



Temadag – Grunndata

Dette er en noe redusert versjon av presentasjoner benyttet for temadager ifm. grunndata og artikler 24.01-25.01.2019. Det er ikke et komplett verk med all informasjon om artikler. Den inneholder generelle anbefalinger fra presentatørene, som selvsagt ikke vil være gjeldende for alle selskap og organisasjoner i alle situasjoner. Presentasjonen deles med hensikt at deltakerne får støtte til å huske aktuelle temaer fra dagene, og også utforske fagområdet ytterligere.

Med andre ord tas det forbehold om mangler og feil, og vi legger inn en påminnelse om at innhold er basert på en umodifisert single-tenant Cloud løsning med Infor OS og M3 13.4.



Atle Feldt & Trond Anton Bukholm
JANUAR 2019



Day 1 Basic data for items

01

**Organization &
Strategy**
09:30 – 10:45

04

Framework parameters
12:45 – 14:00

02

Process & Tools
11:15 – 12:00

05

Parameters for items
14:15 – 16:00

03

Lunch
12:00 – 12:45

06

**Incidents and their
common source**
Final topic

Day 2 Basic data for items

01

**Ordering & Warehousing
parameters**
09:00 – 10:30

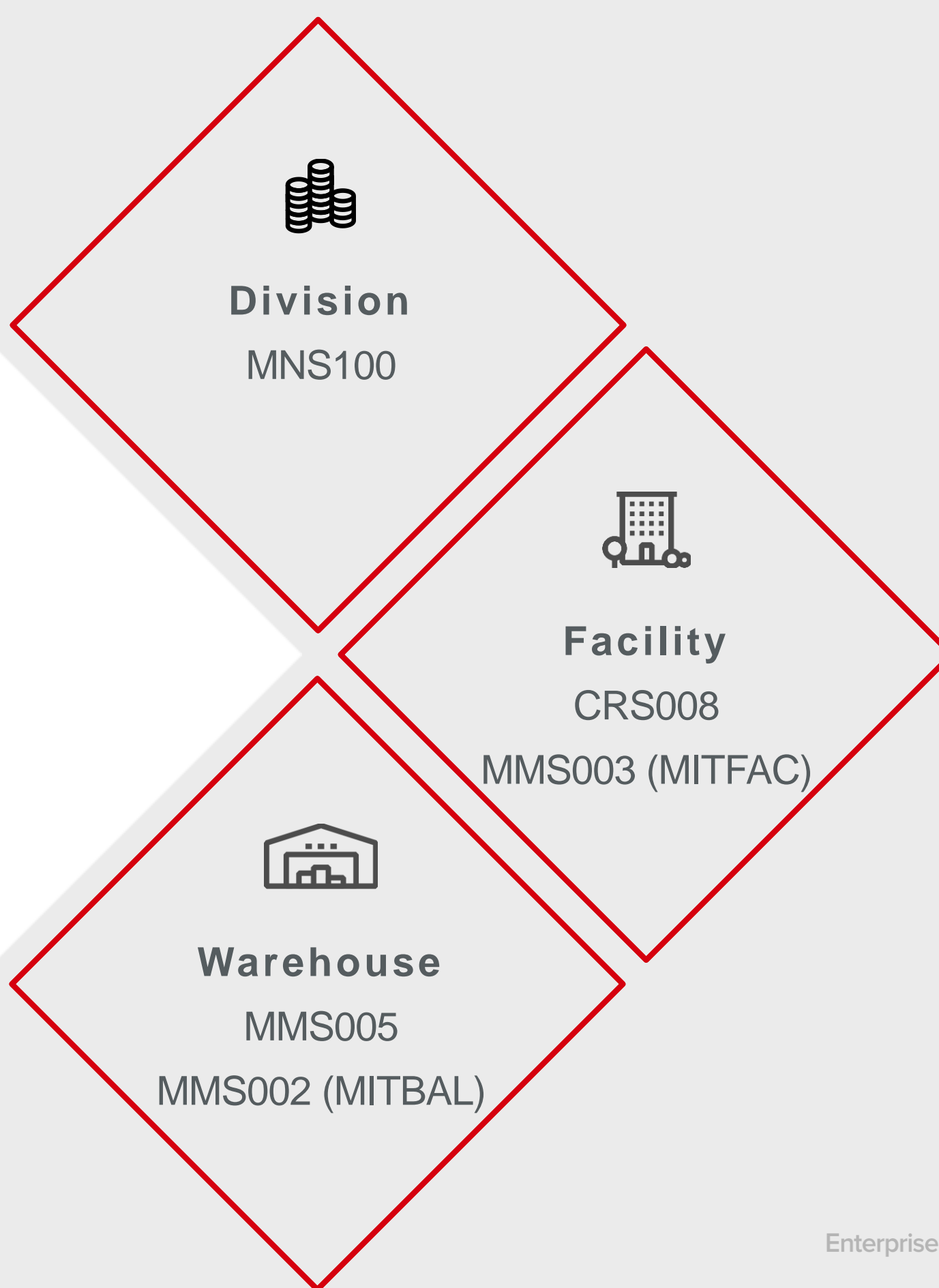
02

**Facility parameters
and reflection**
10:45 – 12:00

SECTION 01

Organization & Strategy

Company & item structure in MMS001 (MITMAS)



MMS001

Parameters important for the organization:

- ✓ Responsible + Planner & Buyer
- ✓ Item type
- ✓ Item group, procurement group, product group
- ✓ Basic U/M
- ✓ Inventory accounting
- ✓ Lot numbering

Item resp	<input type="text" value=""/>	Data
Item type	100	<input type="text" value=""/>
Item group	RENTAL	Rental items
Product group	<input type="text" value=""/>	n/a
Acc control obj	30000	<input type="text" value=""/>
Business area	CON	<input type="text" value=""/>
Revision no	<input type="text" value=""/>	
Inv accounting	1-Inv accounting ▼	
Lot ctrl method	2-Lot no.=Ser no ▼	
Lot numb method	0-Manual entry ▼	

Considerations

There are many other areas to consider at an organizational and strategic level

- ▲ **Naming policy**
- ▲ **Standardization vs. specialization**
- ▲ **Technical vs. practical**
- ▲ **Effectiveness vs. bureaucracy in the processes**
- ▲ **Who to include in the basic data processes**

SECTION 02

Process & Tools



Steps to create the process

- ▲ Assign resources
- ▲ Map items
- ▲ Assign responsibility
- ▲ Make templates
- ▲ Manage access
- ▲ Consider the end user
- ▲ Define the workflow

Assign resources

Before any successful work with items is performed, consider:

- ⊙ Budget: Internal vs. external resources costs to be considered.
- ⊙ Time: What is the timeline, stages and milestones?
- ⊙ People: How to free up time for the involved employees?

Having resources assigned enables opportunity to:

- ⊙ Improve the quality of existing basic data
- ⊙ Improve the process for managing basic data
- ⊙ Define goals, plan activities and make decisions

Map items

Mapping your existing items and potential future requirements is important.

- ⊙ Ensure that you have a good overview of existing items per item type, group.
- ⊙ Consider if any business processes require changes in the high level parameters.
- ⊙ Set general goals with regards to how many item types and groups that are necessary.

Assign responsibility

Responsibility need to be assigned, and a RACI matrix may be a good tool.

- ⊙ RACI is short for Responsible, Accountable, Consulted and Informed.
- ⊙ These letters are typically mapped against functions (or directly to named person) in a table.
- ⊙ For large companies, assigning responsibility towards functions may be smart, as a large company may have a group function for finance and also have finance responsible people in different divisions and further mapping may be performed in an organization matrix.

		RACI		
Number series	Description	Finance	Commercial	Operation
Item type 000-500	Sales items	AC	R	I
Item type 600-800	Consumables	RA	I	C
Item type 900	Services	C	I	RA
Organization Matrix		Finance	Commercial	Operation
Process owner		Per	Pål	Liv
Process specialist Sweden		Ola	Siri	Jon
Process specialist Norway		Hans	Mari	Atle

Make templates

It is highly recommended to always use item templates when creating new items

- ⊙ Remember that the template items needs to exist in both MMS001, MMS002 and MMS003.
- ⊙ Templates are defined the same way items are, only that their status is set to 05.
- ⊙ Automatic creation of the item is triggered by item type settings in CRS040/F “Item copying”.
- ⊙ In order to make best use of templates make sure that you decide which fields in the panels that should be fixed for items using the template and which are variable.

