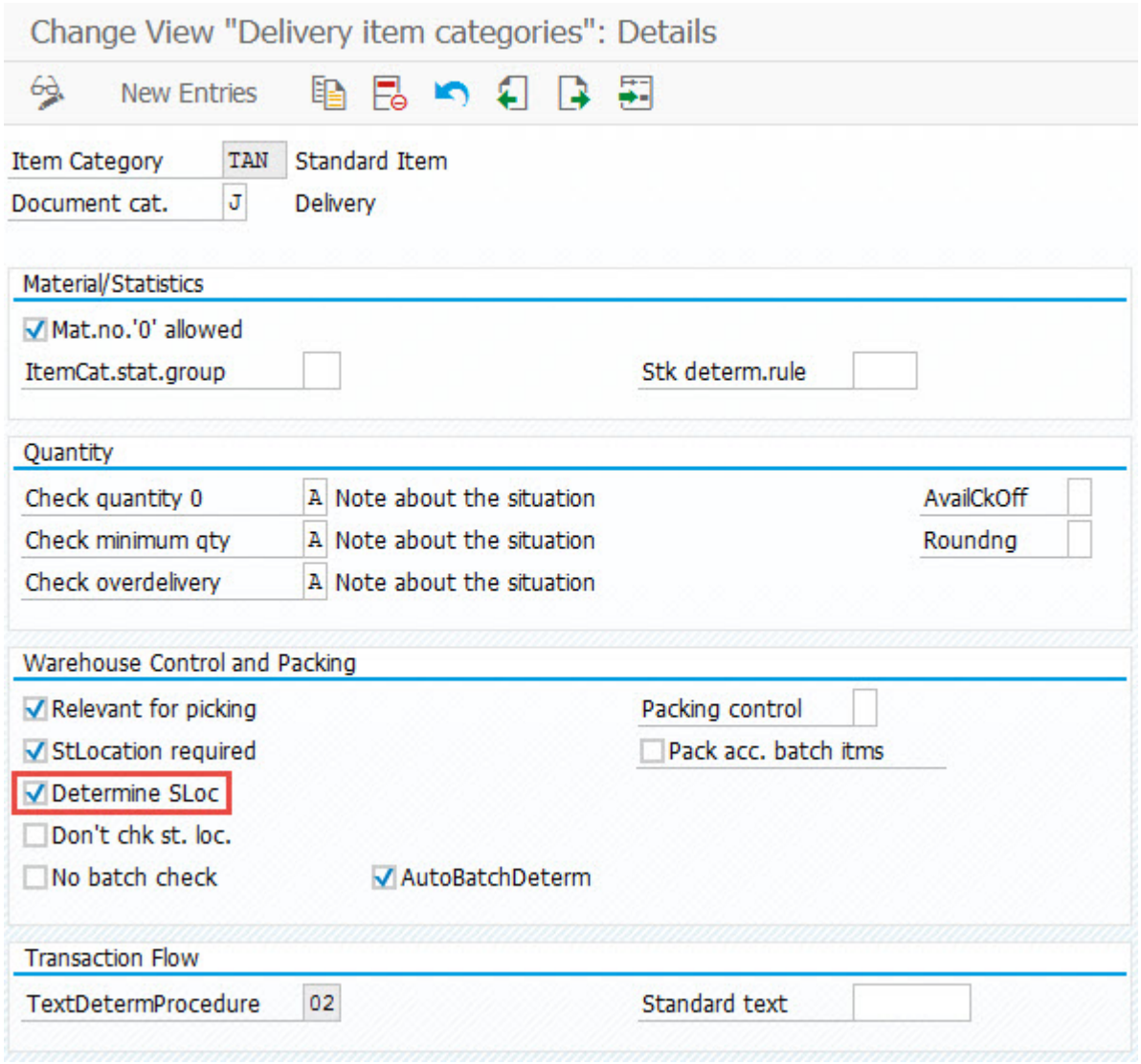
Storage Location Determination in Outbound Deliveries

