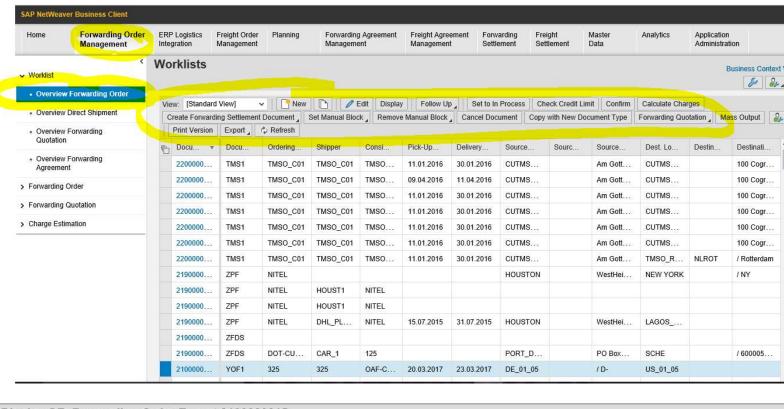
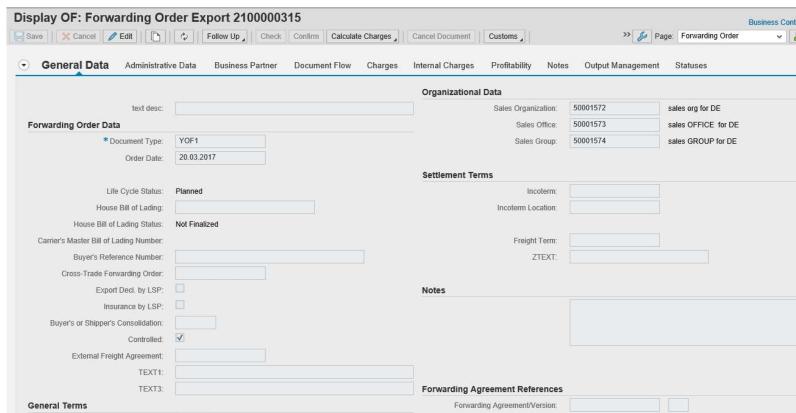
SAP TM - UNDERSTANDING FORWARDING ORDER

Forwarding Order (FWO)





Organizational Data - Sales Org is mandatory for creating Freight Unit

Settlement terms - Incoterms (LSP Scenario - Free Text, Cannot be mapped to Location / Shipper Scenario - Can Be a Location)

House Bill Of Lading - Tracking Reference of FWO (Example - Moving from Legacy to SAP, Legacy Shipment in Progress)

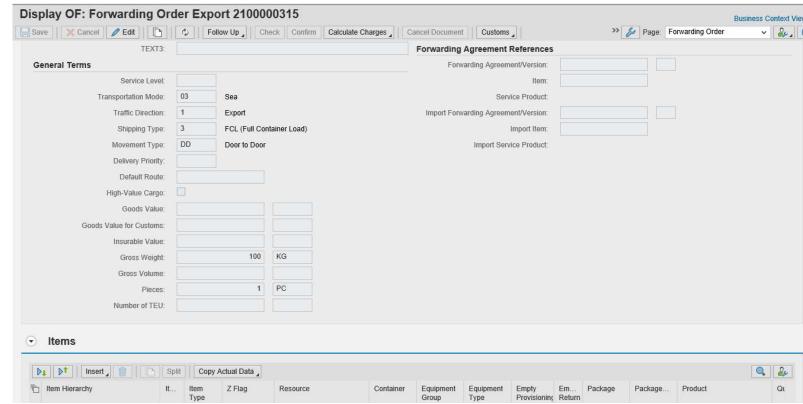
House BoL can be used as TRACKING ID in SAP EVENT MANAGEMENT for Tracking Shipment from Order' Perspective

Buyer's Reference Number - Reference Number of the SHIPPER

Export Declaration / Insurance by LSP - If SAP TM is integrated with GTS then we use this check boxes if goods being shipped needs to be declared to custom and has Insurance

Controlled (Check box) - When LSP does END TO END transportation include MAIN CARRIAGE and charges the entire cost to SHIPPER - it is controlled, but when LSP does not do the MAIN CARRIAGE and the MAIN CARRIAGE Carrier directly charges the SHIPPER, it is UNCONTROLLED

So when it is UNCONTROLLED - EXTERNAL FREIGHT AGREEMENT Number can be entered.

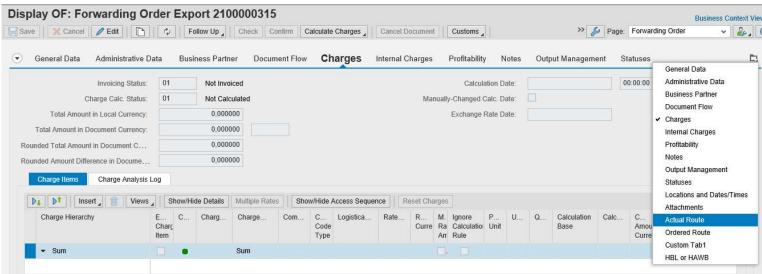


Transportation Mode / Traffic Direction / Shipping Type can be configured to be default when defining FWO Document Type

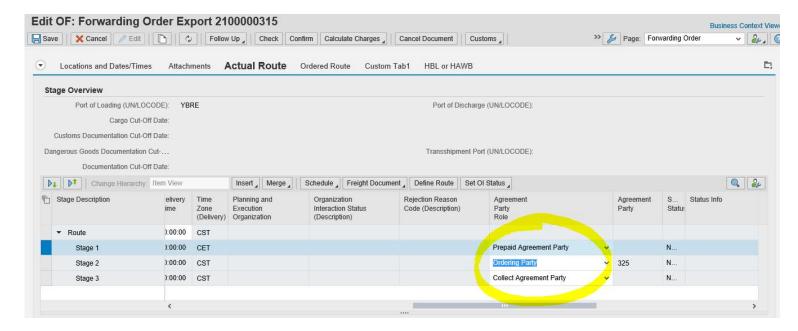
Goods Value for Customs / Goods Value - Used for Declaration

