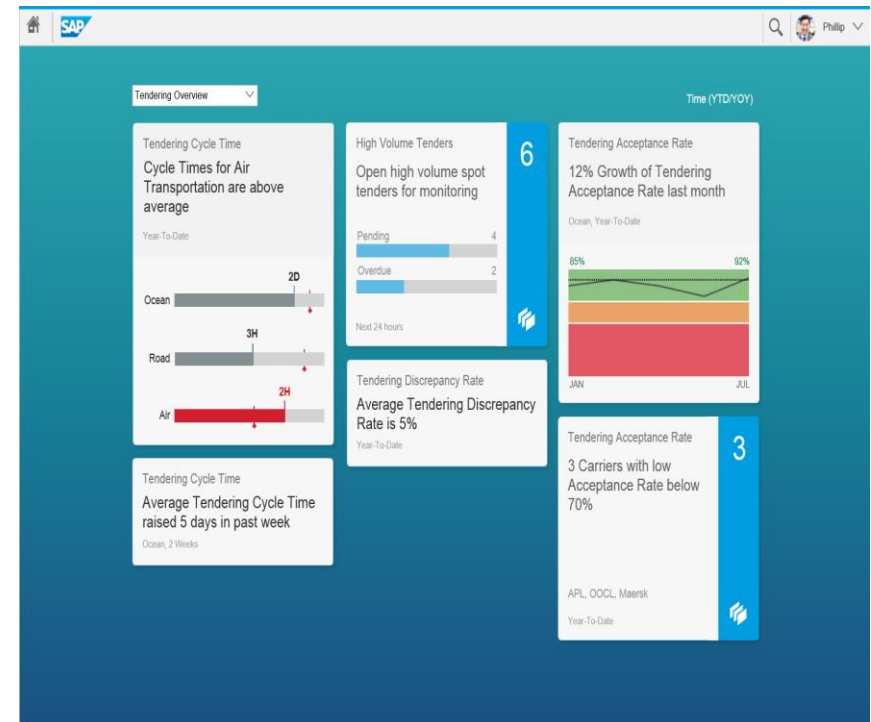
- Delays of deliveries or freight orders in transit or those that arrived at customer sites with an overdue proof of delivery (POD)
- Different On-Time Performance measures, reflecting sensitive spots in your supply chain
- Average cycle times (time between the actual event dates and times of: when picking begins and the last event POD)
- Reporting completeness and compliance – what percentage of transports were reported and how accurate were those reports?

Key performance indicators

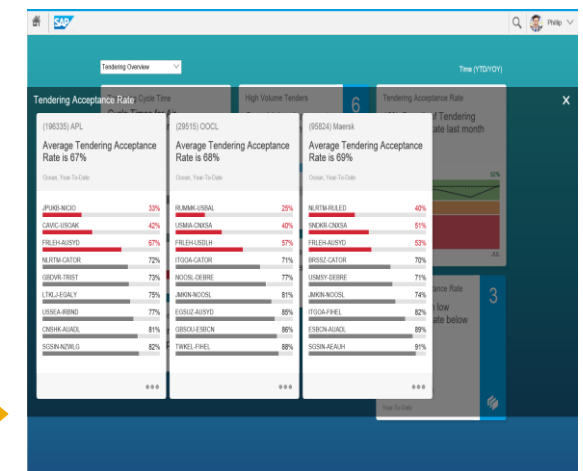
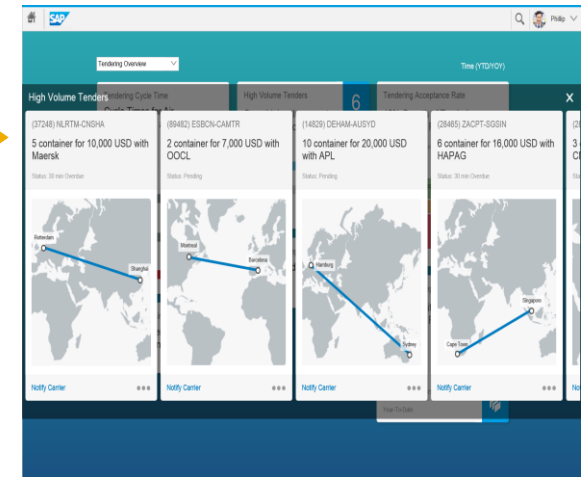
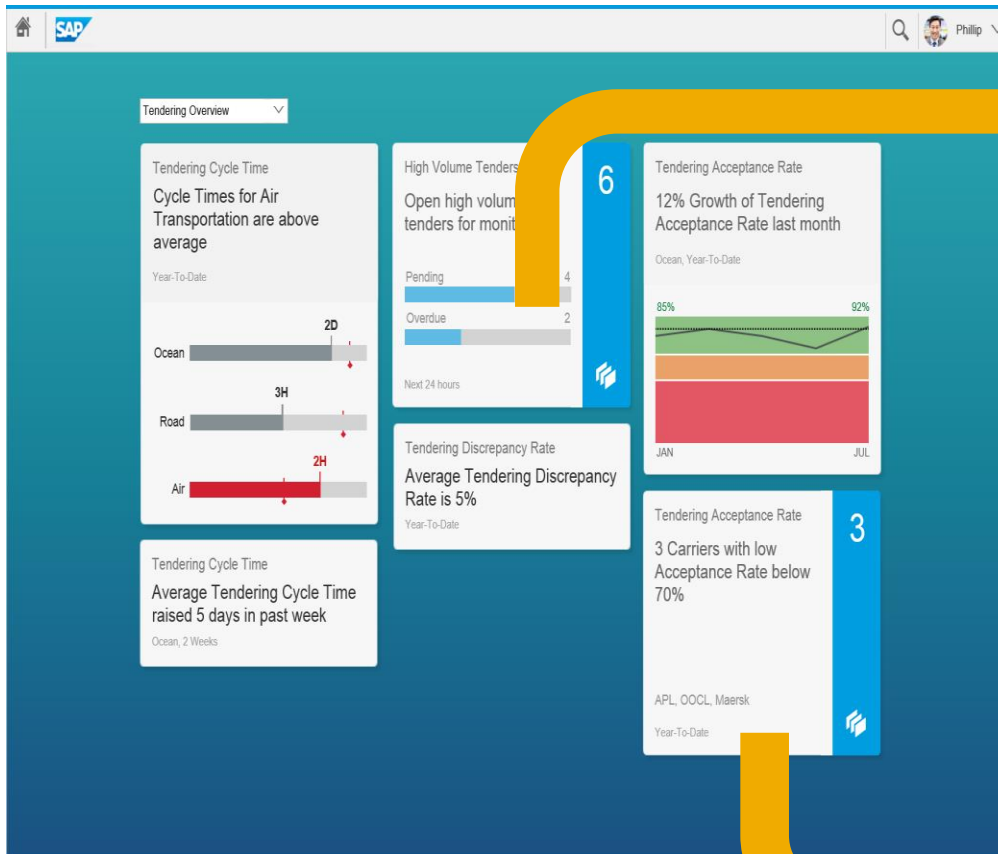
- Avg. Cycle Time Delayed Deliveries POD
- Avg. Cycle Time of Deliveries
- Average Delay Time (POD)
- Delayed Deliveries (in Transit)
- Delayed Deliveries (POD)
- Delayed Deliveries (Total)
- Reporting Completeness
- Reporting Compliance