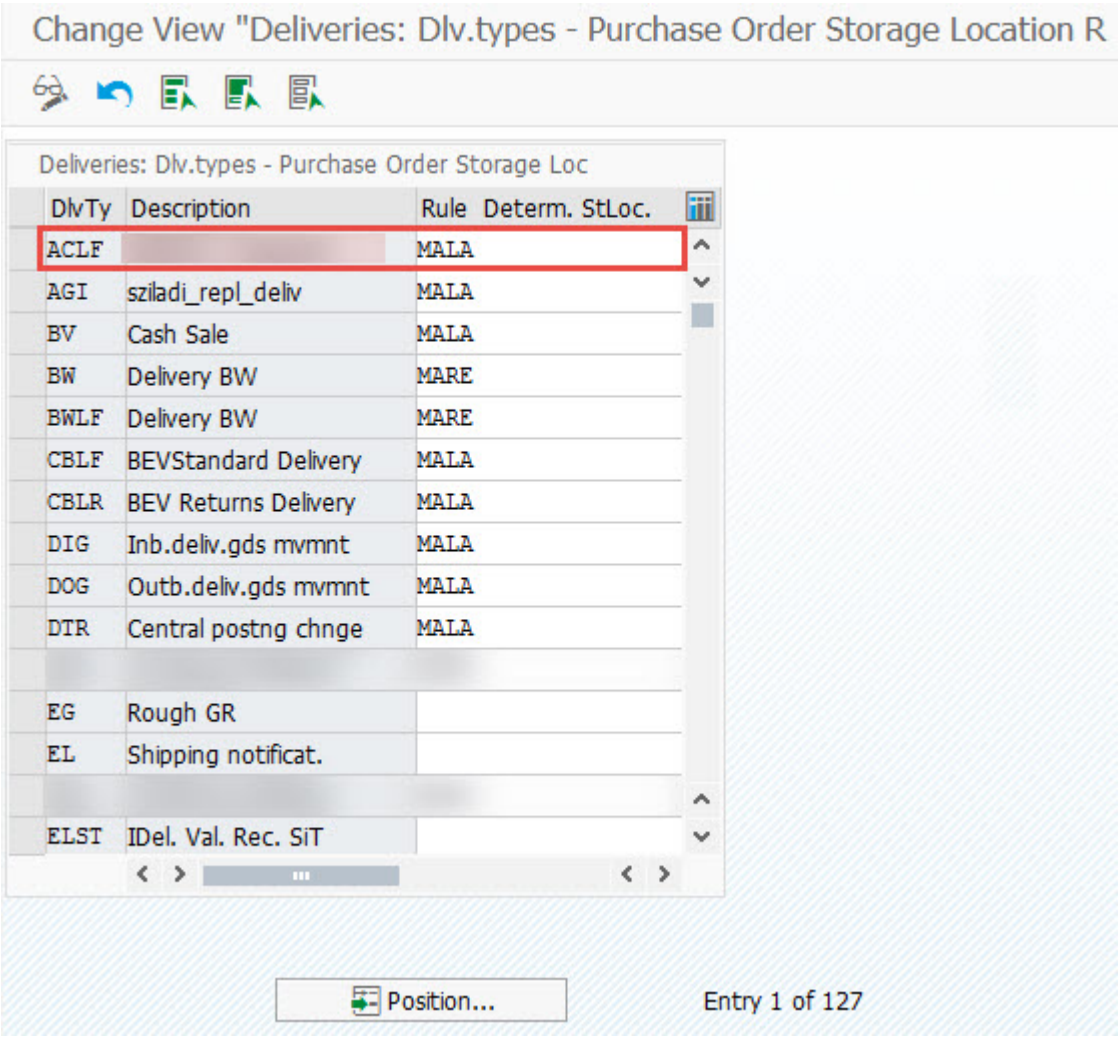
Storage location is an important parameter which has a significant role in availability check. It is important to know the relevant customizing settings, so please go through the below mentioned information and set up your system accordingly.

Customizing
In the standard ERP system, in order to have a storage location determination in outbound deliveries:

- storage location determination must be activated for the relevant delivery item category in *SPRO → Logistics Execution → Shipping → Picking → Determine Picking Location → Assign Picking Location* (transaction 0VLP)



- AND a determination rule must be assigned for the relevant delivery type in *SPRO → Logistics Execution → Shipping → Picking → Determine Picking Location → Define Rules for Picking Location Determination*.



There are three standard determination rules that can be used: MALA, RETA, and MARE.

Let’s take a closer look on the above mentioned rules.

