Movable Assets

Contents

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How does the Movable Assets module work?

The Movable Assets module will allow you to move components and spare parts between units. Component relevant information (Jobs, History, Spare parts, Running hours, documents), will be available to the receiving unit, once it has been received onboard. A Transfer document (Pro forma invoice) is used to perform the transfer process and can be printed as part of the physical documentation.

Once a component has been received on a vessel, it will behave as any other component on board, adding its jobs to the vessels due list, and its job history to the vessel's job history. Changes made to the component in TM Master V2 (Job signed out, changes made to its attributes or spare part list etc.) are as for all other components replicated back to the office system.

The difference with the movable components in regards to system behavior, is that once the office system receives updates to it, these changes are then also replicated to the other vessels in your fleet (those which are configured to be able to receive the appropriate movable component data). This way, when a movable component is actually transferred between units, all information belonging to the component is already on board the receiving unit, and only needs to be "Activated" in that system. The alternative to this solution is to replicate all the information at the time of the actual transfer. This would result in one big replication file every time the component is moved. This would cause problems for vessels with lower bandwidth.

Depending on your fleet size and diversity, it will not be likely that all vessels will receive all the movable components. (Tanker vessels will not receive Seismic equipment for example). To avoid unnecessary replication to vessels that will never receive the component, you can categorize movable components and decide which units receive which categories. Any updates made to a movable component of one category are only distributed to units designated to receive that category. A Unit can receive none, one or several categories. A component can only be added to one of the categories.

How to configure TM Master V2 to start using the «movable assets» module?

Some configurations are required to start using the "Movable assets" module. All configurations should be made in the office installation.

Defining "Movable component category"

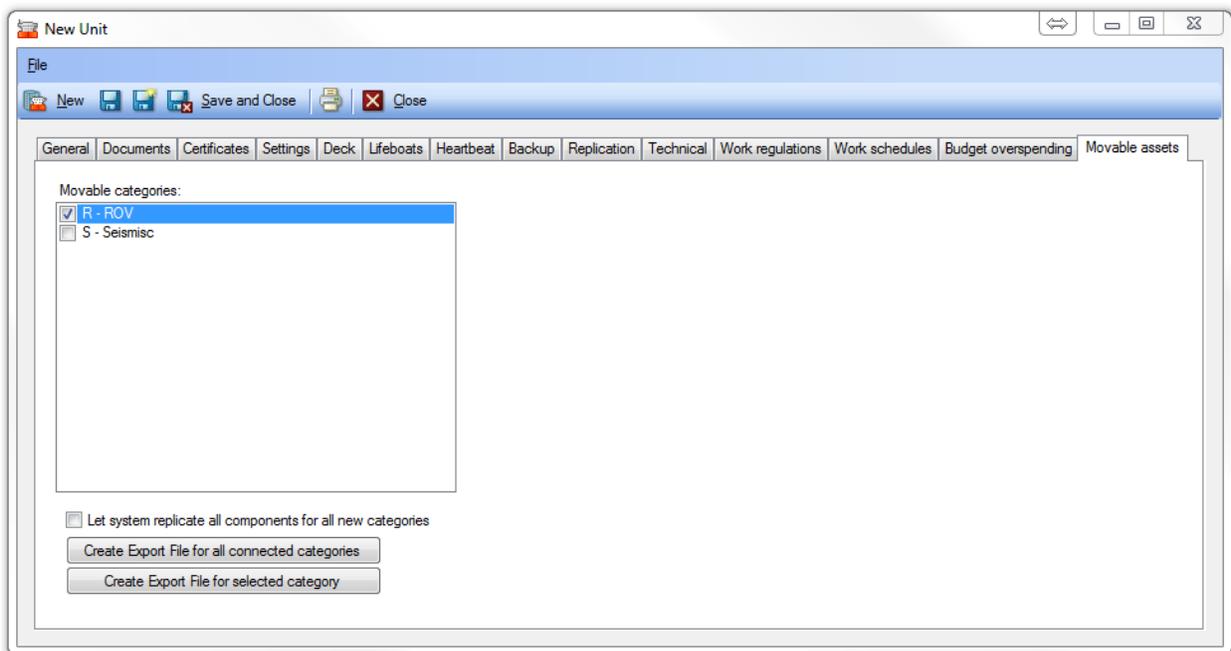To add your "movable component categories" to the system, do the following.

1. Start and log on to TM Master V2 at the office using an admin enabled user.
2. Click [Administration] → [Codes] → Select the "Movable asset category" code table.
3. Click [New]
4. Enter your Category name, and a code value.
5. Click [OK]

Typical values would be "ROV" or "Seismic Equipment". You can create as many movable component categories as you require.

Add units to one or more movable component category.

To create a movable component on any of your units, you will first need to add the unit to one of your movable component categories. Keep in mind that when a unit has been added to a movable component category, the unit will receive updates for all components within that category.

1. Start and log on to TM Master V2 at the office using an account with the correct user rights (ref chapter movable chapter user rights).
2. Click [Fleet] → [Units] → Double click the unit in question. → "Movable Assets" tab.

The movable asset tab

3. Select (tick) the movable component categories that you wish the unit to be able to receive .
   A Unit can receive more than one category at the same time.

