



iPoint

iPCA

VPM

V13.22 onwards

iPCA

VPM

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1 Introduction

1.1 General

This document describes the functionality of the module iPCA/VPM (iPoint Compliance Agent – Virtual Product Model).

Information about the usage of the products is available in the corresponding documents.

Parts of this documentation are describing optional function. These optional functions are marked as “optional” in the documentation.

Some functions are only available with specific rights owned by the login user. If a required functionality is not available for you, please contact your internal administrator.

2 Support

For any questions about the application, please contact your in-house administrator.

This administrator will check and answer your enquiry.

If your in-house administrator cannot solve the problem, he will contact iPoint-systems gmbh to get a solution for it.

It is important that only the in-house administrator contacts iPoint-systems gmbh as this is the only way to get a fast response and to avoid doing the work twice.



3 New functions

Version	Description
13.22	Added optional feature allowing to do standard VP BOM background import (batch job) Added new VP attribute "BOM Created Date"
13.10	"Weight" column split into "Weight" and "Weight UoM" and "Quality" column split into "Quantity" and "Quantity UoM" in the Parts List CSI analysis launched from the VP panel is now done for all datasheets contained in selected VP(s) as Step 3 was removed from CSI analysis wizard for VPs Added possibility to run CSI analysis for all VPs matching the search criteria defined in the search mask
13.00	Added configuration parameter for enabling/disabling of the matching of own MDS created by forwarding of the accepted received MDS
12.25	Function to convert VP with IMDS content to IMDS datasheet now creates new component datasheet per each conversion
12.24	Added possibility to schedule immediate recalculation of the compliance of the VP
12.19	Added configuration parameter for definition of rules for part number manipulation from BOM before the matching to MDS is done Added configuration parameter for definition of rule when the SPM request should be created during the matching (based on recipient status of received MDS)
12.12	Added possibility to remove compliance date from the VP
12.05	Added possibility to open Parts List of the linked VP from the context menu
12.03	Improvements and extensions for creation of MDS for unreported part Added function to convert VP with IMDS content to IMDS datasheet
11.11	Added search for VP by its compliance status Added search for VP by its reporting status Added information about the date of the last compliance check of the VP
11.09	Added VP number attribute Added VP ERP/PDM import configuration panel
10.23	Added VP source attribute
10.16	Huge number of extensions and improvements since last release of the manual, e.g.: - ISO weights calculated for VPs and data in it - PPM status calculated for VPs and data in it - New static VP mode with datasheet candidates - New semi-dynamic mode
9.05	First availability of the VPM module

4 Basic terms

4.1 Overview

VPM is a module for handling product information. Base of the VPM is the so called “Virtual Product” (VP), which is a parts list containing various details about the product as well as associated IMDS and SAM-M data with possibility to do a usage and CSI analysis or RRR calculation directly from the VP.

The VPM is designed to provide the central point of information and the ability to call any related function directly from it. This is to avoid the need to have different entries for similar functions to make the usage of the system much easier and much more efficient.

The VP itself is completely independent from the related IMDS or SAM-M data and designed to document a product or assembly as it is. Just by a single click it can show the related IMDS or SAM-M data for analysis like ELV, REACH or RRR.

It is depending on the licensed modules whether a VP can reference IMDS or SAM-M datasheets in the DS list.

A VP has either a parts list assigned (“BOM”) or other VPs which then have a parts list.

This allows easily creating variants of products by selecting different VPs like different engines.

4.2 Definitions

4.2.1 VP Type

Type of the VP defines the characteristic of the product defined by the BOM in the VP, e.g. engine, chassis, door panel, etc.

VP types can be defined in the “**Virtual product type**” master data panel by a user with permission “**VPM_ADMIN**”. For details see **chapter 6.1.1**.

4.2.2 VP Mode

Mode of the VP defines if and how the data contained in the VP could be updated or changed automatically. Process handling the automatic updates of VPs is started every 30 minutes.

Following VP modes are available:

- **Static**
The content of the VP is not changed automatically at all.
In case the datasheet is available for unreported part, this is visualized in the column “**DS Type**” in the DS List but the parts are kept as unreported.
Only possible changes are manual changes done by the user.
- **Semi-dynamic**
The content of the VP can be changed automatically and manually by the user.
Only unreported parts are automatically replaced with matching datasheet upon its availability.

- **Dynamic**
The content of the VP can be changed automatically and manually by the user.
Both reported and unreported parts are automatically updated with (new) datasheet upon its availability.
- **Released**
The content of the VP is not changed at all.

PLEASE NOTE: In case that VP is configured to use also non-accepted datasheets from the supplier or non-internally released own datasheets, the content of those datasheets and therefore the content of the VP can be changed, even if the VP is released. This is the case if the content of such datasheets is changed.

	Static	Semi-dynamic	Dynamic	Released
Automatic replacement of mission positions with datasheets	No	Yes	Yes	No
Automatic replacement of reported positions (e.g. with newer version of MDS)	No	No	Yes	No
Automatic update based on the changed of the content of not released MDS (e.g. total VP weight, materials, substances, etc.)	Yes	Yes	Yes	Yes
Manual replacement of missing positions with any wished MDS in DS List	No	Yes	Yes	No
Manual replacement of missing positions with suggested MDS candidate in DS List	Yes	No	No	No
Manual replacement of reported positions (e.g. with newer version, MSP) in DS List	No	Yes	Yes	No
Manual replacement of reported positions with missing positions in DS List	Yes	Yes	Yes	No
Manual addition/edit/copy/deletion of a part in Parts List	Yes	Yes	Yes	No
Manual change of the VP attributes (compliance date, expiry date, etc.)	Yes	Yes	Yes	No

Table 1 Summary of possible manual and automatic VP updates depending on the VP mode

The VP modes available for use while working with VPs (e.g. search, create/edit/copy VP, import VP, etc.) can be defined by the iPCA company administrators by changing configuration of the configuration parameter “**VP_MODES**”.



Following values for the configuration parameter “**VP_MODES**” are supported:

- **STATIC**
Will enable the VP mode “**Static**”.
- **SEMIDYNAMIC**
Will enable the VP mode “**Semi-dynamic**”.
- **DYNAMIC**
Will enable the VP mode “**Dynamic**”.
- **RELEASED**
Will enable the VP mode “**Released**”.

Above listed values can be combined according to the needs. The separator is a semicolon “;”.

In case the configuration parameter “**VP_MODES**” is deleted, system will automatically use a fallback mechanism where all four VP modes are enabled.

PLEASE NOTE: In case that any of the VP modes will be disabled, those VPs having disabled VP mode set will not be found by search unless the VP mode will be enabled again.

4.2.3 VP Access

Access mode of the VP defines the visibility of the VP across the company.

Following VP access modes are available:

- **Public**
VP is visible and accessible to every user.
- **Private**
VP is visible and accessible just to the creator of the VP.
PLEASE NOTE: The private VP is visible and accessible also to the user with the permission “**VPM_ADMIN**”.
- **Project**
VP is visible and accessible just to the users with access to the defined project.
PLEASE NOTE: This functionality is not implemented yet.
- **Org. Unit**
VP is visible and accessible just to the users with access to the defined organization unit.
PLEASE NOTE: This functionality is not implemented yet.

The VP access modes available for use while working with VPs (e.g. search, create/edit/copy VP, etc.) can be defined by the iPCA company administrators by changing configuration of the configuration parameter “**VP_ACCESS_MODES**”.

Following values for the configuration parameter “**VP_ACCESS_MODES**” are supported:

- **PUBLIC**
Will enable the VP mode “**Public**”.
- **PRIVATE**
Will enable the VP mode “**Private**”.
- **PROJECT**
Will enable the VP mode “**Project**”.
- **ORG_UNIT**
Will enable the VP mode “**Org. Unit**”.

Above listed values can be combined according to the needs. The separator is a semicolon “;”.

In case the configuration parameter “**VP_ACCESS_MODES**” is deleted, system will automatically use a fallback mechanism where all four VP access modes are enabled.

PLEASE NOTE: In case that any of the VP access modes will be disabled, those VPs having disabled VP access mode set will not be found by search unless the VP access mode will be enabled again.

4.2.4 VP Source

Source of the VP defines the way how the VP was created.

Following VP sources are available:

- **Automated - Standard BOM**
VP was created by the import of the standard CSV BOM started by the mission in Agent Server.
- **Manual - Create**
VP was created manually by click on the “**Create VP**” button in main VP panel.
PLEASE NOTE: This source is assigned to all VPs which existed before update to the iPCA version with implemented “**VP Source**” attribute and where the creator was different than “**IPCA**”.
- **Manual - Standard BOM**
VP was created by the import of the standard CSV BOM started by the user in the application.
PLEASE NOTE: This source is assigned to all VPs which existed before update to the iPCA version with implemented “**VP Source**” attribute and where the creator is equal to “**IPCA**”.
- **Not available**
VP was created by non-standard way for which the specific source is not implemented yet.

5 VP tab

The VP tab is split into three areas:

1. Search mask (orange) - see **chapter 5.1**
2. Result list (blue) - see **chapter 5.2**
3. Actions (green) - see **chapter 5.3**

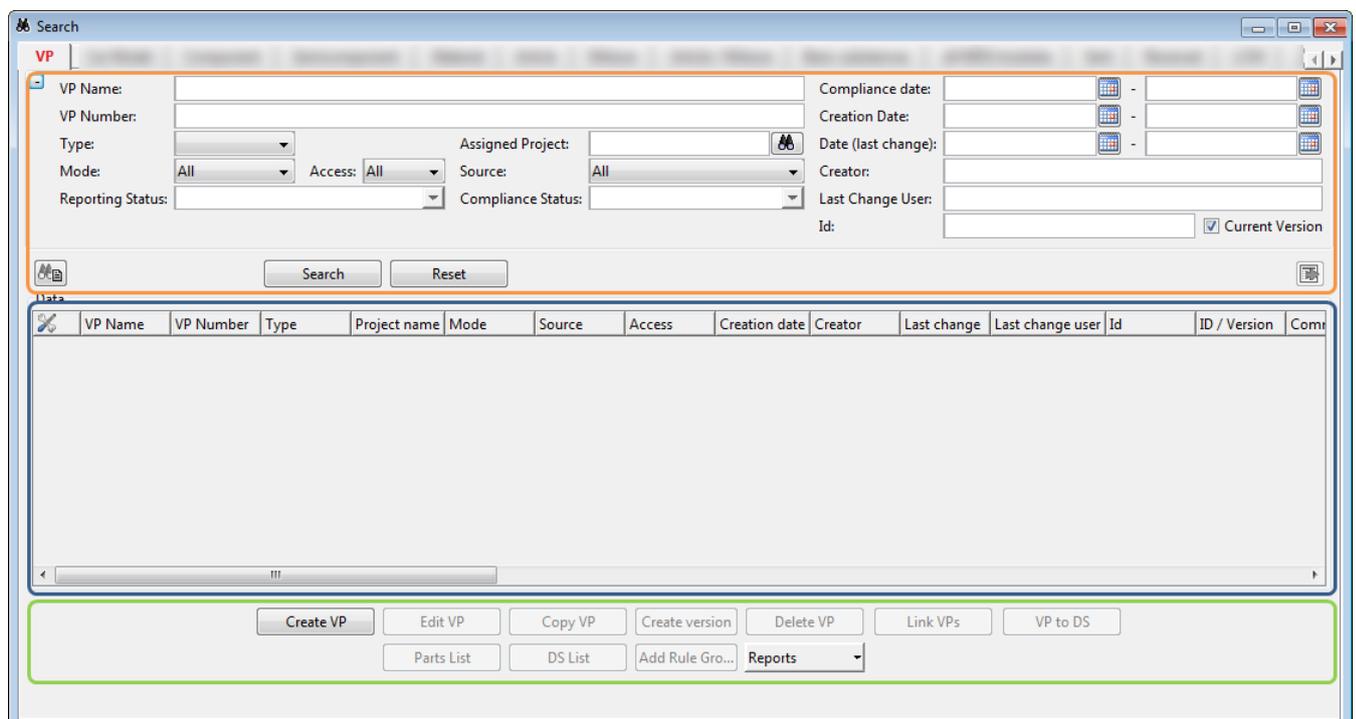


Figure 1 VP tab

5.1 Search mask

Enables to search for VP based on defined search criteria.