Manage access

Role based security..

- ☑ Only a few users should have access to programs defining item type and various groups.
- ☑ In MMS001-003 however, most users may have Display access
- ☑ Lock fixed fields set on item templates for most users
- ☑ The Infocenter contains information on programs that are used to manage program and field access.
- ☑ In Infor OS, administering personalizations has been made very easy. Use and share personalizations to highlight variable and Mandatory fields.

The image shows a composite of two screenshots. The top screenshot is from the Infor Documentation Infocenter, displaying search results for 'security'. It lists 51 matches in all topics, with 'Field Access Security' highlighted. The right pane shows the content for 'Field Access Security', explaining that field security allows for finer control over user access to individual fields compared to function security. It details how field groups are used to control access and lists access levels (0, 1, 2) for displaying and changing field contents. An important note states that field security control 3 (mandatory fields) is not part of the field-level security concept. The bottom screenshot shows the Infor OS interface. The left sidebar lists 'Administration Tools' as a category. The main content area shows a 'Personalizations' screen with a table for defining field access. The table has columns for 'Context', 'Global', 'Role', 'User', and 'Program'. The 'Context' column contains '(A)'. The table is currently empty. Below the table, it shows 'Displaying: 1 - 4 of 4' and 'Selected: 0'. On the right side of the table, there are buttons for 'Import...', 'Copy To...', 'Merge To...', 'Delete...', and 'Export'.

Consider the end user

Guidelines for the end users are necessary

- ☑ Make it easy for certain users to view & create items using personalizations.
- ☑ Make guidelines on how to name the items.
- ☑ Make good filters and searches for the end users so that it becomes as simple as possible to find the correct existing items.
- ☑ Color coding fields to provide information about what the field affects may be a good idea. This can be done by setting a conditional style that “Never happens” for a field and choosing that “if it doesn’t happen, color code the field.” All variable fields in panels could for example have one color.
- ☑ Hide unused fields & add help text to hyperlinks.

Define the workflow

Example:

After structuring a workflow each step may be assigned to various roles.

Soon you will know:

- ☑ What
- ☑ When
- ☑ Where
- ☑ Who

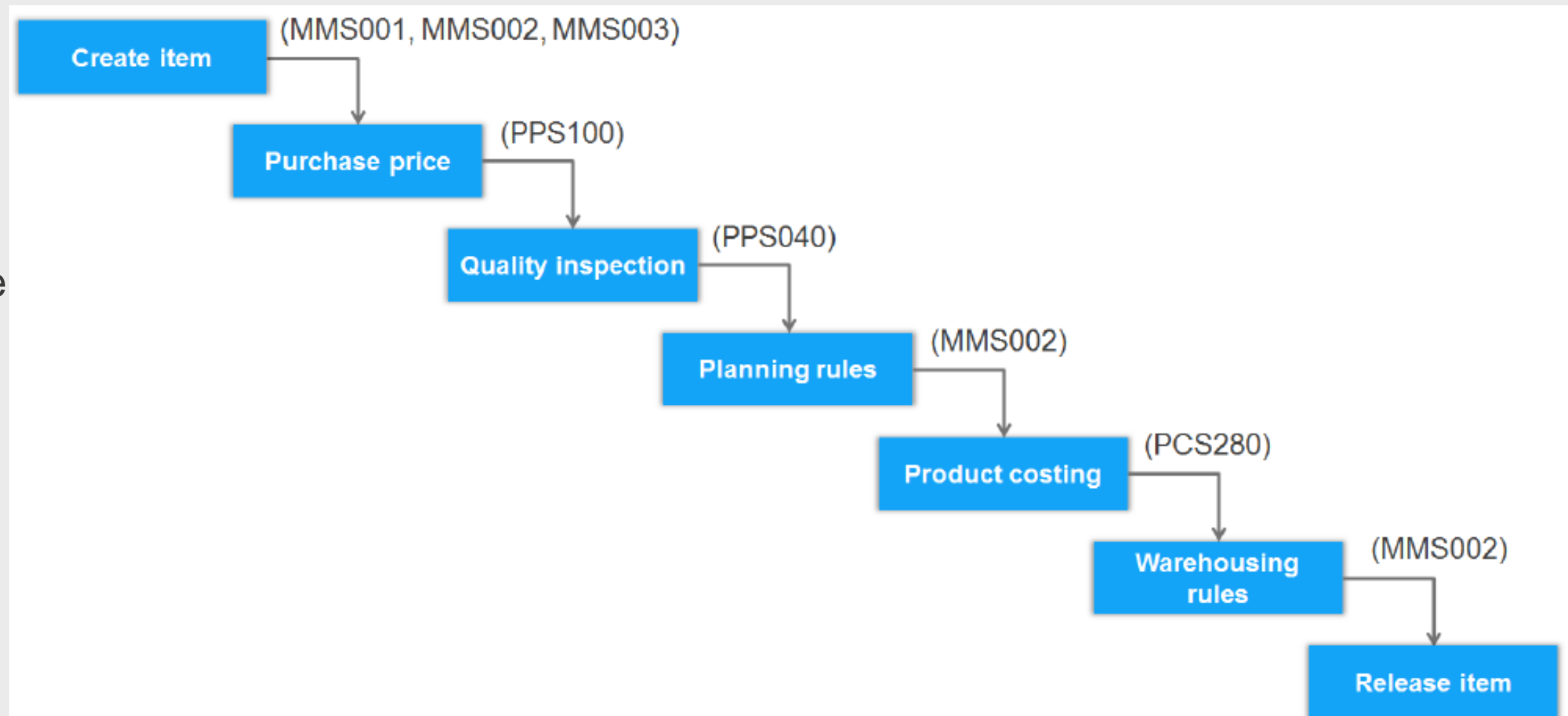


Illustration: Establishing purchased item (saddle)