All updates made to the components within the selected category as well as new components added to the category will now be replicated to the unit. Component data already in the database at the time a unit is added to the movable component category is not automatically transferred \ replicated to the unit. The amount of data related to a movable component category can be very large. To avoid clogging your replication with large replication files, you have 2 options to transfer the required initial data.

a) Transfer all initial data by normal replication files.
   By ticking the "Let the system replicate all components for new categories", the next service loop will export all data related to the selected movable component category to a replication file in the COMM folder.
b) Manually export and import the component group data.
   By clicking the **[Create Export file for all connected categories]** button, all the data is exported to an XML file, which can be manually imported onboard. This button will export data for ALL selected categories, if more than one category is ticked. The **[Create export file for selected category]** only exports data for the selected group. (Marked by the blue selection line)

How to make a component movable?
To be able to transfer a component from one unit to another, you have to add the component to one of your Movable component categories. **Note that, setting a component as movable is only possible at the office installation of TM Master V2**. Here is how you do it.

1. Start and log on to TM Master V2 at the office using an account with the correct user rights (ref chapter movable user rights).
2. Click [Inventory] → [Components] → Double click the component you wish to turn into a Movable component.
3. Click the "Specification" main tab → Click the "Movable Component" sub-tab, found in the bottom of the "specification" form. (ref image)
4. Tick the "Movable asset" check box.
5. Select the "movable component category" for this component.
6. Click [Save].
7. If the component you configured as movable has any sub components you will be asked to confirm that they too should be made movable. All sub components of the component will be set as "movable".

This is the "Movable Asset" tab found on the Component specification form.

How to make a stock location movable?

This manual will refer to transferal of "items". An "item" in this regard can be a "Spare part" or a "Catalog item" / "Consumable item". In order to move an item, it must be placed in a location configured to be movable. Now this can appear a strange way of doing things, but if you consider the box or container used to send an item as a location it makes more sense. When items are received, you can transfer them to your ordinary stock locations, and then delete the "movable" one if you do not need it any more.

Here is how you create a movable location. **Note that, setting a stock location as movable is only possible at the office installation of TM Master V2**.

1. Click [Inventory] → [Stock]
2. Create a new stock location by clicking the 🗃️[Add root node to tree] .
3. Enter a name for the location. (.i.e. Shipping Container 1)
4. Right click the location and select "Open"
5. Tick the "Movable asset" check box.
6. Click [Save & Close]
7. The location is now movable and can now be found in the module [Movable Assets] → [Movable stock locations].

Adding items to a movable stock location is done in the same way as for any other stock location. You can drag and drop items from one location to another, or you can open a specific item and add it to the stock location using the stock location selector.

Keep track of all your movable assets in your fleet.

Having assets that will be moved around your fleet and keeping track of everything can be a challenging task. TM Master v2 will allow you to move your assets and be in complete control of where they are located, at any given time. TM Master v2 has 4 views that will do this for you, they are as follows.

Movable components

All components configured to be movable, are listed in the [Movable Assets] → [Movable Components] module. The units with movable components and the movable components themselves are listed in the tree view on the left hand side. Selecting a movable component in the tree view, will list all sub components in the grid view on the right hand side. A movable component will remain linked to the sending unit until the component is received on board the receiving vessel.

The users on board a vessel, can also view the movable components on all vessels. This applies only to the components that are in the same "Movable component category" or categories that the unit is enabled for.

The "Movable Components" overview shows the movable components listed under the "unit" where the component is currently linked.

Movable Stock Locations

All locations configured to be movable, are listed in the [Movable Assets] → [Movable stock locations] module. The units with movable locations and the movable locations themselves are listed in the tree view on the left hand side. Selecting a movable location in the tree view, will list all items in this location in the grid view on the right hand side. A movable stock location will remain linked to the sending unit until the location is received on board the receiving vessel.
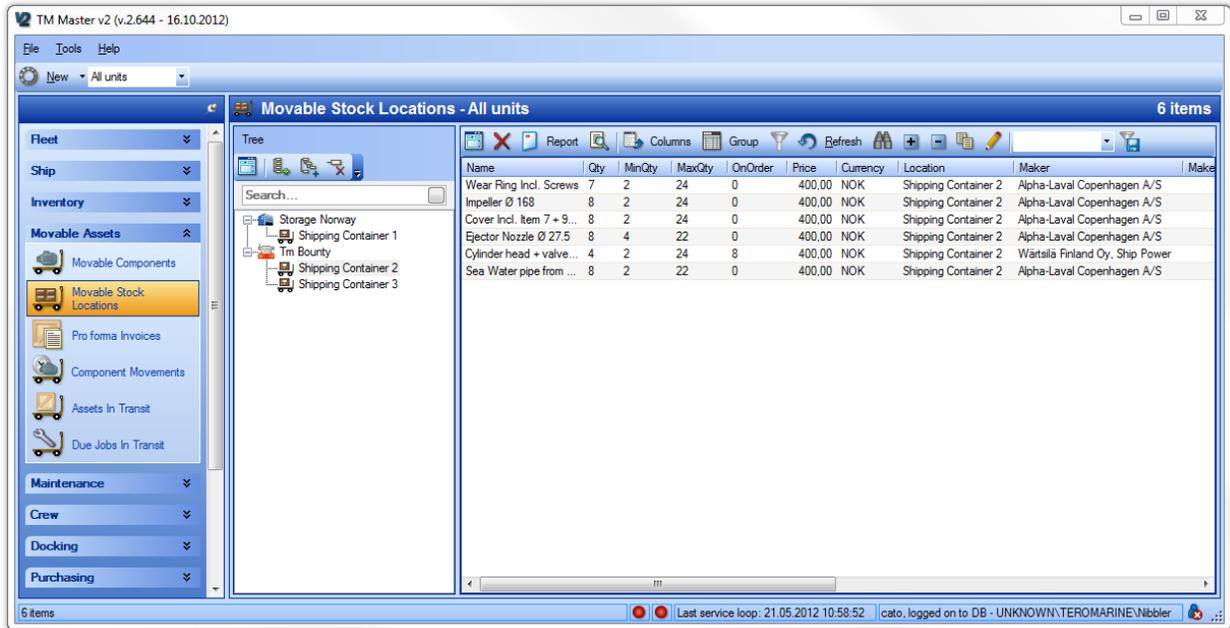
The "Movable Stock Location" overview shows the movable stock location listed under the "unit" where the location is currently linked.