FWO Basic Config

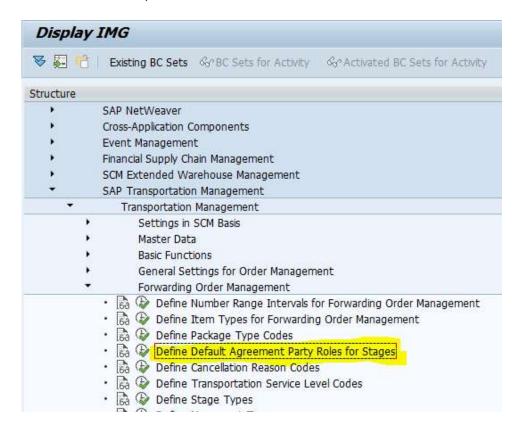




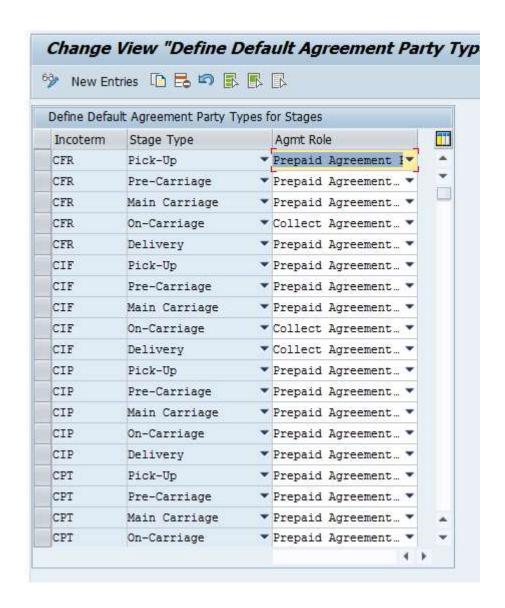
Actual Route can be determined based on INCOTERM being used- below you see 3 stages have been defined, each with its agreement party role.



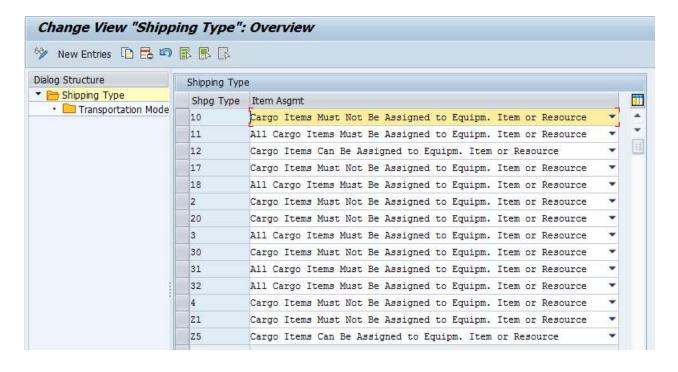
3 choices available to select from for each stage, this configuration can be done as shown below Based on the Incoterm used in FWO - stages can have agreement party role. This is not mandatory.



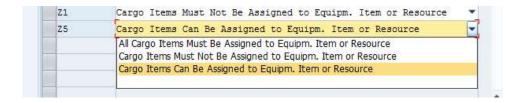
So incoterm CIF has 5 stages types and each stage type has agreement party role defined.



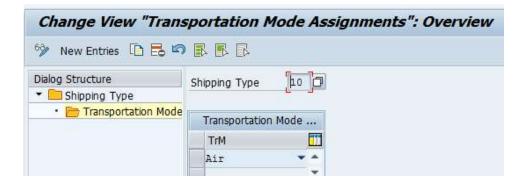
Shipping Type -->



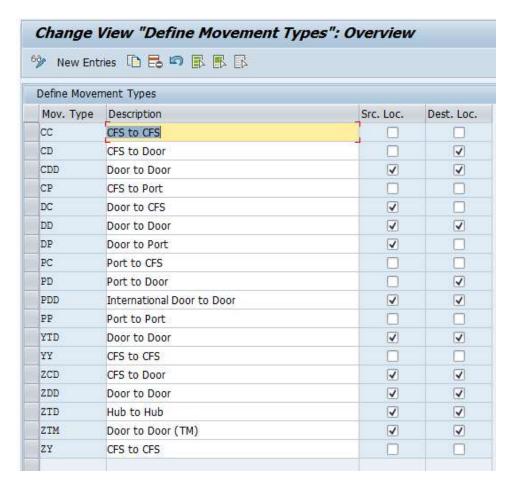
Each Shipping Type can be assigned to an ASSIGNMENT TYPE (Choice of 3 as shown below)



Each Shipping Type HAS TO BE assigned to a TRANSPORTATION MODE

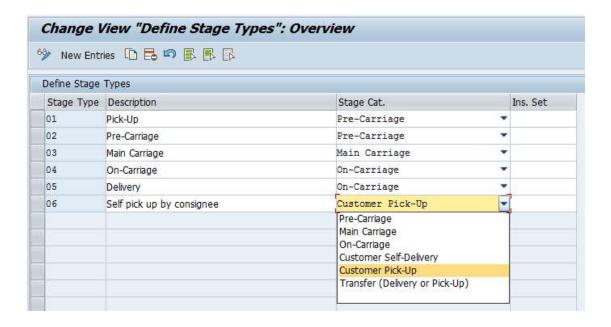


Movement Type --> Determines the ROUTING (Where-to-Where)

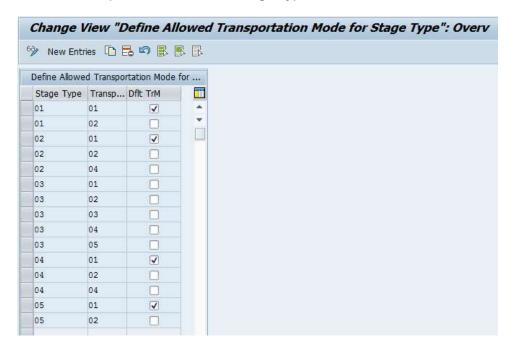


Source Location/ Destination Location - system automatically sets the (location of the shipper/location of the consignee) that you have entered as a business partner in a forwarding order or forwarding quotation as a default value for the (Source/Destination) locations of a forwarding order or forwarding quotation.