- On-Time Performance Departure
- On-Time Performance Arrival
- On-Time Performance POD
- Delayed Freight Orders In Transit
- Average Delay Time

SAP TM: Analytics mit HANA



SAP TM: Analytics mit HANA



Transportation Management 9.4 (10/10)

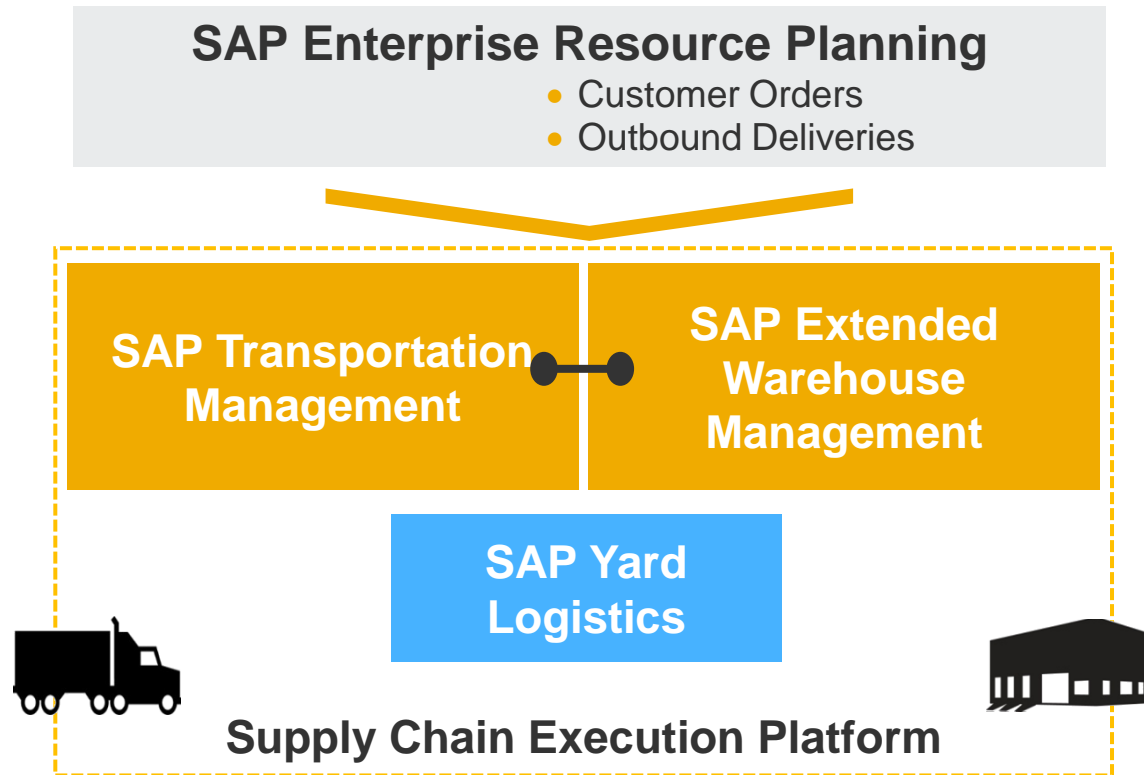
World-Class & Real-time



SAP Yard Logistics (FBS Solution)

- In Cooperation with TM Custom Development
- Yard Logistics is integrated with SAP TM

SCE – Platform with SAP Yard Logistics



End-to-end, integrated logistics fulfilment platform with transportation planning, yard management and warehouse execution via interfaces between SAP TM, SAP YL and SAP EWM

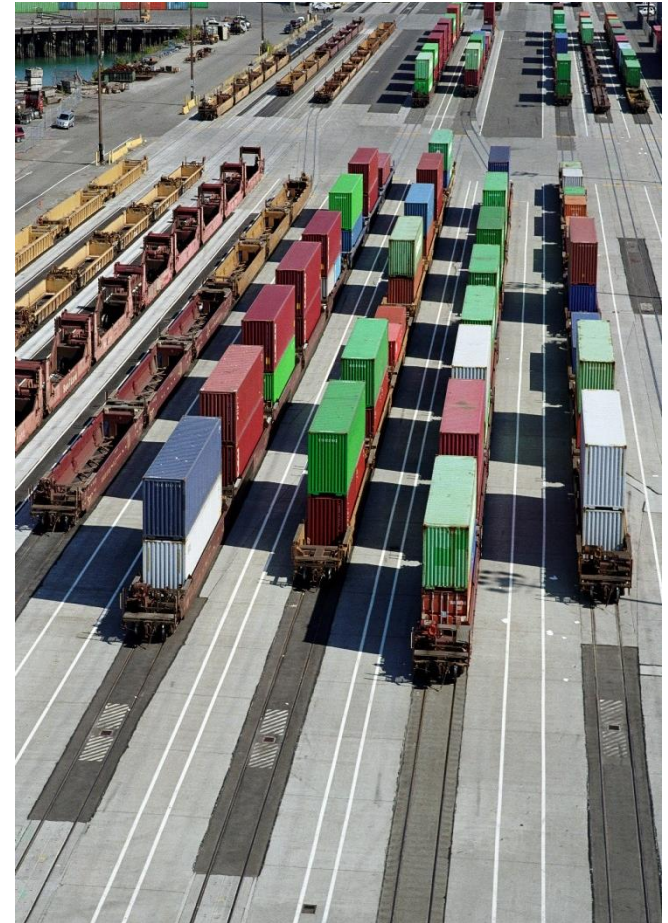
Background

Requirements of our customers for a Yard Management system are

- Visibility
- Planning, execution and settlement in **one** central system
- Flexibility and standalone capabilities
- Integration in existing business processes
- Technical integration capabilities (mobile device, RFID, scales, barriers, other systems, etc.)
- Easy and intuitive User Interfaces

SAP's answer:

SAP Yard Logistics



SAP Yard Logistics


Main Capabilities

- In the first release the solution will focus on truck and rail yard processes.
- Due to the flexible SAP Yard Logistics architecture it can be adopted to fit to further yard types (e.g. container yards) within implementation projects.