Assets in Transit

The [Assets in Transit] module gives you an overview of the assets currently in transit. Components and stock locations are available on the different tabs found on top of the tree view.
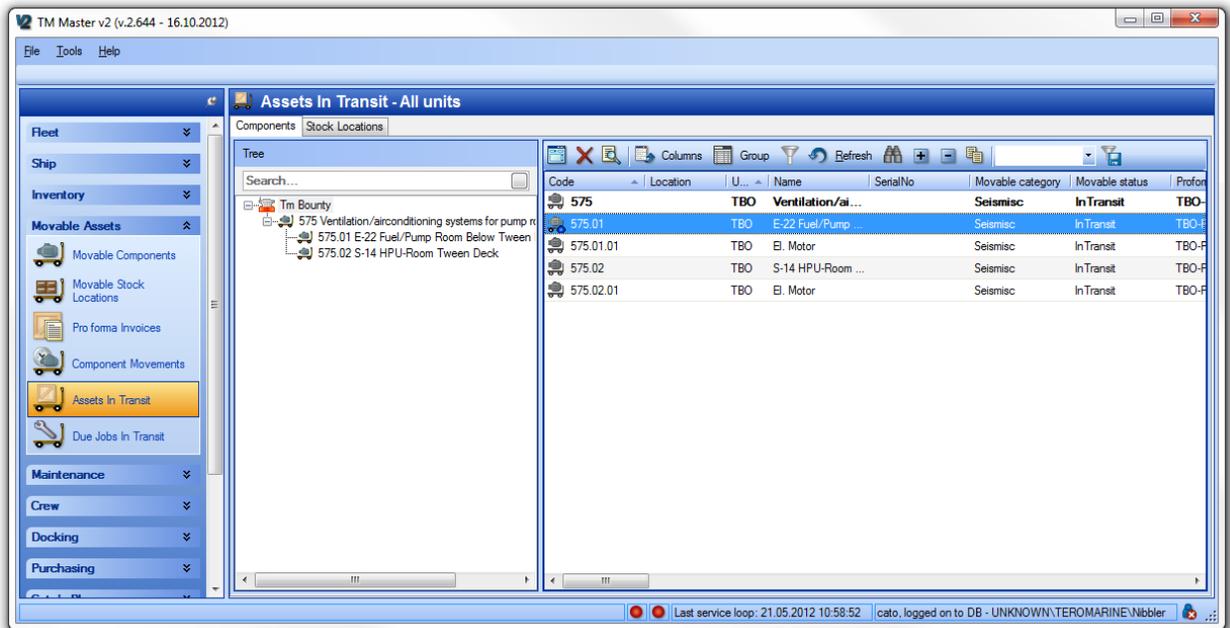
The "Asset in Transit" overview shows the movable components and stock locations.

Component Movements

The [Component Movements] module will keep track of each movable component's transfer history. Using the date range controller at the top of the view, allows the user to check when assets were transferred between units at any time in the past.

The "Component movement" overview shows the movable components and its transfer history.

Pro Forma Invoices

The "Pro Forma Invoices" overview shows the various status levels for all movable asset transfers in the system, both for the sending and receiving units.

How to create a "pro forma invoice" from the overview

This is a detailed description of the procedure required to create a pro forma invoice and initialize the move of a component from one unit to another unit. This description assumes that all the required configurations, as described earlier in this document, have been done. It is possible to initiate a component move from the office or any unit within the fleet that can 'see' the component. However, only the unit that currently owns the component or the office can approve the pro forma invoice.

1. Click [Movable Assets] → [Pro Forma Invoices]
2. At the top left of the screen, click the **[New]** button
3. Fill in the Name of the invoice
4. Select the 'Sender Unit'
5. Select the 'Receiver Unit'
6. Click **[Save]**

It will now be possible to add assets to the Shipping List (either components, stock locations or both) to this invoice as well as defining other aspects of the transfer procedure.

How to create a "pro forma invoice" and initialize a component move, from movable components

This is a detailed description of the procedure required to create a pro forma invoice and initialize the move of a component from one unit to another unit, while in the movable components module. This description assumes that all the required configurations, as described earlier in this document, have been done. It is possible to initiate a component move from the office or any unit within the fleet that can 'see' the component. However, only the unit that currently owns the component or the office can approve the pro forma invoice.