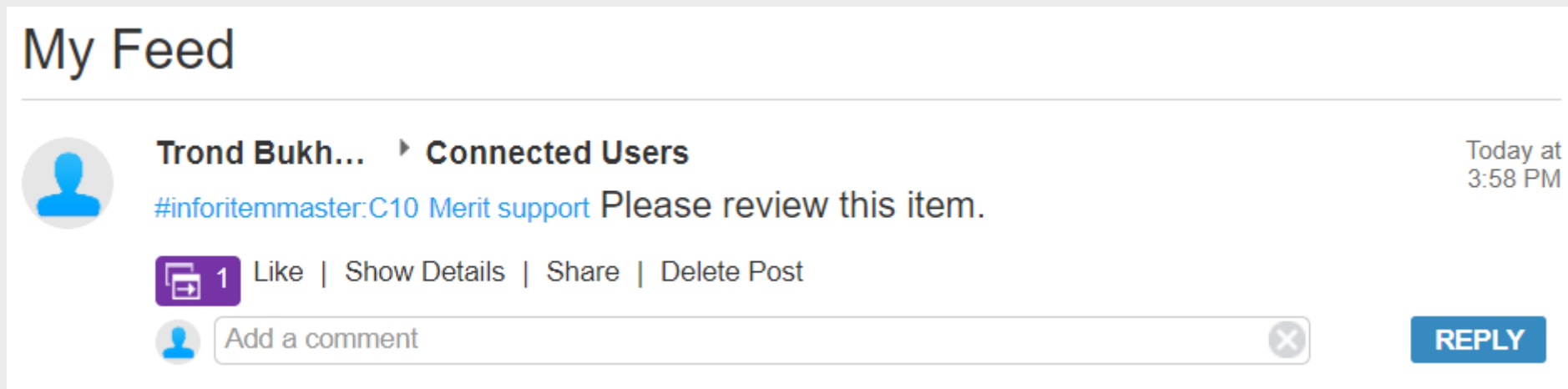
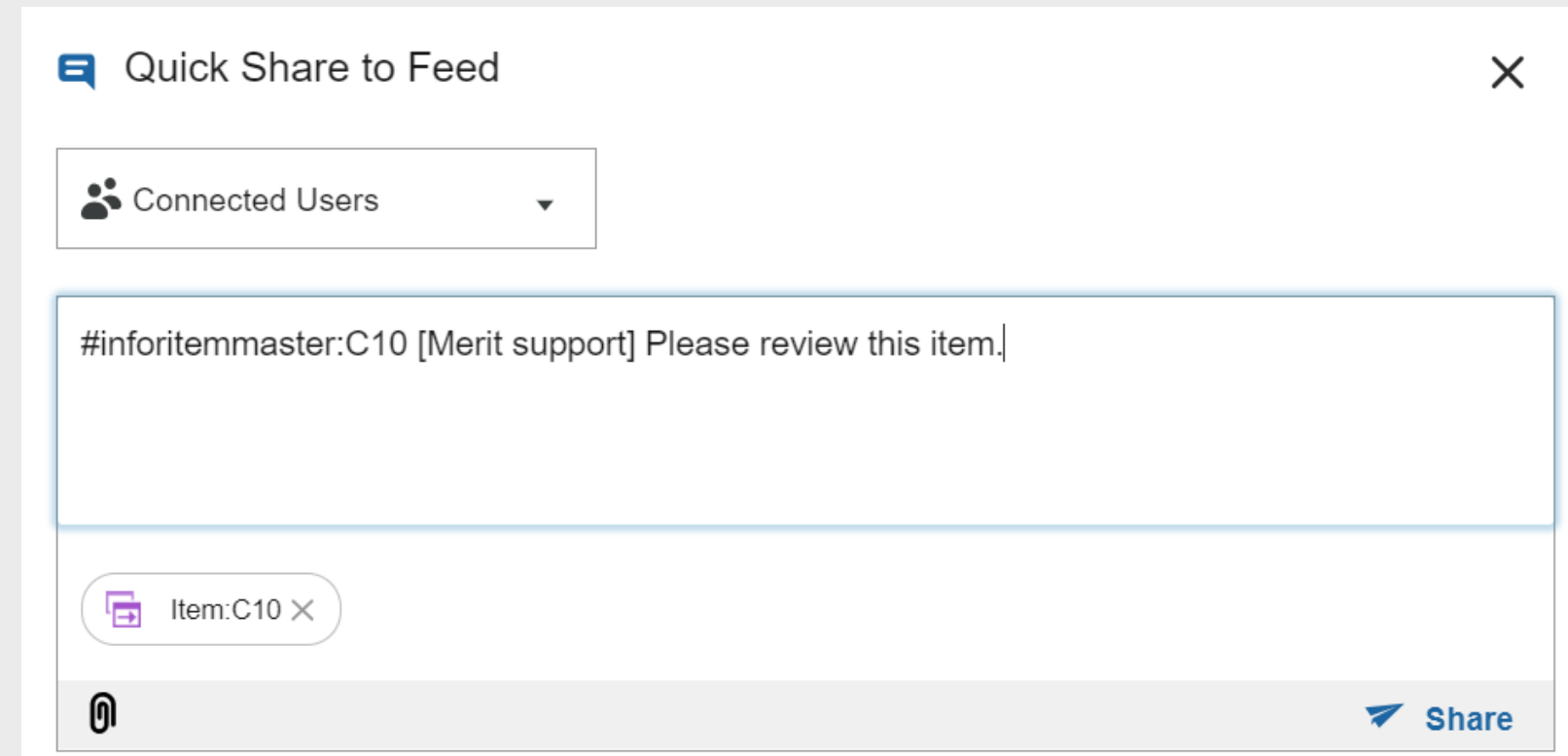
Tools

- ▲ Ming.le
- ▲ Homepage widgets & APIs
- ▲ Enterprise search
- ▲ Mass update & Phasing out
- ▲ Infor Document Management
- ▲ Infocenter

Ming.le

Its easy to get started

- ✓ Ming.le is Infors social application. It is possible create workflows and alerts using this application.
- ✓ The Share bookmark functionality combined with News feed for a person or a group is perhaps the easiest to get started, although it is less formal. From anywhere in Infor OS, clicking Share and tagging the receiver will give them a post with a link that they can use to access the object.
- ✓ The news feed can easily be part of the Infor OS homepage through a widget.



Homepage widgets & APIs

Use M3 widgets on the Infor OS homepage to monitor items

- ✔ M3 Information monitor and M3 Information viewer act similarly, and can be used to count/view items in certain statuses.
- ✔ There is a maximum of 100 records, so it is best suited to monitor temporary statuses that need to be pushed. (For example to monitor scrapping proposals of lot numbers)
- ✔ Example M3 monitor shown to the right uses API MMS200MI (item toolbox) to search items with a query that has item status 05 (template), and will create a list showing the item number and description for those items. Monitoring status 10 (drafts) probably makes more sense, as you want to actually process those.. 😊

Edit Monitor

Monitor name
Preliminary items

Severity indication [Configure](#)

Drilldown

Primary action
Drilldown

Max record count
100

Bookmark Options
[Get Ming.le Bookmark](#)

Program
MMS200MI

Transaction
SearchItem

Input
SQRY=STAT:05;

Output
ITNO;ITDS;

Display content as
Card [Configure](#)

Cancel [OK](#)

Enterprise search

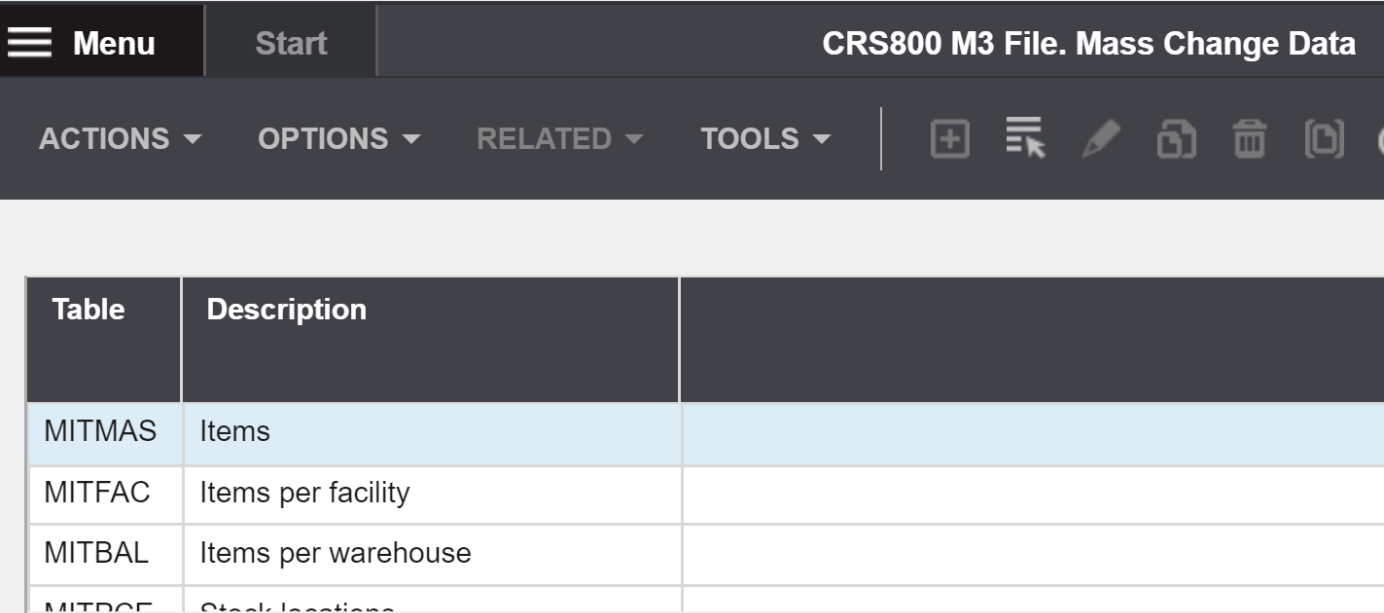
- ⊙ Local searches for items may help. Here set up for MMS001
- ⊙ If tables are indexed (technical) local searches may be activated in CMS021.

Mass update & phasing out

Several programs and methods may assist with updating item parameters and their status.

Examples:

- ⊙ MWS815, MWS810 and MMS530 may be used to set items to status 40 and then to status 50 if it hasn't had stock transactions for a long time. Various activities in other programs may be required if status becomes 30 (errors in the process)
- ⊙ Setting item status 50 for an item will allow it to remain on hire (Rental), but will not allow to be put on hire again. This could be used to gradually phase out old items and restructure them.
- ⊙ CRS800 may be used to mass update item parameters. This is effective, but could also be quite dangerous!!!