SAP Yard Logistics

Mobile Transaction for Task Execution



SAP Yard Logistics - Tile Group for Yard Operator

Yard Task Execution Queue

✓

Yard Task Execution Manual Selection

✓

Telekom.de 18:20 83 %

← SAP Yard Logistics

Start Time
Wuerth_Standard M...

Overview Pictures Measurements S

Source Location:
Door 1

Destination Location:
Parkplatz 1

Hallo Tom,
Toor 14 ist noch belegt, fahr bitte
zum Parkplatz. Gruss Kai

Start ✓ Reject ...

SAP Yard Logistics

Yard Task 94 (Active)

10:23 AM Start Time

Movement

0
Overview Pictures

Source Location: DEPOT-0002
Destination Location: DEPOT-0002

Move the Truck
Be careful, contains Hydrochloric acid (HCL)

TRANSPORTATION UNITS

ID	Description
TRUCK_3006_99	Truck for special DG movements

SAP Yard Logistics

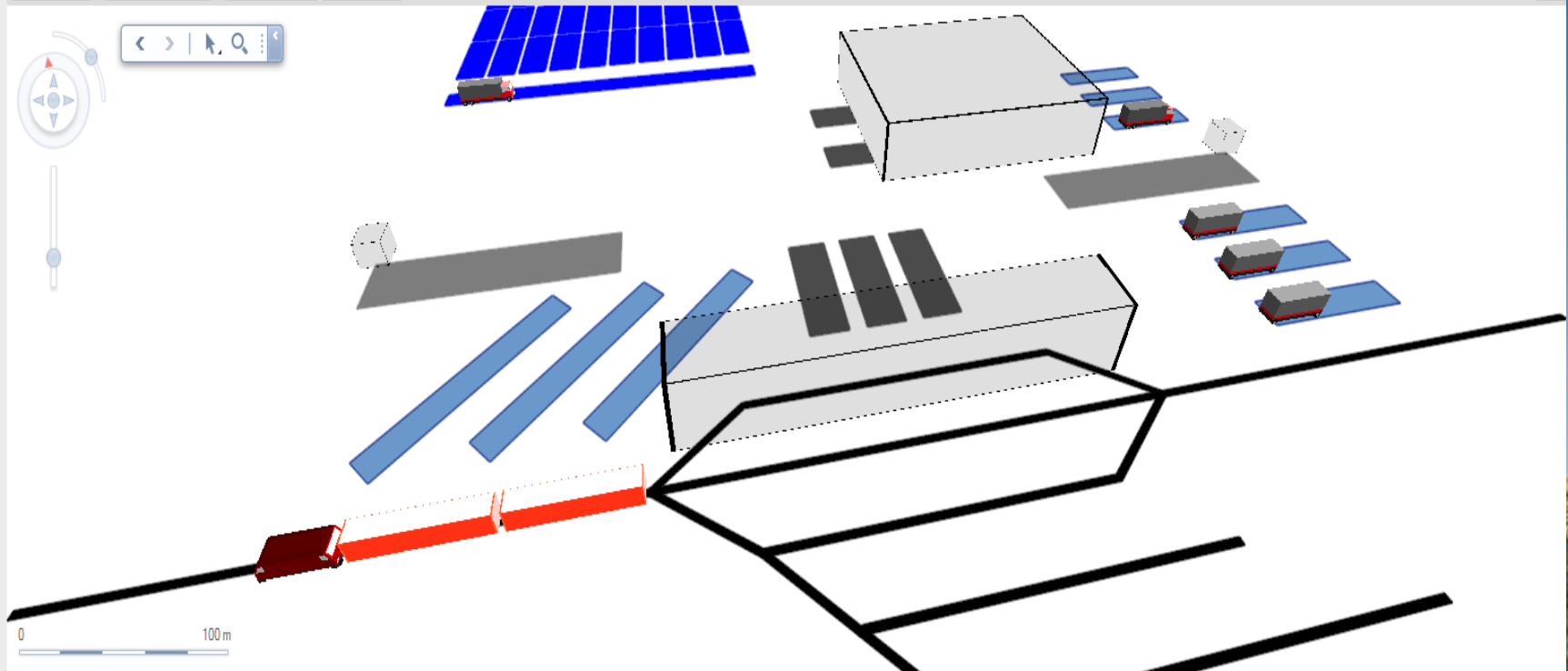