1. Click [Movable Assets] → [Movable Components]
2. Locate the component you wish to transfer from one unit to another, in the "Tree" view.
3. Right click the component and select "Add to invoice", select an existing one or create a new invoice.
4. If you created a "New Invoice", enter a name for the invoice, the name can be used to identify the "Pro forma Invoice" later on.
5. You are then asked to confirm the newly added movable component.
   This dialog also allows you to:
   [Save] which confirms the addition of the new component.
   [Save and Open] which confirms addition and opens the pro forma Invoice form.
   [Cancel] which will cancel the addition of the component.
6. In addition to clicking [Save and Open] in step 6 - To review any existing "Pro forma Invoices" and/or to process them further at any time in the future, Click [Movable Assets] → [Pro forma Invoices].
7. To open the "pro forma invoice" double click it.
8. Fill in the "Pro forma Invoice" details you have available.

How to initialize a stock location transfer (item transferal)
1. Click [Movable assets] → [Movable Stock Locations] → Select the unit you added the stock location for.
2. Right click the stock location and select "Add to invoice" and create a new invoice or select an existing one. You can mix movable components and stock locations on the same invoice.
3. Fill in the "Pro forma Invoice" details you have available.

Due Jobs in Transit

The [Due jobs in Transit] module will keep track of all maintenance jobs on components currently in transit. The jobs for the movable components are removed from a vessel's\unit's due list when the component status is set to "In Transit", and are then only available in this view.

The jobs can be signed out while in transit if required

Jobs can be disabled for components in transit and disabled jobs will by default not appear in the due list. To be able to view the disabled jobs, the "Disabled jobs" check box, found in the due list filter bar, must be ticked. All disabled jobs will be shown in the due list with a strike through.

The "Due Jobs In Transit" view, listing all the disabled jobs for the component in transit.

Holding Bay

The Holding bay is where all incoming received assets are shown, before being placed within their respective structures (Component or Stock structure trees) and being set as active on board. The Holding bay is split into two separate tabs, one for Movable components and one for Movable Stock Locations.
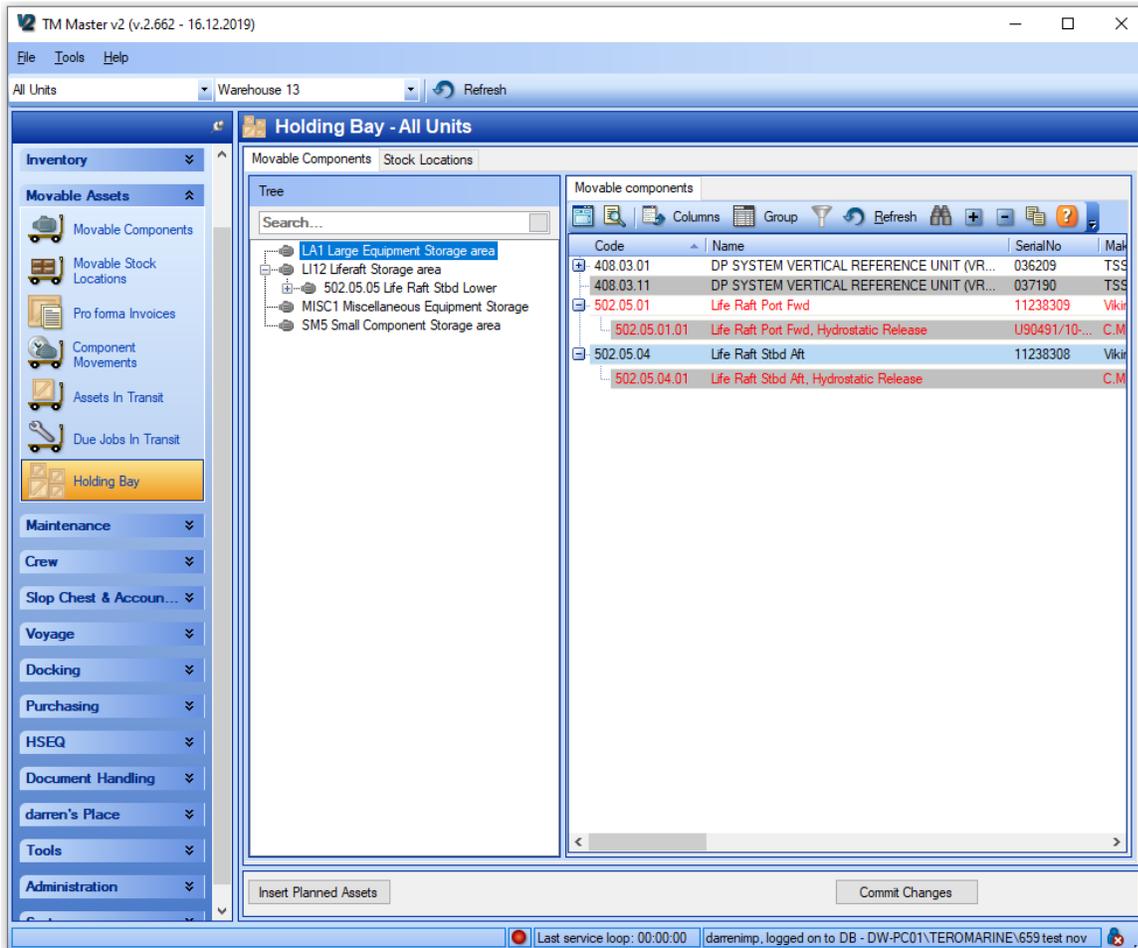
Incoming assets are displayed on the right-hand side and the current structure on board is displayed on the left. The holding bay view can be accessed at any time, but it is also presented as a separate window when clicking the ✔ **[Set to finished and set assets to "active onboard"]** button within the pro forma invoice.

