



# Documentation:

## **Planning and dispatch**

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# 1 Introduction

Welcome to the official planning & dispatch module manual.

Make order taking, planning and dispatching more efficient by taking into account the customers' closing days and preferred ordering dates.

The Dynavision Planning & dispatching extension offers the possibility to register the customers' delivery date, preferred order date and the days of the week they are closed. Specific holidays can be registered too.

This extra information is used to generate handy contact lists for the account managers or internal sales. These lists give an overview of which customers need to be contacted for taking down weekly or monthly orders.

Moreover the orders can quickly be taken down right from the call list. The orders will be generated automatically based on this information.

These extra dates also pave the way to streamline the planning & dispatching of orders because the warehouse & logistics flows take into account these customer-specific dates.

- The order and delivery day functionality allow the creation of standard days on which sales orders can be created using the customer order worksheet, or where delivery days of customers are grouped.

## 2 Installation

### 2.1 Extension

The Dynavision Advanced Planning & Dispatch module is a separate Business Central extension.

1. Choose the search icon, enter **Extension Management**, and then choose the related link.
2. Choose **Manage** in the Action bar on the page and choose action **Extension Marketplace**.
3. In the search bar, enter **Dynavision Planning & Dispatch** and install this app.

## 3 Order day and delivery day functionality

The functionality of the Recurrence Schedules has been extended in order to be able to set up Recurrence Schedules to be used in the specification of order and delivery days for customers. The new features will also properly interact with the general calendar functionality and order dates such as the fields **Order Date**, **Requested Delivery Date**, etc.

To keep an overview of the newly grouped orders a custom worksheet has been created, the **Customer Order Worksheet**.

### 3.1 Configuration

#### 3.1.1 Recurrence Schedules

Set up the order and delivery dates according to a certain schedule.

1. Choose the search icon, enter **Recurrence Schedules**, and then choose the related link.
2. Choose the action **Get Default Data**, to add weekly occurrence to the list for each day of the week.
3. Set up the Recurrence schedule schema's that can be used to indicate the possible delivery and order dates for customers.
  - a. **Code**  
Specifies the code to identify the Recurrence Schedule.
  - b. **Description**  
Specifies the description for the Recurrence Schedule.
  - c. **Schedule**  
Specifies the settings of the recurrence. *Example given: a recurrence might be set up for a day in the first week of every month.*
  - d. **Status**  
Specifies if the schedule is valid. Please ensure the schedule contains a Start Date. The Start Date should not be too far in the past.
4. Choose the action **Create new schedule...** in the line of the recurrence Schedule code that needs to be set up.  
*Remark, it is currently not possible to edit an existing schedule. If a schedule needs to be edited, it first needs to be cleared using the action **Clear Schedule**, and next, choose the action **Create new schedule...** in the **Schedule** column on the line.*  
 In order to view the set up schedule, It is possible to select the line, and choose the action **Show Schedule**, or to select the value in the column **Schedule**.
5. On the **Recurrence Schedule Card**, specify the information for the recurrence. It is important that a **Start Date** is chosen, otherwise the schedule will not be valid.
  - a. *Small remark: The options Days – Weeks – Months – Years Between are default set to 1. This means that the next day, week, month or year are also taken into account. When this is set to e.g. 2, the next day, week, month or year will be skipped in the date calculations.*

6. After specifying the settings for the Schedule, when returning to the page **Recurrence Schedules**, the Status will be updated, and the **Dates** (in the Dates fact box) will contain calculated dates using the schedule settings.

*The dates are calculated up to 10 years in the future, starting from the specified starting date. This has been implemented because standard Business Central has limited the periods to 500 in the future. This implementation eliminates the need to calculate the dates yearly using a job queue. Choose the action **Calculate Dates** in order to recalculate the dates in the background.*

**Remark:** if, in the company settings, a nonworking day is indicated, in the date fact box, the date will be colored red.

**Tip:** On the **Recurrence Schedule Card**, the three dots next to the title can be selected, in order to give other options (default Weekly is selected). It is possible to select the action **Show as menu**, in order to set these options more visibly on the Card page.

**Remark:** when there are no dates calculated and shown in the fact box, the schedule is invalid and cannot be used in the Planning and Dispatch functionalities.

### 3.1.2 Customer Card

On the Customer Card, it is possible to indicate the Order and Delivery Schedules.