STAGE TYPE

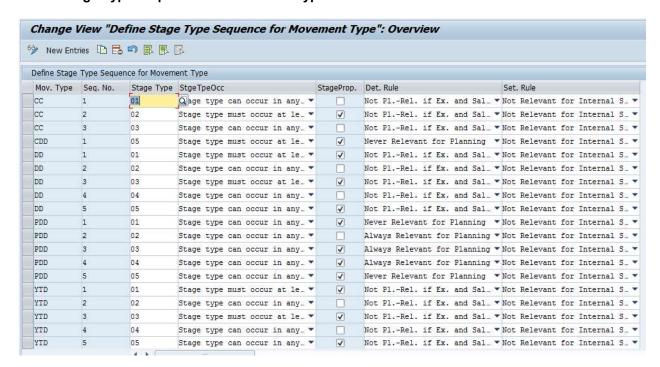


Allowed Transportation Modes for Stage Types

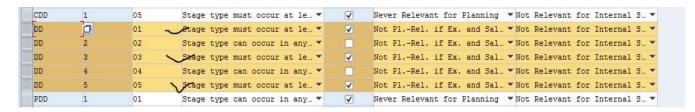


Default Transportation Mode CHECKBOX can be checked if needed Stage Type 01 (Pick-UP) can use transportation mode 01 and 02 only whereas transportation mode 01 is set as default for Stage type 01 01 - Road, 01 - Rail, 03 - Sea, etc...

Define Stage Type Sequence for Movement Type



Let's concentrate on the subset



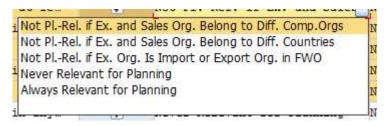
STAGE PROP checkbox - Is checked for MANDATORY STAGE TYPES that SHOULD Occur when respective Movement Type is selected

So stage type 01, 03, 05 is mandatory and 02, 04 can be elective.

Options for Determination Rule

This is to determine whether Stage is ready for planning or only statistical. In the FWO, every stage can have a PLANNING & EXECUTION ORGANIZATION UNIT (PEOU) value- in the customization of this org. unit.

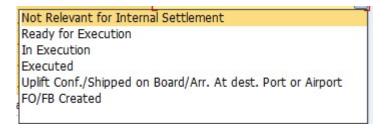
PEOU belongs to Germany and Sales Org belongs to US then 1st option is not valid and so on.....



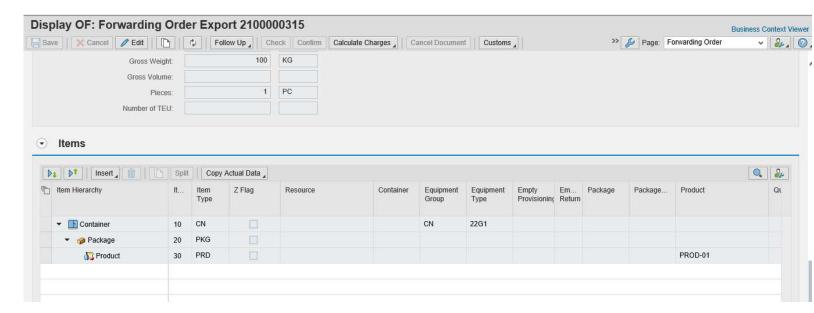
Options for Settlement Rule

Specifies at what point in time, settlement can take place

Internal Settlement - LSP has 2 entities involved in the transportation belonging to 2 different company codes (Germany, USA) then Internal Settlement is used.

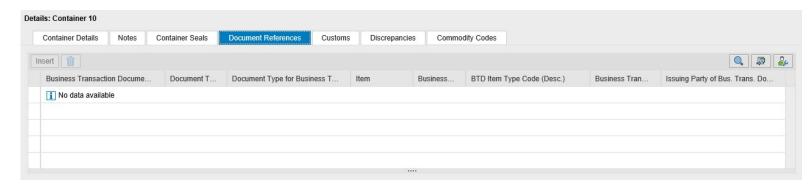


Line Items -->



Item Hierarchy - Container has Package which has a product This depends upon what hierarchy does Business follow

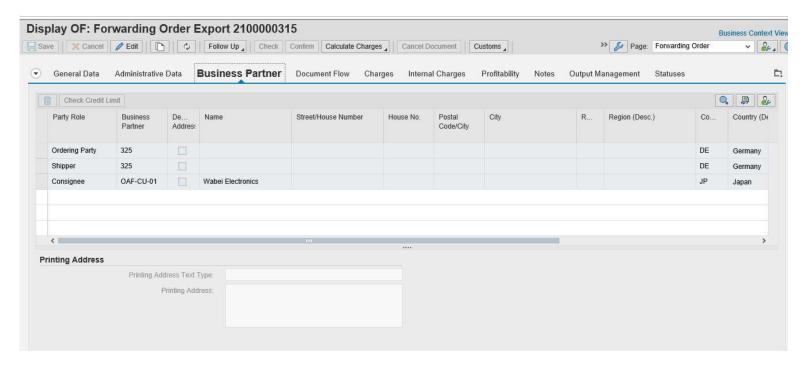
When you select a line item and double click - below screen appears



Following document reference types are available

earch: Document Type for Business Transaction lesults List: 236 results found for Document Type for Business Transaction		
Document Type	A	Description
001		Purchase Order
002		Sales Contract
003		Quote
004		Invoice
005		Credit Memo
100		Production Task
101		Product Tax Declaration
103		Project Cost Estimate
104		Planning View of Inventory
105		SAP Support Request