How to Set an Asset to active on board from the Holding Bay

1. Go to Movable Assets → Holding Bay
2. Select the 'Movable Components' or the 'Stock Locations' tab
3. Drag and drop the asset from the right-hand side of the screen to the structure on the left

Or

Click the button in the 'Assigned Parent' column and choose which component/location the asset should be placed under
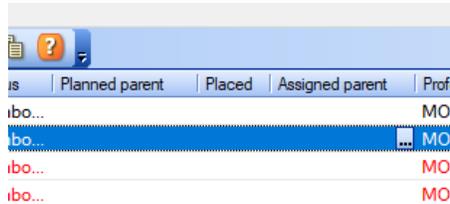
4. Repeat steps 1 through 3 for each asset you wish to place into the structures
5. Click the 'Commit Changes' button to save the changes you've made and set the assets to active on board.

Note: There is a feature for office users to plan where an asset should be placed into the structure of the receiving unit. This feature is called 'Planned Parent' and is a field available within the details of each pro forma invoice line. Clicking the 'Insert Planned Assets' button at the bottom left of the Holding Bay view, will automatically insert these 'Planned' assets into the structure, but the user will still need to click 'Commit Changes' for the operation to be completed.

How to mark a Movable Component as 'Missing'

Any movable components (or their sub-components) that are found to be missing from a delivery can be marked as 'Missing'. The reasons for the assets being missing can be many, it may be that they will arrive in a different container later the same day/week/month or that they have not been placed in the correct container.

1. Go to Movable Assets → Holding Bay
2. Select the 'Movable Components' tab
3. Select the asset and right click
4. Select 'Mark as Missing'
5. Click Yes to confirm that the Asset is missing

This will change the Movable status of the component to 'Missing'. This status can be removed again by right clicking and selecting 'Remove Missing Flag'

How to Create a 'Missing Asset' Pro Forma

In the event that missing assets do not turn up at a later date, or are still located at the original sender (they weren't actually sent), then a 'Missing Asset' pro forma can be created to effectively send the 'ownership' of the asset within TM Master V2 back to the original sender.

1. Go to Movable Assets → Holding Bay
2. Select the 'Movable Components' tab
3. Select a Movable Component with the Movable Status 'Missing'
4. Click the **[Create 'Missing Asset' Pro Forma]** button
5. This will create a new pro forma, with a large number of the fields already filled out based on the pro forma that was used to send the asset originally (see below)
6. Fill out any additional comment or details that are needed and then process as for a normal pro forma

Note: Sender and Receiver Unit are automatically set, as are the name and number of the pro forma. These are based on the original pro forma that was used to send the asset.

How to set 'Lost in Transit'

When a 'Missing Asset' has been received back at the original sender, the asset can either be resent (in the normal manner), or, in the event that the asset has actually been lost, it can be set as 'Lost in Transit'

1. Go to Movable Assets → Holding Bay

2. Select the 'Movable Components' tab
3. Select a Movable Component with the Movable Status 'Missing'
4. Right Click and select 'Mark component as 'Lost in Transit''
5. Click Yes to confirm the Lost in Transit status

As stated in the message that requires you to confirm the status, Setting 'Lost in Transit' is essentially the same as scrapping a component. As such, components that are 'Lost in Transit' can be re-instated if they are later found. This is done on the scrapped components tab of the Inventory → Components module.

Details for the Pro forma Invoice form.

The pro forma invoice form allows you to add details to your transfer, these details can be printed and used as a transport document. Even if you do not need to print any transport documents for your transfers, you will need to fill in at least some of the details found in this in order to complete a transfer of one or more components.

The details available in this pro forma invoice form are as follows:

The "General" tab found on the Pro forma Invoice form.

1. The "General" tab fields
   a. **Name:** The user given name/title for the "Pro forma invoice"
   b. **Shipment status:** The current status for the "Pro forma Invoice" the following statuses are possible (New, Approved, Packed, In Transit, Partly Received, Completely Received, Partly Finished and Finished.) More details on the statuses later in this document.
   c. **Created by:** The "user name" of the user who initially created the Pro forma invoice.
   d. **Pro forma Invoice no:** Once the pro forma has been approved the pro forma invoice number is set and shown here.

