Review Document
Document version: 1.0 – 2015-08-28

INTERNAL

Manage Tours

Document History

> **Caution**
> Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location: xxx /xxx

The following table provides an overview of the most important document changes.

Table 1

Version	Date	Description
0.1	2015-08-28	Preliminary Version

Content

1 Manage Tours

The job of a carrier involves shipping goods or containers. A carrier, generally considers different orders in hand, combines or optimizes the shipment requirements for specific location over time, and arrives at a tour plan for his trucks.

A tour completion for truck or driver comprises travelling to different destinations, picking up or dropping goods at particular destinations. Having planned for the tours in external systems, the data of tours can be replicated into SAP Networked Logistics Hub either manually or through integration.

Once tour data is maintained in SAP Networked Logistics Hub, it can be assigned to a truck and the truck driver is notified about the tour assignment on his onboard device or telematic systems mobile application. The driver can accept the assignment and complete the shipment process. The telematic systems also provides the Estimated Time of Arrival (ETA) information for arrival at specific destinations of the tour.

Once a tour is completed, the Dispatcher or Administrator at Carrier can mark the tour as completed using the *Mark as Completed* button. It is also possible for the Administrator at Carrier or Dispatcher to analyze the efficiency of tour planning. The color of the plan effectiveness bar helps by reflecting the time taken by a truck to complete its tour. If the truck completes the tour within the stipulated timeframe, the bar displays as green. If the truck exceeds the planned time for tour completion, the bar displays as red. The actual and planned duration of a tour in time also displays on the *Tour Details* screen.

In order to have an efficient tour planning and completion, the Administrator at Carrier must analyze the tour progression, reason for delays, if any, and the minimum and maximum stop turnaround time of trucks at the various stops. The stop turnaround time is the time taken for a specific stop to service a truck with the orders or items. If the servicing time is less, it indicates that the turnaround time at the specific stop is efficient. For more information about the tour time estimation, plan effectiveness, and calculating the minimum and maximum turnaround time at stops, refer Tour Analysis - Plan Effectiveness and Turnaround Time [page 8]

Click the *Navigate to Traffic Status* button to navigate to the *Traffic Status* application.

Using the *Tours* application, you can create tours that are expected to be completed by your organization. The tour data comprises:

- stops or destinations to be visited
- goods or containers to be picked up or dropped
- arrival and departure time of trucks at stops
- assignment of truck to execute the tour. The assigned truck can be removed

You can create a tour independently without assigning a truck to it. Using the *Save For Later* button, you can assign a truck to the newly created tour later. The first screen of the application displays the unassigned, active, and completed tours.

- unassigned – tour details not sent to any truck
- active – tour sent to truck
- completed – tour confirmed as completed by truck driver via associated device

Click each tour to view details of tours comprising the status, stops, and goods. You can also edit the tour details using the *Edit* button. You can add and move the stops when creating or editing the tour details. When a stop is deleted, the freight items with the stop are unassigned. You must define a stop for pickup and drop of freight item. You cannot move up the stop with drop defined before the stop with pickup defined.

> **Note**
>
> You cannot assign the same stop for the pickup and drop of freight items. If you assign the same stop, the freight items will be unassigned.

You can also view the truck to which the selected tour is assigned in the *Traffic Status* application. Click the *View in Traffic Status app* button to navigate. If the truck reaches the specific destination at the scheduled time (ETA), the icon displays in green in the *Traffic Status* application. If the truck is delayed, the icon displays in red.

> **Note**
>
> In the *Tours* application, only trucks with the active and assigned tours are visible on the map. If a tour assigned to a truck is in progress, you can view the start time and tour progress on the map. The path traversed by the truck displays on the map as bolded line.

Analyze Tour Completion Plan

As the driver completes the tour using the mobile or onboard device, he can post events about arrival at a destination, pickup and drop off of goods and departure from a destination. These events are tracked by the Administrator at Carrier and Dispatcher to view the actual progress of the tour completion. Using this application, any delay in arrival or departure of the truck at a destination can be tracked. For example, a truck arrives at a scheduled destination 5 minutes behind the stipulated time. The details of delay such as the arrival and departure time are visible to the Administrator at Carrier and Dispatcher. The number of delays in completing the tour also displays.