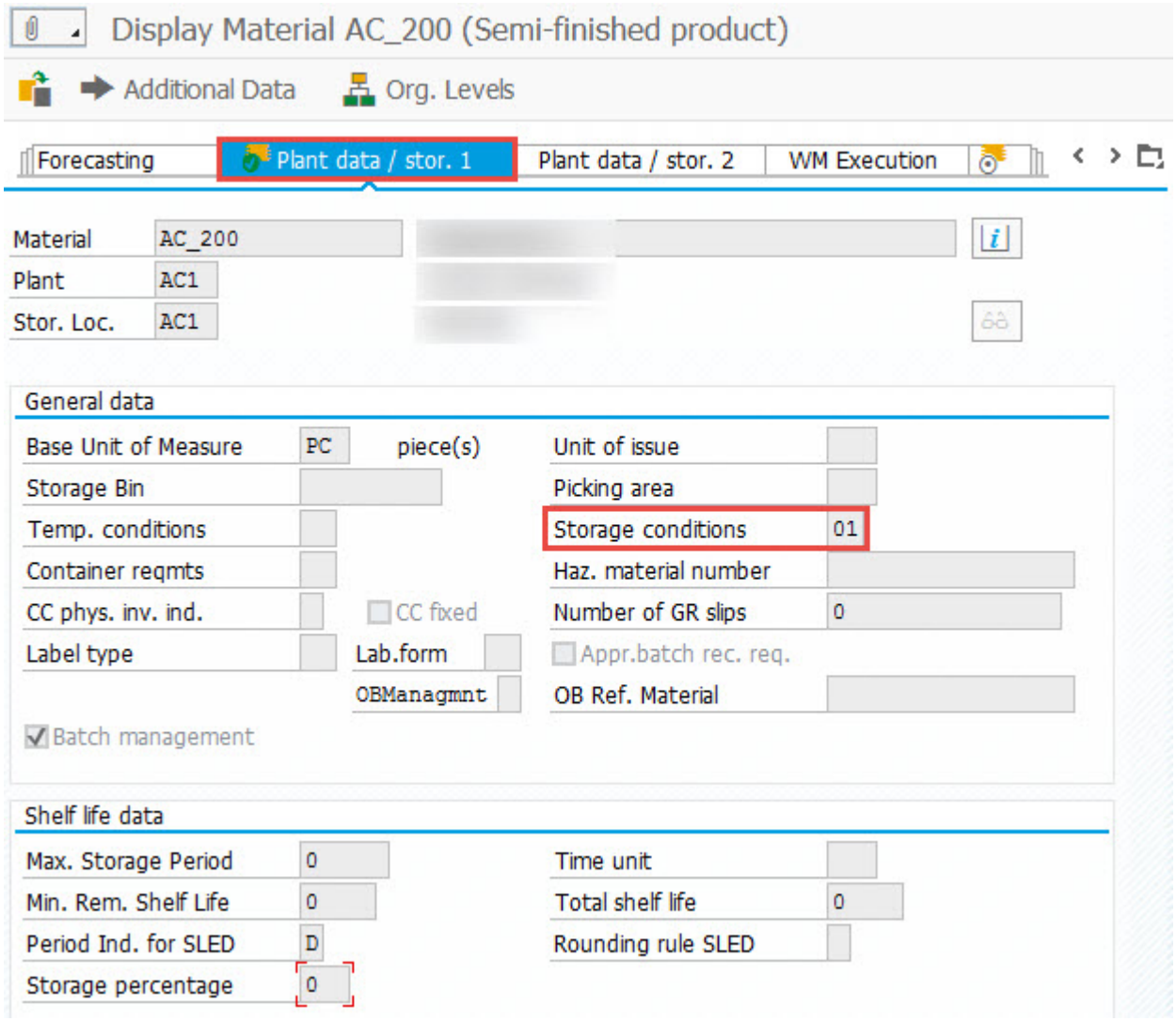
In case of rule MALA, the system determines a storage location based on:

– the shipping point,

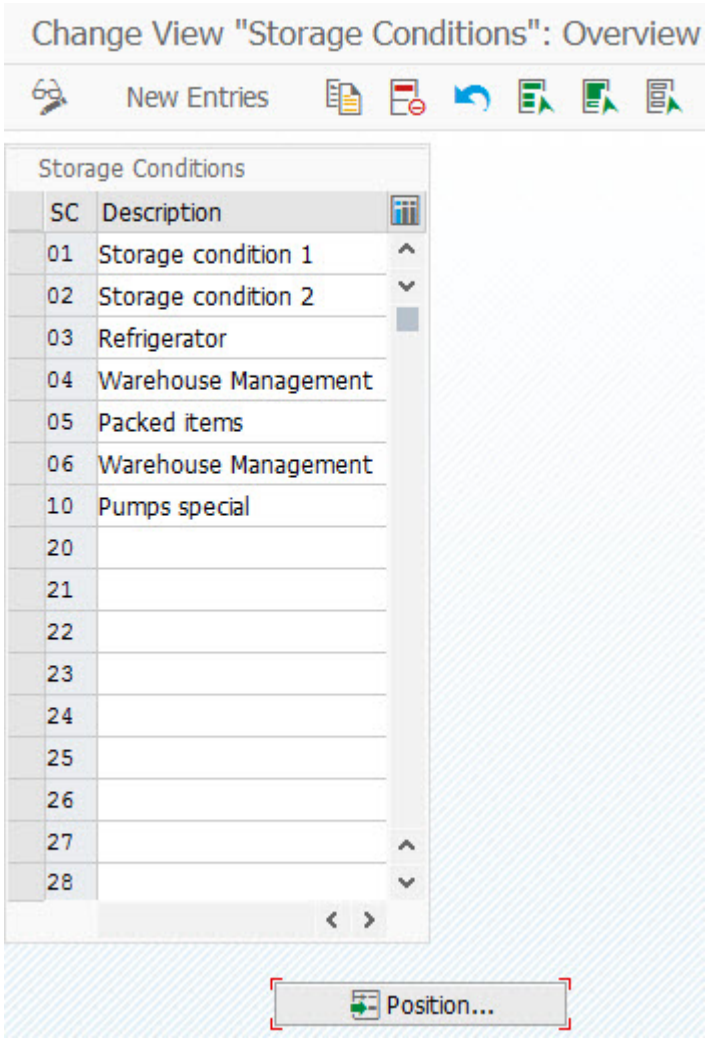
– the delivering plant,

– and the storage condition.

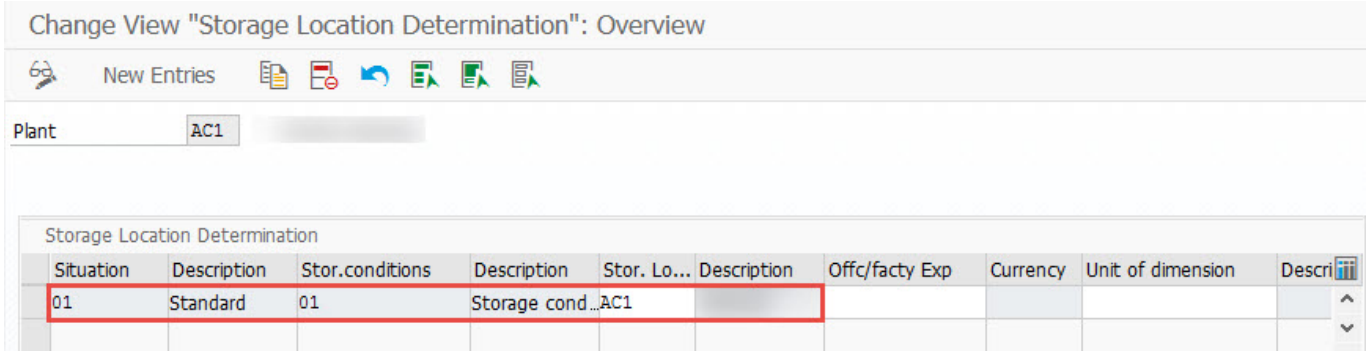
The shipping point and the plant are very straightforward, these data are (mostly) copied from the predecessor document (for which the delivery note is being created). The storage condition can be maintained in the material master, on the ‘Plant data / stor. 1‘ tab.



Please be aware that the ‘Plant data / stor. 1‘ tab will not be accessible until you specify the plant AND the storage location when entering transaction MM02. Storage conditions can be created under *SPRO → Logistics Execution → Shipping → Picking → Determine Picking Location → Define Storage Conditions*.