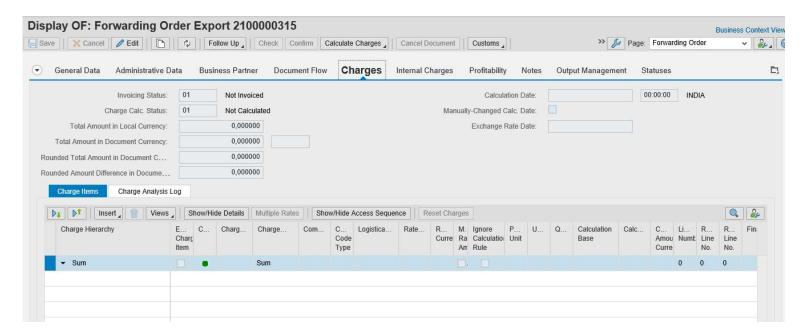
Business Partner --



Document Flow Tab is skipped - it is usual document flow that we even see in ECC

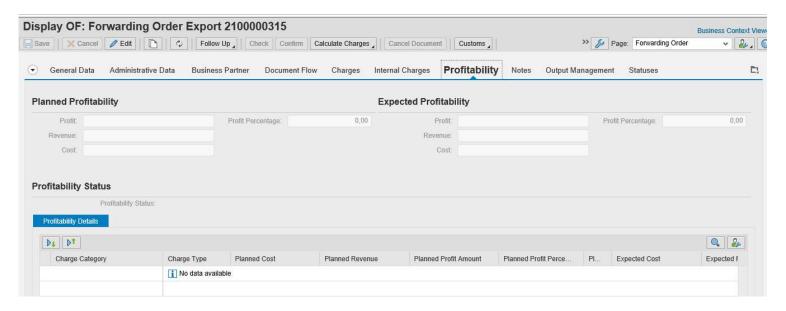
Charges

This is related to Charge Management config - explained later



PROFITABILITY - read only

Compares expected revenue against the cost



Revenue - Charge Calculation FWO

Cost - Charge Calculation Freight Order

Planned Profitability - Difference between Freight Order & Forwarding Order

Expected Profitability - Difference between Freight Settlement & Forwarding Settlement

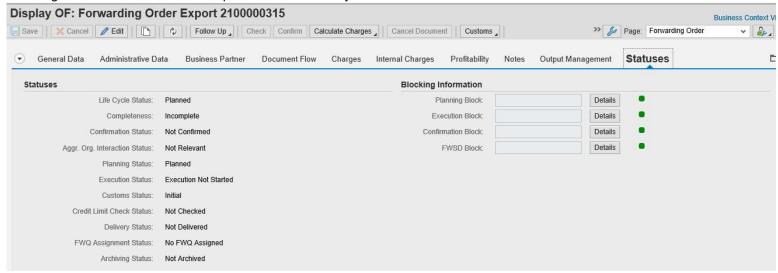
Notes - to Maintain any notes

Output Management - PPF concept is used (will be covered later).

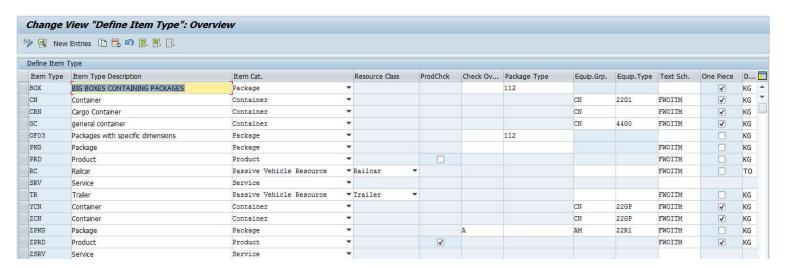
Statuses

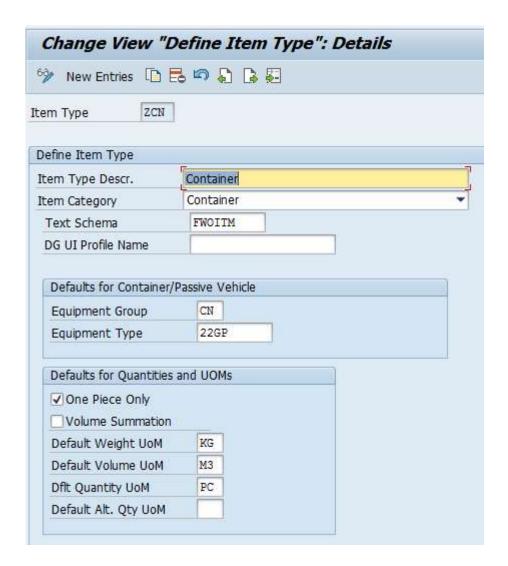
Status are automatically updated

Planning Block etc...values can be updated here manually



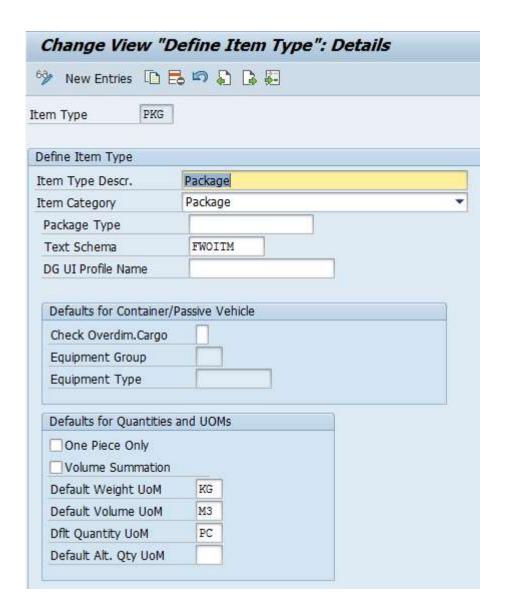
Item Hierarchy Config



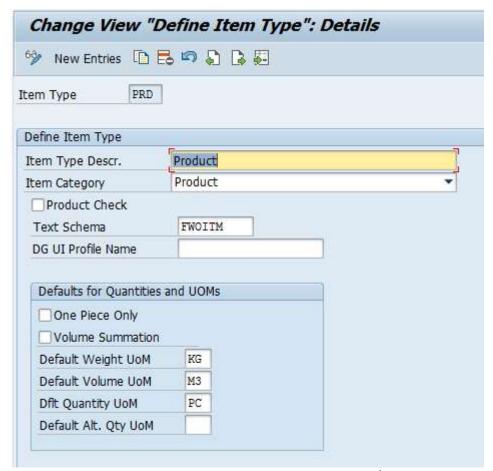


Item Type - Container

Text Schema - is defined whenever the item has any Node under it Equipment Type/Group - Specific for container ...etc Weight, Volume, etc...of container