> **Note**
>
> The effectiveness of tour completion can be analyzed only for a completed tour.

To view the progress of tours at the various destinations, click the individual tours. As and when the truck driver posts events about the tour, the color of the process flow changes to green. For example, when the goods are delivered at a particular destination, the color of the respective action in the process flow change to green. If not, the color remains grey.

Business Value

- Bridges the gap between tour planning and completion
- Provides real-time visibility of tour movement and completion

Features

- Quick overview of unassigned, active, and completed tours
- Search tour (according to the freight item, location, truck assignment, driver name, and container ID)
- Create new tour. For more information, see Create Tours [page 11]
- Add a stop
- Assign truck or driver to a tour
- Select trucks of companies
- Monitor tour status

Related Information:

- *SAP Networked Logistics Hub - Overview* [external document]

- *SAP Networked Logistics Hub - User Roles* [external document]
- *Launch Applications* [external document]
- *Register with SAP Networked Logistics Hub* [external document]

2 Tour Analysis - Plan Effectiveness and Turnaround Time

An Administrator at Carrier or tour planner optimizes his tour planning by considering factors such as the overall planned execution time against overall actual execution time and the stops in the tour that serviced the order effectively. This provides better insight to the planner of the actual situation with a specific tour and all the tours and helps to plan tours efficiently. The most important KPIs for a Administrator at Carrier are:

- Plan effectiveness
- Turnaround time index

Plan Effectiveness

Plan Effectiveness defines how effectively an Administrator at Carrier organizes the planned start time of tours and end time of the tours. It is a comparison between the actual duration needed to execute the tour as compared to the time the planner has considered.

This KPI is a negative trending KPI. If the actual value of time duration exceeds the planned value, the KPI results in a negative outlook of that tour for the planner. In case of key figure analysis, it is always recommended to take one threshold(s) for analysis, as this eliminates the instances of KPI always being in red. For example, If the actual execution time is five minutes more than the planned execution time, it should not impact the tour planning of Administrator at Carrier. The thresholds help isolate tours that should be strictly planned, thereby reducing the chances of alerts being raised for all tours. When defined as a percentage (%) of the planned execution time, it helps to achieve a more flexible method of calculating the key figures.

Table 2

Rule	Lower Threshold	Upper Threshold
> 2 hours	5%	10%
2 - 10 hours	10%	15%
> 10 hours	17%	20%

The above rule set evaluates to:

Table 3

Rule	Planned Tour Duration	Lower Threshold (% of planned)	Upper Threshold (% of planned)	Actual Tour Duration	Plan Effectiveness
< 2 hours	1 hour and 55 minutes	2 hours and 1 minute	2 hours and 6 minutes	2 hours and 0 minutes	
				2 hours and 5 minutes	
				2 hours and 14 minutes	
2 hours - 10 hours	5 hours and 30 minutes	6 hours and 3 minutes	6 hours and 9 minutes	5 hours and 45 minutes	

				6 hours and 8 minutes	
				6 hours and 20 minutes	
> 10 hours	11 hours and 45 minutes	0 hour and 0 minutes	0 hours and 0 minutes	11 hours and 44 minutes	
				11 hours and 66 minutes	

Plan Effectiveness - Formula

Table 4

Measures	Comments
Planned Start Time (PST)	Arrival time at a stop as planned by the Administrator at Carrier
Planned End Time (PET)	Time of departure from the last stop, as planned by the Administrator at Carrier
Actual Start Time (AST)	Time when the first even is received from the device
Actual End Time (EDT)	Time when the last event is received from the device
Lower Threshold (LT)	Percentage of planned tour duration
Upper Threshold (UT)	Percentage of planned tour duration

Formula

- Planned Duration Time (PDT) = Planned End Time - Planned Start Time
- Actual Duration Time (ADT) = Actual End Time - Actual Start Time

KPI bar

- (PDT *LT [%]) + PDT < ADT < (PDT* UT [%]) + PDT = **Warning**
- (PDT *UT[%]) + PDT < ADT = **Critical**
- (PDT * LT[%]) + PDT >= ADT = **Good**