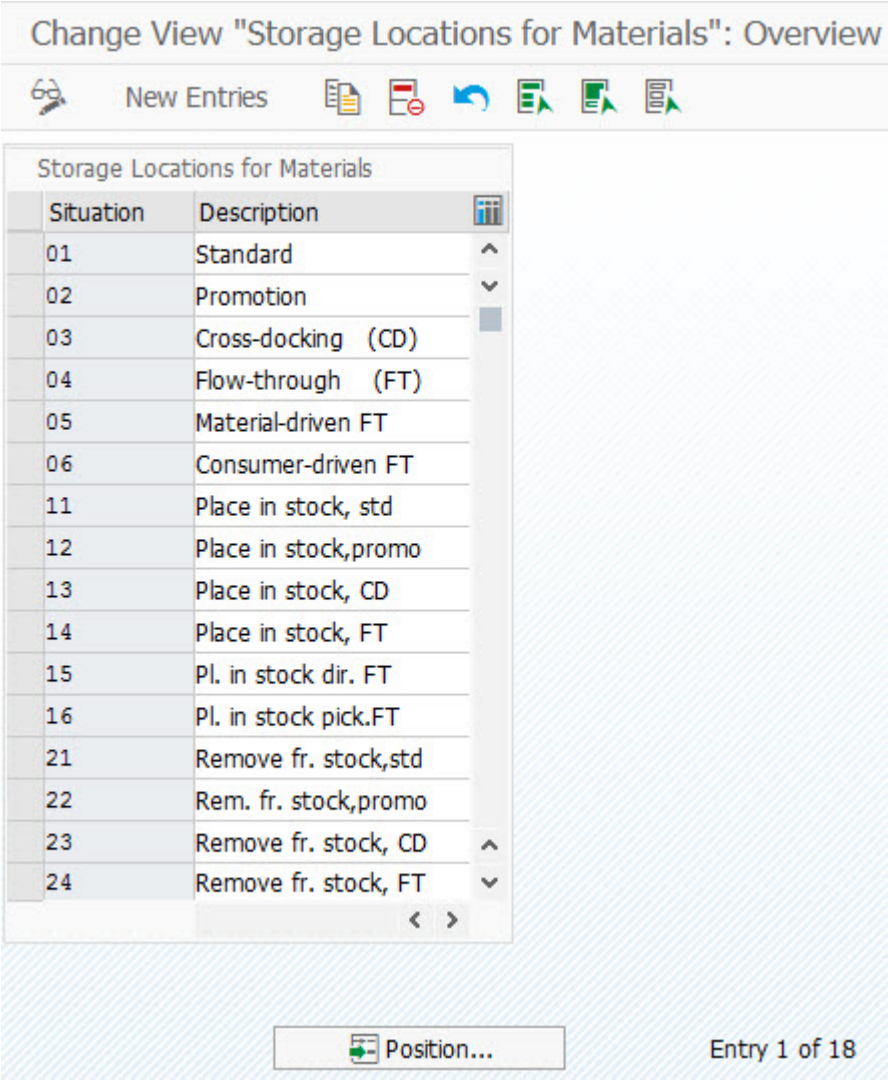


In case of rule RETA, the system determines a storage location based on:
– the delivering plant,
– the situation,
– and the storage condition.
The situation can be assigned under *SPRO → Logistics Execution → Shipping → Picking → Determine Picking Location → Storage Location Determination with Situation*.



If you want to define a new situation, you can do so under *SPRO → Logistics Execution → Shipping → Picking → Determine Picking Location → Define*

Situations.



In case of rule MARE, the system chooses rule MALA first, and if the predetermined storage location cannot be applied (like for instance the respective material is not created / maintained for the concerned storage location, or there is no storage location determined in transaction OVL3), it switches to rule RETA. If there is no storage location maintained for the combination of plant / situation / storage condition, storage location determination will not give back any storage location and the delivery document will be created without this parameter.

Remarks

Please note that if the predecessor document already contains a storage location, this storage location will simply be copied into the delivery document, so storage location determination will not be carried out.

Also, storage location determination in sales documents is not possible in the standard ERP system. If you want storage location to be determined for a sales document then you have to implement your own system logic in a user exit. SAP

recommends to use USEREXIT_SOURCE_DETERMINATION in include MV45AFZB. From a technical point of view, it is possible to use USEREXIT_MOVE_FIELD_TO_VBAP (include MV45AFZZ), but this user exit is not recommended to carry out a storage location determination. Using this user exit for a storage location determination can lead to problems / inconsistencies. Please consider SAP Note 387482.

Related SAP Notes / KBAs
1513607 – Error message VL150 'Only & & of material & & available' is raised while creating a delivery
2229827 – How to debug
2219495 – Debugging guide ERP ATP check
387482 – MRP areas and storage location determination in user exit