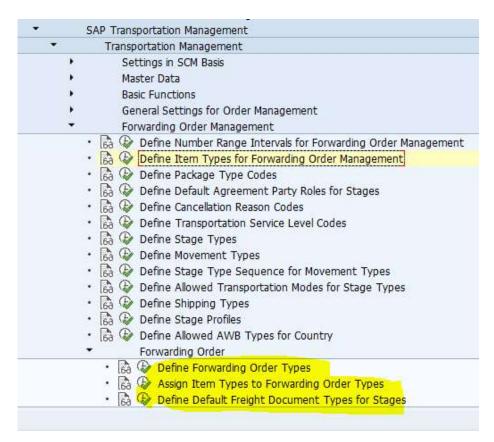


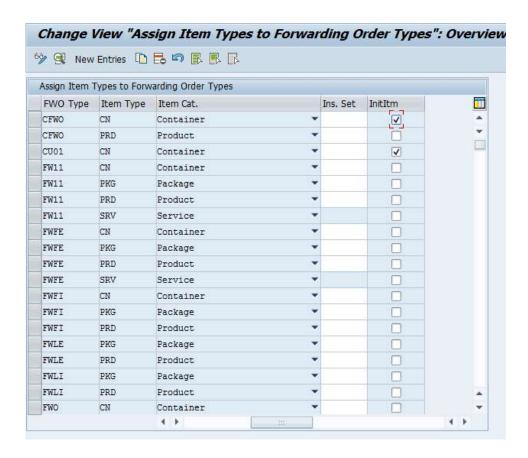
If you see - Package does not need any type of Equipment Type or Group ITEM TYPE - PACKAGE (Important)



The moment we select ITEM TYPE - Product; Equipment Type/Group option itself disappears

Assign Item Types to Forwarding Order Type

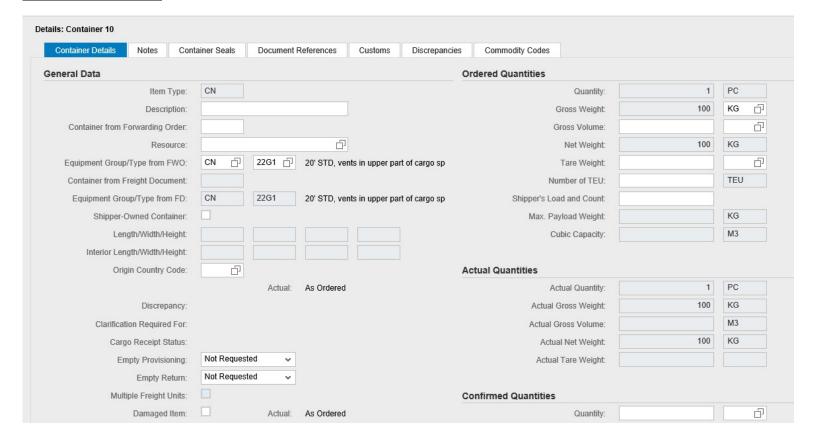




Checkbox - INIT ITEM - system enters an item of this type automatically when you manually create a forwarding order or forwarding quotation,

provided the item category and the shipping type allow this.

ITEM LEVEL DETAILS



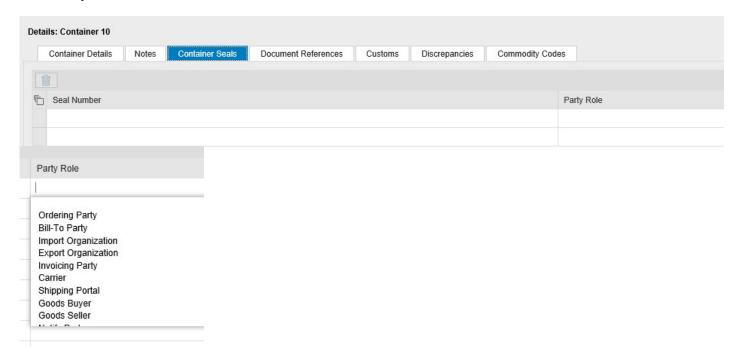
Container Details are maintained at the item level

Container Seals - if SEALING of container is involved (Stage Wise) then all the SEAL details are maintained here Notes - Specific to line items

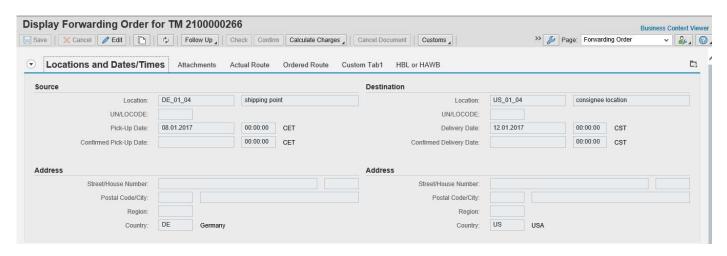
Document Reference - already discussed

Customs - customs declaration information (SAP GTS is maintained)

Commodity Codes - Same as ECC



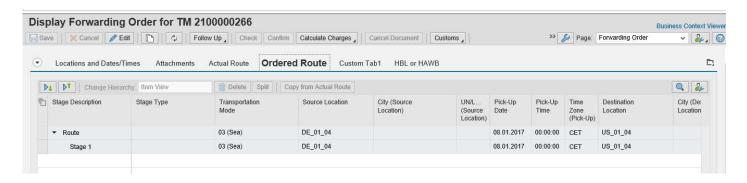
Location & Date/Times



If the (Source/Destination) Location has been assigned a Business Partner while the location was being created - then the system considers those business partners as (Shipper/Consignee) Respectively when those locations are entered