The following search criteria are available:

- **VP Name**
The name of a VP.
- **VP Number**
The number of a VP.
- **Type**
The type which is assigned to a VP.
Only defined VP types can be used for search (see **chapter 4.2.1** and **chapter 6.1.1**).



- **Assigned project**

The project which assigned to a VP.

Upon click on  button, a project search panel is opened. Upon selection of a project and search for VPs, all VPs requests existing for selected project are listed.

- **Mode**

The mode which is assigned to a VP.

Only enabled modes can be used for search (see **chapter 4.2.2**).

- **Access**

The access mode which is assigned to a VP.

Only enabled access modes can be used for search (see **chapter 4.2.3**).

- **Source**

The source of a VP.

Only predefined sources can be used for search (see **chapter 4.2.4**).

- **Reporting Status**

Reporting status of a VP:

- Completely reported
- Completely reported but contains preliminary MDSs
- Not completely reported

- **Compliance Status**

Compliance status of a VP:

- All datasheets are checked OK
- All datasheets are unchecked
- At least one datasheet has ERROR
- At least one datasheet has INFORMATION
- At least one datasheet has INFORMATION or WARNING
- At least one datasheet has WARNING
- Compliance status is being calculated

- **Compliance date**

Period of time of the due date which is assigned to a VP and used for compliance check.

This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.

- **Creation date**

Period of time in which the VP was created.

This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.

- **Date (last change)**

Period of time in which the VP was changed.



This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.

- **Creator**
Name of the user who created the VP (using iPCA username).
Name of the user of a VP created by a system (e.g. by import) is “**IPCA**”.
- **Last change user**
Name of the user who last changed the VP (using iPCA username).
Name of the user of a VP changed by a system (e.g. by import) is “**IPCA**”.
- **Id**
The ID of a VP.
- **Current version**
If this checkbox is checked, only current version of a VP will be shown in the result list.

Following actions are available:

- **Search**
Perform searches based on criteria entered into the search fields
- **Reset**
Remove entered search criteria from search fields

5.2 Result list

The result list displays VPs as per defined search criteria. Each row represents one VP.

The following standard columns are available:

- **VP Name**
Name of the VP.
- **VP Number**
The number of a VP.
- **Type**
Type of the VP.
- **Project name**
The project which the VP is linked to.
- **Mode**
The mode of the VP.
- **Source**
The source of the VP.

- **Access**
The access level of VP.
- **Creation date**
The date of the creation of the VP.
- **Creator**
Name of the user who created the VP (iPCA user name).
Name of the user of a VP created by a system (e.g. by import) is “**IPCA**”.
- **Last change**
The date when the VP was last time changed either by the user or by an automatic update.
- **Last change user**
Name of the user who last updated the VP (iPCA user name).
Name of the user if VP was last updated by an automatic update is “**IPCA**”.
- **Id**
The ID of the VP.
- **ID / Version**
The ID and version of the VP.
- **PDM System**
PDM System which is the source of the BoM used for creation of the VP.
This column is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **PDM Client**
PDM Client which is the source of the BoM used for creation of the VP.
This column is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Number**
Number of the BoM used for the creation of the VP.
This column is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Alternative**
Alternative of the BoM used for the creation of the VP.
This column is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Type**
Type of the BoM used for the creation of the VP.
This column is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **Comment**
Comment defined for a VP.
- **Compliance Date**
The compliance data used for the calculation of the compliance status of the VP.

- **Compliance Status**

Compliance status of the VP against CSI rule group(s) and compliance date assigned to the VP:

-  - VP is compliant (all datasheets are checked with result OK)
-  - VP is compliant but an information is raised for at least one datasheet (at least one datasheet is checked with result INFORMATION but none with result ERROR)
-  - VP is compliant but a warning is raised for at least one datasheet (at least one datasheet is checked with result WARNING but none with result ERROR)
-  - VP is not compliant (at least one datasheet is checked with result ERROR)
-  - VP is not checked yet (not yet processed, CSI rule group and/or compliance date is not assigned or no datasheet is assigned to any of the parts)
-  - Compliance status calculation is queued (the compliance status will be (re)calculated soon)

In general, each VP with compliance status  is processed by the background process that is running every 15 minutes. This sets the compliance status of the VP (with assigned CSI rule group(s) and compliance date and at least one reported part) to . Afterwards, the DB job for calculation of the compliance is created. Once this job is finished, the VP will be again processed by the background process, which sets the appropriate compliance state for the VP as detailed above.

The compliance status of the VP is reset to  on below listed actions:

- addition of new or removal of already assigned CSI rule group(s)
- change of the defined compliance date
- addition of new reported part
- replace of the datasheet assigned to the reported part
- removal of reported part

By click on the icon for the compliance status, a compliance status overview panel with overall compliance status for each CSI rule group assigned to the VP is displayed (see **Figure 2**).

On the top of the list, there is information about the last calculation of the compliance for the particular VP. This is the date when the last automatically created compliance database job for the VP has finished. The date of the last CSI check that was run against the VP by the user is not considered.

PLEASE NOTE: In case the compliance status is not calculated for the VP (calculation in progress, no rule group assigned, no compliance date assigned) this panel does not contain any entries.

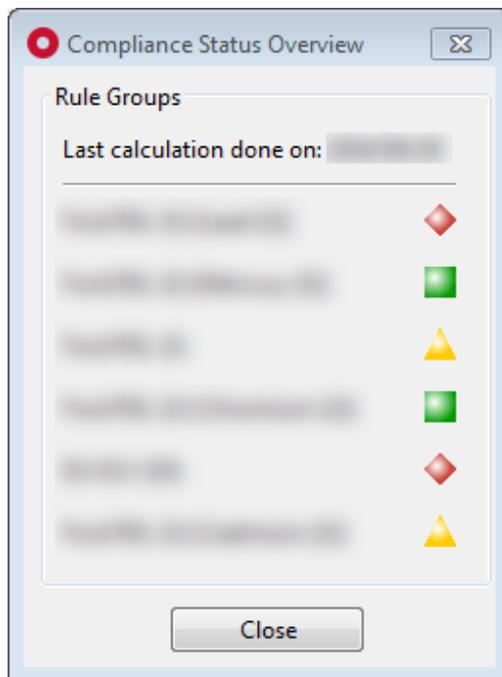


Figure 2 Compliance state overview panel

- **Reporting status**

Reporting status of the parts in the VP:

-  - Completely reported (a datasheet is assigned to each part in the VP)
-  - Completely reported but contains preliminary MDSs (a datasheet is assigned to each part in the VP but at least one is declared as preliminary MDS)
-  - Not completely reported (datasheet is not assigned to at least of the parts in the VP)
-  - VP does not have any parts or the reporting status is not calculated yet

Reporting status is recalculated every 15 minutes on following triggers:

- addition of new (un)reported part
- removal of a (un)reported part
- link of the VP
- unlink of the VP

- **Total number of items**

The total number of parts in the VP.

The value is recalculated every 15 minutes on following triggers:

- addition of new (un)reported part
- removal of a (un)reported part
- link of the VP
- unlink of the VP

In case the new VP is created and the total number of items was not calculated for it yet, the value "-1" is displayed.

- **Number of IMDS DS available**

The number of parts with linked IMDS datasheet.

The value is recalculated every 15 minutes on following triggers:

- addition of new (un)reported part
- removal of a (un)reported part
- link of the VP
- unlink of the VP

In case the new VP is created and the number of IMDS DS was not calculated for it yet, the value "-1" is displayed. This column is not visible in case the IMDS module is not licensed.

- **Number of SAM-M DS available**

The number of parts with linked SAM-M datasheet.

The value is recalculated every 15 minutes on following triggers:

- addition of new (un)reported part
- removal of a (un)reported part
- link of the VP
- unlink of the VP

In case the new VP is created and the number of SAM-M DS was not calculated for it yet, the value "-1" is displayed. This column is not visible in case the SAM-M module is not licensed.

- **Number of unreported items**

The number of parts without linked IMDS or SAM-M datasheet.

The value is recalculated every 15 minutes on following triggers:

- addition of new (un)reported part
- removal of a (un)reported part
- link of the VP
- unlink of the VP

In case the new VP is created and the number of unreported items was not calculated for it yet, the value "-1" is displayed.

- **VP calculated weight [g]**

The total weight of all reported parts in the VP calculated using the formula:

$$\text{VP calculated weight [g]} = \text{DS Total weight [g] of MDS1} + \text{DS Total weight [g] of MDS2} + \dots + \text{DS Total weight [g] of MDS n}$$

- **Expiry date**

The date when the VP expires and will be automatically deleted.

- **BOM Create Date**

The date when the BOM for the VP was created/generated/exported.

- **Parts marking status**

Information whether the answers on parts marking questions in all datasheet linked to the VP are correct or not (if applicable):

-  - all datasheets have all answers on polymeric parts marking question correct
-  - at least one datasheet has at least one incorrect answer on polymeric parts marking question
-  - parts marking is not relevant to all datasheets
-  - datasheets are not checked yet (not yet processed or no datasheet is assigned to any of the parts)

This column is shown only in case the polymeric parts marking check is activated in the check configuration for VP (see **chapter 6.3.1**).

- **Parts marking OK [%]**

Percentage of datasheets with correct answers on parts marking question.

The value is calculated using the formula:

$$\text{Parts marking marked [\%]} = \text{Total number of IMDS DS with appropriately answered parts marking question} / (\text{Total number of polymeric parts marking relevant MDSs}) * 100$$

- **Metals [g]**

Weight (converted to grams) of the materials belonging to the “**Metals**” ISO material classification.

- **Polymers [g]**

Weight (converted to grams) of the materials belonging to the “**Polymers**” ISO material classification.