1. Navigate to the **Customer Card** of a Customer for which the Delivery and order schedules need to be specified. (Or navigate to the Ship-to address for which the schedule needs to be configured.)
2. Navigate to the tab **Shipping**.
  - a. **Order Delivery Schedules**  
Specifies that a customized order delivery schedule is set up for the customer.
3. Choose the value of the field in order to open the **Order Delivery Schedules** page.
4. Choose the action **New** in order to add a new Schedule, or choose the action **Edit List** to edit the existing schedules.
  - a. **Recurrence Schedule Code**  
Specifies the Recurrence Schedule. Select a schedule that has been set up previously or add a new one.
  - b. **Recurrence Schedule Description**  
Displays the description of the selected Recurrence Schedule Code.
  - c. **Order Day**  
Specifies if the schedule is used to define valid order intake days.
  - d. **Delivery Day**  
Specifies if the schedule is used to define valid delivery days.
5. After selecting the schedule code, the Dates fact box displays the dates that are valid according to the selected line in the list view.
  - a. **Remark:** currently, there is no functionality yet to color the lines in the dates fact box based on the nonworking days in the Customized Calendar of the Customer.

### 3.1.2.1 Customized Calendar

1. It is possible to create a customized calendar per customer if needed.  
This is possible by navigating to the **Customer Card**. In the **Shipping Tab**, a Shipping Method field is added. Select the field **Customized Calendar**, and create the customized calendar.
2. In this Calendar, mark the closing days.

## 3.2 Usage on sales documents

When a sales order is created, the requested delivery date field will be filled in automatically based on the set up **Order Delivery Schedules** of the selected customer.

Following calculations are used for the determination of the requested delivery date:

Order date + outbound warehouse handling time + shipping time + nonworking days + first available delivery date based on order date & delivery date. This results in the requested delivery date.

If a Sales order is created, and an Order Date is selected that is not according to the set Schedule, a message will be displayed.

### 3.2.1 Some examples

#### 3.2.1.1 Example 1

**Order Day:** each Tuesday.

**Delivery Day:** Each Friday.

**Holiday:** Friday 07/01/22.

A Sales order is created on Tuesday 04/01, the requested delivery date will be 14/01/22. The first proposed delivery day would be Friday 07/01/22 but since that is configured as a nonworking day, the next Friday 14/01/22 is taken.

#### 3.2.1.2 Example 2

**Order Day:** each Tuesday.

**Delivery Day:** Each Friday.

**Shipping time:** 2D.

**Outbound Warehouse Handling time:** 1D.

A sales order is created on Thursday 06/01/22, considering the shipping time and the outbound Warehouse Handling time +3D, the next delivery date of Friday 07/01/22 is not feasible, thus the requested delivery date will be the next possible delivery day being 14/01/22.

### 3.3 Customer Order Worksheet

The **Customer Order Worksheet** page can be used to get an overview of the customers that have been contacted based on their configured order date.

1. choose the search icon, enter **Customer Order Worksheet**, and then choose the related link.
2. In the **Filters** section on the page, filters can be set on the different fields in order to get the list of customers that satisfy these filters.
3. The field **Last Sales Calculation** can be filled in with a date formula, in order to have a date to format the list based on past sales activity. Customers who have not ordered something for a long time will be indicated in a red color in the list.  
The field **Last Sales Date** can be used to specify the limit date of the last sales.
4. The Customer Order Worksheet lines are grouped based on the Customer No.
  - a. **Contacted**  
When checked, indicated that the customer has been contacted.
  - b. **Comment**  
If necessary, comments can be noted that apply to the line in the Customer Order Worksheet. This will be saved for the specific line and can serve as historical data.
  - c. **Order No.**  
Specifies the linked Sales order that is created for the customer. Choose the action **Sales Order...** which can be found by choosing **New** in the actions bar in the header.
  - d. **Customer/Ship-to information columns**  
Displays the Customer information or the information of the Ship-to address that has an assigned order delivery schedule. *It is possible that a customer is mentioned in several lines on the worksheet for the specified filters because the ship-to addresses have assigned Order Delivery Schedules that comply to the selected filters.*  
*In case the line is displayed for the Ship-to address, the information on the line (address, shipping agent code, ...) will contain the information set on the Ship-to card.*
  - e. **No. of Pstd. Invoice Lines**  
Displays the number of invoice lines that have been posted in the past for this customer. This is a float field, and when selecting the number in the field, a detailed overview can be found.
5. After filtering the lines in the worksheet, a new order can be created for the customer or ship-to address on the line. Choose the action **New > Sales Order** to create the new order.
  - a. This will be a suggestion for the order, containing the information of the customer or ship-to address on the customer order worksheet line for which the order is created. Choose the number series that need to be used for the order to continue creating the order.