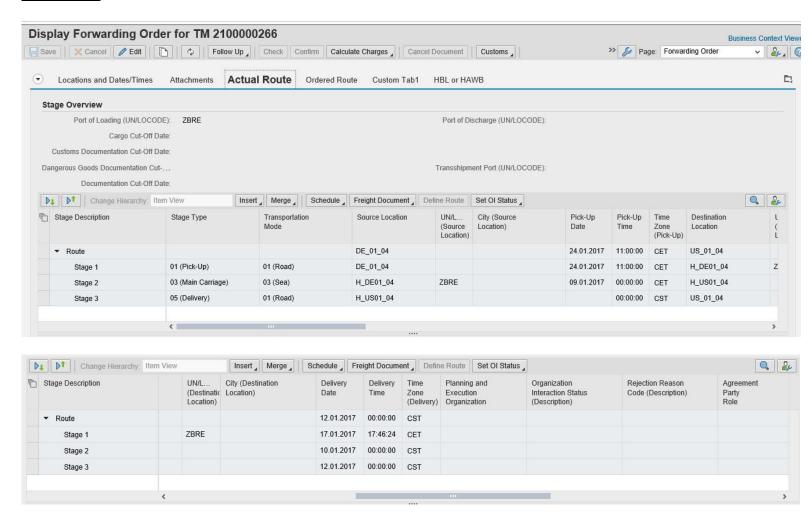
Address & UN/LOCODE comes from the Location Master data

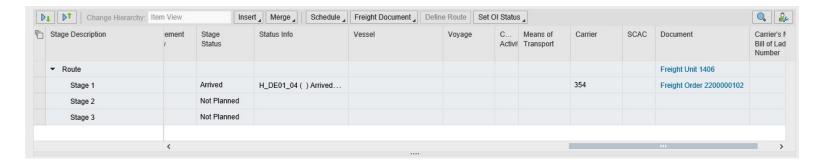
Ordered Route



Values populated in previous LOCATION/DATE/TIMES tab - is coming here in this tab
It is possible to enter Agreement Party Role, Carrier details, etc here in this tab, But it is recommended to enter those details in ACTUAL ROUTE tab.

Actual Route





The Source Location of 1st Stage and Destination Location of last stage will always be READ ONLY as they are based on the

Source/Destination Location entered on the LOCATIONS tab.

Pick-Up Date/Time is entered manually here

PEOU can also be entered here

Agreement Party Role can also be entered here

Stage Status is updated automatically by system - no manual intervention

A freight Order/Booking can be created from this tab collectively or individually.

A Schedule can be assigned to a stage

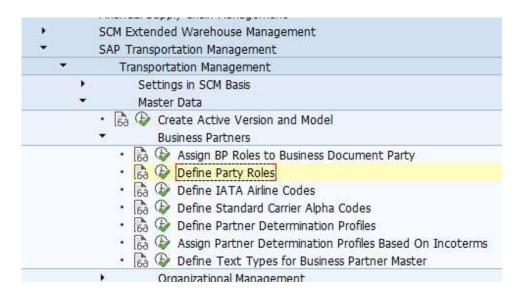
An additional stage can be inserted

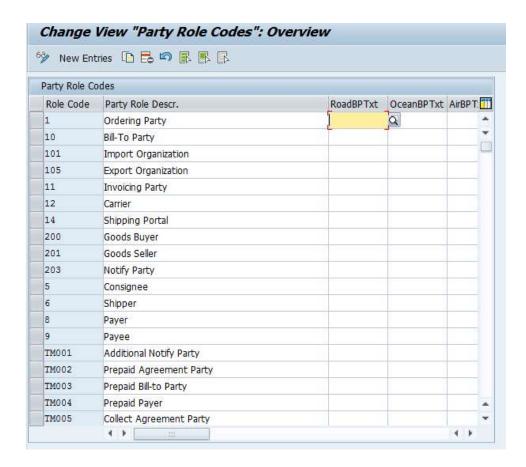
Two or more stage can be merged as well

Intermediate (Unplanned) stage can also be inserted here

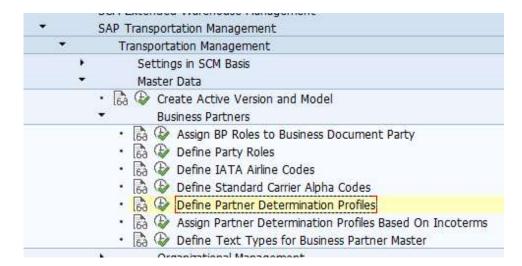
FWO can also be cancelled from here

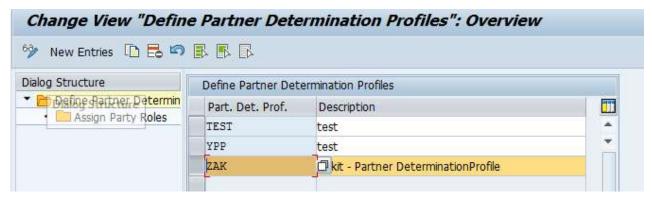
Define Party Roles

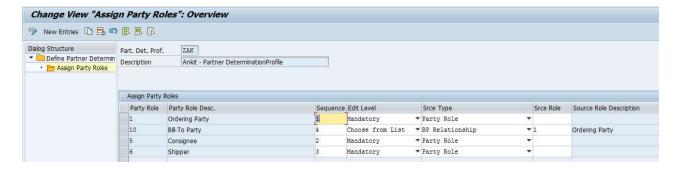




Define Partner Determination Profile







Edit Level -

- Optional
 - The system adds the party role, which you can change or delete.
- Mandatory
 - The system adds the party role, which you cannot change or delete.
- Choose from List
 - The system does not add the party role; instead you can add the party role from a list. You can change or delete the party role.