Visual Yard for Yard Disposition

Yard DEMO, Yard Cockpit, Schematic View

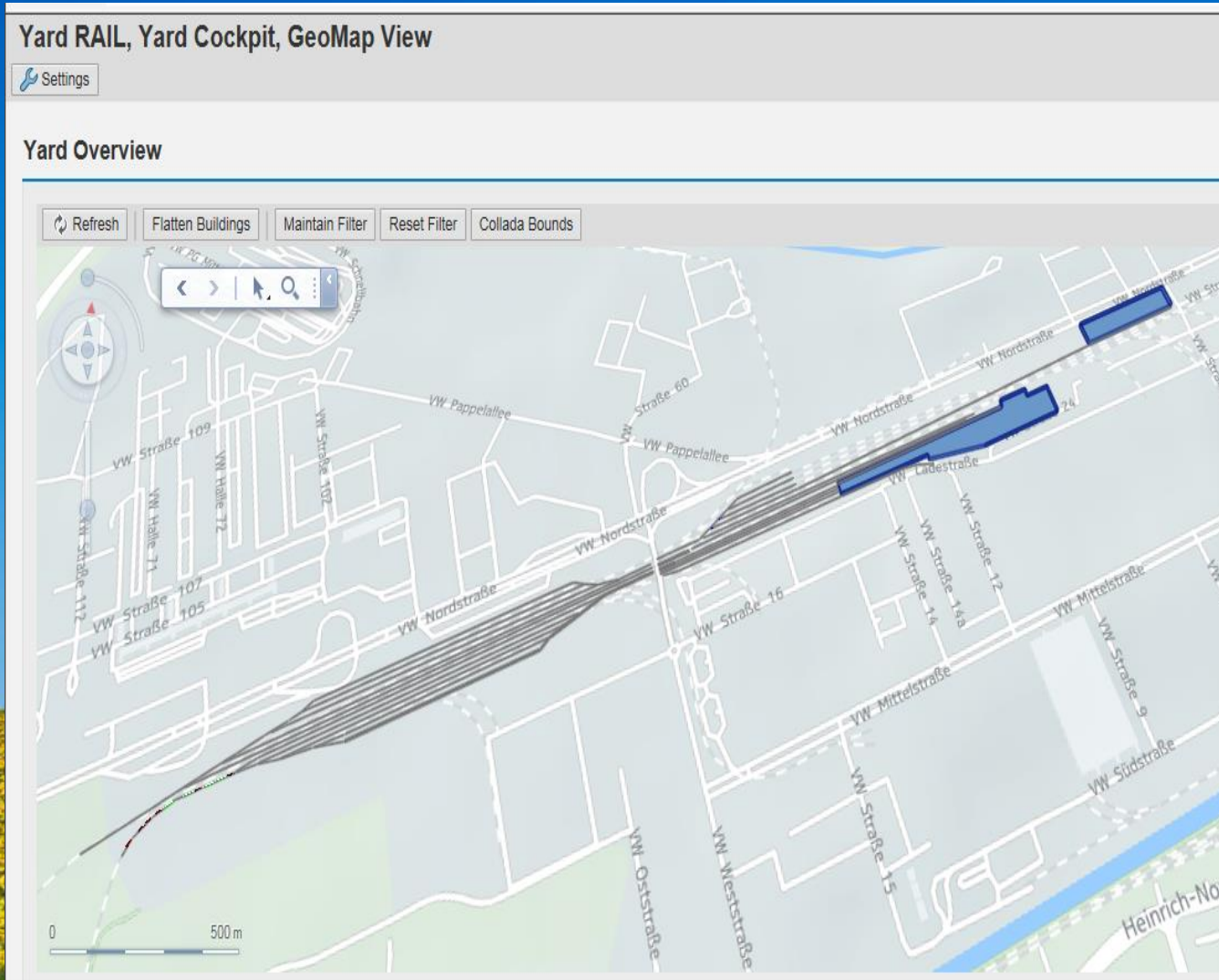
Settings

Yard Overview

Refresh Flatten Buildings Maintain Filter Reset Filter



SAP Yard Logistics Demo



Transportation Management 9.4 (10/10)

World-Class & Real-time



SAP Transportation Resource Planning (FBS Solution)

- In Cooperation with TM Custom Development
- Transportation Resource Planning is integrated with SAP TM
- Delivers support to provide the right resource at the right time and right location to fulfill the customer demand at a minimal cost

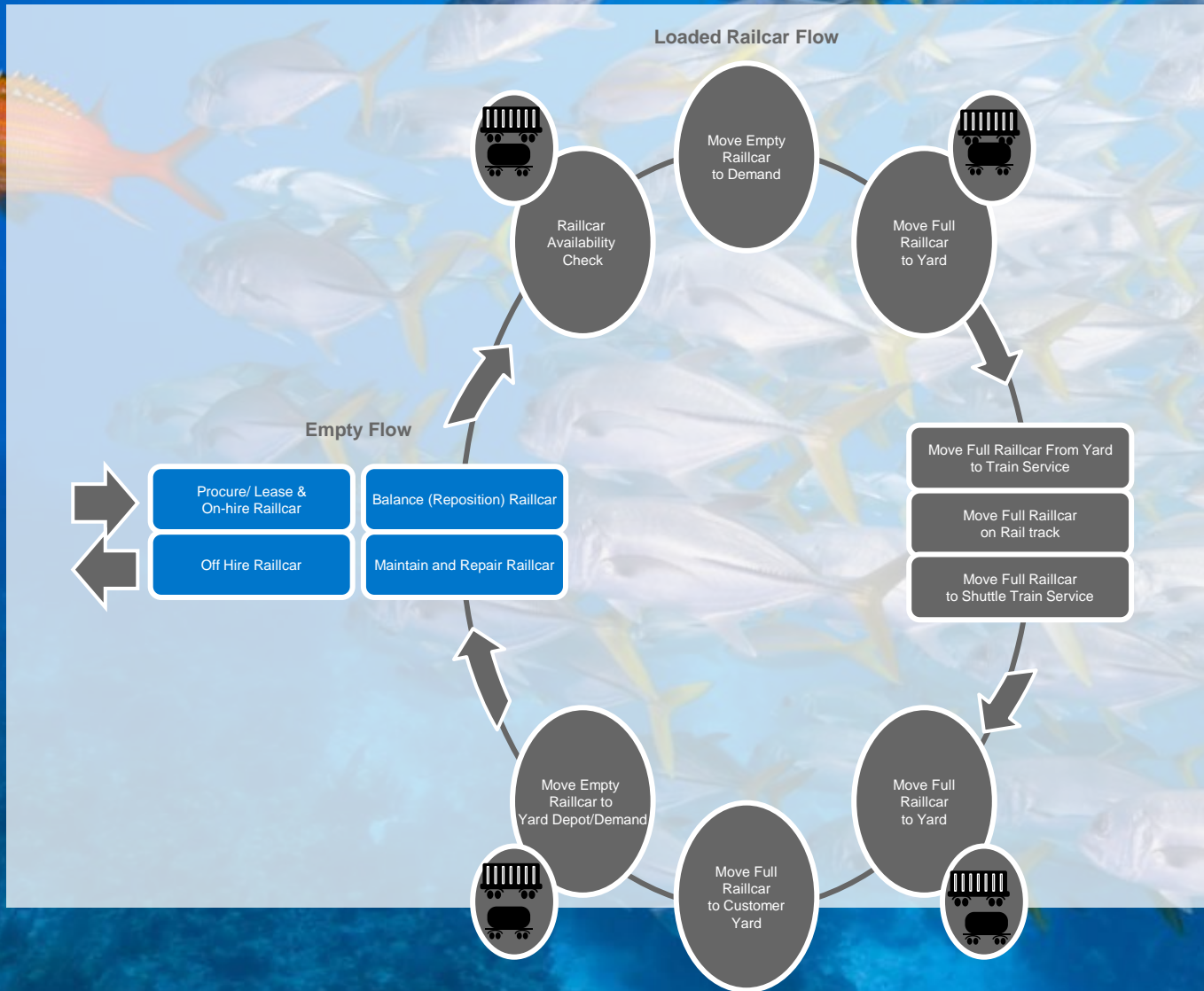
SAP Transportation Resource Planning

Delivers support to provide the right resource at the right time and right location to fulfill the customer demand at a minimal cost.