## 4 Outbound and inbound warehouse Request lines

In order to be able to quickly get an overview of the items that can be shipped or received, the **Outbound Warehouse Request Lines** and **Inbound Warehouse Request Lines** pages can be used.

In Business Central, the system captures the (expected) demand when sales documents are **released** and the (expected) supply when the purchase documents are **released**.

### 4.1 Warehouse Document Groups

In order to be able to filter and group certain warehouse request lines, Warehouse Document Groups need to be set up.

1. Choose the search icon, enter **Warehouse Document Groups**, and then choose the related link.
  - a. This page can also be accessed from the **Warehouse Setup Page** by choosing the action **Document Groups** that can be found by selecting **Combine Documents**.
2. Fill in the necessary fields in order to create the different groups.
  - a. **Code**  
Specifies the code that identifies the Warehouse Document Group.
  - b. **Description**  
The description of the group.
  - c. **No. of Fields**  
Shows the number of fields on which the request lines will be grouped when they are put into this group, based on the Warehouse Document Group Setup. Choose the action **Fields** to set this up.

### 4.2 Warehouse Document Group Setup

The created Warehouse Document Groups need to have filter values assigned to them in order to filter the lines that will be put into the groups.

In the **warehouse document group setup**, there are three main areas in which we start to filter our demand and supply lines: Location(s), Type of source documents and Destination type.

1. Choose the search icon, enter **Warehouse Document Group Setup**, and then choose the related link.
  - a. This page can also be accessed from the **Warehouse Setup Page** by choosing the action **Document Group Setup** that can be found by selecting **Combine Documents**.
2. Fill in the necessary fields to create the groups for the warehouse request lines. There are three main areas that are used to filter demand and supply lines: location, type of source documents and destination type.
  - a. **Location Type**  
Specifies the Location type. The options are: All Locations, and Location. This filters warehouse request lines based on all or a specific location.

**b. Location Code**

If Location Type Location is chosen, a Location has to be specified.

**c. Source Document Type**

Specifies the Source Document Type that can be put into this group. This filters warehouse request lines based on their origin type.

The options are:

- i. All Document Types,
- ii. Sales order,
- iii. Sales Return Order,
- iv. Purchase Order,
- v. Purchase Return Order,
- vi. Outbound Transfer,
- vii. Inbound Transfer,
- viii. Outbound Service Order, and
- ix. Inbound Service Order.

**d. Destination Type**

Specifies the type of destination that can be put into the group.

The options are:

- i. All Destinations,
- ii. All Customers,
- iii. All Vendors,
- iv. All Locations,
- v. Customer,
- vi. Vendor, and
- vii. Location.

**e. Destination No.**

If Customer, Vendor or Location was chosen in the Destination Type, the Destination needs to be specified.

**f. Group Code**

Specifies the Group Code for which these parameters apply.

Based on the above-mentioned filters, a **group code** will be assigned to group specific warehouse lines.

**Remark:** the **group code** contains additional filters, for instance if the warehouse lines will be grouped by **Shipment date**, but also by **shipment method**.  
set results in a **Group Code**.

### 4.2.1 The Group Code filter logic

If only the three main area filters are used, all warehouse request lines would be grouped together based on those criteria.

The additional filters on the **group code** allow to split the same group codes based on **Date**, **Document Number**, **Shipping agent**, etc.

If two filter sets could be applied for a single warehouse request line, the most fine-grained filtered group code will be applied.

## 4.3 Location Setup

In the Location for which the Warehouse Request Lines need to be created, the option **Use Warehouse Request Lines** needs to be activated.

## 4.4 The use of the Outbound/Inbound Warehouse Request Lines Page

1. Choose the search icon, enter **Outbound Warehouse Request Lines**, and then choose the related link. (Or enter **Inbound Warehouse Request Lines**.)
2. From the overview page, it is possible to **create receipts or shipments**, to navigate to the source documents or existing receipt or shipment that has been created for the selected line, etc.
  - a. **When creating Warehouse Shipments or receipts**, based on the filters, different warehouse request lines will be grouped together on one or more warehouse shipments/receipts.  
The user gets to choose whether the unassigned Outbound/Inbound warehouse request lines have to be added to existing warehouse documents or whether new warehouse documents must be created.
  - b. When creating the Warehouse Shipments or receipts, it is possible to use the field **Reserved stock only**. This will give the user the possibility to only include source document lines that are fully or partially reserved from current stock.
3. The pages contain information for following order types: Sales (return) orders, Purchase (return) orders, Service orders, and Transfer orders.
4. Choose the action **Update Groups** to apply changes made during ad hoc setup, to all existing warehouse request lines (that don't have an existing warehouse shipment/receipt attached).
5. Using the **Update Source Document Lines** action, the **Shipping Agent Code**, **Shipping Agent Service and Shipment Date/ Expected Receipt date** can be updated or overwritten.