- **Elastomers [g]**

Weight (converted to grams) of the materials belonging to the “**Elastomers**” ISO material classification.

- **Glass [g]**

Weight (converted to grams) of the materials belonging to the “**Glass**” ISO material classification.

- **Fluids [g]**

Weight (converted to grams) of the materials belonging to the “**Fluids**” ISO material classification.

- **MONM [g]**

Weight (converted to grams) of the materials belonging to the “**MONM**” ISO material classification.

- **Others [g]**

Weight (converted to grams) of the materials belonging to the “**Others**” ISO material classification.



PLEASE NOTE: ISO columns described above are shown only in case the ISO classifications check is activated in the check configuration for VP (see **chapter 6.3.1**). Quantities of parts are not considered for the calculation of the weight in ISO columns.

The order of the columns in the result list and columns displayed can be managed by the user. For more details see IHS user manual, **chapter 29**.

The content of the result list could be exported to CSV or XLS(X) format using the button .

5.2.1 Context menu functions

By selecting an entry and click on the right mouse button, the context menu is opened.

Following actions are available:

- **Copy**
Allows to copy the content of the selected cell to the clipboard (see **chapter 5.2.1.1**).
- **Immediate compliance recalculation (optional)**
Allows to schedule ad-hoc DB job for recalculation of the compliance status of the selected VP. (see **chapter 5.2.1.2**).
This item is shown only in case this feature is enabled by iPoint.

5.2.1.1 Copy

The content of selected cell in the result list is copied by click on the “**Copy**” option in the context menu. This can be then used either in iPCA (e.g. for further searches) or in any other application for any purpose. This option is always enabled.

5.2.1.2 Immediate compliance recalculation (optional)

The ad-hoc DB job for recalculation of the compliance status of the selected VP can be scheduler by click on the “**Immediate compliance recalculation**” option in the context menu.

The option is enabled only if below conditions are met:

- A single VP is selected
 - Mode of the VP is either “**Static**” or “**Semi-dynamic**” or “**Dynamic**”
 - “**Compliance Date**” is set
 - At least one rule group is assigned
 - At least one part is reported
- User has the permission “**VPM_EDIT**” granted

5.3 Actions

The following actions are available:

- **Create VP**
Allows to create a new VP manually (see **chapter 5.3.1**).
- **Edit VP / Show**
Allows to edit details of selected VP (see **chapter 5.3.2**).
- **Copy VP**
Allows to create a new VP by copying a selected VP (see **chapter 5.3.3**).
- **Create version**
Allows to create a new version of selected VP (see **chapter 5.3.4**).
- **Delete VP**
Allows to delete selected VP(s) (see **chapter 5.3.5**).
- **Link VPs**
Allows to link other VPs to selected VP to create structured VP (see **chapter 5.3.6**).
The button is disabled in case the selected VP is in “**Released**” mode.
- **VP to DS (optional)**
Allows to convert selected VP to the datasheet (see **chapter 5.3.7**).
- **Parts List**
Displays parts contained in the selected VP and allows to manage them (see **chapter 5.3.7**).
- **DS List**
Displays datasheets contained in the selected VP and allows to manage them (see **chapter 5.3.9**).
- **Add rule groups**
Allows to add compliance checks for selected VP (see **chapter 5.3.10**).
- **Reports**
Allows to start RRR calculation for selected VP or run usage or CSI analysis for selected VP(s) or see results from CSI analysis (see **chapter 5.3.11**).

5.3.1 Create VP

The new VP can be created manually by click on the “**Create VP**” button. This load empty VP creation dialog (see **Figure 3**).

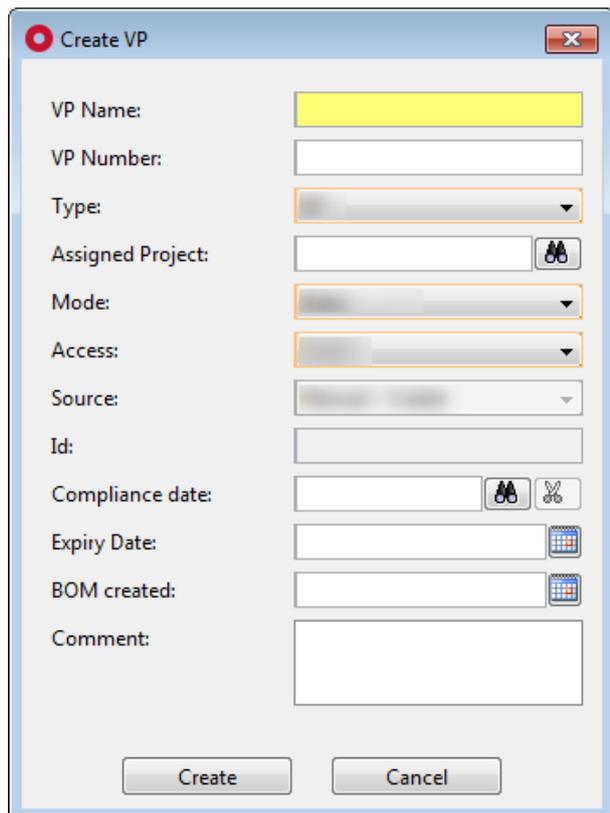


Figure 3 Dialog window for creation of a VP

HINT: VP can be created also by an import (see **chapter 7.1**) or from results of the CSI analysis (see **chapter 7.2**).

Following information must/could be defined:

- **VP Name**
Name of the VP.
This is mandatory field.
- **VP Number**
Number of the VP.
- **Type**
Type of the VP.
This is mandatory field.
Only defined VP types can be used. These can be managed as detailed in the **chapter 6.1.1**.

- **Assigned Project**

The project to which the VP is to be linked.

Project can be chosen using the  button, which will load standard project search window. Wished project can be then confirmed by click on the “**Apply**” button.

Projects are managed in the “**Projects**” master data.

- **Mode**

The mode of the VP.

This is mandatory field.

Only enabled modes can be used. These can be managed as detailed in the **chapter 4.2.2**.

- **Source**

The source of the VP.

This is automatically populated with value “**Manual – Create**”.

This field is read-only and cannot be modified by the user.

- **Access**

The access level of VP.

This is mandatory field.

Only enabled access modes can be used. These can be managed as detailed in the **chapter 4.2.3**.

- **Id**

The ID of the VP is generated by the system.

This field is read-only and cannot be modified by the user.

- **Compliance Date**

The compliance data used for the calculation of the compliance of the VP.

Compliance date can be chosen using  button, which will load standard compliance due date search window. Wished compliance date can be then confirmed by click on the “**Apply**” button.

Only defined compliance dates can be used. These can be managed as detailed in the **chapter 6.1.2**.

Compliance date can be removed using  button, which is activated only if a compliance date is set.

- **Expiry Date**

The date when the VP expires and will be automatically deleted.

This can be defined either manually in the text field or by using  button and selecting the date from the calendar shown.

- **BOM created**

The date when the BOM was created/generated/exported.

This can be defined either manually in the text field or by using  button and selecting the date from the calendar shown.

- **Comment**

The comment for a VP.

Once all details are defined, the VP can be created using “**Create**” button. To cancel creation of the VP, the “**Cancel**” button is used.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 4**).

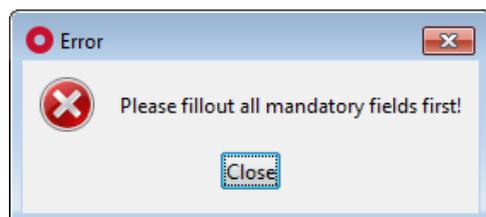


Figure 4 Error message shown on save of VP if not all mandatory VP details are defined

PLEASE NOTE: Only user with activated permission “**VPM_MANUAL**” can create a VP manually.

5.3.2 Edit VP / Show

Label and function of this button is interactive:

- If a selected VP is in “**Released**” mode, the label of this button is “**Show**”
- If a selected VP is not in “**Released**” mode, the label of this button is “**Edit VP**”

The details of the selected VP can be displayed by click on the “**Show**” button or modified by click on the “**Edit VP**” button. This load a standard VP creation dialog window (see **Figure 5**) populated with details of a selected VP and they could be changed.

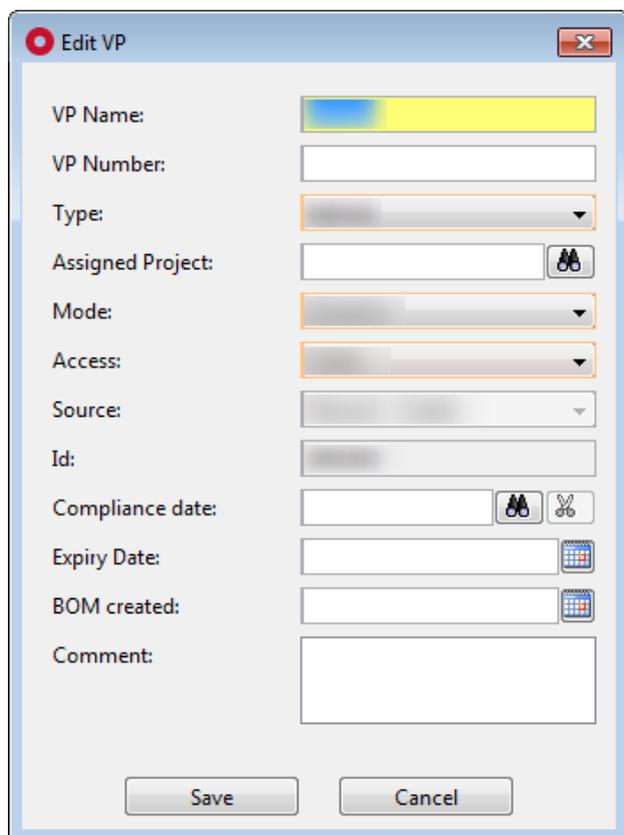


Figure 5 Dialog window for edit of a VP

PLEASE NOTE: “Access” drop-down list is enabled only in case the VP is being edited by its creator or by the user with “VPM_ADMIN” permission granted.

Once all changes are done, VP can be saved using “Save” button. To cancel changes, the “Cancel” button is used.

In case a compliance date is changed for a VP, the dialog is shown to the user (see **Figure 8**). On click on the “Yes” button, the compliance state is set to . If the VP has at least one compliance rule assigned, the VP is then processed by the background process that is running every 15 minutes. This sets the compliance status of the VP to . Afterwards, the DB job for calculation of the compliance is created. Once this job is finished, the VP will be again processed by the background process which sets the appropriate compliance state for the VP. On click on the “No” button, changes in CSI rule group assignment are cancelled.