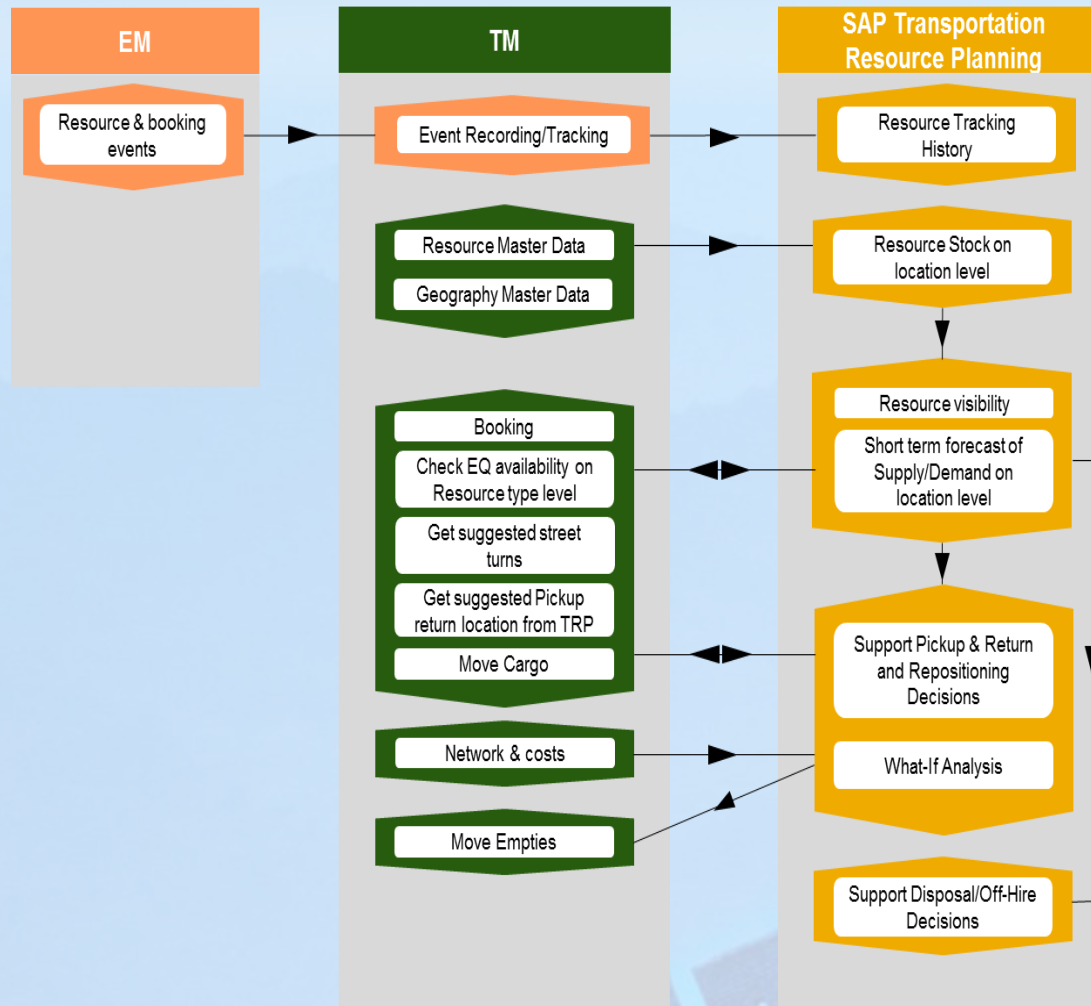
- Increase the visibility of transportation resources
- Determine supply and demand of empty transportation resources incl. forecasts
- Take decisions to avoid or optimize repositionings based on calculated provisioning and return locations
- Balance the stock of empty resources
- Trigger plan execution in the transportation management system
- Monitor resource related KPIs