The screenshot shows a software interface with a dark header bar. On the left, there is a 'Menu' button with a hamburger icon and a 'Start' button. On the right, the text 'CRS800 M3 File. Mass Change Data' is displayed. Below the header, there is a toolbar with several icons: a plus sign, a list icon, a pencil, a folder, a trash can, and a document. Below the toolbar, there is a table with two columns: 'Table' and 'Description'. The table contains the following data:

Table	Description
MITMAS	Items
MITFAC	Items per facility
MITBAL	Items per warehouse
MITDCE	Stock locations

Infor Document Management

IDM may help visualize & control

- ⊙ Adding pictures to represent item types, items and lot numbers may make it a lot easier to quickly perceive what an item is.
- ⊙ This may be done using the various numbers as attributes on documents. For example item number and/or lot number.

Infocenter

Its easy to use

- ☑ Some customers have it installed locally, and you may have an older version. Url to 2017 version:
- ☑ Pretty much the same as Companion for older versions. Should be located under Widgets in SmartOffice
- ☑ Search is effective, and it is quick to navigate to the correct article (even through related articles)
- ☑ Making pdfs through print is quite effective to create local easy-to-read versions



M3 Business Engine User Documentation Infocenter

Version 15.1.4

Published September 2017

This infocenter contains the following doc

- [M3 Financial Accounting User Guide](#)

- Company structure creation
- Create facility.pdf
- Create location.pdf
- Create stock location zone.pdf
- Create warehouse type.pdf
- Create warehouse.pdf
- Create whs structure.pdf
- Creating items copy items.pdf
- Creating items different methods.pdf
- Creating items flow.pdf
- Creating items item toolbox.pdf
- Creating items numbering rules.pdf
- Define Alternate Unit of Measure.pdf
- Define Item-related Data.pdf
- Define Names and Languages for an Item.pdf
- Managing Item Hierarchy Structure.pdf
- MMS001.pdf
- MMS002.pdf

SECTION 04

Framework parameters

Item type – CRS040

The item type affects the item in various ways:

- ⊙ It is not possible to change an item type when the item has been created. The only time an item type can be changed is when copying template items.
- ⊙ Template item containing default values for creating items are defined here.
- ⊙ Numbering rule to assign the correct item number based on settings in (MWS050).
- ⊙ Field control in (Related option 11 goes to MWS041) that sets the fields displayed for the item in MMS001, MMS002 and MMS003.
- ⊙ Control if new item is automatically generated in a warehouse when item is created (Related option 12 goes to MWS042).
- ⊙ The item type can also be used as a selection criteria to find items.
- ⊙ They are linked to an item category in CRS040/E that will be default for the items of this type.

Item category may be viewed in MMS001/G

The item category affects how the item behaves, but require M3 process knowledge...

- ⊙ A subcontracted item can be used on a maintenance order to trigger a planned purchase, but will be recorded as a normal item after the last subcontracted operation is completed.
- ⊙ Repairable items are items that may be broken and then repaired.
- ⊙ Extended Catalog Item (ECI) are typically used for “one time usage” such as unique products acquired and sold to customers. Used for line type 1 (acquire and sell) and 2 (directly shipped from supplier to customer)
- ⊙ Non material items are used for dummy records and often purchased and sold services.



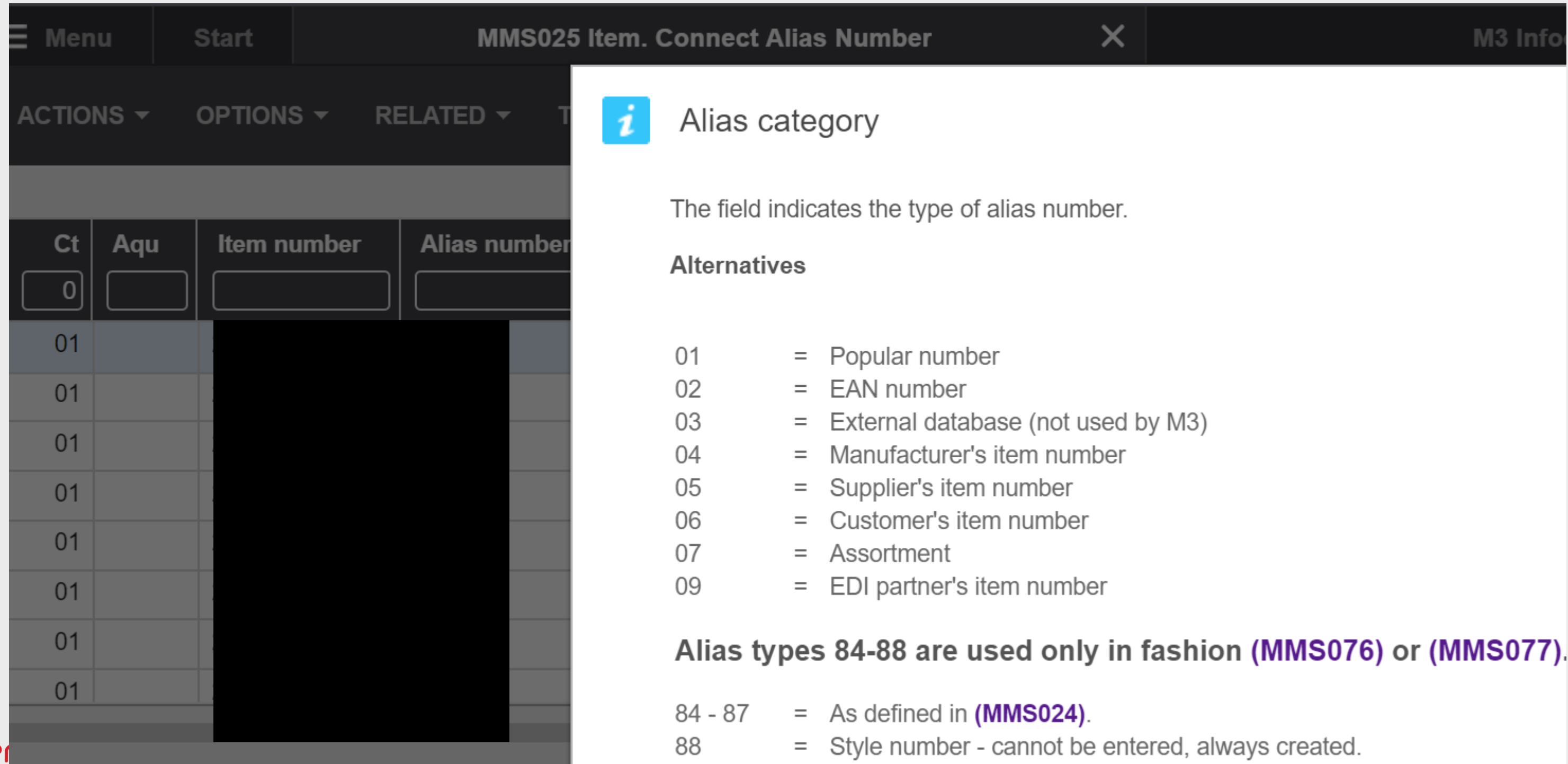
Item category

The field indicates the item category that best represents the characteristics of each item.

Alternatives

00	=	Normal item
02	=	Phantom item
03	=	Subcontracted item
04	=	Tool
05	=	Fixed machine
07	=	Repairable item
08	=	Recyclable item
11	=	Extended Catalog Item (ECI)
12	=	Non-coded Extended Catalog Item
13	=	Non-material item

Alias numbers – MMS025 / OIS005 / PPS040



The screenshot shows the SAP MMS025 'Item Connect Alias Number' screen. The top bar includes 'Menu', 'Start', 'MMS025 Item. Connect Alias Number', and 'M3 Info'. Below the bar are tabs for 'ACTIONS', 'OPTIONS', and 'RELATED'. A table is visible with columns 'Ct', 'Aqu', 'Item number', and 'Alias number'. The 'Ct' column contains values like 0, 01, 01, 01, 01, 01, 01, 01, 01, 01. A large black redaction box covers the 'Item number' and 'Alias number' columns for the rows with '01' in the 'Ct' column. An information popup is overlaid on the right side of the screen.

Alias category

The field indicates the type of alias number.

Alternatives

- 01 = Popular number
- 02 = EAN number
- 03 = External database (not used by M3)
- 04 = Manufacturer's item number
- 05 = Supplier's item number
- 06 = Customer's item number
- 07 = Assortment
- 09 = EDI partner's item number

Alias types 84-88 are used only in fashion (MMS076) or (MMS077).