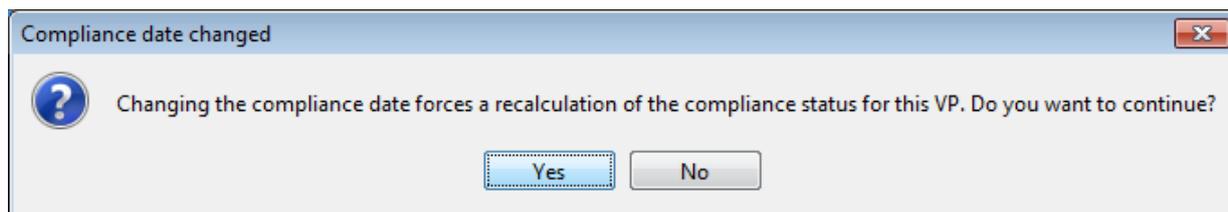


Figure 6 Confirmation of a change of compliance date for VP

In case a compliance date is removed from a VP, the dialog is shown to the user (see **Figure 7**). click on the “**Yes**” button, the compliance date is deleted and the compliance state is set to **?**. On click on the “**No**” button, removal of the compliance date is not done.

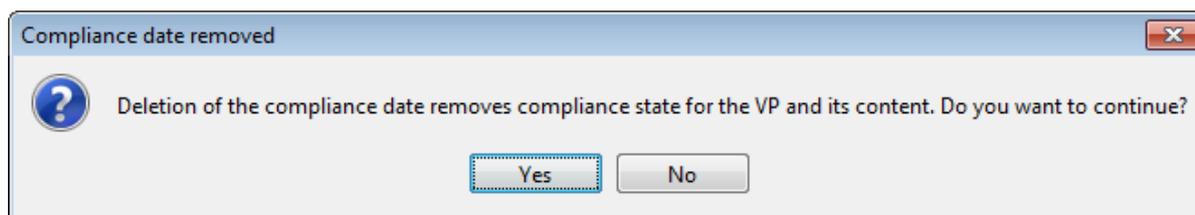


Figure 7 Confirmation of a removal of compliance date from VP

In case the VP mode is set to “**Released**” a question is shown (see **Figure 8**). VP can be released by click on the “**Yes**” button or keep in current mode by click on the “**No**” button.

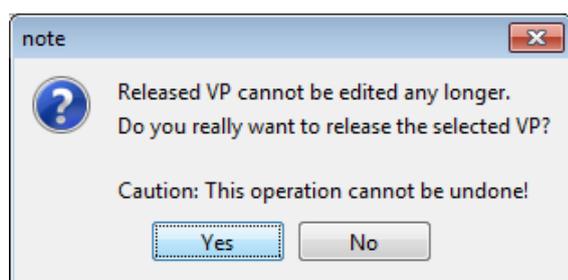


Figure 8 Question shown prior to release of the VP

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 4**).

PLEASE NOTE: Only user with activated permission “**VPM_EDIT**” can edit details of a VP.

5.3.3 Copy VP

A new VP can be created by copy of the selected VP by click on the “**Copy**” button. This load a standard VP creation dialog window (see **Figure 9**) populated with details of a selected VP extended with a checkbox “**Copy also parts list and linked content (VPs)**”. If this checkbox is checked, a created VP will have the same content as original VP.

In this dialog, any of the VP details can be changed.

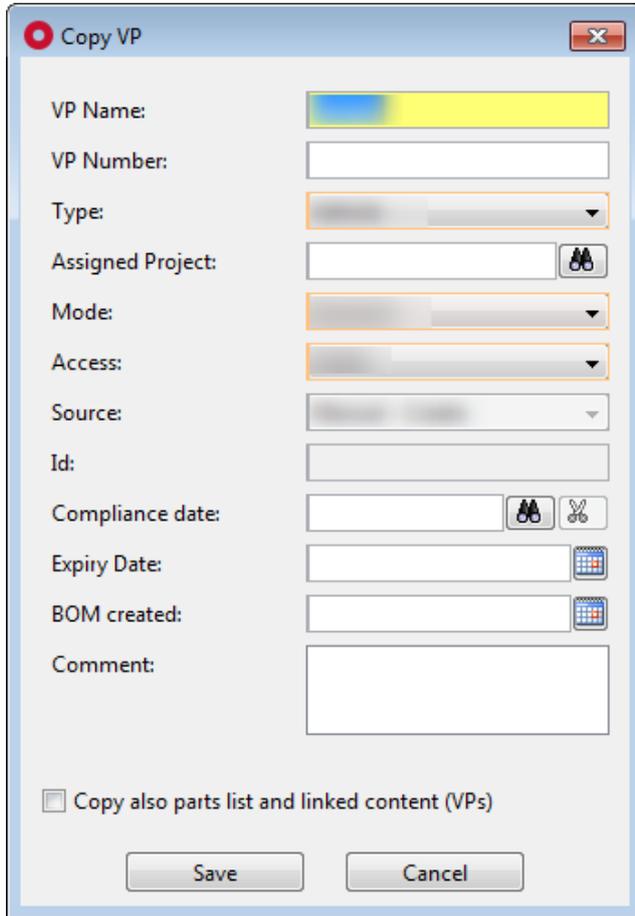


Figure 9 Dialog window for copy of a VP

Creation of a new VP by copy can be confirmed using **“Save”** button. To cancel copy process, the **“Cancel”** button is used.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 4**).

The mode of newly created VP depends on the mode of the original VP:

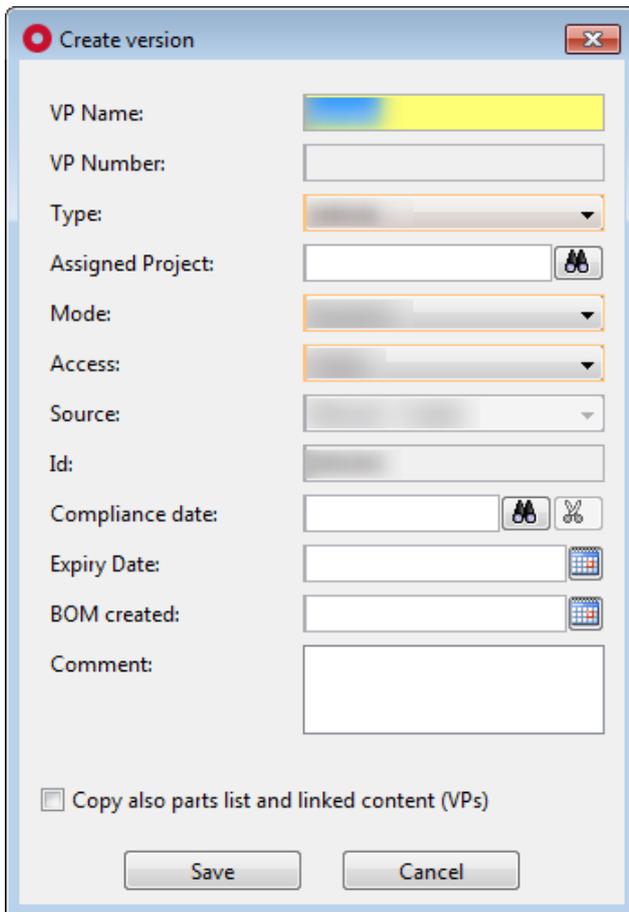
- If mode of original VP is **“Static”**, mode of new VP will be **“Static”**
- If mode of original VP is **“Semi-dynamic”**, mode of new VP will be **“Semi-dynamic”**
- If mode of original VP is **“Dynamic”**, mode of new VP will be **“Dynamic”**
- If mode of original VP is **“Released”**, mode of new VP will be **“Dynamic”**

PLEASE NOTE: Only user with activated permission **“VPM_COPY”** can copy a VP.

5.3.4 Create version

A new version of a selected VP can be created by click on the “**Create version**” button. This load a standard VP creation dialog window (see **Figure 10**) populated with details of a selected VP extended with a checkbox “**Copy also parts list and linked content (VPs)**”. If this checkbox is checked, a created VP will have the same content as original VP.

In this dialog, all VP details except of the “**VP Name**“ can be changed.



The screenshot shows a 'Create version' dialog box with the following fields and controls:

- VP Name: Text input field (highlighted in yellow)
- VP Number: Text input field
- Type: Dropdown menu
- Assigned Project: Text input field with a user icon
- Mode: Dropdown menu
- Access: Dropdown menu
- Source: Dropdown menu
- Id: Text input field
- Compliance date: Text input field with user and lock icons
- Expiry Date: Text input field with a calendar icon
- BOM created: Text input field with a calendar icon
- Comment: Text area
- Copy also parts list and linked content (VPs)
- Save button
- Cancel button

Figure 10 Dialog window for new version of a VP

5.3.5 Delete VP

Selected VP(s) can be deleted by click on the “**Delete VP**” button. The deletion of VP(s) is either interactive where user has to wait until all VPs are deleted (see **chapter 5.3.5.1**) or via DB job where user can work with iPCA as the VP deletion is done in the background (see **chapter 5.3.5.2**). This depends on the number of selected VPs and on the value of the configuration parameter “**THRESHOLD_FOR_DB_JOB_VP_DELETION**” which default value is “**10**”.

PLEASE NOTE: Only user with activated permission “**VPM_DELETE**” and/or permission “**VPM_PHYSICALLY_DELETE**” can delete VP(s).

5.3.5.1 Interactive deletion of VP(s)

In case the number of selected VPs is lower than or equal to the value defined in the configuration parameter “**THRESHOLD_FOR_DB_JOB_VP_DELETION**”, the deletion is done interactively in the client.

Upon click on the “**Delete VP**” button one of the dialog windows for VP deletion is shown:

- In case one VP is selected, see **Figure 12**
- In case multiple VPs are selected, see **Figure 11**