Relevant business processes

Transportation Resource Lifecycle

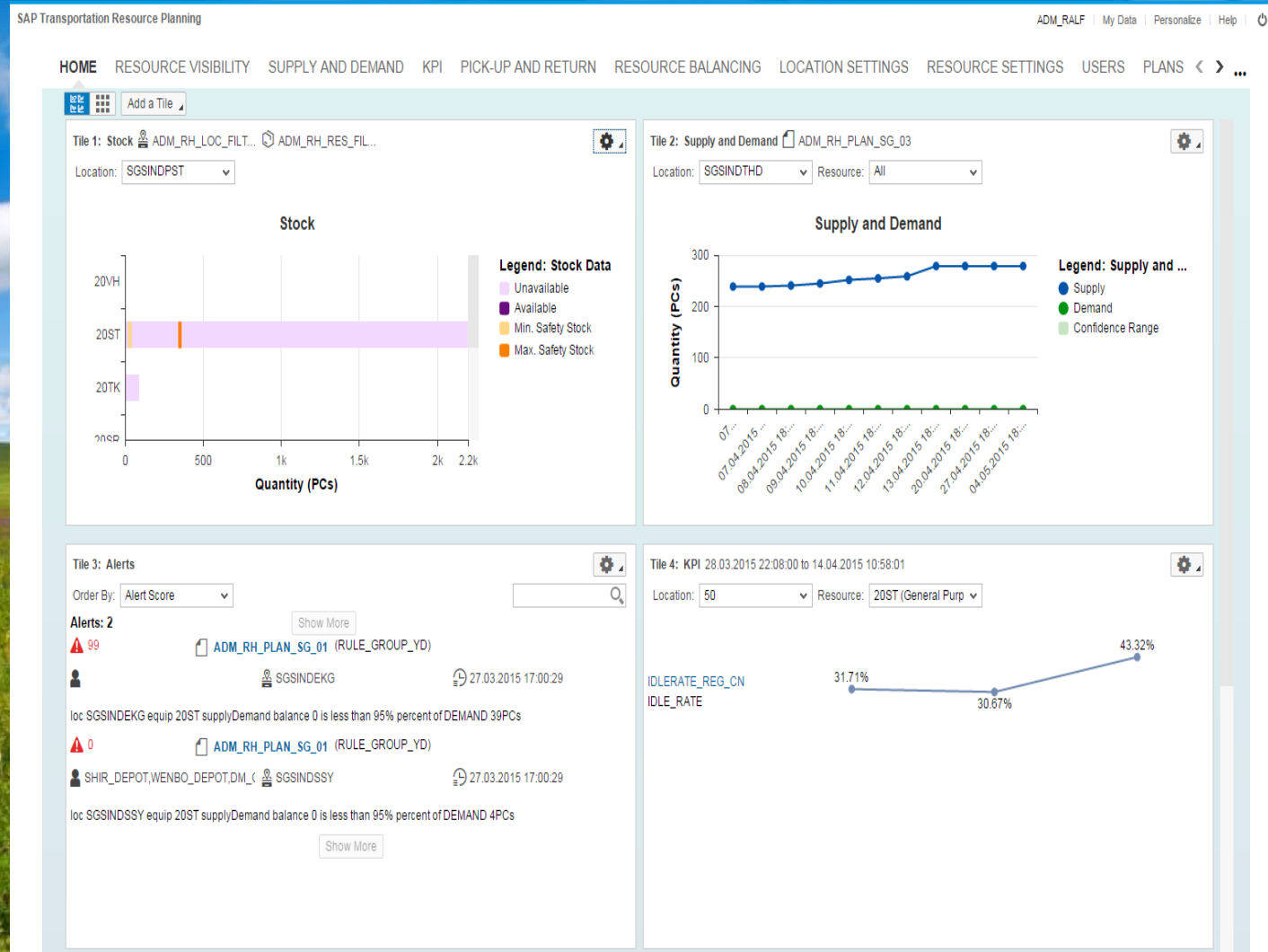


Architectural overview



Process flows and screen views

Landing Page SAP Transport Ressource Planning



Process flows and screen views

Supply and Demand

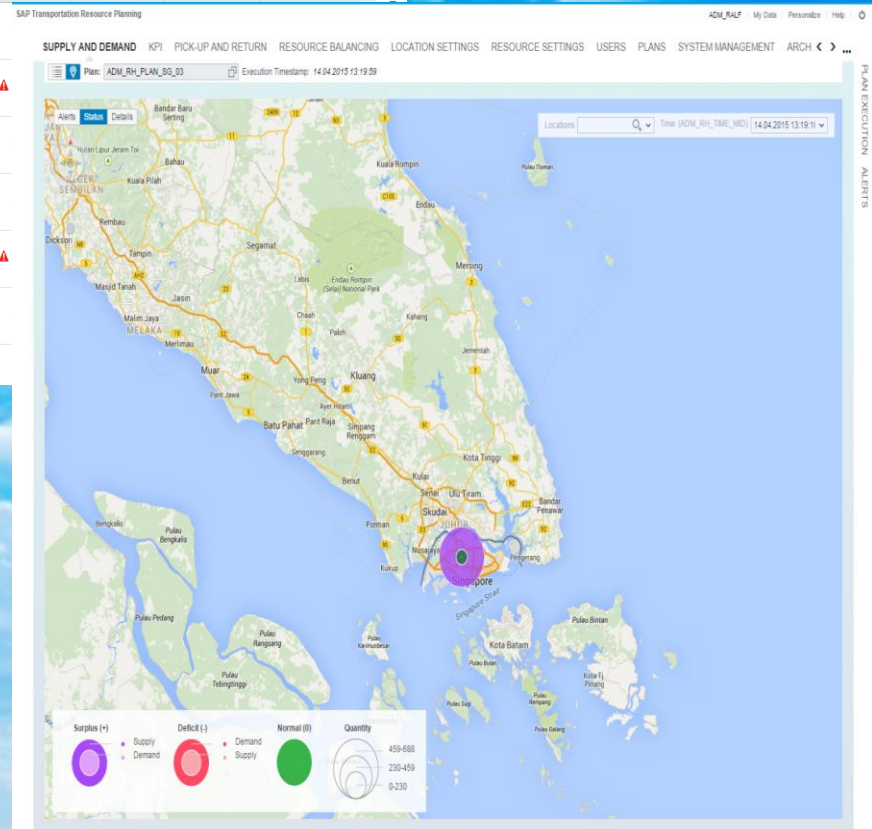
SAP Transportation Resource Planning

ADM_RALF | My Data | Personalize | Help

SUPPLY AND DEMAND KPI PICK-UP AND RETURN RESOURCE BALANCING LOCATION SETTINGS RESOURCE SETTINGS USERS PLANS SYSTEM MANAGEMENT ARCH < > ...

Plan: ADM_RH_PLAN_SG_03 Execution Timestamp: 14.04.2015 13:19:59

Location/Resource Type	Calculatio...	14.04.2015 1...	14.04.201...	15.04.201...	16.04.201...	17.04.201...	18.04.201...	19.04.201...	20.04.2015 1...	27.04.2015 1...	04.05.2015 1...
SGSIN	Supply	0	0	0	0	0	0	0			
	Demand	0	0	0	0	0	0	0			
SGSINDEKG	Supply	0	0	0	0	0	0	0			
	Demand	23	23	23	23	23	24	24			
SGSINDJUR	Supply	14	14	14	14	14	14	14			
	Demand	0	0	0	0	0	0	0			
SGSINDPST	Supply	688	688	688	688	688	688	688			
	Demand	0	0	0	0	0	0	0			
SGSINDSSY	Supply	0	0	0	0	0	0	0			
	Demand	2	2	2	2	2	2	2			
SGSINDTHD	Supply	73	77	80	83	91	99	99			
	Demand	0	0	0	0	0	0	0			



Resource Balancing & Simulation

HOME RESOURCE VISIBILITY SUPPLY AND DEMAND KPI PICK-UP AND RETURN **RESOURCE BALANCING** LOCATION SETTINGS RESOURCE SETTINGS USERS PLANS SYSTEM MANAGEMENT ARCHIVING

Balancing Simulation: GL_TEST Status: Draft Supply and Demand Plan: EOS_D_T1 (Execution Timestamp: 23.09.2015 17:14:37) Cost Model: EOS_DEMO [Delete] [Release] [Create Simulation]

Simulated Supply and Demand Status (6)

Location/Resource Type	Calculation...	24.09.2015 07...	27.09.2015 19...	04.10.2015 19...
EOS_CUX	Supply	0	0	0
	Demand	0	0	0
EOS_DD	Supply	7	9	9
	Demand	9	9	9
EOS_H	Supply	4	4	4
	Demand	2	2	2
EOS_HH	Supply	0	2	2
	Demand	2	2	2
EOS_SZ	Supply	5	5	5
	Demand	5	5	5
EOS_WOB	Supply	0	13	8
	Demand	10	12	7
20ST	Supply	0	6	1
	Demand	5	5	0
40ST	Supply	0	7	7
	Demand	5	7	7

Scenarios (5)

Name	Activity St...	Description	Scenario S...	Balancing...	Total Costs	Activity Co...	Balancing...	Actions
EOS_TEST	Expired	Manual VW...	Draft		2.615,00	2.615,00	Not Available	[Icon] [Icon] [Icon]
VW_AUTO...	Expired	Auto VW Te...	Draft		3.969,00	3.969,00	Not Available	[Icon] [Icon] [Icon]
VW_WDADF	Expired	Test	Draft		288,00	288,00	Not Available	[Icon] [Icon] [Icon]
MANUAL_R...	OK		Draft		400,00	400,00	Not Available	[Icon] [Icon] [Icon]
AUTO_REPO	OK		Draft		1.779,00	1.779,00	Not Available	[Icon] [Icon] [Icon]

Selected Scenario: AUTO_REPO

Planned Activity Costs: 1.779,00 EUR

Balancing Costs: Not Available [View Details for Balancing Costs](#)

Storage Costs: Not Available

Planned Activities (5)

Type	Activity Status	Descript...	Quantity	From	To	Cost (EU...	Start Time	End Time	Actions
Proposed...	OK		2	EOS_H	EOS_HH	288,00	24.09.201...	01.10.201...	[Icon] [Icon]
Proposed...	OK		2	EOS_SZ	EOS_DD	280,00	24.09.201...	01.10.201...	[Icon] [Icon]
Proposed...	OK		4	EOS_DD	EOS_WOB	452,00	24.09.201...	01.10.201...	[Icon] [Icon]
Proposed...	OK		3	EOS_DD	EOS_WOB	339,00	24.09.201...	01.10.201...	[Icon] [Icon]
Proposed...	OK		3	EOS_SZ	EOS_DD	420,00	24.09.201...	24.09.201...	[Icon] [Icon]

SAP

views

Plan Execution and get

updates

SAP Transportation Resource Planning

HOME RESOURCE VISIBILITY SUPPLY AND DEMAND KPI PICK-UP AND RETURN RESOURCE BALANCING LOCATION SETTINGS RESOURCE SETTINGS USERS PLANS < > ...