## 4.5 Best practices

- It is advised that there is at least a Generic **Group Code** for the three filter areas: All locations, All Document Types & All Destinations. This will make sure that the warehouse request lines get at least one group code assigned.

## 4.6 Create Warehouse Documents

Dynavision Planning & Dispatch module makes it possible to create Warehouse Shipments and Warehouse Receipts for a selection of lines. These actions are available on the corresponding pages as described above.

It is also possible to Create Warehouse Documents by using the task that has been implemented.

1. Choose the search icon, enter **Create Warehouse Documents** and choose the related link.
2. Fill in the options and filters for generating the correct warehouse documents.
  - a. **Type**  
Specifies if warehouse receipts or warehouse shipments will be created. This can be specified by choosing either Inbound or Outbound.
  - b. **Add to warehouse document allowed**  
Specifies if lines can be added to an existing warehouse document with the same grouping criteria.
  - c. **Do Not Fill Qty. to Handle**  
Specifies if the Quantity to Handle field in the warehouse document is prefilled according to the source document quantities.
  - d. **Reserved stock only**  
Specifies if only source document lines should be included that are fully or partially reserved from the current stock.
  - e. **Date Filter (DateFormula)**  
Specifies a dateformula to filter the lines on shipment date or expected receipt date. *This can be used when scheduling the creation of the warehouse documents.*
  - f. **Filters**  
Specify filters if needed to make sure that the documents are generated for the wanted location, shipment date, etc.

## 4.7 Collaboration Planning & Dispatch Module and Business Central

Below, some general information on the behavior of how the **Shipping Agent Code** is transferred in standard Business Central and how the custom logic uses the Shipping Agent Code.

- In standard Business Central, when a warehouse shipment is created from a sales order, the **Shipping Agent Code** is taken from the sales order header, regardless of different shipping agent codes that might have been added on the sales order lines.
- In the warehouse request line logic, when you create a warehouse shipment from the warehouse request lines, the shipping agent code **from the first sales order line** is transferred onto the warehouse shipment header.
- In standard Business Central, when the flow starts from an empty warehouse shipment document, and the source document is fetched, no shipping agent codes are transferred.
- In standard Business Central, if the **Shipping Agent Code** is updated on the warehouse document, the information is pushed back to the **sales order header**.

## 5 Warehouse Receipt / Shipment

### 5.1 Release for Transport

On the Warehouse receipt document, the functionality **Release for Transport** is added. This function can be used to release the shipment, which makes it possible to plan the transport on the transport trips, as explained in the next section.

### 5.2 Pick lines

On the warehouse Shipments, extra fields are added, **Pick Lines** and **Registered Pick Lines**. These will display the number of (registered) related pick lines for the document.

## 6 Trip planning

The trip planning functionality makes it possible for customers that use own transport for delivery and receiving of items to create a trip, which is a grouping of warehouse documents (warehouse shipment and/or warehouse receipts).

If Dynavision Reusable Packaging is installed, it is also possible to register the collection of reusable packaging that occurred during a transport trip. This registration will be made to the linked source document (sales order or purchase order).

It is also possible to register payments on the source documents of the transport trips, to make sure the processing of trips can be done efficiently without having to navigate to the source documents individually to register the payments.

### 6.1 Configuration

#### 6.1.1 Planning & Dispatch Setup

The configuration of the way that the Transport Trips will be created is set up in the **Planning & Dispatch Setup**.

1. choose the search icon, enter **Planning & Dispatch Setup**, and then choose the related link.
2. Fill in the necessary fields in in the **Transport Planning** tab.
  - a. **Transport Trip Nos.**  
Specifies the code for the number series that will be used to assign numbers to transport trips.
  - b. **Vehicle Nos.**  
Specifies the code for the number series that will be used to assign numbers to vehicles.
  - c. **Trailer Nos.**  
Specifies the code for the number series that will be used to assign numbers to trailers.
3. Choose the action **Report Selection – Planning** to indicate the report that needs to be printed for the trips. Currently only the Trip sheet can be configured in the report selection for the Transport Planning.
4. Choose the action **Resources** in the actions bar of the setup page in order to set up the different resources available for planning Transport Trips.
  - a. **Shipping agents**  
The Shipping agents functionality of Business Central has been enriched with a column **Use Transport Trips** to indicate that Transport lines will be created when releasing warehouse documents for the shipping agent specified on the line. When the checkbox has been activated, it enables the use of Transport Trips.
    - i. Choose the action **Shipping Agent Services** to specify the different parameters for the services of the Shipping Agent.  
The fields that are important for the creation of transport trips are:
      - 01. Base Calendar Code**  
Select the Calendar that needs to be used to create the

transport trips. **Remark:** *it is very important to mark the non-working days. These days are not used when generating trips, so no trips can be created for these days.*