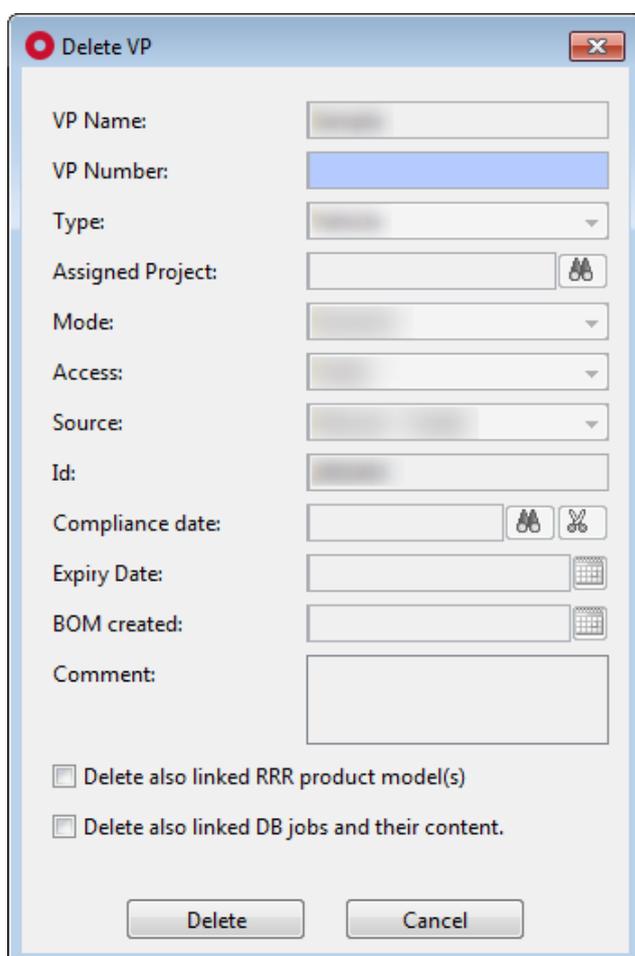


Figure 11 Dialog window for deletion of a single VP

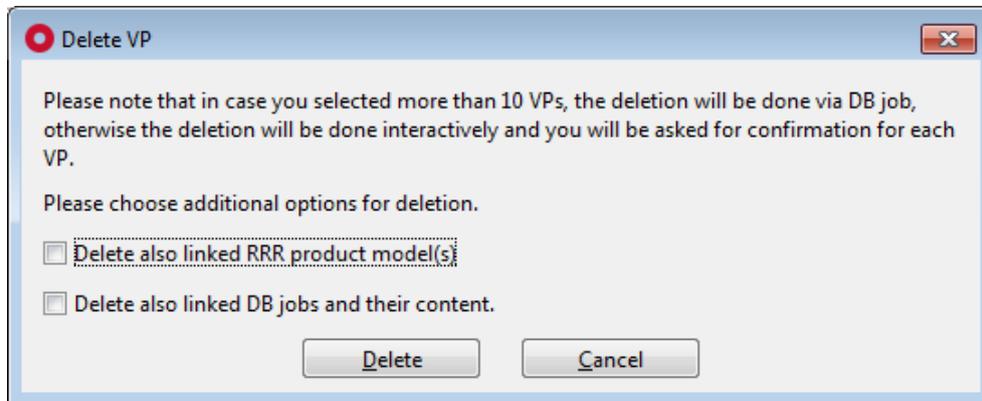


Figure 12 Dialog window for deletion of multiple VPs at once

By click on the “**Delete**” button the VP deletion process will be started. By click on the “**Cancel**” button, it will be cancelled.

A confirmation dialog is shown for each VP marked for deletion (see **Figure 13**). By click on the “**Yes**” button a VP will be deleted. By click on the “**No**” button, a VP will be kept.

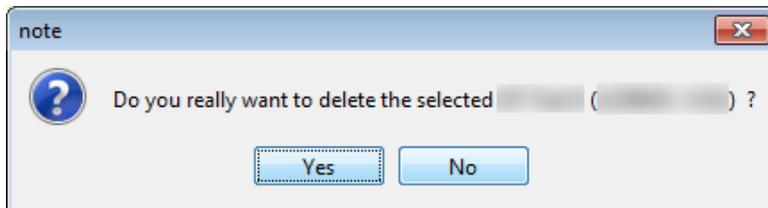


Figure 13 Confirmation of a deletion of a VP

In case the VP is linked to any other VP, it cannot be deleted and the error message is shown (see **Figure 14**). This list contains names and IDs of all VPs to which the particular VP is linked to, so that it cannot be deleted.

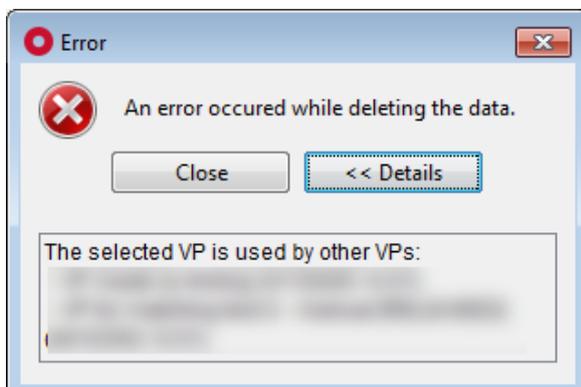


Figure 14 Error message shown if a VP cannot be deleted due being linked to another VP

In case the VP was meanwhile deleted by another user or by background job deleting expired VPs an error message is shown (see **Figure 15**). This means that a VP does no longer exist and on a next search, it won't be displayed.

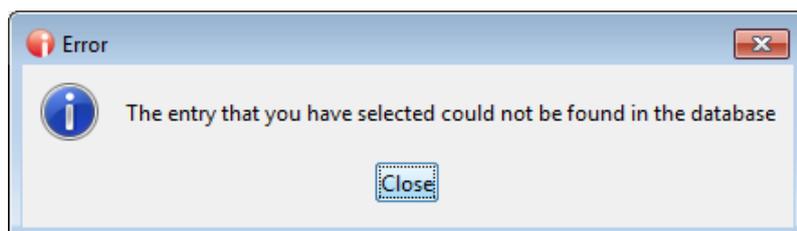


Figure 15 Error message shown if a VP cannot be deleted due being linked to another VP

5.3.5.2 Deletion of VPs via DB job

In case the number of selected VPs is greater than the value defined in the configuration parameter **“THRESHOLD_FOR_DB_JOB_VP_DELETION”**, the deletion is done via DB job.

Upon click on the **“Delete VP”** button the dialog window for VP deletion is shown (see **Figure 16**).

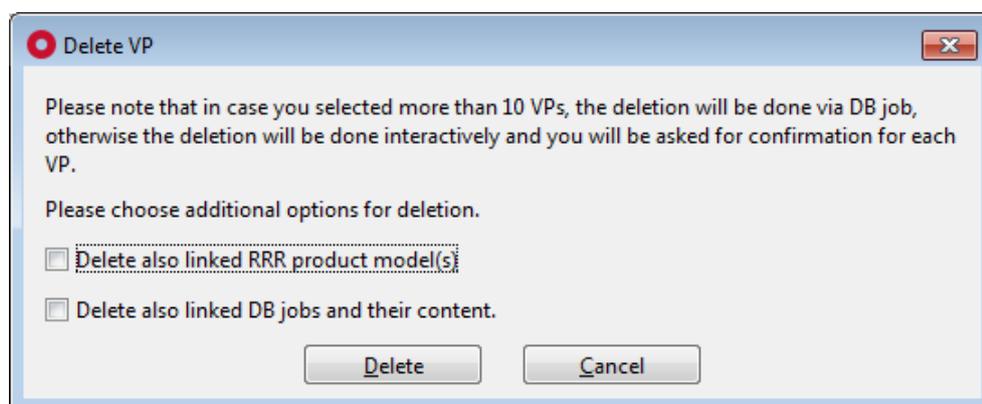


Figure 16 Dialog window for deletion of multiple VPs at once

By click on the **“Delete”** button the VP deletion process will be started. By click on the **“Cancel”** button, it will be cancelled.

A confirmation dialog is shown (see **Figure 17**). By click on the **“Yes”** button the DB job for deletion of VPs will start and notification is shown to the user (see **Figure 18**). This allows user with the permission **“JOB_ADMIN”** to monitor the status of the VP deletion job. By click on the **“No”** button, VPs will be kept.

For more details about working with DB-Job Manager, please see IHS user manual, **chapter 21**.

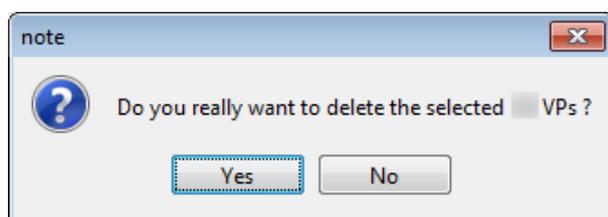


Figure 17 Confirmation of a deletion of VPs via DB job

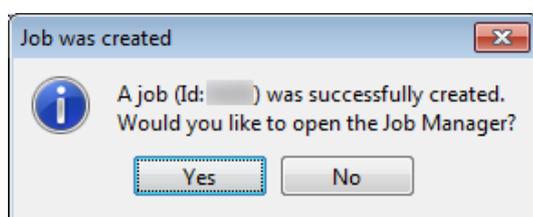


Figure 18 Notification that DB job for deletion of VPs was created

5.3.5.3 Additional VP deletion options

5.3.5.3.1 Delete also linked RRR product model(s)

This checkbox is available in VP delete dialog windows (see **Figure 11**, **Figure 12** and **Figure 16**).

If this checkbox is checked, all RRR product models created for RRR calculation for a VP will be deleted together with the deletion of this VP.

PLEASE NOTE: This checkbox is shown only if a RRR module is licensed.

5.3.5.3.2 Delete also linked DB jobs and their content

This checkbox is available in VP delete dialog windows (see **Figure 11**, **Figure 12** and **Figure 16**).

If this checkbox is checked, DB jobs linked to the VP as well as their content (e.g. logs, results from the usage analysis, etc.) will be deleted together with the deletion of this VP.

PLEASE NOTE: Only user with permission “**VPM_DELETE_JOBS**” can delete jobs linked to VP.

5.3.5.3.3 Physical VP deletion

If a user with activated permission “**VPM_PHYSICALLY_DELETE**” clicks on the “**Delete**” button to delete VP(s), the physical deletion will be done. With physical deletion of the VP, also physical deletion of related data (depending on the decision of the user - see **chapters 5.3.5.3.1** and **5.3.5.3.2**) is done.

The physical deletion helps to release the space on the server as the standard deletion keeps the data on the server with just flagging them as deleted.

PLEASE NOTE: If user has assigned both permissions for VP deletion, i.e. “**VP_DELETE**” and “**VP_PHYSICALLY_DELETE**”, the priority has the permission “**VP_PHYSICALLY_DELETE**”.

5.3.6 Link VPs

Existing VP(s) can be linked to the selected VP by click on the “**Link VPs**” button. This load a standard VP search panel (see **Figure 19**).

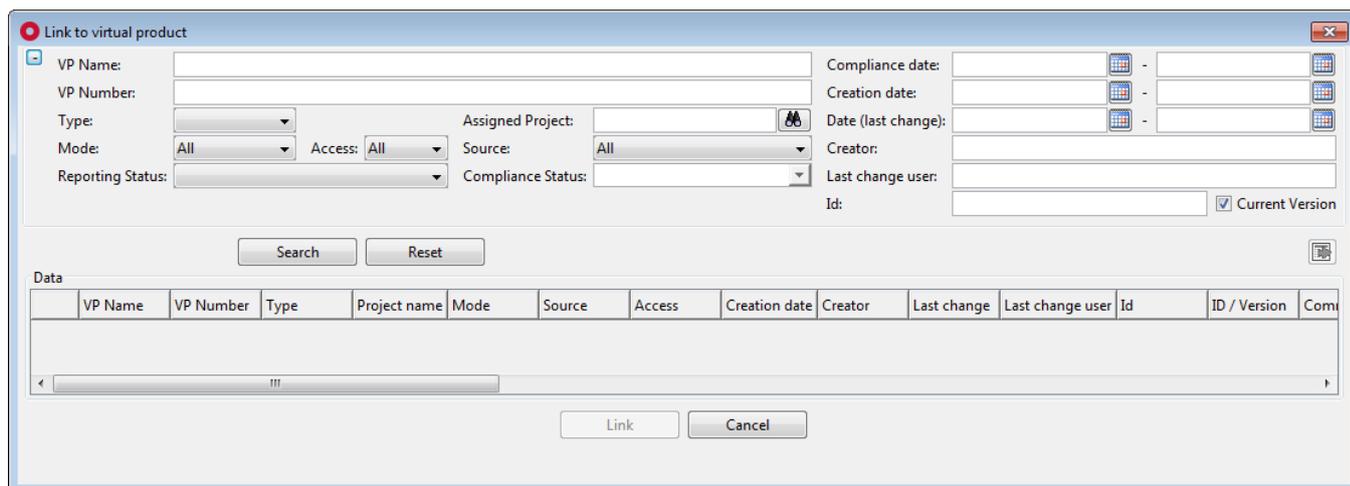
Upon search for and selection of at least one wished VP, the button “**Link**” is activated and upon click on it, selected VP(s) are linked to the VP selected in the main VP panel and the notification is shown to the user (see **Figure 20**).