Turnaround Time Index

Turn Around Time (TAT) is the time for which a truck is stationed at a stop during a tour. A stop is the place where the items are either loaded or unloaded. There is time associated with the loading and unloading of items (for example, customs check, security inspection, and goods movement). An Administrator at Carrier or planner gets a better insight about the stop wherein a delay resulted by analyzing the turnaround time. Using this information, the Administrator at Carrier can:

- Identify the stop that took more time to service items than the others in the leg
- Gain information about the stop that exceeded the planned stay duration and to what percentage
- Consider this data for better planning in future

A higher value of TAT Index means that the servicing delay at the stop is contributing to the overall delay of the tour. A lower value of TAT Index indicates that the stop is servicing the particular leg of the tour efficiently. This could be due to sophisticated loading/unloading method at the stop, efficient labour management, and well planned traffic and goods movement within the stop.

A turnaround time index more than one indicates that the actual stay duration at the stop has exceeded the planned stay duration. An optimal value for TAT index is <= 1. An example is provided below:

Table 5

Tour	Stop	Planned Arrival	Actual Arrival	Planned Departure	Actual Departure	Planned TAT	Actual TAT	TAT Index
Tour 1	Stop 1	01.02.2015 10:40	01.02.2015 11:01	01.02.2015 10:55	01.02.2015 11:30	15 minutes	29 minutes	1.93
	Stop 2	01.02.2015 14:30	01.02.2015 14:35	01.02.2015 15:35	01.02.2015 15:20	1 hour and 5 minutes	45 minutes	0.69
	Stop 3	01.02.2015 18:00	01.02.2015 18:15	01.02.2015 19:30	01.02.2015 20:00	1 hour 30 minutes	1 hour 45 minutes	1.16

Based on the above calculation, it is clear that the TAT index for stop 1 is 1.93, stop 2 is 0.69 and for stop 3, it is 1.16. This indicates that an efficient servicing of items is done at stop 2 and that stop 1 has contributed to the delay of the tour.

TAT Index Formula

Table 6

Measures	Comments
Planned Arrival (PA)	Planner defined Time of Arrival (ToA) at Stop
Planned Departure (PD)	Planner defined Time of Departure (ToD) from Stop
Actual Arrival (AA)	Time of arrival at destination
Actual Departure (AD)	Time of departure and departure events

- Planned Turnaround Time = Planned Departure - Planned Arrival
- Actual Turnaround Time = Actual Departure - Actual Arrival
- TAT Index = Actual Turnaround Time/Planned turnaround Time
- Maximum TAT Index = MAX (TAT INDEX) = 1.93 = Stop 1
- Minimum TAT Index = MIN (TAT INDEX) = 0.69 = Stop 2

Related Information

- Manage Tours [page 5]

3 Create Tours

You use the *Create New Tour* button to add new tour details such as the freight items, stops, and truck. The tour name and stops are mandatory entries. The steps involved are:

- Assigning freight items
- Adding stops
- Assigning tours to truck

Prerequisites

- Trucks must be registered so that the Administrator at Carrier can assign tours
- Relevant subscription is required

Procedure

1. On the *Manage Tour* s screen, click *Create New Tour* .
2. Click the *Add freight item* link to add freight items. You can also edit and delete the freight item.
3. Add new stop by entering details in the *Enter New Location* dialog box. Use the *Edit Stop* button to edit the stop details.

   Note

   - You can add multiple stops to a single tour.
   - You can also select existing stops, date and time of arrival and departure of the trucks.
   - The deviation in arrival and departure time of trucks is displayed on the map in the *Traffic Status* application.

4. Assign freight item to the newly created stop.
5. Using the *Assign Freight Item* dialog box, decide whether freight items needs to be picked up or dropped off. Use the *No Action* button to not assign pickup or drop of the freight items.
6. Assign a truck to the tour.

   Note

   Use the *Save For Later* button to assign a truck to tour later. The tour details are available to the truck drivers in their mobile or onboard devices.

7. Enter the tour name, ID, and any additional comments.
8. Click the *Assign Now* button to assign the tour to selected truck.

> **Note**
>
> The *Assign Now* button is enabled only when the picked up items are dropped, stops are defined, and a truck is selected.