**02. Location Code**

In order to make the transport Trips, it is required to set up a location from which the deliveries start for the shipping agent

**03. Driver No.**

Specifies the default driver when the shipping agent service is used on a trip. This field is optional.

**04. Vehicle No.**

Specifies the default Vehicle when the shipping agent service is used on a trip. This field is optional.

**05. Trailer No.**

Specifies the default Trailer when the shipping agent service is used on a trip. This field is optional.

**b. Drivers**

The Drivers are the standard Business Central Resources that can be assigned to trips. In order to indicate that a resource can be assigned on trips, an extra tab is created on the Resource Card.

**i. Transport Tab**

**01. Driver**

Indicates that the resource is a driver and can be assigned to trips.

**02. Shipping Agent Code**

Specifies the Shipping Agent for which this resource is a driver.

**c. Vehicles**

It is possible to set up Vehicles that can be assigned to the Transport Trips.

**i. No.**

Specifies the number of the vehicle, according to the specified number series in the setup page.

**Remark:** *fill in the fields in the list, and the number will be automatically assigned to the line.*

**Remark:** *enable the **Manual Nos.** check for the Number Series for the Vehicle, this will prevent errors when manually trying to specify a Code for the Vehicle.*

**ii. License Plate**

Specifies the License plate of the Vehicle.

**iii. Description**

The description of the Vehicle.

**iv. Maximum Gross Weight**

Specifies the maximum gross weight that can be planned on the vehicle for one trip.

**v. Maximum Volume**

Specifies the maximum volume that can be planned on the vehicle.

**vi. Shipping Agent Code**

Specifies the value of the Shipping Agent Code field.



**vii. Blocked**

Specifies that the vehicle is blocked from being used on transport trips.

**d. Trailers**

It is possible to set up Vehicles that can be assigned to the Transport Trips.

*The trailer List has the same fields as the **Vehicles** List.*

**Remark:** enable the Manual Nos. check for the Number Series for the Vehicle, this will prevent errors when manually trying to specify a Code for the Vehicle.

5. For filtering purposes and purely informational, it is possible to set up **Trip Types**. Choose the action **Trip Types** which can be found under **Related**.
  - a. **Code**  
Specifies the Code of the Trip Type.
  - b. **Description**  
Specifies the description of the Trip Type.
6. After configuring everything in the Planning & Dispatch Setup, the Transport Trips can be created.  
Choose the action **Create Transport Trips**, which can be found under **Actions**.  
The Transport Trips can also be created by choosing the search icon, entering **Create Transport Trips**, and then choose the related link.  
**Remark:** it is very important that the configuration of the trips is set up completely and correctly before creating the Transport Trips. Otherwise, the trips might be incorrect and will need to be manually deleted and created again.
7. On the report page that opens, fill in the Options and filters needed to create the trips for the desired shipping agent and period.
  - a. **Date Range**  
Specify the Date Range for the period that the trips need to be created. In this field, a Date Formula can be specified.
  - b. **Shipping Agent Code**  
Specifies the Shipping agent Code for which the Transport Trips should be created.
  - c. **Use Transport Trips**  
Specifies if Transport Trips will be created only for the Shipping Agents for which the option **Use Transport Trips** is enabled.
  - d. Other filters can be added and specified if needed.
8. Choose **OK** after specifying the filters and options.
9. The transport trips are created and a message is shown to navigate to the created trips.

## 6.1.2 Shipping defaults based per region

In order to make it more easy to add a default Shipping Agent to a customer or ship-to address, a new page has been added, **Shipping Defaults**.

1. Choose the Search Icon, enter **Shipping Defaults**, and choose the related link. *The page can also be accessed by navigating to*
2. Set up the Shipping Defaults using the provided columns on the page.
  - a. **Country/Region Code**  
Specifies the Country/ Region for which the default shipping agent is defined.