e. **Date sent:** Will be set to the current date when the [Send package] is clicked.
f. **Date received:** Will be set when the "Set as received" is clicked.
g. **No of packages:** Is the total sum of "Packages" found on the "Packages" tab
    (For more details on the packages tab please refer to the chapter "Packages")
h. **Total weight:** If packages have been registered on the "Packages" tab and these
    packages have each been given a value for weight, the total sum of all packages is
    shown in this field. By ticking the "Manual" check box you may override the sum by
    typing a weight value.
i. **Total Volume:** You can register height, width and depth for each package, registered on
    the "packages" tab. The total volume of all packages is shown in this field. By ticking the
    "Manual" check box you can override the sum by typing a volume value.
j. **Our reference:** This is a free text field where you can register your reference person or
    code for this component transfer.
k. **Estimated sending date:** Allows you to select an estimated date for when the
    component(s) should/will be sent.
l. **Estimated receiving date:** Allows you to select an estimated date for when you expect
    the component(s) to be received by the receiving unit.
m. **Total Value:** The total value of the component(s) being transferred.
n. **Remarks:** Free text field, where you can enter additional information for the transfer.
o. **Sender unit:** This is the unit where the component(s) currently is/are active
p. **Receiver unit:** Select the unit to receive the component(s). Only units eligible to receive
    the component category of the component(s) are listed.
q. **Receiver address:** When selecting a receiving unit, the selected unit's default delivery
    address is added to this field. Can be manually overwritten.
r. **Your Reference:** The receiving party's reference person or code.
s. **Handling Company:** Select the "Handling company", who will transport/handle the
    components, by clicking the […] button.
t. **Handling company trace no:** Free text field to register the handling company's trace no.
u. **Transit location:** Free text field to register the current location of the component(s)
    being transferred. This is manually updated throughout the transfer process and
    changes are logged in the invoice history.
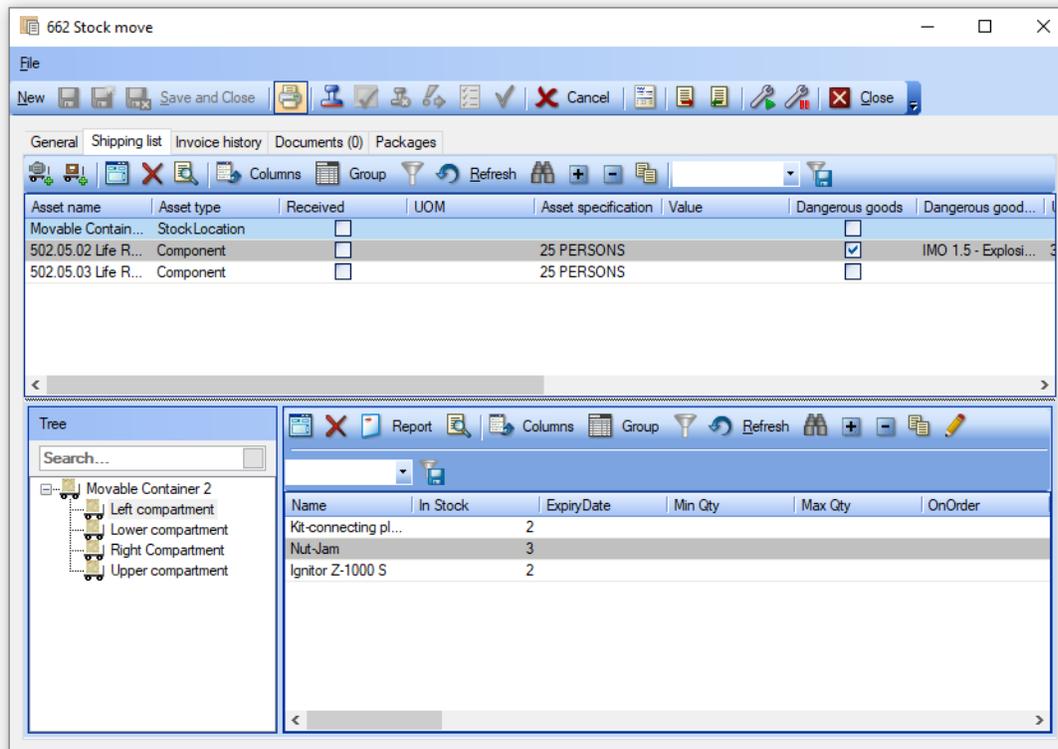
The "Shipping list" tab on the pro forma invoice form

2. The "Shipping list" tab
    a. **The upper grid:** Here you will find all the assets you are going to transfer with this pro forma invoice.

    An asset is either a movable component or a movable stock location. In other words, these are the pro forma invoice lines. Note: for each pro forma invoice line, a number of details can be entered, such as weight, height, width etc. For components, some of these details can be defined on the actual component and these are automatically copied to the pro forma invoice line when the component is added to the pro forma invoice.

    b. **The lower left structure tree:** The structure of the selected item in the upper grid will be shown here.

    c. **The lower right grid:** If the item you select in the lower left structure tree is a movable stock location, a list of all items found within that location will be listed in this grid. If it is a movable component, then the component and its sub-components will be listed here.

    d. 🛒 **[Add a new component to the invoice]:** Allows you to select additional movable components you wish to include in this transfer, directly from this form.

    e. 🛒 **[Add new stock location to the invoice]:** Allows you to select additional movable locations to include in the transfer, directly from this form.

f. ✗ [Delete the selected item]: Allows you to remove the selected asset(s) from the pro forma invoice.

3. The "Invoice history" tab
   This view will list all status changes through the life of the pro forma invoice, allowing you to retrace the events later on.