In case of a single VP, this can be linked also by left button mouse double-click on record in the result list.

The mode of a VP to which the selected VPs were linked can be changed depending on the source mode:

- If mode of parent VP is “**Static**”, mode after linking VP will be “**Static**”
- If mode of parent VP is “**Semi-dynamic**”, mode after linking VP will be “**Dynamic**”
- If mode of parent VP is “**Dynamic**”, mode after linking VP will be “**Dynamic**”

It is not possible to link a VP to the VP which is in mode “**Released**”.



The screenshot shows a window titled "Link to virtual product". It features several search filters: VP Name, VP Number, Type, Mode (set to "All"), Reporting Status, Assigned Project, Source (set to "All"), Compliance Status, Compliance date, Creation date, Date (last change), Creator, Last change user, and Id. There are "Search" and "Reset" buttons. Below the filters is a table with the following columns: VP Name, VP Number, Type, Project name, Mode, Source, Access, Creation date, Creator, Last change, Last change user, Id, ID / Version, and Com. At the bottom, there are "Link" and "Cancel" buttons.

Figure 19 Search panel for linkage of VP(s) to another

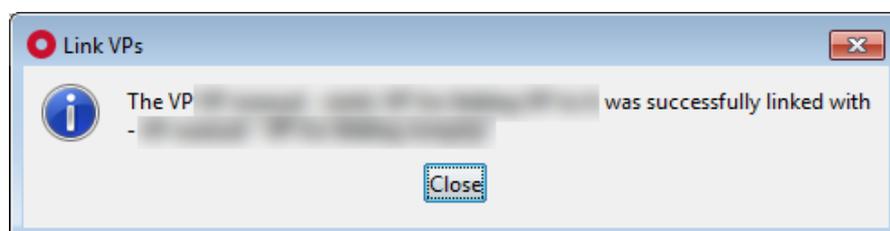


Figure 20 Notification shown upon the link VP(s) is done

In case that the VP selected for linkage has been earlier linked to the parent VP, the linkage is not done and the user is notified (see **Figure 21**).

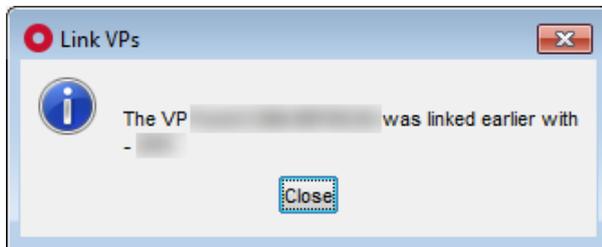


Figure 21 Notification shown if the VP is already linked

PLEASE NOTE: Only user with activated permission “VPM_LINK” can do linkage of VP(s).

5.3.7 VP to DS (optional)

A datasheet can be created for selected VP by click on the “VP to DS” button.

This button is only displayed if the optional feature for conversion of the VP to DS is licensed.

The button is active in case the select VP is matching below requirements:

- Exactly one VP is selected
- Selected VP contains only IMDS datasheets (the value in “**Number of IMDS DS available**” is greater than “0”)

Upon this a dialog is shown (see **Figure 22**). User can decide whether to proceed with VP to DS conversion (by click on the “Yes” button) or not (by click on the “No” button).

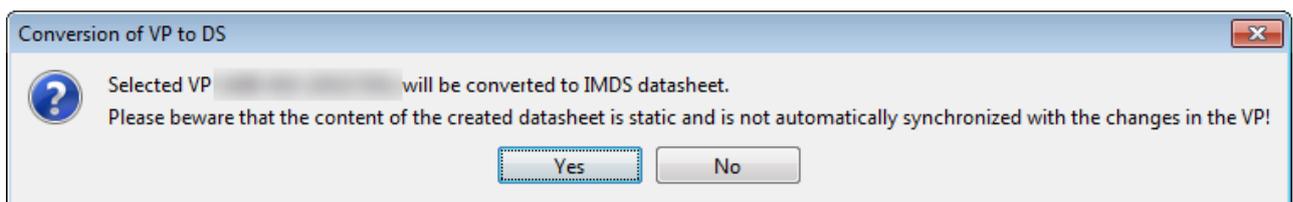


Figure 22 Confirmation of continuation with VP to DS conversion

In case at least one part in the selected VP has undefined quantity (i.e. is “0”), the dialog is shown to the user (see Figure 23). User can decide whether to continue with VP to DS conversion (by click on the “Yes” button) or not (by click on the “No” button).

PLEASE NOTE: The quantity of parts with VP quantity “0” will be set to “0” in created datasheet.

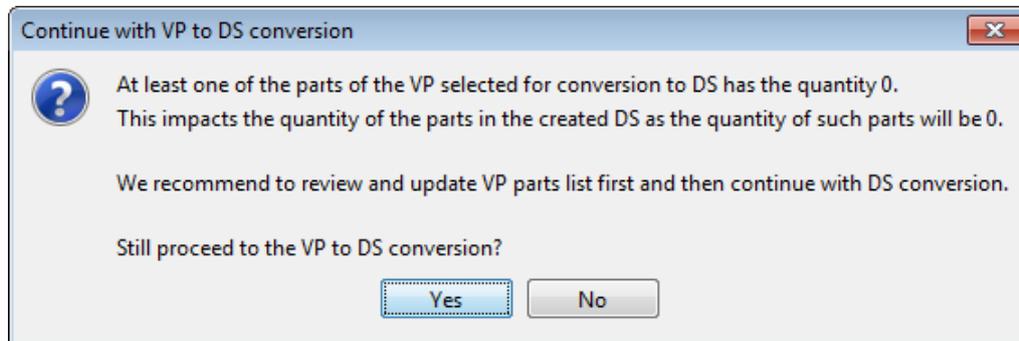


Figure 23 Confirmation of continuation with VP to DS conversion with part(s) with quantity 0

PLEASE NOTE: On this action, the VP is converted to the datasheet. Depending on the amount of parts in the VP and system performance this action may take several seconds up to several minutes.

Upon the successful conversion of the VP to the datasheet, the confirmation dialog is shown (see **Figure 24**). The created datasheet is of type “**Component**” thus it can be found either in “**Component**” or “**All MDS/modules**” tabs in the main search panel.

PLEASE NOTE: With every new conversion, the new component datasheet is created based on the actual content of the VP. The content of the datasheet is not automatically updated with changes of the VP.

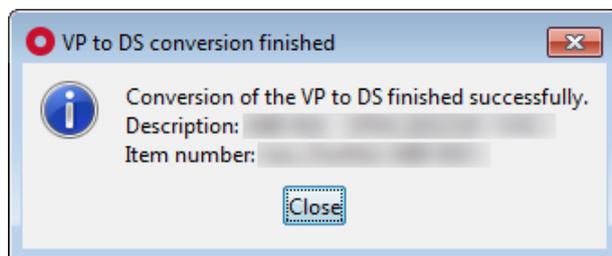


Figure 24 The confirmation upon successful conversion of the VP to the DS

PLEASE NOTE: Only user with activated permission “**VPM_CONVERT_TO_IMDS_DS**” can create DS for the selected VP.

PLEASE NOTE: Currently, the VP with SAM-M content cannot be converted to the datasheet.

5.3.8 Parts List

The content and structure of the selected VP can be accessed by click on the “**Parts List**” button. This loads a new panel (see **Figure 25**).

The Parts List panel is split into four areas:

1. Header (orange) - see **chapter 5.3.8.1**
2. Search mask (blue) - see **chapter 5.3.8.2**
3. Result list (green) - see **chapter 5.3.8.3**
4. Actions (black) - see **chapter 5.3.8.4**

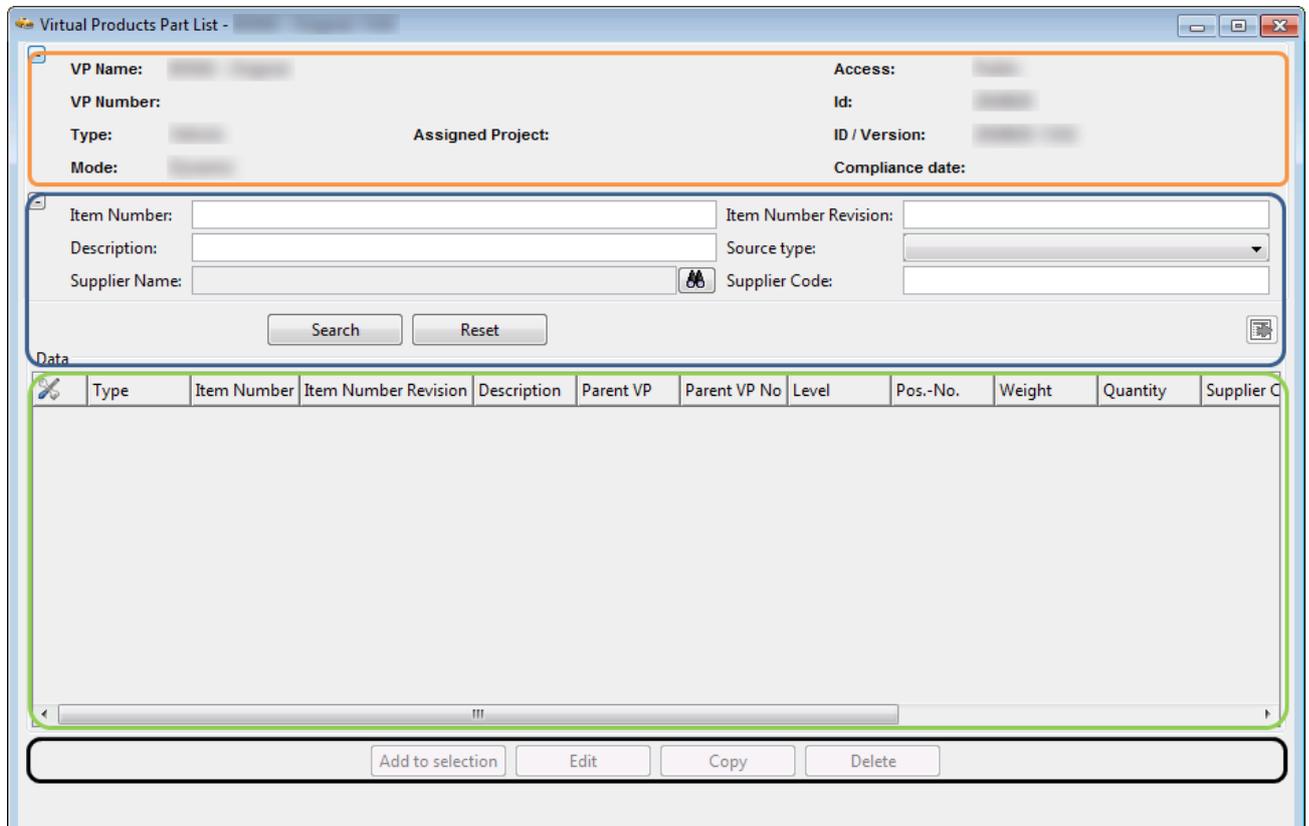


Figure 25 Parts List panel

PLEASE NOTE: For read-only access to the Parts List, user needs to have granted activated permission “**VPM_PARTS_VIEW**”. All other permissions mentioned in the subchapters of chapter 5.3.7 are write permissions that cannot be combined with the read-only permission.