Location Assignment Pick-Up/Return Rulesets Ruleset Execution History

Transportation Units (705)

Pick-Up/Return Ruleset: EZE_RS_PICKUP... Pick-Up

Transportation Unit	Status	Shipper	Resource Type	Quantity	Destination	Port of Lo...	Vessel Arriva...	Original Pick...	Original P...	Pick-Up Date	Pick-Up Location
2478948	Not Started	HP_SHIPT01	40HC	1	CNDLC	CNDLC	15.12.2014 02...	15.12.2014 02...	CNNGBOCT	15.12.2014 02:59:00	CNNGBOCT
2478949	Not Started	HP_SHIPT01	40HC	1	CNDLC	CNDLC	15.12.2014 03...	15.12.2014 03...	CNNGBOCT	15.12.2014 03:00:00	CNNGBOCT
2478950	Not Started	HP_SHIPT01	40ST	1	CNDLC	CNDLC	16.12.2014 04...	16.12.2014 04...	CNMINDIW...	16.12.2014 04...	CNNGBOCT
2479145	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 07...	17.12.2014 07...	FR3CDDGAZ	17.12.2014 07...	CNNGBOCT
2479146	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 07...	17.12.2014 07...	FR3CDDGAZ	17.12.2014 07...	CNNGBOCT
2479147	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 07...	17.12.2014 07...	FR3CDDGAZ	17.12.2014 07...	CNNGBOCT
2479148	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 09...	17.12.2014 09...	FR3CDDGAZ	17.12.2014 09...	CNNGBOCT
2479149	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 09...	17.12.2014 09...	FR3CDDGAZ	17.12.2014 09...	CNNGBOCT
2479150	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 09...	17.12.2014 09...	FR3CDDGAZ	17.12.2014 09...	CNNGBOCT
2479151	Not Started	HP_SHIPT01	20ST	1	CNDLC	CNDLC	17.12.2014 09...	17.12.2014 09...	FR3CDDGAZ	17.12.2014 09...	CNNGBOCT

SAP NetWeaver Business Client

Display Container 2478948

General Data Stages Statuses Document Flow Utilization Execution Attachments

General Information

Document Type: CNT

Description: BOOKING DNF401166

Container Count: 1

Planning Status: Not Ready for Planning

Container Provisioning/Return: Not Required

Movement Category: Empty Provisioning

Container Capacity

Weight: 22,100 KGM

Volume:

Cargo Information

Cargo Weight:

Cargo Volume:

Maximum Utilization: 0%

Dangerous Goods:

Source

Location: CNNGBOCT

Planned Departure Date/Time: 15.12.2014 09:59:00 UTC+8

Earliest Pick-Up Date/Time: 15.12.2014 09:59:00 UTC+8

Start Date (Requested): 15.12.2014 09:59:00 UTC+8

End Date (Requested): 15.12.2014 09:59:00 UTC+8

Transportation

Total Distance: 24,00 KM

Total Duration: 24,00

First Activity: 15.12.2014 09:59:00 U

Last Activity: 16.12.2014 09:59:00 U

Number of Visits: 2

Number of Freight Documents: 0

Organizational Data

Planning and Execution Organization:

Planning and Execution Group:

Person Responsible:

Destination

Location: CNDLC

Planned Arrival Date/Time: 16.12.2014 09:59:00 UTC+8

Latest Delivery Date/Time: 16.12.2014 09:59:00 UTC+8

Start Date (Requested): 16.12.2014 09:59:00 UTC+8

End Date (Requested): 16.12.2014 09:59:00 UTC+8

Cargo

Equipment

Current Location and Date/Time

Location:

Date: 00:00:00

Change Hierarchy: Cargo Management

Insert Product:

Insert FUs Based on Freight Unit ID:

Set to Loaded:

Set to Initial:

Report Discrepancies:

Item Hierarchy	It...	Transpor...	Package	Product	Gross Weight	UoM	Actual Weight	UoM	Gross Volume	UoM	Actual Volume	UoM	Quantity
GP de W/T vent 95 10 TRP Imported - Con...	10	CMAU46...											1

Transportation Management 9.4 (10/10)

World-Class & Real-time



Supplementary Services for Railways (SSR)

- In Cooperation with TM Custom Development
- Transportation Resource Planning is integrated with SAP TM
- Many services related to railcar movements, storage, documentation, and safety may result in the assessment of charges
- Determined based on the rules defined in tariffs within a product catalog as general terms
- Exceptions can be defined in customer specific contracts
- Along with events reported by various applications or business processes
- **Simple** SSR Type which results in a flat charge for a specific activity such as cleaning or inspection of a car with an invoice issued for each service typically manually reported
- **Complex** which involves a sequence of activities that take place over a period of time with billing for multiple services on a periodic basis including charges that may be offset by credits. The activities can be reported manually and for mass processing automated from external sources.