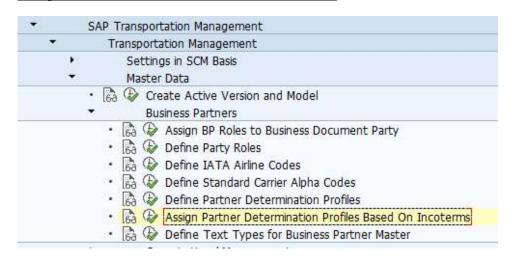
Source Type - method the system uses to automatically determine the business partner.

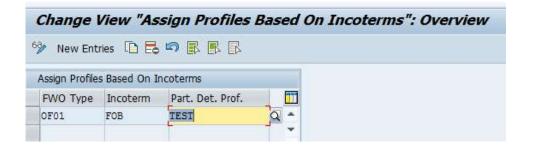
- If we enter *Party Role*, the system copies the business partner from the *Source Role* to the party role.
- If we enter **BP Relationship**, the system takes the following steps:
 - 1. Looks up the business partner associated with the source role in the business partner master data
 - 2. Checks the *Customer Partner Determination* tab page for the party role for forwarding quotations, forwarding orders, and forwarding settlements. Checks the *Vendor Partner Determination* tab page for the party role for freight bookings, freight orders, and freight settlements
 - 3. Checks that the sales or purchasing organization associated with the party role matches the sales or purchasing organization specified on the *General Data* tab page of the relevant business document
 - 4. Assigns the business partner associated with the party role to the party role in the business document
- If we enter Business Add-In, the system uses the logic we have defined in the Business Add-In BAdI
- If we enter **Business Partner**, the system assigns the business partner we have specified in Customizing to the party role in the application.

Not Modifiable CheckBox - If we select this checkbox, we cannot change the address of the business partner in the application.

If we deselect this checkbox, wecan select the *Deviating Address* checkbox in the application and change the address.

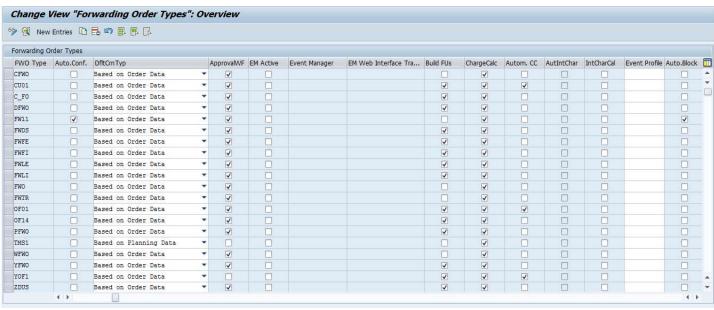
Assign Partner Determination Based on Incoterms

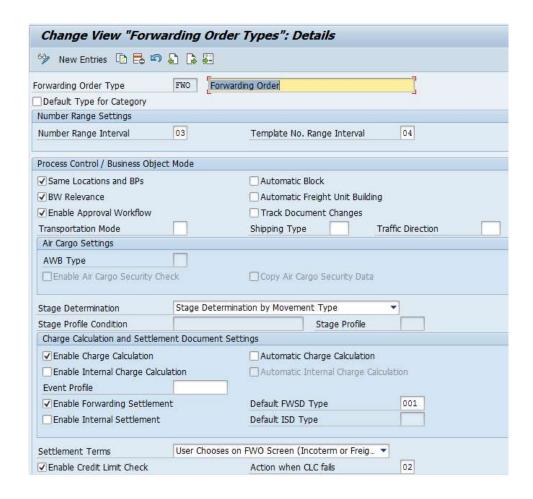




Define FWO Types







Shipping Type/Transportation Mode/Traffic Direction can be defaulted

- a) Same locations & BPs When we select this checkbox, the following data must be the same on the header and item level of an FWO or FWQ:
 - o Shipper
 - o Consignee
 - Source location
 - o Destination location
 - **BW Relevance** If you select this checkbox, the system extracts data from documents of this type (for which you have activated BW extraction) to the SAP NetWeaver BW system.
 - **c. Enable Approval Workflow -** Indicates that the approval workflow is activated. Used to trigger a workflow to get approval for further processing of business documents and master data such as agreements and rate tables.
 - **d. Automatic Block** Specifies if business documents of forwarding order management are blocked automatically. Only special creation channels are considered.
 - If this parameter is enabled, business documents that are created by EDI will be blocked.
 - e. Automatic Freight Unit Building Specifies if freight unit building is performed automatically after the system saves the business document.
 - It is recommend that you activate automatic freight unit building
 - f. Track Document Changes -Any changes to the document are tracked
 - **g. AWB Type-** this attribute specifies how forwarding orders (FWOs) are assigned to freight bookings (FBs). The AWB type applies to the main carriage of a route only.
 - Back-to-Back: When you define this AWB type for the FWO, the data is transferred to the FB, and the FB is also marked as Back-to-Back. This means that you cannot assign another FWO to this FB.
 - Direct Shipment: As with Back-to-Back, you can assign only one FWO to one FB. However, the system does not create an HAWB(house air waybills). It creates only one air waybill, that is, the MAWB(master air waybills). The FB is created automatically from the FWO when you create an FWO of the category Direct Shipment using the Direct Shipment UI. If you cancel the FWO, the FB is also canceled automatically.

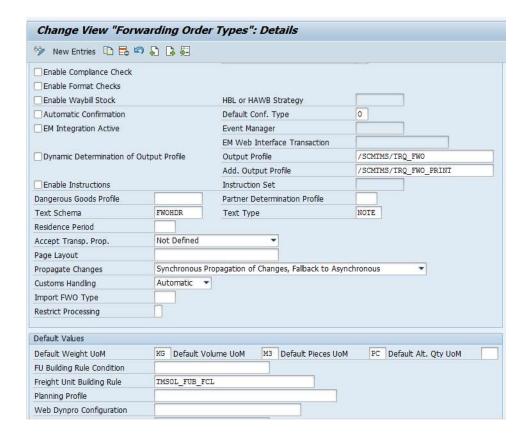
- Co-Load: This option is currently not supported.
- Normal Consolidation: You can assign several MAWBs or FBs to one HAWB or FWO and vice versa. This means that there are no restrictions concerning consolidation of FWOs to FBs.
- Enable Air Cargo Security Check Specifies whether air cargo security must be checked for a business document.