5.3.8.1 Header

Provides base information about a VP to which the opened Parts List panel belongs to:

- **VP Name**
The name of a VP.
- **VP Number**
The number of a VP.
- **Type**
Type of the VP.
- **Assigned Project**
The project to which the VP is to be linked.
- **Mode**
The mode of the VP.
- **Access**
The access level of VP.
- **Id**
The ID of the VP is generated by the system.
- **ID / Version**
The ID and the version of the VP.
- **Compliance Date**
The compliance data used for the calculation of the compliance of the VP.\
- **PDM System**
PDM System which is the source of the BoM used for creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **PDM Client**
PDM Client which is the source of the BoM used for creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Number**
Number of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Alternative**
Alternative of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Type**
Type of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.

5.3.8.2 Search mask

Enables to search for parts in the VP based on defined search criteria.

The following search criteria are available:

- **Item Number**
The part number of the part.
- **Item Number Revision**
The revision level (change level, revision, index, etc.) of the part number.
- **Description**
The name/description of the part.
- **Source type**
The source of the part in the BOM:
 - IMDS: with automotive data assigned
 - SAM-M: with non-automotive data assigned
- **Supplier Name**
The supplier name of the part in the VP as defined in the BOM.
- **Supplier Code**
The supplier code of the supplier of the part in the VP as defined in the BOM.

5.3.8.3 Result List

The result list displays parts in the VP as per defined search criteria. Each row represents one part.

The following columns are available:

- **Type**
Type of the entry in the VP:
 - VP
 - Part
- **Item Number**
The part number of the part in the VP as defined in the BOM.
- **Item Number Revision**
The revision level (change level, revision, index, etc.) of the part in the VP as defined in the BOM.
- **Description**
The name of the part in the VP as defined in the BOM.
- **Parent VP**
The name of the VP underneath which is the entry is located.

- **Parent VP No**
The number of the VP underneath which is the entry is located.
- **Level**
The level of the VP structure where the part linked with a datasheet is located.
- **Pos.-No.**
The position number of the part underneath its parent.
- **Weight**
The weight of the part in the VP as defined in the BOM.
- **Weight UoM**
The weight unit of measure of the part in the VP as defined in the BOM.
- **Quantity**
The quantity of the part in the VP as defined in the BOM.
- **Quantity UoM**
The quantity unit of measure of the part in the VP as defined in the BOM.
- **Supplier Code / Supplier Org ID / Supplier DUNS**
The supplier code / organization ID / DUNS number of the part in the VP as defined in the BOM.
PLEASE NOTE: The used and displayed label and value depends on the configuration parameter “SUPPLIER_IDENTIFICATION_BY”.
- **Supplier Name**
The supplier name of the part in the VP as defined in the BOM.
- **Source type**
The source of the part in the BOM:
 - IMDS: with automotive data assigned
 - SAM-M: with non-automotive data assigned
- **Last change date**
The date when the part was last time changed either by the user or by an automatic update.
- **Last change user**
Name of the user who last updated the part (iPCA user name).
Name of the user, if part was last updated by an automatic VP update job, is “**IPCA**”.

The order of the columns in the result list and columns displayed can be managed by the user. For more details see IHS user manual, **chapter 29**.

The content of the result list could be exported to CSV or XLS(X) format using the button .

5.3.8.3.1 Context menu functions

By selecting an entry and click on the right mouse button, the context menu is opened.

Following actions are available:

- **Copy**
Allows to copy the content of the selected cell to the clipboard (see **chapter 5.3.8.3.1.1**).
- **Open VP Parts List**
Allows to open parts list of the linked VP.

5.3.8.3.1.1 Copy

The content of selected cell in the result list is copied by click on the “**Copy**” option in the context menu. This can be then used either in iPCA (e.g. for further searches) or in any other application for any purpose. This option is always enabled.

5.3.8.3.1.2 Open VP Parts List

The Parts List of the linked VP can be opened by click on the “**Open VP Parts List**” option in the context menu.

The option displayed only in case that the context menu is called for the linked VP.

5.3.8.4 Actions

The following actions are available:

- **Add to selection**
Allows to add a new part (see **chapter 5.3.8.4.1**).
- **Edit**
Allows to edit details of existing part (see **chapter 5.3.8.4.2**).
- **Copy**
Allows to create a new part by copying a selected part (see **chapter 5.3.8.4.3**).
- **Delete part / Delete link to VP**
Allows to delete selected part or unlink selected VP (see **chapter 5.3.8.4.4**).

5.3.8.4.1 Add to selection

The new part can be created manually by click on the “**Add to selection**” button. This load empty part creation dialog (see **Figure 26**). Created part is then added underneath the selected entry in the result list in the Parts List.

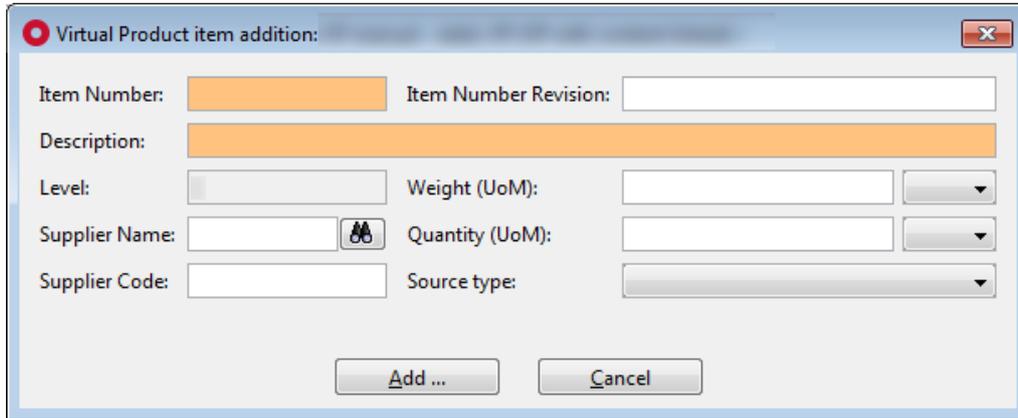


Figure 26 Dialog window for addition of new part to the VP

Following information must/could be defined:

- **Item Number**
The part number of the part.
- **Item Number Revision**
The revision level (change level, revision, index, etc.) of the part number.
- **Description**
The name/description of the entry.
- **Level**
The level of the VP structure where the part is located.
This field is read-only and cannot be modified by the user.
- **Weight (UoM)**
The weight of the part including the unit of measure (see also **chapter 9**).
On part creation/edit/copy, the unit of measure is automatically populated with value “**g**” upon entering a weight. On the deletion of the weight, the unit of measure is set to no value.
- **Supplier Name**
The supplier of the part.
Supplier can be chosen using the  button, which will load standard company search window. Wished supplier can be then confirmed by click on the “**Apply**” button.
- **Quantity (UoM)**
The quantity of the part including the unit of measure (see also **chapter 9**).
On part creation/edit/copy, the unit of measure is automatically populated with value “**EA**” upon entering a quantity. On the deletion of the quality, the unit of measure is set to no value.
- **Supplier Code / Supplier Org ID / Supplier DUNS**
The supplier code / organization ID / DUNS number of the supplier of the part.

PLEASE NOTE: The used and displayed label and value depends on the configuration parameter “SUPPLIER_IDENTIFICATION_BY”.

- **Source type**

The source of the part in the BOM:

- IMDS: with automotive data assigned
- SAM-M: with non-automotive data assigned

Once all details are defined, the part can be created using “**Add ..**” button. To cancel creation of the part, the “**Cancel**” button is used.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 27**). In case that invalid values are entered for the weight and the quantity an error message is shown (see **Figure 28** and **Figure 29**).

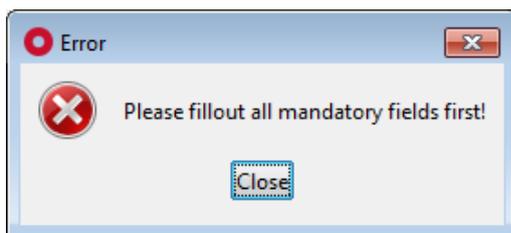


Figure 27 Error message shown on addition of new part

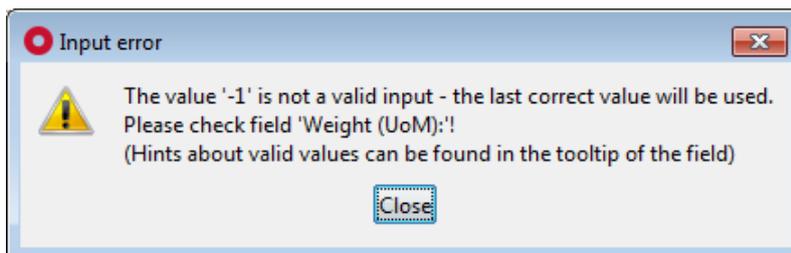


Figure 28 Error message shown if invalid value was entered for a weight of the part

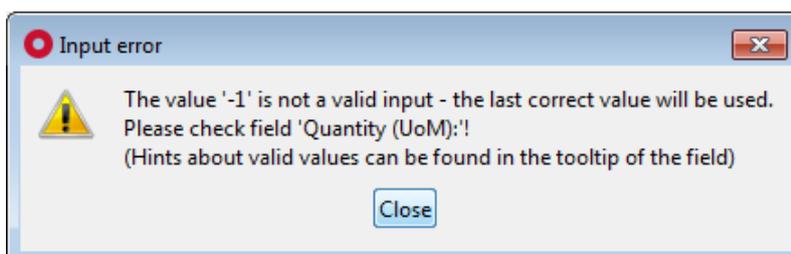


Figure 29 Error message shown if invalid value was entered for a quantity of the part

In case that the datasheet does not exist for the part number defined for the part, the part is created as unreported and depending on the configuration and licensed module, the request can be created for it automatically (see **chapter 0**).