- 84 - 87 = As defined in (MMS024).
- 88 = Style number - cannot be entered, always created.

Unit of measure – CRS050 & MMS015

Must be defined before items can be created

- ☑ The unit of measure defines how the item is recorded in inventory, and is used for financial purposes and defining prices.
- ☑ International standard for U/M is recommended.
- ☑ There is no standard unit of measure conversion in M3.
- ☑ The basic unit cannot be changed once the item has a balance ID.
- ☑ Alternative units of measure may be set for an item. However, this is typically used for alternative pricing and is set on the item itself. Most commonly alternative U/M is for alternative quantity and alternative price. Alternative units for an item is activated in MMS001/E, purchasing alternative u/m may be set in MMS001/F and sales in MMS001/H. The MITMAS table collects u/m data from MMS015, so the standards should be created here.

M3 defined framework parameters

The following is set on the item in MMS001/E, but should may be considered framework parameters.


- ☑ Inventory accounting
- ☑ Lot control method
- ☑ Lot numbering

They should be kept the same for items connected to an item type.

M3 defined framework parameters

Inventory accounting

- ☑ Most commonly used is 0 or 1.
- ☑ Anyone have experience with the other alternatives?
- ☑ A bit confusing: Notice that the Norwegian help text translates “No.” to “Antall”...

 Inventory accounting ✕

The field indicates whether the stock kept for the item is accounted in inventory.

Alternatives

0	=	No.
1	=	Yes, the item is inventory accounted.
2	=	No, the item is not inventory accounted, but it is planned as demand in the material planning process in (MMS080) .
3	=	No, the item is not inventory accounted, but it is planned as a function number. A function number is a dummy number for items that can replace each other. So material planning for the item is done on the function number level instead of the item level.

For alternative 0, the on-hand balance is always zero. There are no transactions in the material plan or the file that is updated when inventory accounting is done.

Alternative 1 is used most often.


Close

STCD (MMSTCD)

M3 defined framework parameters

Lot control in MMS001/E:

- ✔ Lot is commonly used to define a version of an item. Color codes for paint is a good example.
- ✔ Having lots defined in the lot master file may be described as MMS235 being used. If the lot master is not used, the transaction history will contain lot information – but the lots are not managed.
- ✔ Items that have defined serial numbers are unique versions of an item. They are defined in MMS240. A classic example of a serialized item is a car.

 Lot control method ✕

The field indicates if and how lot control is to be applied for each item.

Alternatives

0	=	Lot control not used.
1	=	Lot control used. Lots do not need to be defined in the lot master file.
2	=	Lot control used. All lots must be entered in the lot master and each lot number is considered a serial number.
3	=	Lot control used. All lots must be entered in the lot master.
5	=	Lot control used. All lots must be entered in the lot master. Serial number specification is connected to each lot.

Note

Laboratory inspections can only be performed for items with lot control methods 2-5.

[Close](#) MMINDI (MMINDI)

M3 defined framework parameters

i Lot numbering method ×

The field indicates how the serial number is created.

Alternatives

0	=	Manually
1	=	Automatically using YYYY plus a six-position long sequence number
2	=	Automatically, using YY plus an eight-position long sequence number
3	=	Automatically, using a seven-position long sequence number
4	=	Goods receiving number generated during goods receipt, but this must be entered manually
5	=	Order number - only used with manufacturing orders
6	=	Automatically, using YYYYDD plus a four-position long sequence number
7	=	Automatically, using the numbering rules defined in (CRS040)
8	=	Simple lot tracing for outbound deliveries, mandatory to fill in a lot reference when reporting pick lines
9	=	Simple lot tracing for outbound deliveries, optional to fill in a lot reference when reporting pick list lines.

Lot or serial numbers can only be generated automatically in those cases where accounting is done from the lot/serial number file, since this is the only location where new numbers can be generated.

Close BACD (MMBACD)

Lot numbering in MMS001/E:

- ☑ Manually, at goods receipt or not (0 & 4)
- ☑ Automatically, many options including order number (1, 2, 3, 5, 6 & 7)
- ☑ Outbound only, with manual processes for lot numbering/entry (8 & 9)

It is not logical in M3 to assign the same lot number to different items. Grouping several items at a low level would instead use Container Management.

The container master is found in MMS230. It may be used to combine with items and lot numbers to form unique inventory balance identity that may be processed as a unit.

Groupings, accounting rules and reports

Many groupings exist (most set in MMS001/E)

- ☑ Item group – CRS025
- ☑ Procurement group – CRS037
- ☑ Product group – CRS035
- ☑ Accounting control object – CRS355
- ☑ Business area – CRS036
- ☑ User defined fields & Specifications (Free fields MMS001G/I)

The groupings are commonly used for sorting, planning, creating accounting rules and reports.

It is best practice to use groupings rather than each individual items settings for accounting rules.

Template items (Status 05)

In CRS040 a template item may be connected to an item type. However, you can create many templates connected to the item type in MMS001-003.

- ⊙ Much user documentation for creating items does not refer to the simple method of copying a template item...
- ⊙ Each item type should always have a template with parameters that are always the same for items of this type.
- ⊙ Having many fields fixed/the same for all items created from a template is smart.
- ⊙ The main template should be defined at the item type, and the CRS040/F panel does also contain settings for what should be incl. when copying →
- ⊙ If necessary, several template items may be created for one item type. This is one of the reasons we recommend always copying a template when creating a new item.

Panel Header

Item type

130

Item Copying

Automatic Copying

Itm/whs/fac/ali



2-Editable

Automatic Creation/Copy

Text



2-Editable

Alternate U/M



2-Editable

Related item



2-Editable

Popular no



2-Editable

Danger class



2-Editable

Descr/language



2-Editable

Style info



2-Editable

Service supplm





SECTION 5

Parameters for items

Make/buy code & Acquisition code

MMS001/E defaults some values to MMS002/E:

☑ In MMS001, an item is set to either be Purchased or Manufactured. These are indications on how the item normally is acquired.

However, it is the acquisition code in MMS002 is the parameter that controls this for each warehouse:

1. Manufactured
2. Purchased
3. Distributed (from another Warehouse)
4. Maintenance (within a Warehouse)

i Acquisition code ×

The field indicates how acquisition is performed for requirements (immediate or planned) for each item/warehouse.

Alternatives

1	=	Manufacturing
2	=	Purchasing
3	=	Distribution from another warehouse
6	=	Maintenance.

Since the acquisition code can be overridden, both purchasing and manufacturing can occur simultaneously.

Acquisition code 2 requires that a supplier number is entered, regardless of the field selection in MWS041.

[Close](#) PUIT (MBPUIT)

Description & Naming

MMS001/I assists you with creating good item Description in MMS001/E

☑ Example from MMS001/I:

Description 1	<input type="text" value="1T SODIUM"/>
Description 2	<input type="text" value="HYPO TANK"/>
Description 3	<input type="text" value="SMALL"/>

= the following in MMS001/E:

Description	<input type="text" value="1T SODIUM HYPO TANK SMALL"/>
-------------	--

The Description field must be cleared before using the assistance fields.

Smart usage of this option will provide very tidy lists where different positions contain difference information.

i Description 1 ✕

The field indicates a breakdown of Panel E's description field, as follows:
positions 1-10 is description 1 positions 12-21 is description 2 positions 23-32 is description 3

Note

Note that changing the contents of the field on the E Panel changes the value on Panel I and vice versa.

VAR1 (MMVAR1)

Items connection to User

Responsible & Planner (RESP):

- ☑ Item responsible is set in MMS001/E and is responsible for the item itself. It is the default value set for Planner in MMS002/E when creating an item from scratch.
- ☑ Planner may be changed for each warehouse in MMS002/E, and is used as the default Planner for planned orders.

Buyer (BUYE):

- ☑ Buyer may be set in MMS002/G for each warehouse, and indicates the buyer normally responsible for purchasing the item. Its not the same as responsible/planner.

Inspection code

Should received goods should be inspected?

- ☑ M3 will check PPS040 (Supplier/Item) first
- ☑ Then it will check MMS001/F
- ☑ Last it will check the purchase order type in PPS095.

Goods receiving method is set in MMS001/F, and defines the inspection method (PPS345) and the item setting will overrule the setting on purchase order type.

Basic Information

Inspection code	0-No
No. dec places	2-Two decimals
PO U/M	ea
Ext instruction	
Goods rec mtd	DPA

i Inspection code ✕

The field indicates if and how the item should be quality inspected.