- b. Post Code**  
Specifies the postal code for which the default shipping agent is defined.
  - c. City**  
Specifies the city linked to the postal code for which the default shipping agent is defined.
  - d. To Post Code**  
Specifies the "to" postal code. This is to be used when defining ranges for the post codes for which the default shipping agent is defined.
  - e. Shipping Agent Code**  
Specifies the default shipping agent code for which the default shipping agent is defined.
  - f. Shipping Agent Service Code**  
Specifies the default shipping agent service code for which the default shipping agent is defined.
3. Choose the action **Update Customers...** to update the shipping defaults for a group of customers and/or ship-to addresses.
  4. Define the filters to update the wanted customers or ship-to addresses.
  5. Choose **OK** to update the shipping agent information on the customer and ship-to addresses.

*Remark: when a postcode is added to a customer or ship-to address (or updated on customer or ship-to address): when a default shipping agent is assigned to a city, this has precedence over the shipping agent set for the range of post codes. If there is a shipping agent set for the range of post codes, and not for the city of the customer, this takes precedence over the shipping agent assigned to the Region. In case no shipping agent is defined for the post code of the customer, the system falls back on the shipping agent set for the region.*

### 6.1.3 Customer Card

In order to make full use of the Planning & Dispatch functionality, make sure the preferred shipping agent is set on the Customer Card. This can be set on the Customer Card, in the **Shipping Tab** in the fields **Agent** and **Agent Service**, or it can be automatically filled in when the **Shipping Defaults** is set up and a postcode that has an assigned shipping agent is entered on the customer card or ship-to card.

This will make sure the shipping agent will be filled in on the sales documents and thus also the warehouse documents, resulting in the correct parameters that can be used to automatically calculate the Transport Trips.

*Remark: When a postcode is updated on the Customer or Ship-to address, and no Default Shipping agent is assigned to this postcode (or to the Region), in case a shipping agent was already filled in on the card, this information will remain. This can be cleared manually if needed on the Customer or Ship-to Card.*

## 6.1.4 Setting up the Message Type

In case that the transport trips that have been created and filled need to be send to an external partner or application, it is possible to set up a Message Type for this file. Choose the search icon, enter **Message Types**, then choose the related link.

There are two options to set up the necessary Message Type:

### **Option 1:**

1. Select the plus sign next to the **New** action in the actions bar on the opened page. Choose the action **Get Default Data...**
2. A list opens with a filtered view of the available, not yet downloaded and configured Message Types. Choose the Message Type that needs to be set up and choose the action **Apply**.
3. The Message Type will be created and it is possible to navigate to the created **Message Type Card**.
4. In this card, the fields will be filled in with the information that has been set up in the Data link for the Message Type.
5. After the creation of this Message Type, the Card can be edited in case something needs to be changed. *Remark: once the message type has been downloaded, it will not be visible anymore when choosing the **Get Default Data...** action again. The Card needs to be managed in the system.*
6. In the **Partner Mapping**, it is now possible to select a Shipping agent to which messages need to be send.

### **Option 2:**

1. Choose the action **New** to set up a new **message Type** card.
2. Specify the necessary fields for the specific vendor report. In the **Format** field, select Circuit (File).
3. Choose **Message Type** Transport Trip.
4. *Remark: the fields of the Message Type card are described in the Dynavision Connect manual.*
5. Make sure to define a partner code using the action **Partners**.
6. In the **Partner Mapping**, it is now possible to select a Shipping agent to which messages need to be send.

## 6.2 Planning of the trips – flow

### 6.2.1 Settings on the sales/purchase/transfer/service documents

Create a Sales, Purchase, Transfer or Service document and fill in all necessary fields.

In the **Shipping and Billing Tab** fill in the **Agent** that will handle the shipment.

In the field **Agent Service**, select the service that will be used.

This information will be used for the automatically assigning of the shipment lines to a Transport Trip.

### 6.2.1.1 Transport Information

In order to make it possible to add Transport Information to the documents, an extra field is implemented on the different documents (*sales/purchase/transfer/service*), **Transport Information**. This field makes it possible to specify additional information to be printed on transport documents.

When this information is filled in, and shipments or receipts are created and added to a transport trip, on the printout of the transport trip, this information will be printed.

### 6.2.2 Creation and releasing of the warehouse documents

Create the warehouse shipments or receipts for the created documents with items that need to be transported.

This can be directly from the document or by using the functionality to fetch the shipment/receipt lines and bundling these lines on a single warehouse document.

From the warehouse documents, it is possible to view the Source documents that are noted on the warehouse document. This is possible by choosing the action **Source Document(s)**, which can be found by selecting the action **Source Documents** in the actions bar of the warehouse document.

This function will open the linked source document, or a list of linked source documents. In case a listview is shown, it will show the information noted on these source documents, including the Ship-to Contact.