4. The "Documents" tab
   From this tab you can attach any document or file related to the transfer.
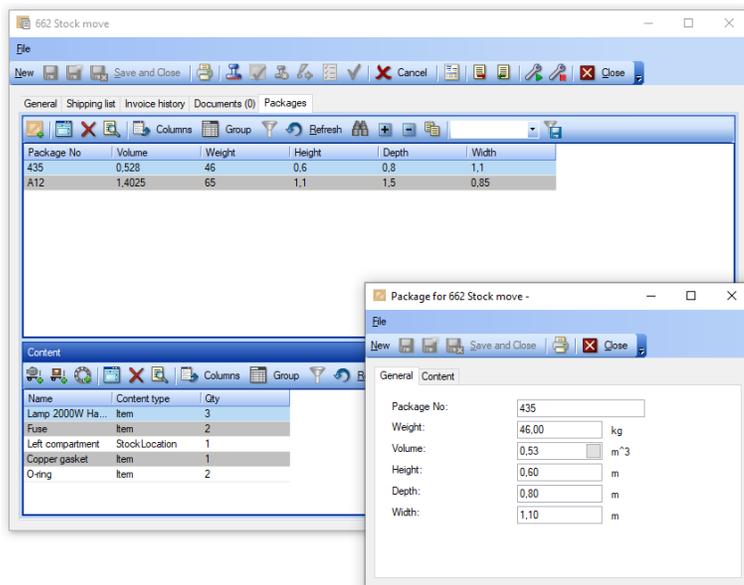
The "Packages" tab on the pro forma invoice form and the packages details form

5. The "Packages" tab.
   The Packages tab allows you to register the number of packages the transfer consists of. You are maybe only moving one movable component, but you may need to ship it in 3 different packages. Each package has 5 attributes "Weight", "Volume", "Height", "Depth" and "Width". It is also possible to define which components, stock locations or items are contained in each package.
   The total weight and volume of all packages is summed up and is shown on the pro forma invoice form "General" tab (ref item 10. h) and i) mentioned previously in this chapter) .

   a. 🖼 [Add new package]: Using this button will open the "Package details form", once this has been filled out and saved a new package has been added to the transfer.

6. The "Package details" form
   a. **Weight:** Enter the total weight of the package

b. **Volume:** If you know the total volume for the package you can type it in directly. If you only have the measurements (Height, Depth and Width) you can enter them first (c. d. e.) and then click the small button that will appear (once H/W/D has been filled out), and the program will calculate the volume for you.

c. **Height:** Enter the height of the package.

d. **Depth:** Enter the depth of the package.

e. **Width:** Enter the width of the package.

Pro forma Invoice functions

You will find 10 functions in the main menu for the pro forma invoice form. 6 of them relate to status changes for the pro forma invoice, through the life of the invoice. They are:

7. Pro forma invoice statuses

a. **[Approve]:** When this button is clicked the following will happen

- The invoice is given its invoice number

- Once approved it is no longer possible to add additional assets to the invoice.

- TM Master will check that all component categories added to the "shipping list" can be received by the selected receiving unit. TM Master will also check a number of other possible issues, such as running hours masters, postponed jobs and jobs with locally assigned work permits. If a conflict is detected, you are notified.

- The next pro forma invoice status button "Packed" is activated along with the "revoke approval" button.

b. **[Revoke approval]** This will return the pro forma invoice to the starting point. So, the pro forma will require a new approval to be processed any further (all other statuses

must also be set again) The revoke approval can be used until the pro forma status is set to "Sent".

c.   [Packed]: The assets being shipped between units need to be packed for shipping before they can be sent. Transfers of assets are usually initiated at the office by an assets co-ordinator in most organisations. However, the person co-ordinating the transfer needs to rely on the people on the vessel or at the location to notify them of when the assets are packed, ready to be transferred. The people doing the actual packing can enter the package details directly if they have access to TM Master v2, and once they are done, they can notify the office personnel by changing the status to "Packed". If they do not have access to TM Master v2, the office personnel can of course enter the information themselves.

d.   [Send package]: When you are ready to send the assets, you click [Send package].
 The following will then happen.
- TM Master will check for any active jobs linked to any of the movable components. If any are found, you will be notified. You are allowed to ship a movable component with active jobs linked to them, but you can also disable (pause) the scheduled jobs while the components are in transit and storage.
- TM Master will check for any orders linked to the components, if any are found the user will be notified. Linked orders are not transferred to the receiving unit.
- Movable component status is set to "In Transit".
- Users onboard can no longer make changes to the assets (or linked jobs) being sent.
- The movable component's jobs are removed from the vessels "Due" list, and are now available in the [Due jobs in transit] module.
- It is now possible for the receiving unit to receive the assets.

e.   [Set as Received]: In order for the receiving unit to add the assets to their system, they will need to click [Set as Received]. Once clicked, a dialog with the shipping list will appear allowing the users to confirm what they have received. By changing the value in the received column they can partly receive the invoice if necessary.
Once the invoice is set to received, the following happens:
- The assets will now be removed (from view) on the sending unit's system, and appear in the receiving unit's system.
- "Movable component status" on the components are changed to "Received on board"
– The assets are placed in the 'Holding Bay' view (see the section about the holding bay).

f.   [Set to finished and set assets to "active onboard"]: This button is used once the assets have been installed on board. The following happens once the button is clicked:

g. – The user is presented with the 'Holding Bay' view where they can place the incoming assets into the existing structure. When components are placed in the structure and the changes are committed, the following takes place.
- Component status is set to "Active onboard"
- The movable components jobs are added to the unit's due list
- The components are now available for updates/changes
- If any of the components are placed under a running hour receiving component, the movable component will start receiving running hours.