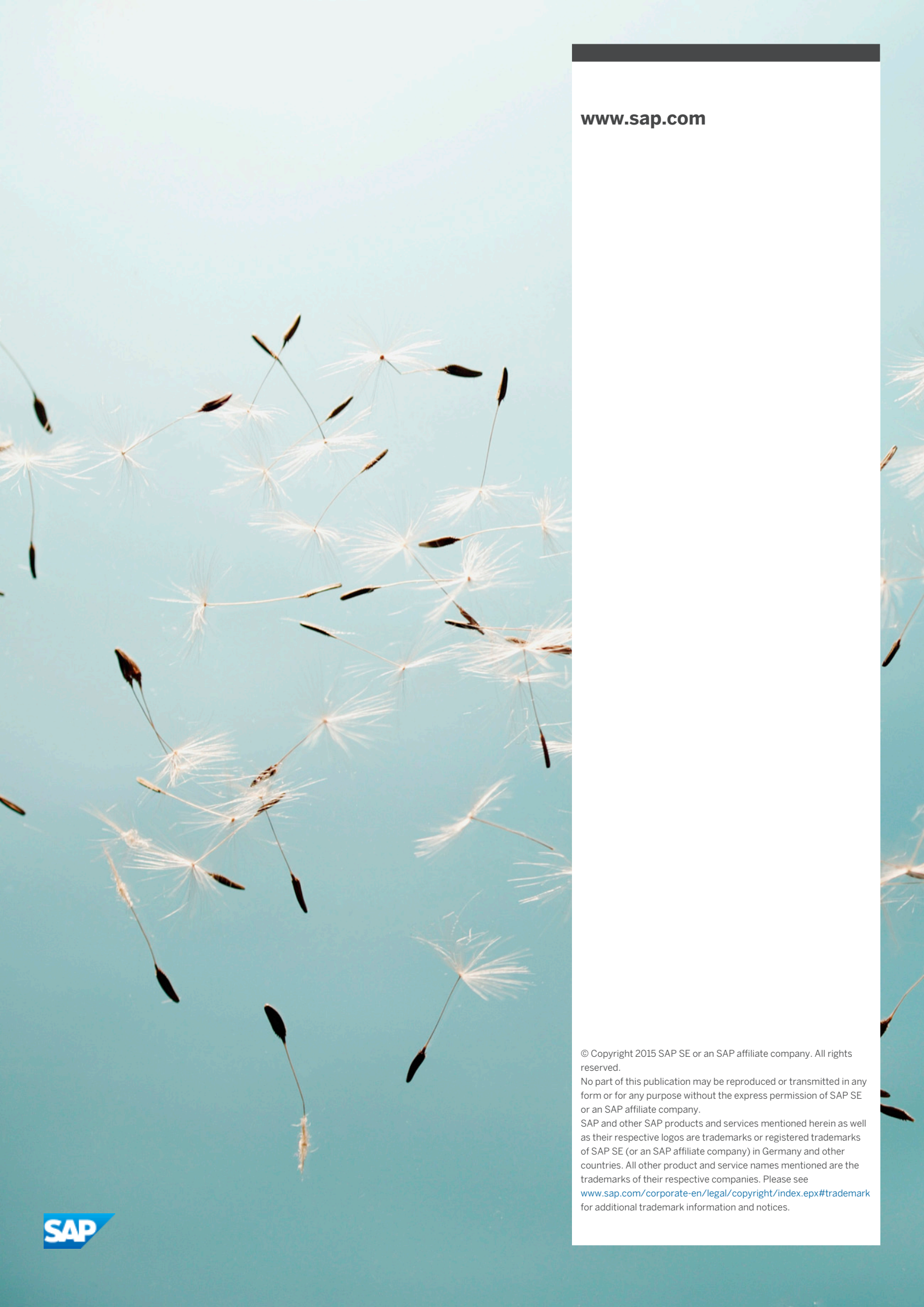
Related Information

- Manage Tours [page 5]

Typographic Conventions

Table 7

Example	Description
<Example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, “Enter your **<User Name>** ”.
Example > *Example*	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
www.sap.com	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456	Hyperlink to an SAP Note, for example, SAP Note 123456
Example	• Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. • Cross-references to other documentation or published works
`Example`	• Output on the screen following a user action, for example, messages • Source code or syntax quoted directly from a program • File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, `SELECT` and `INCLUDE`
EXAMPLE	Keys on the keyboard



www.sap.com