If the **Shipping Agent Code** and the **Shipping Agent Service Code** is filled in, and there were Transport Trips created for the entered combination, when choosing the action **Release**, the warehouse document will automatically be assigned to a **Transport Trip No.** The number of the trip will be visible in the corresponding field on the warehouse document.

On the warehouse document, it is possible to register payment methods to the linked documents using the action **Payment Methods...**, or to register Reusable Packaging to the source documents by choosing the action **Return Reusable Packaging**.

When adding the Reusable Packaging, don't forget to choose the action **Add to Document**, or **Add and post the reusable packaging** in order to push the registration to the source document.

### 6.2.3 Transport Lines

In the page **Transport Lines** an overview can be found of the Transport lines that are released and have been planned or need to be planned.

Choose the search icon, enter **Transport Lines**, then choose the related link.

On the page that opens, the Transport lines are visible with their information. On the page, a few actions can be performed in order to plan, unplan or move transport lines.

1. **Plan**

Plan the selected lines on an existing trip. *Remark: this function can only be performed for transport lines that are not already assigned to a trip.*

2. **Plan (New Trip)**

Plan the selected lines on a new trip. *Remark: this function can only be performed for transport lines that are not already assigned to a trip.*

3. **Set Free**

Undo the planning of the selected lines from their current trip.

4. **Move**

Move the selected lines to another trip.

On this page, the action **Source Document(s)** is also available.

For the Transport lines, the Pick lines are visible, as well as the Registered pick lines. This shows the number of related (registered) pick lines for the transport line.

It is possible to navigate to the Trip that contains the shipment line by selecting the shipment line and choosing the action **Trip**, under **Related**.

### 6.2.4 Transport Trips

In the page **Transport Trips** an overview can be found of the Transport trips that are created.

1. Choose the search icon, enter **Transport Trips**, then choose the related link.

2. On the page that opens, the Transport Trips are visible with their information, like the number of lines planned on the trip and their status. On the page, a few actions can be performed.

- a. Choose the action **New** to create a new Transport Trip.

- b. It is possible to **Release**, **Reopen** or **Close** the Transport Trip by using the corresponding action, which can be found under **Home**.

- c. A **Trip sheet** can be **printed** or **mailed** and the **warehouse documents** that are assigned to the Trip can be printed.

- d. The actions to register payments and reusable packaging to the linked source documents are also available using the action **Payment Methods...**, and the action **Return Reusable Packaging**.

When adding the Reusable Packaging, don't forget to choose the action **Add to Document**, or **Add and post the reusable packaging** in order to push the registration to the source document.

3. It is also possible to create Transport Trips in batch by choosing the action **Create Trips...** (described in [Planning & Dispatch Setup](#))

4. When a Trip has been released, it is also possible to use the action **Send Message** to generate a file based on the configuration in the Message Type.

5. Items that are on Warehouse Shipments that are linked to a trip can be posted in batch by choosing the action **Post**, or the action **Post and print**.

**Remark:** a warehouse document can only be linked to one Transport Trip.  
If the Trip sheet columns are not aligned correctly, adjust the Text Constants as needed.

## 6.2.5 Transport Trip Card

The **Transport Trip Card** contains information about the selected Transport Trip.

1. Choose the search icon, enter **Transport Trips**, then choose the related link.
2. Select a Transport Trip and open the card.
3. The Transport Trip card contains information that has been filled in when creating the trips (Trip date, location code, etc.)
4. Using the action **Get Lines**, it is possible to retrieve an overview of the Transport Lines that are not yet planned. These lines can be added to the Transport Trip.
5. The **Transport Lines** show the lines that are included in the Transport Trip. On these lines, it is possible to **Move** a line or **Set** a line **Free**. It is also possible to **Move** the Transport Lines **Up** and **Down** in order to (re)order the Trip Sequence.  
The transport lines will also display the (registered) Pick lines for the document, and the Pick status will be reflected in the line. The **Pick Status Legend** can be consulted by selecting the value in the column on the line, or by choosing the action **Pick Status Legend**.

- a. It is possible to add 'free' transport lines to the transport trip. Choose the action **New**, which can be found when choosing **Line** in the **Transport lines** section.