Export & import of files and documents linked to a movable asset.

TM Master v2 can replicate any document linked to a component, item or job, but sending large files does require a certain amount of bandwidth. There are settings that set a maximum file size for files to be replicated in order for customers to be able to restrict the number of files attached to the system being sent. As a result some documents are never sent. This can be important information for the users of the components, items or jobs. When a component is transferred, we would want all files and documents attached to them also to be transferred, but replicating them is out of the question.

To solve this problem, it is possible to extract all files and documents linked to the assets being transferred. The files can then be saved to a memory stick or burned to a CD/DVD and shipped along with the assets. Once the items are received on the other end, the files can be imported to the receiving system.

8. Export and import functions on the Pro forma invoice form.

a. [**Export all asset files to a zip file**]: When clicked the user will be asked where to save the export file (.zip), and what to name the file.

b. [**Import all asset files from a zip file**]: When clicked the user will be asked to locate the .zip file with the asset's files.

Disable and enable jobs for components on a pro forma invoice shipping list.

The functions to disable and enable jobs, are available on the "Pro forma Invoice" form. The functions have also been made available for ordinary component jobs, not only movable components. Using the functions from the Pro forma invoice form will disable/enable jobs linked to the components attached to that pro forma invoice.
The linked jobs current status is shown on the pro forma invoice "General" tab.

9. Disable and enable functions in the pro forma invoice form

a. [Disable Jobs]: Will disable all jobs linked to components (and any sub-components thereof) in the pro forma invoice shipping list. Disabled jobs will not become due or overdue, but will be kept in limbo until enabled again.

b. [Enable Jobs]: Will enable any disabled jobs linked to components and any sub-components thereof) in the pro forma invoice shipping list. When disabled jobs are enabled again, you will need to decide on what to do concerning the due date settings.

The following options are given as shown in image below, one job at the time. The job in question is shown at the top of the dialog box that appears. If you want your selection to apply to all the jobs you are enabling, tick the
"Remember due-option for all jobs"
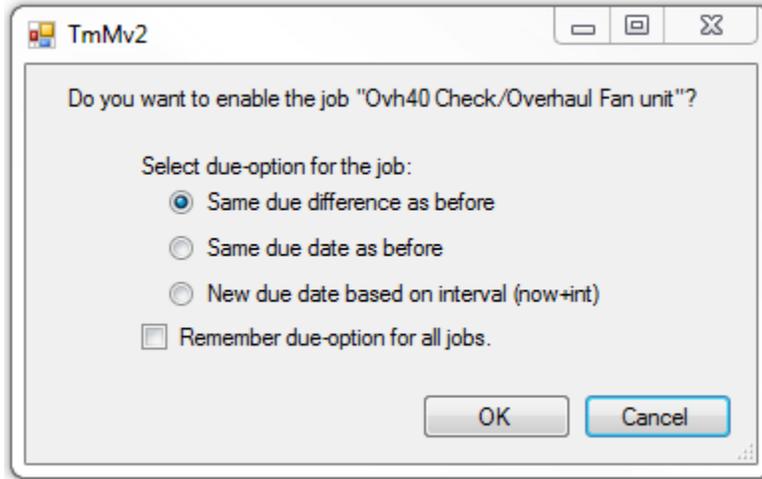
Enable jobs with the same due difference as before.
This means that if the job had 10 days until it was due when it was disabled, it will be added to the due list with 10 days until due.

Same due date as before.
This will make no changes to the job due date and the job will be added to the due list with the same due date it had when it was disabled. If the job's due date occurred during the period it was disabled, it will reenter the due list as overdue.

New due dated based on interval (now + int.).
This option will reset the due date to the current date + the interval. This means that re-enabling a job that has a monthly interval today, would receive a new due date which would be a month from now..

Movable Asset Module User rights

The main user rights for Movable Assets are split across two groups of rights – MovableAssets and ProFormaInvoice, but there a few user rights elsewhere which you may need to be able to set up the movable assets function (such as 'SetMovableCategories' in the 'Units' group of rights)

MovableAssets

Read	Can read movable assets data
Edit	N/A
Add	N/A

Delete	N/A
EditGrid	N/A
SetMovable	Can set assets to movable. Note, this is only allowed at the office installation
SetMovableCategory	Can set assets' movable category
InitiateAssetMove	Can initiate asset move by adding assets to a pro forma invoice
ImportAndExportAssetDocuments	Can import and export all asset documents for a pro forma invoice

ProFormaInvoice

Read	Can read pro forma invoice data
Edit	Can edit pro forma invoices and invoice lines. Can ad, edit and delete invoice documents
Add	Can create a new pro forma invoice
Delete	Can delete pro forma invoice lines
EditGrid	N/A
Approve	Can approve an invoice
Pack	Can set an invoice to Packed
Send	Can send an invoice
Receive	Can receive an invoice
SetToFinished	Can set an invoice to finished
Cancel	Can set an invoice to cancelled
CancelApprove	Can cancel approve (reset an approved invoice to draft)
CanChangePlannedParent	Can assign assets to a different parent than the planned parent when receiving assets on board