Alternatives

0	=	The item should not be quality inspected.
1	=	The item should be quality inspected but without a quality request.
2	=	The item should be quality inspected together with a quality request.
3	=	The item should be quality inspected together with a quality request and automatically create inspection records in (PPS300) and lots in (MMS235).

Close QACD (MMQACD)

VAT codes – Purchase & Sales

VAT code is defined in MMS001/G, but will be overruled by MMS002/I

- ☑ The VAT codes are custom made, and general settings are chosen for the item.
- ☑ The country code and end destination for a delivery will overrule the VAT code set on item. This is set up in TXS020/B1 via a “Generic object control table” in CMS017
- ☑ When registering an order, the VAT code may also be overruled.
- ☑ The general customers VAT code in CRS610/I will be overruled by the settings above.

M3 Generic Object Control Table. Open - CMS017/B1

Handler ▾ Alternativer ▾ Beslektet ▾ Verktøy ▾

Sorteringsrekkefølge: 1-Program

Obj control par: Tax exemption texts

Program	Start value 1	Start value 2	Start value 3	Txt	Sts
TXS020					
TXS020	001	2			
TXS020	001	3			

M3 VAT Exception. Open - TXS020/B1

Handler ▾ Alternativer ▾ Beslektet ▾ Verktøy ▾

Text/VAT cd: 2-VAT code - external sales

Priority: 2 1/2/3/4

Apply

Tax applicable	From/To country	Item group	Fr dt
1	NO	XX	
1	NO	XXX	010518

Attribute models

MMS001/G & ATS050

- ⊙ A “generic” item may be used for serialized items, and the attribute model could be used to differentiate between various qualities related to serial numbers.
- ⊙ Attribute models may be used to manage items that have varying qualities.
- ⊙ An example from equipment hire is that the content of a rental object may vary greatly. (Container shelves removed/added etc)
- ⊙ Certain chemicals may also have varying attributes. (pH, oil content in waste etc)

Assortment and discount

In MMS001/H, the assortment and discounts are most commonly used...

Bonus gen	0-Does not affect	Statistical U/M	STK
Bonus group		Catch wt U/M	STK
Commis gen	0-No	Upd buy pattern	<input type="checkbox"/>
Commis group	Brukes ikke	Assortment chk	<input type="checkbox"/>
		Order disc gen	<input type="checkbox"/>
		Discount group	

Lead times

Each item will have its own lead time in each warehouse

- Realistic lead time data is important for calculations that M3 does with regards to planning acquisitions and delivery time to customer.

Lead time

The field indicates the lead time for each item. This is the time needed to meet a requirement, from the point in time when acquisition activities are started to the point in time when the requirement is fulfilled.

Lead time includes administrative time, postal lead time, supply lead time, transportation time, and inspection time.

Lead time is always expressed in the unit five (5) days per week when referring to production or distribution supply. For purchased items, the lead time can be as above or expressed in calendar days (7 day per week).

Planning Parameters

Note	<input type="text"/>
Planner	<input type="text"/>
Acquisition cd	2-Purchased
Planning method	1-MRP
Mastr scheduled	0-Not mstr sch it
Admin lead tm	<input type="text"/>
Postal lead tme	<input type="text"/>
Supply lead tm	<input type="text"/>
Transp lead tm	<input type="text"/>
Inspec lead tm	<input type="text"/>
Lead time	<input type="text"/>
Inventory plnd	30-Stocked
Status	20-Released

Hierarchy & search

**Set in MMS001/M. It is rarely used...
Have anyone used it? (for searches and statistics)**



Hierarchy level 1

The field indicates item hierarchy, which groups items vertically in a way that describes a company's business. Item hierarchy provides a flexible and logical way to search for items and to group items for statistics and control purposes.

Acceptable item hierarchies are defined in (MMS021) and are connected to an item via (MMS001/M).

The number of item hierarchies (max 5) and the length on each hierarchical level are defined in (CRS704). The total length of all item hierarchies is 15 positions.

Hierarchy Level

Hierarchy lvl 1

Hierarchy lvl 3

Hierarchy lvl 4

Search group 1

Search group 3

Search group 4

Planning method

Set in MMS002/E

- ☑ Most commonly used are alternative 0-3:
 - Manual
 - MRP
 - Re-order point
 - Order-driven
- ☑ Notice MMS003/E refers to this setting as order control methods...
- ☑ Anyone have experience with 4 or 5?



Planning method

The field indicates the material planning method set for the item/warehouse during acquisition order entry. There are two basic methods (material requirements planning and reorder point planning) used to plan and create acquisition orders.

Alternatives

0	=	Manually planned
1	=	Material requirements planning (MRP)
2	=	Reorder point planning (ROP) per item/warehouse
3	=	Order-driven - Acquisition orders are only triggered, created and released by a requiring order
4	=	Reorder point planning (ROP) per item and facility
5	=	Reorder point planning (ROP) per item and global facility.

Material requirements planning (MRP) is a set of techniques that uses bills of material, inventory data, and the master production schedule to calculate requirements for materials.

Reorder point planning (ROP) is a set inventory level that triggers an acquisition order. If the total on-hand balance plus stock on order equals or falls below the reorder point, the triggered acquisition order replenishes the stock.



Order-driven (alternative 3) means that the order is created and released only in direct relation to the controlling order.

Note

The planning method is a key parameter and it affects the entire material planning process in M3.

Continuous net change (on/off)

Order-driven planning method is not affected by continuous net change, as there is a direct link between the order requiring items and the automatically created planned acquirement. This is set in MMS002/E.

 **Continuous net change** 

Select the check box if M3 should be checking the material planning situation for the item/warehouse immediately. Requirements planning is done in a queue system that is processed in real time.

If you do not select the check box, then the check of the material planning situation is made in batches, normally at the end of the day.

This can result in M3 Material Planning generating planned orders (MO, DO, PO or WO) or action messages to propose activities. Action messages are created in **(RPS001)** as set in the selected planning policy.

Stock parameters in MMS002/F

The stock parameters define how and how much should be ordered when according to the planning method.

Various parameters may be calculated in various methods, but many M3 customers choose manual input here for planning orders.

More about this and warehousing parameters tomorrow.

Stock Parameters	
Safety stock	0.000
Safety stk unit	
Reorder point	0.000
Order quantity	0.000
Order qty days	
Maximum stock	0.000
Annual demand	0.000
Min order qty	0.000
Order multiple	0.000
Safety stk mtd	0-Manual
Service level	
RoP method	0-Manual
Order policy	0-Man entered qty
Max stock pct	Point of tm tab
Max stock mtd	0-No
Annual dmd mtd	<input type="checkbox"/>
Max order qty	0.000
Issue multiple	0.000

Expiration date

Goods may expire, or be required to age...

- ☑ In MMS001/F, the expiration date method is set for the item.
- ☑ In MMS002/I the expiration and aging times are set specifically for each warehouse.
- ☑ MMS002/I also offers the option to trigger a re-inspection of the item based on last approval date.



SECTION 1-2 (day 2)

MRP, Warehousing & facility parameters

Material requirements planning (MRP)

May be set as planning method in MMS002/E...

- ☑ Material requirements planning is used to transform incoming demands to appropriate order proposals that relieve a shortage. These order proposals are created in a timely manner, taking into consideration the lead time for the actual item to be ready on demand.
- ☑ Planning horizon, planning time fence, demand time fence, planning policy, lead times, safety time, forecast methods, forecast logic, minimum ordered units and maximum capacity of the warehouse.
- ☑ Using MRP require deep insight into your business processes.
- ☑ Due to the complexity of the MRP calculations, a lot of companies choose to use reorder points.

Stock parameters in MMS002/F

The stock parameters define how and how much should be ordered when according to the planning method.

☑ Safety stock, reorder point and order policy and max stock method may use various parameters to calculate other fields.

☑ (Order multiple = Used for rounding up)

Stock Parameters

Safety stock	0.000
Safety stk unit	
Reorder point	0.000
Order quantity	0.000
Order qty days	
Maximum stock	0.000
Annual demand	0.000
Min order qty	0.000
Order multiple	0.000



Safety stock unit

The field indicates the safety stock unit.