**Remark:** this can only be used to add inbound transport lines.

- b. A screen opens, in which address information can be filled in, to add this to the transport trip.
  - i. Enter the **Customer No.** and the **Code** of the address that needs to be added, or manually enter address information in the related fields.
  - ii. Enter comments in the field **Transport information**, that need to be included in the lines.
- c. After specifying the information, choose **Close** to close the screen and add the line to the Transport Trip.
6. Choose the **Card** action to open the warehouse document of the transport trip line, or the card of the manually added "free" address.
7. Choose the **Comments** action to view either the warehouse document comments, or the comments added for the free transport lines
8. The Transport Line can be displayed on an online map by choosing the action **Online Map** in the Transport Lines.
9. The **Trip Sheet** can be printed and mailed, and the **Warehouse Documents** can be printed. When the Trip is released, it is also possible to use the action **Send Message** to generate a file based on the configuration in the Message Type.
  - a. *The trip sheet will also display the Ship-to contact that has been filled in on the Order.*

10. It is possible to navigate to the linked source documents and to register payments and reusable packaging to the linked source documents (as described in [Transport Trips](#)).
11. The source documents that are linked to the Transport Trip can be found and checked by choosing the action **Warehouse Document(s), Source Document(s)**
12. It is possible to post the Warehouse Shipments that are assigned to the trip in bulk, by choosing the action **Post** or **Post and Print...** in the actions bar in the header; or a selected Transport line (for a Warehouse Shipment) by using the action **Post** or **Post and Print** in the Transport Lines section. The linked (posted) warehouse Shipments can still be accessed from the Transport Trip.
13. After the trip has been processed (released, closed, reusable packaging registered, payments registered if applicable), The linked source orders can be posted and finalized. Once these orders are posted, they will not be accessible anymore from the transport lines and transport trip pages by using the action Get Source Documents.

*Remark: a factbox will show the capacity of the Vehicle and/or trailer, and the current load of the transport*

## 6.3 Create Return Sales Order from Trip

In order to make it more easy to create Return Sales Orders, for items that are picked up during a Transport Trip, an extra action, **Create Sales Return Order**, is added on following locations:

- On the **Source Documents Page**, when choosing the action **Source Document(s)** on the **Transport Trip Card** (under **Warehouse Documents**).
- On the **Transport Trip Card**:
  - In the actions bar in the header (under **Warehouse Documents**)
    - When this action is chosen, if the Trip contains multiple sales orders, the list is shown of the source documents for which a return order can be created.
  - In the **Transport Lines** section on the page (under **Warehouse Document**).

After choosing the action **Create Sales Return Order**, after either selecting a customer, or when executed in the Transport Lines for a customer, the Return Sales order is created and the selected customer is taken over to the order. The Order date will be set to the date of the Transport Trip (on the Transport Trip Card).

*Remark: the contact of the original sales order, for which a return is created will not be filled in. This can be manually added by the user on the document if needed.*

In this created order, the lines of the items can be added, and the Return order can be further processed in Business Central.

**Remark:** there is no link with the Transport trip and the return order that is created from a trip.



## 6.4 Trip planning – Partial shipments

It is possible that shipments are not fully shipped at once. In order to process the trip planning for partial shipments, follow the following steps.

1. Create the warehouse shipment for the sales order. Adjust the Qty. to ship to the quantity that will be effectively shipped.
2. Release the shipment. The transport lines will be created and plan the lines on a transport trip.
3. Post the (partial) warehouse shipment. On the Transport Trip, the transport line is updated to Posted Warehouse Shipment, with the adjusted information from the shipment. *In the factbox, the Warehouse Status is adjusted to partially shipped for the warehouse document.*
4. The trip can be further processed as described in the section “Planning of the trips – flow”.
5. When the other items from the partially shipped warehouse shipment need to be shipped, the **Shipment Date** on the warehouse shipment needs to be changed. This will recreate the transport lines and will plan the new transport line(s). If needed, change the shipping agent and service.  
***Remark:** the transport lines linked to the posted warehouse shipment will remain unchanged.*  
*If the auto plan option is not enabled, the Transport Trip No. will need to be manually adapted to the new transport trip.*
6. The Transport Trip No. will be filled in with the transport trip that now contains the remaining items from the shipment, with the corresponding weight.
7. The trip and shipment can now be processed as previously described.

***Remark:** the transport trip no. on the warehouse shipment will always represent the last or active transport trip. The Posted warehouse shipment can be used to trace the transport trips on which the partial shipment is transported.*

## 6.5 Best Practices

When using the Get Source Documents... function on a Warehouse document, and selecting lines, it is possible to combine warehouse shipment lines with different Shipping Agent codes.

When using the function to make a warehouse document by using this function, it is best practice to set up the filters on the fields **Shipping Agent** and **Shipping Agent Service**. These filters will make sure that the grouping of warehouse documents is done for warehouse lines that have the same shipping agent and shipping agent service in order to correctly plan the Transport Trips.