The solution with SAP

Event capturing



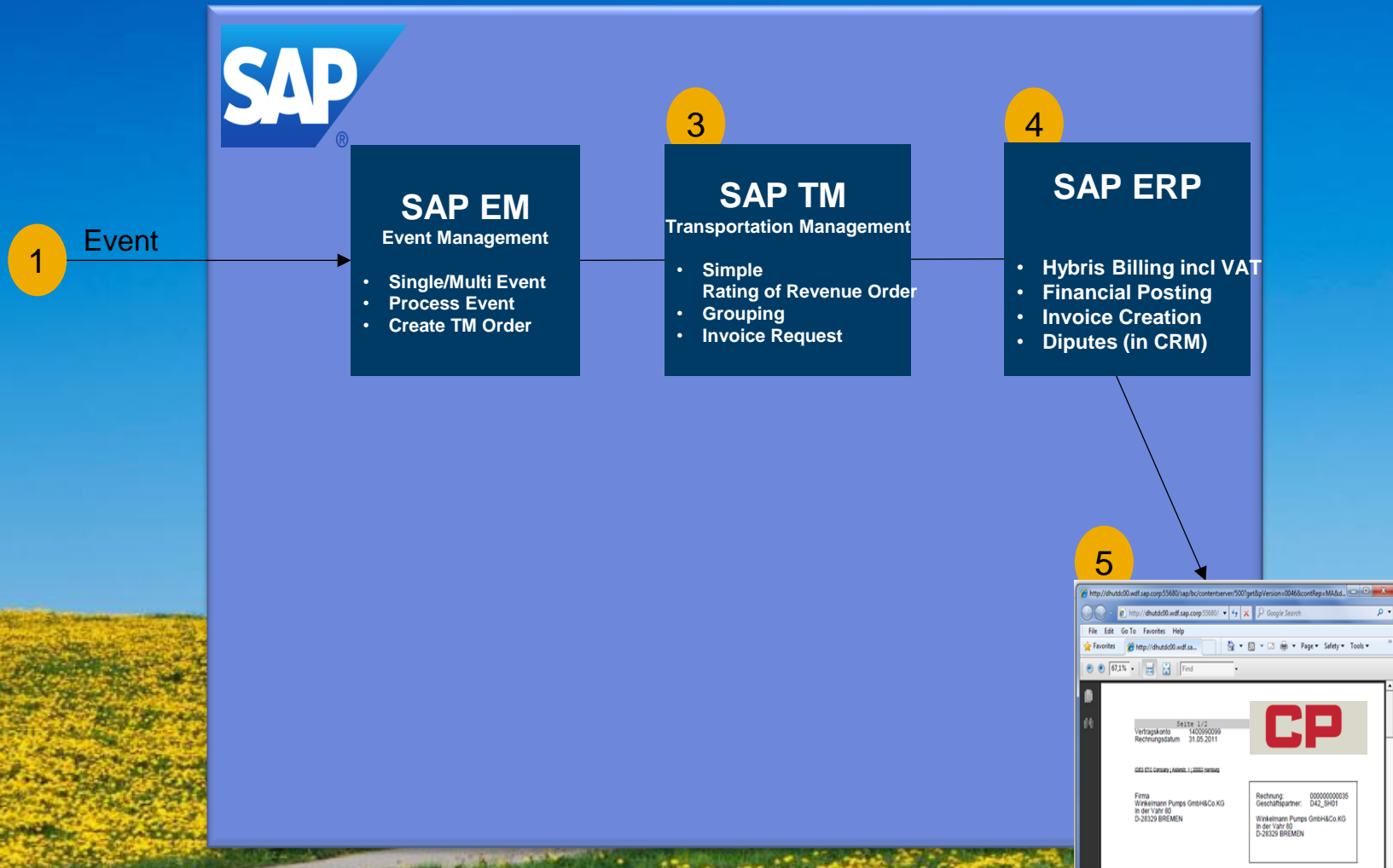
1

Event



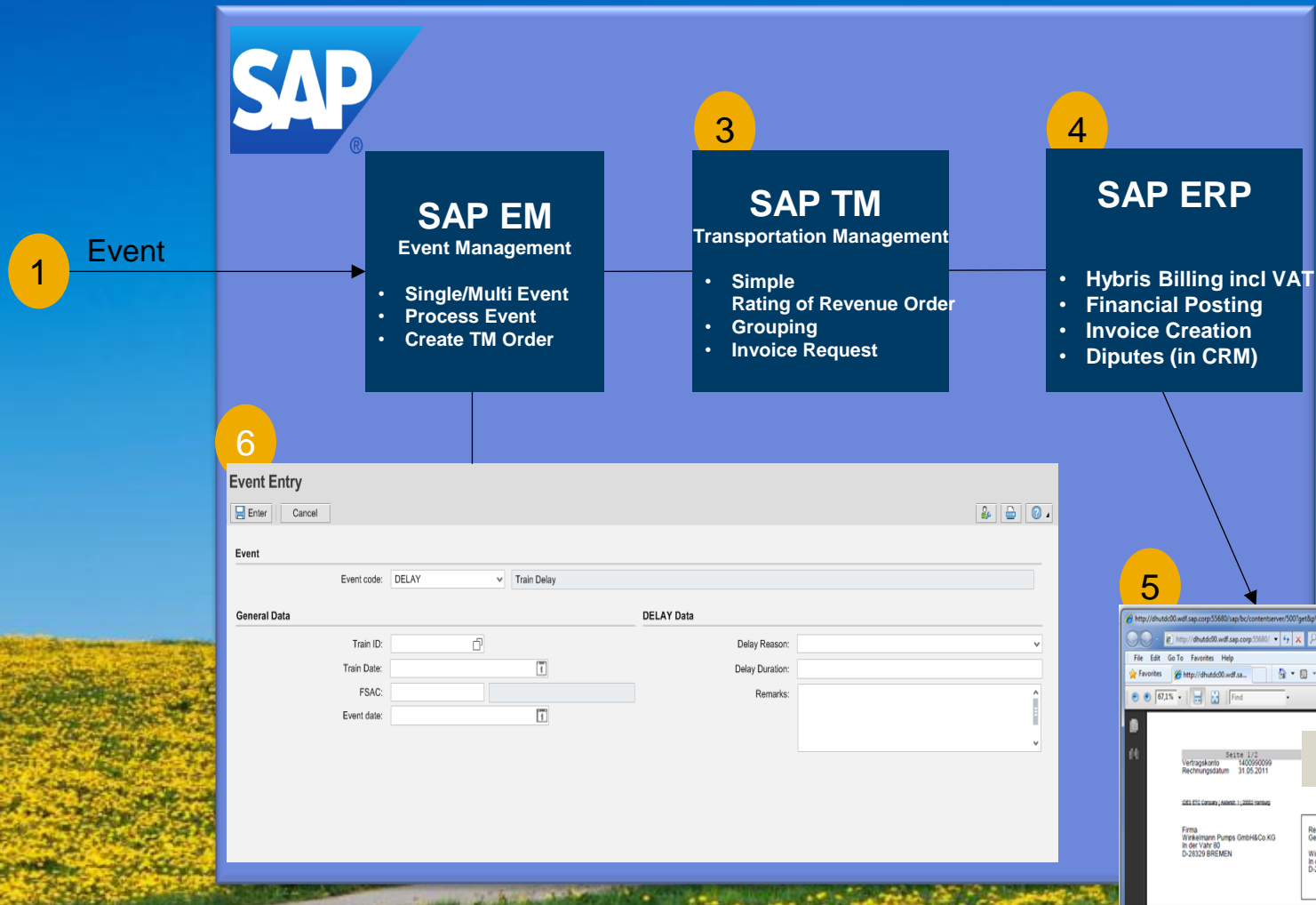
The solution with SAP

Event capturing & automated processing



The solution with SAP

Correction Screen automated generated for CRM triggered disputes





You're welcome

TM Product Management

Dietmar-Hopp-Allee 16
69190 Walldorf

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