If you enable the air cargo security check, air cargo security data must be entered in the relevant business documents (that is, forwarding orders, freight units, and air freight bookings). In addition, automatic checks are activated that prevent further processing if data is missing or inconsistent. The following data is entered in the forwarding order by the user or the system:

- The regulated agent code for the sales organization is displayed on the General Data tab page.
- The Air Cargo Security tab page in the forwarding order contains the following data:
 - Air cargo security data for the cargo handover party: This comprises the <u>security status</u> of the cargo handover party, the <u>cargo handover party code</u>, and the <u>expiry date</u> of the security status.
 - Known shipper details: This shows the <u>date</u> as of which you have known the shipper and whether you have <u>known the shipper long enough</u>.
 - Air cargo security status and country-specific security status
- Copy Air Cargo Security Data- Specifies whether air cargo security (ACS) data is copied to the document. If you select this checkbox, the system copies the following data from the master data for the pick-up location or business partner to the document and displays it on the Air Cargo Security tab page:
 - Security Status of Cargo Handover Party
 - Cargo Handover Party Code
 - Expiry Date
- Enable Charge/(Internal Charge) Calculation Specifies whether the charge/(internal charge) calculation is active for forwarding order business documents.
- **k. Automatic Charge/(Internal Charge) Calculation** Specifies whether (internal) transportation charges for business documents involving forwarding orders or forwarding quotations are calculated automatically.
- I. Enable Forwarding/Internal Settlement specifies whether the (Internal)settlement process is active for forwarding orders.
- m. **Default ISD/FWSD Type-** Specifies the type of the internal/forwarding settlement document (ISD/FWSD type) that is created from the forwarding order
- n. Credit Limit Check if enabled, which action the system takes if the credit limit check fails.

The following options are available:

- The result of the credit limit check process is used as a warning only. No further action is taken by the system.
- The forwarding order is blocked by the system for follow-up processes.
- **Stage Determination-** Defines whether the system is to create freight unit stages based on the movement type or the stage profile.



p. Enable Way Bill Stock - Specifies whether the waybill stock function is available for forwarding orders.

You have the following options for enabling or disabling the waybill stock function:

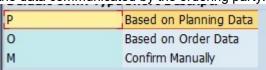
- If you select this checkbox, the system enables the waybill stock function. This provides you with the following features:
 - If the waybill number range is marked as an external number range, you can enter a waybill number manually on the user interface (UI) of a forwarding order. A waybill number includes a house air waybill (HAWB) number for air forwarding orders, or a house bill of lading (HBL) number for ocean forwarding orders. The system validates the waybill numbers you enter against the waybill stock.
 - If the waybill number range is marked as an internal number range, you can draw a waybill number from the waybill stock.

You can also specify a strategy for building HAWBs or HBLs. If you do not specify a strategy, the system uses the default strategy.

- If you deselect this checkbox, you can only enter a waybill number on the forwarding order UI
 manually. You cannot draw the next number from the waybill stock. The system does not validate
 manually entered waybill numbers against the waybill stock.
- Automatic Confirmation Specifies if forwarding orders are confirmed automatically.

If you select this checkbox, forwarding orders of this type will be confirmed automatically after creation. This means that if you save a forwarding order of this type, it is automatically confirmed and the confirmation will be sent to the ordering party.

In this Customizing activity, you can also specify the default type of confirmation. You can specify whether the forwarding order of this type is confirmed based on the data of a planning run or based on the data communicated by the ordering party.



r. Text Schema - You can select a text schema that you have defined in Customizing. The text schema determines the types of text that you can choose for creating notes on the *Notes* tab page of the business document UI in SAP NetWeaver Business Client. It also determines certain attributes of the text for a note, for

- example, if a note is mandatory for this type of business document, or whether or not a note text is language-dependent.
- s. Residence Period Describes the minimum time in days between the completion date of a business object instance and the date the business object instance is allowed to be archived. Typically, the completion date is the date when the lifecycle status has been set to Completed or Canceled
- t. Accept Transport Proposal- When creating or editing a forwarding order in SAP NetWeaver Business Client, you can let the system determine a transportation route. In doing so, the system determines several alternative routes for each freight unit, one of which you can then accept.

In this field, you have the following options. Thus, you can specify if you have the corresponding options on the forwarding order UI:

- Save Route Only: Only the freight units are saved when the system takes over the route that you have chosen.
- Save Route and Freight Documents: Freight units and freight documents (freight orders or freight bookings) are saved by the system.
- Not Defined: You have both options on the forwarding oder UI.
- **Propogate Changes-** Defines the type of the change propagation.

You use the different types to specify the behavior of the business documents with respect to the propagation of changes to successor business documents.

You can define the following types of change propagation:

- Synchronous
 - The system propagates changes to the successor documents immediately after the change of the business documents. In case of lock issues, the changes cannot be propagated to successor documents and the system issues an error message.
- Asynchronous
 - The system propagates changes to the successor documents after a specific time. In case of lock issues, the propagation is restarted automatically after a specific time until the changes to the successor documents can be propagated successfully.
- Synchronous with fallback to asynchronous propagation of changes
 The system first tries to propagate the changes to the successor documents immediately after the change of the business documents. In case of lock issues, the changes are propagated asynchronously.

Asynchronous change propagation

You create a forwarding order with freight unit 1 and freight unit 2. The life cycle status is *Planned*. You can open the forwarding order document and change the items within both of the freight units, for example due to dangerous goods error messages. In case the freight units are processed in another process, the system locks them. However, you still can make your changes. The system later processes the changes in the background and updates the freight units.

• **Restrict Processing-** Defines whether the forwarding order is relevant for processes such as planning and execution.

You have the following options:

- Restricted Processing: The system automatically blocks planning and execution for the forwarding order.
- Unrestricted Processing: The system does not block any processes.