Depending on the safety stock method used, the value is entered as:

- Safety stock days for safety stock methods 1 and 7
- Safety stock percentage for safety stock method 2
- An optional safety stock factor for safety stock method 8

Safety stk mtd	0-Manual
Service level	
RoP method	0-Manual
Order policy	0-Man entered qty
Max stock pct	Point of tm tab
Max stock mtd	0-No
Annual dmd mtd	<input type="checkbox"/>
Max order qty	0.000
Issue multiple	0.000

Reorder point method in MMS002/F

The reorder point triggers ordering when stock is below the point.

☑ Reorder point at 0 requires alternative 2 at reorder point method (M3 formula)

Reorder point method

The field indicates the method used to determine the reorder point.

Alternatives

0	=	Set manually. A reorder point value of 0 is not included in the reorder point calculation.
1	=	Calculated automatically according to the formula: Reorder point = Safety stock + (daily usage * lead time).
2	=	Reorder point is always 0 (zero).

Safety stock method in MMS002/F

The safety stock is a part of MRP, and defines a quantity you should never get below. It may be calculated in many different ways...

☑ Annual demand may be used to calculate daily consumption

Safety stock method

The field indicates how the safety stock is calculated and updated.

Alternatives

0	=	Manually
1	=	Automatically according to the formula: Number of safety stock days * Daily consumption
2	=	Automatically according to the formula: Safety stock percentage * Lead time * Daily consumption

Maximum stock in MMS002/F

Used to set a ceiling on how much may be stocked.

Maximum stock method 2 is used to phase the item out of stock

Maximum stock method

The field indicates whether the maximum stock is to be calculated automatically.

Alternatives

0	=	No
1	=	Yes
2	=	Yes, with maximum stock 0 (zero)

Automatic calculation of maximum stock is performed as follows:

$(\text{Reorder point} + \text{order quantity}) * \text{Maximum inventory \%}$

Stock parameters in MMS002/F

Max stock pct = A factor (cannot be below 100)

Maximum stock percentage

The field indicates calculation of the maximum inventory quantity according to maximum inventory method 1.

The percentage entered in the field is multiplied by the sum of the reorder point and the order quantity.

Example:

Order quan = 500 unit

Reorder point = 100 units

Max. Inven = 150

This gives the following maximum inventory quantity:

$150/100 * (500 + 100) = 900$ units.

Order policy

Set in MMS002/F decides amounts, size and frequency of the generated orders.

The amount of alternatives are many, but may be categorized:

- a) Fixed quantity/variable period: Generates orders of fixed amounts at needed intervalls.
- b) Variable quantity/fixed period: Generates orders of variable quantity at fixed intervalls.
- c) Variable quantity/variable period: Generates orders for the necessary amount when needed.

One example is alternative 11 (category b): Discrete order quantity, that will generate one order for each requirement, but will do this at a fixed time, for example during the night job if continuous net change is turned off. However, this would be quite similar to the order-driven planning method.

Warehousing parameters

MMS002/G contains many important warehousing parameters.

- ☑ Locations and stock zones.
- ☑ How the item is allocated.
- ☑ How the item is issued.

Warehousing Parameters	
Location	<input type="text"/>
Pack location	<input type="text"/>
Dock location	<input type="text"/>
Location type	<input type="text"/>
Ph invent cycle	<input type="text"/>
Inv sharing	<input type="checkbox"/>
Allocation mtd	1-Manually
Issue method	1-Picking list
Alloc non-appr	<input type="checkbox"/>
Returnable ind	0-Returnable
Buyer	RISBEGE
Distr/sup cal	0-Anytime
Fill partly emp	0-No
Warehouse type	02
Lowest level DO	<input type="text"/>
Lowest level	<input type="text"/>
Storage method	2-Multip location
Container mgt	0-Not used
Stock zone	<input type="text"/>
CTP policy	1 Standard
Stat stge grp	5
Hist stge mtd	1-Detailed
Qty ctrld alloc	<input type="checkbox"/>
Whs equipment	<input type="text"/>
Dely split rule	<input type="text"/>
Returnable msg	0-No messages
Insp location	<input type="text"/>
Distrib group	<input type="text"/>
Whs subtype	<input type="text"/>
Cross-dock	<input type="checkbox"/>
Alternate U/M	<input type="text"/>
Scan required	<input checked="" type="checkbox"/>

Stock zone

The stock zone in MMS002/G:

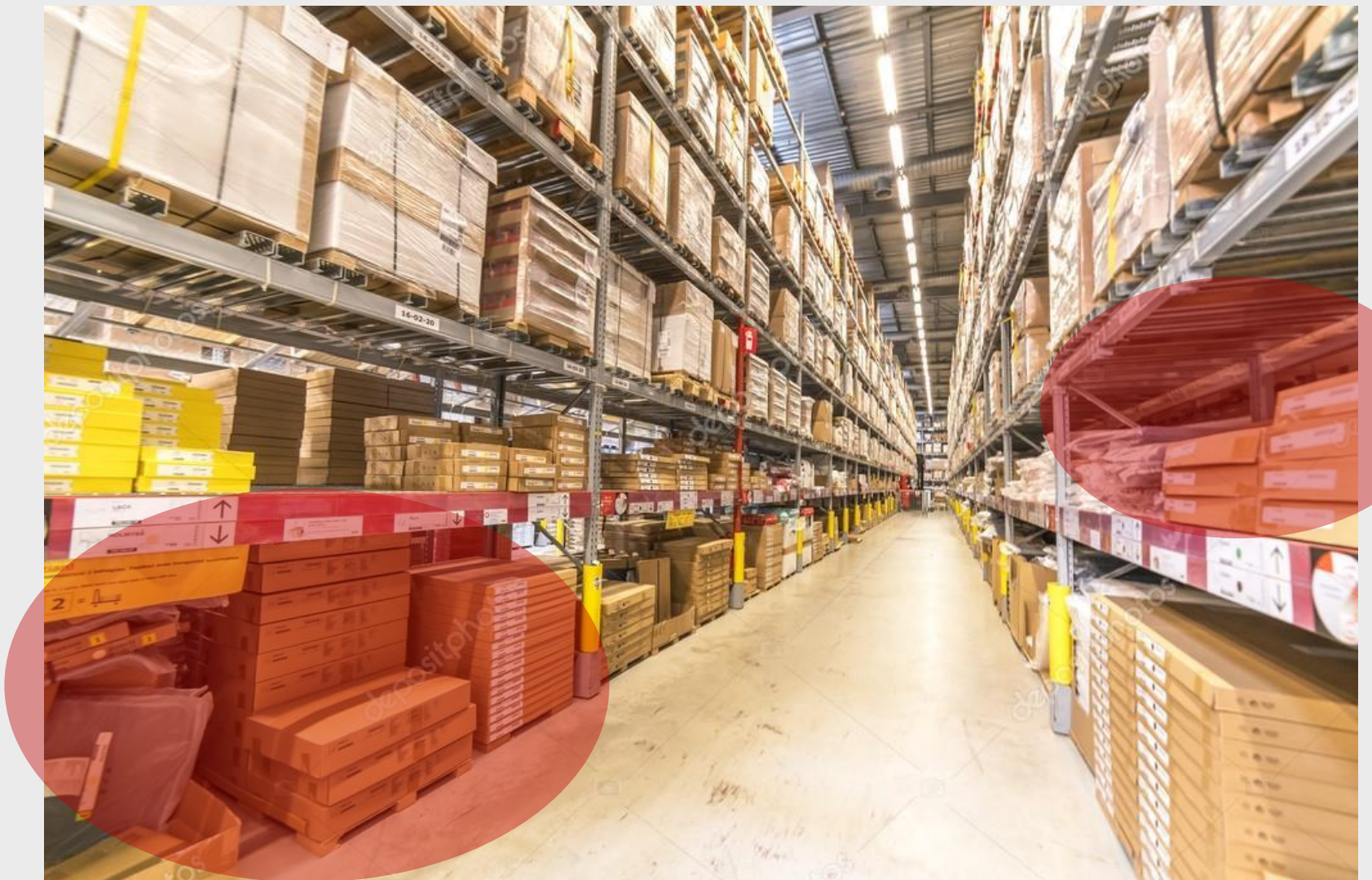
- ☑ The stock zone is a level above the locations in the warehouse structure. Several locations may belong to one stock zone.
- ☑ It is not mandatory, but the stock zone set in MMS002/G is used to suggest stock zone during goods receipt.
- ☑ Stock zones are often used to affect how picking lists are generated (a parameter for dispatch policy allows to make one picking list per zone).
- ☑ Printers may be connected to locations in MMS040.



Locations

The locations in MMS002/G:

- ☑ The various locations set here are default locations for different M3 processes such as issue and receipt.
- ☑ For example, «location» may be used to set the default location when equipment is taken off hire.
- ☑ The storage method controls if multiple locations are available for usage or not for the item.



Containers

Container management in MMS003/G:

- ☑ Using containers in M3 is optional, and depends on the business processes.
- ☑ It is possible to decide if a container may be stored in several or only one location at a time.
- ☑ It is also possible on the item to decide if the container register is to be used or not (to very existence of the container)
- ☑ A stock items balance ID is measure against defined containers if used.



MMS002/G

Allocation & Issue methods

- ⊙ Automatic allocation methods are optional, and allow warehouses to decide how items are allocated to orders with regards to balance identities and demand time fence.
- ⊙ The issue methods control how the items in storage are issued based on various rules. Many options are available, but the most common method is:



1 = Material is issued against a picking list according to the allocation method used. Note that this method should be used if the item is order-initiated.

MMS003/E

Parameters here are mostly related to finance, trade and calculations

- ⊙ Customs stat no. Is important for export businesses and is important for shipping document printouts and regulating and calculating data for transactions to INTRASTAT, the trade statistics of the EU.
- ⊙ The production line indicates the default production line where the item is produced. The production line is defined as a work center, which may exist of one or several replacable machines/equipment and personnel.
- ⊙ The main warehouse parameter offers the oppertunities to define the warehouse to be used for facility related calculations with regards to acquisitions.

Basic Information

Customs stat no	TBD	To b
Production line		
Main warehouse	100	Tanager
Country of orig		
Admin lead tm		
Optimal on-hand		0
On-hand method	1-Acc chg balance	▼
Ordering cost		0,00
Min contr ratio		0,00
Attribute cost	<input type="checkbox"/>	
Cstng dec place	0-No decimals	▼
Inv acc method	4-Actual cost	▼
Average cost		24982 NOK/ea
Standard cost		NOK/ea
Item cost qty		
Acc control obj		n/a

MMS003/E..

- Country of origin can be used for trade statistics reported to the authorities, and it may also be used with regards to shipping document requirements.
- Administrative lead time is lead time valid for all warehouses/items connected to the facility.
- If the planning method for the main warehouse is set to 4 (re-order point per facility & item), the amount set in optimal on-hand will trigger acquisition according to the main warehouse item settings in MMS002.
- On-hand method allows for calculating the facilities on-hand balance or not.
- Attribute cost tagged on allows for cost calculations that include attribute costing functionality.

Basic Information

Customs stat no	TBD	To b
Production line		
Main warehouse	100	
Country of orig		
Admin lead tm		
Optimal on-hand		0
On-hand method	1-Acc chg balance	
Ordering cost		0,00
Min contr ratio		0,00
Attribute cost	<input type="checkbox"/>	
Cstng dec place	0-No decimals	
Inv acc method	4-Actual cost	
Average cost		NOK/ea
Standard cost		NOK/ea
Item cost qty		
Acc control obj		n/a

MMS003/E....

- ☑ Inventory accounting method defines how the cost of an item is determined.
- ☑ Inventory accounting method may be highly relevant for transfer pricing.
- ☑ Example: Actual cost requires a serialized item. If one facility purchases a serialized item with actual cost and then transfers it to another facility through a distribution order, internal invoicing including a markup could be performed according to internal transfer pricing rules set in MFS001.
- ☑ Accounting control object may be set specific per item & facility in MMS003/E, but generally in MMS001/E.

Inventory accounting method

The field indicates the inventory accounting method that defines how the cost of an item is determined per item/facility.

Alternatives

0	=	Zero cost
1	=	Standard cost
2	=	Average cost
3	=	Dynamic product cost
4	=	Actual cost
5	=	Simplified purchasing.

Internal Transfer Price

Search path	2
Price list	
Price list tab	
Price list SO	
Part of pr list	
Part of IAP	105,00
Part of sls prc	
Part of In net	

MMS003/F – Production control

Production control

- Many of the parameters in MMS003/F are only relevant for production companies.
- We will only explain the part of MMS003 that relates to preliminary pricing.
- Comment: We have not looked at every parameter in every panel, and MMS001/J & MMS002/K for maintenance information has not been mentioned.

Production Control	
Order-less prod	<input type="checkbox"/>
MO reservations	<input checked="" type="checkbox"/>
Auto create MO	<input type="checkbox"/>
MO It method	<input type="checkbox"/>
Dyn It fence	<input type="text"/>
MO leadtime lim	<input type="text" value="0,00"/>
Flow order plan	<input type="text" value="0-No"/>
Flow ord fence	<input type="text"/>
Production rate	<input type="checkbox"/>
Critical mtrl	<input type="checkbox"/>
Prl prc In tp 0	<input type="text" value="0-Final price"/>
Prl prc In tp 1	<input type="text" value="0-Final price"/>
Prl prc In tp 2	<input type="text" value="0-Final price"/>
Consumpt cd TST	<input type="text" value="TBD"/> To be decided
State	<input type="text" value="NO"/> NORWAY
Custom proc imp	<input type="text" value="TBD"/> To be decided
Custom proc exp	<input type="text" value="TBD"/> To be decided
Cstng mod	<input type="text"/>
Cstng mod prod	<input type="text"/>
Cstng mod sales	<input type="text"/>
Cstng mod distr	<input type="text"/>
Plan process	<input type="text"/>
Push process	<input type="text"/>
Cal prc In tp 0	<input type="checkbox"/>
Cal prc In tp 1	<input type="checkbox"/>
Cal prc In tp 2	<input type="checkbox"/>

MMS003/F

Line types

☑ Various types of customer order line types (OIS101) may have different settings related to preliminary sales prices:

0	=	Normal order line. Order line that creates a purchase, manufacturing or distribution directly connected to the customer order line. When delivery is r
1	=	customer order line is automatically allocated and the picking list printed.
2	=	Order line that creates a purchase order that is directly connected to customer order line, but with a delivery address according to the order. Direct delivery from supplier to customer is desired. Via phantom receipt of goods for the purchase order, the customer order line status is changed to 66 (Delivered). Afterwards, the order may be invoiced.



Preliminary price for line type 1

The field indicates the default value for the preliminary price code on the CO (customer order) line for line type 1. Preliminary price code on CO line controls whether the sales price on a customer order line is preliminary or not. Customer order lines with preliminary price marking will not be invoiced until the marking has been removed.

Alternatives

- 0 = The sales price is not preliminary.
The sales price is preliminary. The preliminary price marking will automatically be set to 0 (final price) if sales price calculation is performed from: - Purchase proposal (PPS170) - Purchase order line (PPS201) - Purchase confirmation (PPS250) - Check supplier invoice (PPS405) - Re-calculate sales price (OIS156).
- 1 = The sales price is preliminary. The preliminary price marking will automatically be set to 0 (final price) if sales price calculation is performed from: - Check supplier invoice (PPS405) - Re-calculate sales price (OIS156).
- 2 = The sales price is preliminary. The only way to remove the preliminary price marking is to change the order line.

Close

PPL1 (M9PPL1

MMS003/F

Preliminary price options

- ☑ Preliminary prices are unconfirmed sales prices.
- ☑ Mostly relevant for line type 1 and 2, and various alternatives for calculating the final sales price may be set.
- ☑ In order for preliminary pricing to be used, a costing model is required to be set up.

i Preliminary price for line type 1 ✕

The field indicates the default value for the preliminary price code on the CO (customer order) line for line type 1. Preliminary price code on CO line controls whether the sales price on a customer order line is preliminary or not. Customer order lines with preliminary price marking will not be invoiced until the marking has been removed.

Alternatives

0	=	The sales price is not preliminary. The sales price is preliminary. The preliminary price marking will automatically be set to 0 (final price) if sales price calculation is performed from: - Purchase proposal (PPS170) - Purchase order line (PPS201) - Purchase confirmation (PPS250) - Check supplier invoice (PPS405) - Re-calculate sales price (OIS156).
1	=	The sales price is preliminary. The preliminary price marking will automatically be set to 0 (final price) if sales price calculation is performed from: - Check supplier invoice (PPS405) - Re-calculate sales price (OIS156).
2	=	The sales price is preliminary. The only way to remove the preliminary price marking is to change the order line.
3	=	

[Close](#) PPL1 (M9PPL1)