The button is disabled in following cases:

- no entry is selected in the result list in the Parts List
- the selected entry is not direct part of the VP for which the Parts List panel is opened but the entry belongs to linked VP
- the selected VP is in “**Released**” mode

PLEASE NOTE: Only user with activated permission “**VPM_PARTS_ADD**” can create a new part.

5.3.8.4.2 Edit

The details of the selected part can be modified by click on the “**Edit**” button. This load a standard part creation dialog window (see **Figure 30**) populated with details of a selected part and they could be changed.

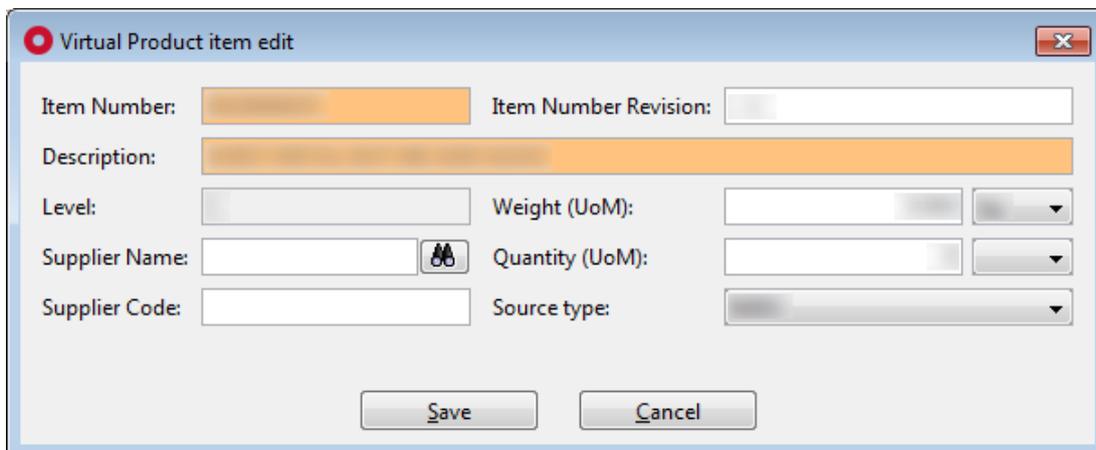


Figure 30 Dialog window for edit of existing part in the VP

Once all changes are done, part can be saved using “**Save**” button. To cancel changes, the “**Cancel**” button is used.

In case the value in the “**Item Number**” is changed, the question is shown to the user (see **Figure 31**) with a question whether this change should trigger the datasheet matching process:

- **Yes**
Saves the changes done for a part including the item number and the datasheet for new part number will be matched.

- **No**
Saves the changes done for a part including the item number and the datasheet matched for previous part number will be kept.
- **Cancel**
Closes this question and returns to the part edit dialog (see **Figure 30**).

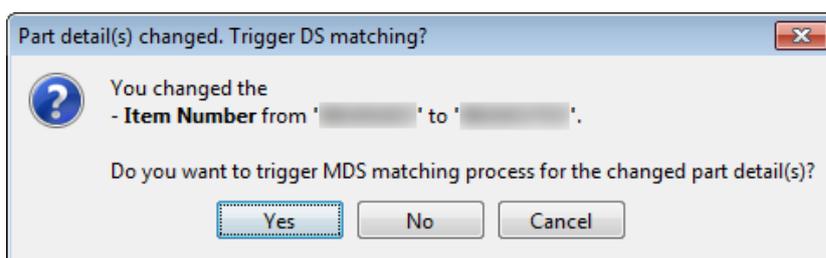


Figure 31 Question shown on change of the item number

In case that the datasheet does not exist for the part number defined for the part, the part is created as unreported and depending on the configuration and licensed module, the request can be created for it automatically (see **chapter 0**).

The button is disabled in following cases:

- no entry is selected in the result list in the Parts List
- the selected entry is parent VP itself (level 0)
- the selected entry is not direct part of the VP for which the Parts List panel is opened but the entry belongs to linked VP
- the selected VP is in **“Released”** mode

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 27**). In case that invalid values are entered for the weight and the quantity an error message is shown (see **Figure 28** and **Figure 29**).

PLEASE NOTE: Only user with activated permission **“VPM_PARTS_EDIT”** can edit details of a part.

5.3.8.4.3 Copy

A new part can be created by copy of the selected part by click on the “**Copy**” button. This load a standard part creation dialog window (see **Figure 32**) populated with details of a selected part and they could be changed.

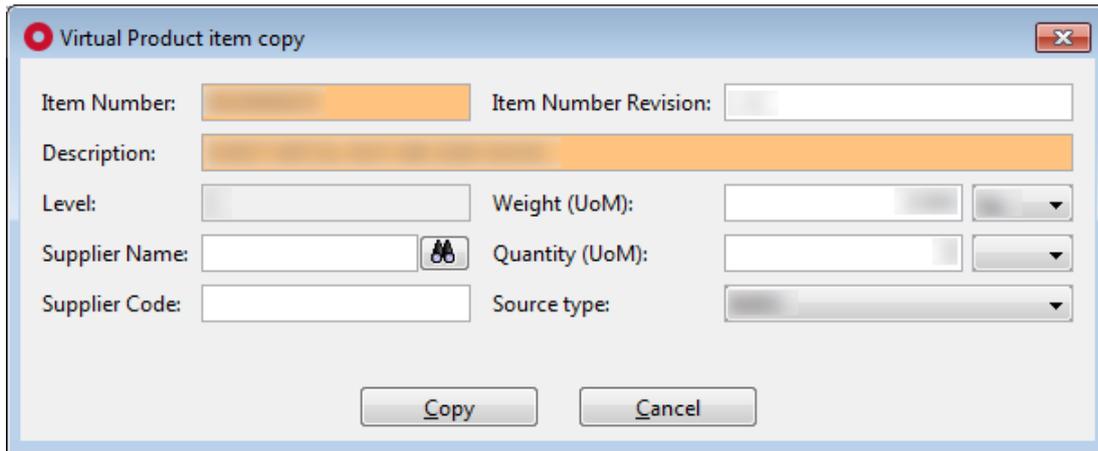


Figure 32 Dialog window for copy of existing part in the VP

Once all changes are done, part can be copied using “**Copy**” button. To cancel copy process, the “**Cancel**” button is used.

In case the value in the “**Item Number**” is changed, the question is shown to the user (see Figure 33) with a question whether this change should trigger the datasheet matching process:

- **Yes**
New part is created and the datasheet for new part number will be matched.
- **No**
New part is created and the datasheet matched for previous part will be kept.
- **Cancel**
Closes this question and returns to the part copy dialog (see **Figure 32**).

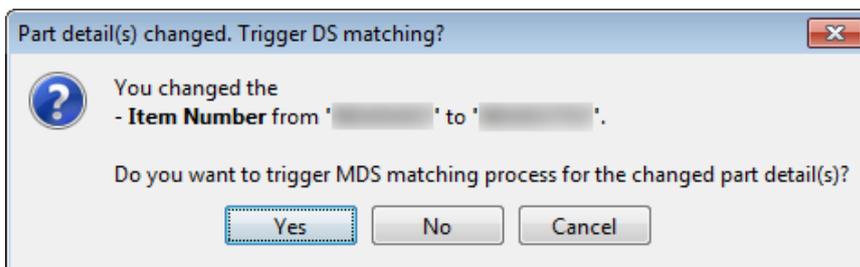


Figure 33 Question shown on change of the item number

Upon successful copy of the part, the newly created part is automatically shown at the bottom of the result list in the Parts List.

In case that the datasheet does not exist for the part number defined for the part, the part is created as unreported and depending on the configuration and licensed module, the request can be created for it automatically (see **chapter 0**).

The button is disabled in following cases:

- no entry is selected in the result list in the Parts List
- the selected entry is parent VP itself (level 0)
- the selected entry is not direct part of the VP for which the Parts List panel is opened but the entry belongs to linked VP
- the selected VP is in “**Released**” mode

PLEASE NOTE: Only user with activated permission “**VPM_PARTS_COPY**” can copy a part.

5.3.8.4.4 Delete part / Delete link to VP

Label and function of this button is interactive:

- If a selected entry is a part the label of this button is “**Delete part**” (see **chapter 5.3.8.4.4.1**)
- If a selected entry is a parent of linked VP the label of this button is “**Delete link to VP**” (see **chapter 5.3.8.4.4.2**)

The button is disabled in following cases:

- no entry is selected in the result list in the Parts List
- the selected entry is parent VP itself (level 0)
- the selected entry is not direct part of the VP for which the Parts List panel is opened but the entry belongs to linked VP
- the selected VP is in “**Released**” mode

PLEASE NOTE: Only user with activated permission “**VPM_PARTS_DELETE**” can delete a part or delete link to VP.

5.3.8.4.4.1 Delete part

Selected part can be deleted by click on the “**Delete**” button. This load a standard part creation dialog window (see **Figure 34**) populated with details of a selected part extended with a checkbox “**Delete also structure underneath**”. If this checkbox is checked, also all parts located underneath the selected part will be deleted, otherwise only the selected part is deleted and all parts located underneath it are move to one level up.

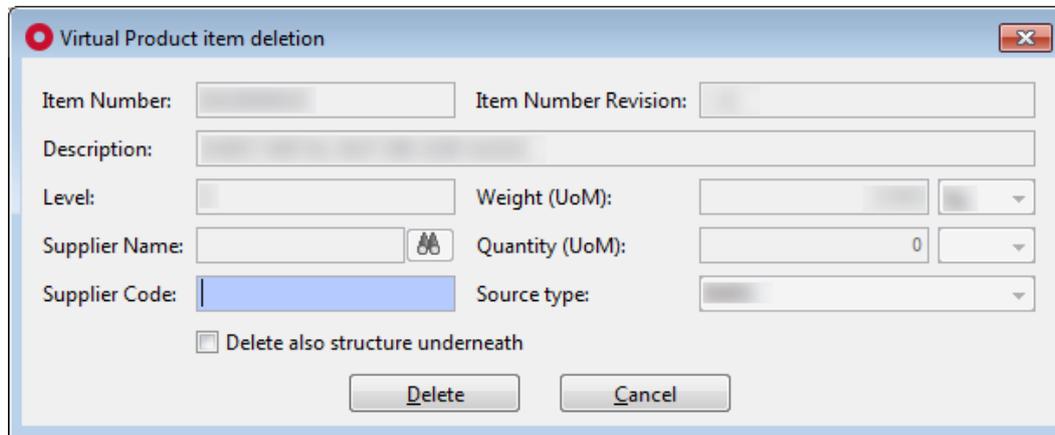


Figure 34 Dialog window for deletion of a part from the VP

By click on the “**Delete**” button the part deletion process will be started. To cancel deletion process, the “**Cancel**” button is used.

A delete confirmation dialog is shown (see **Figure 35**). By click on the “**Yes**” button the part will be deleted. By click on the “**No**” button, the part will be kept.

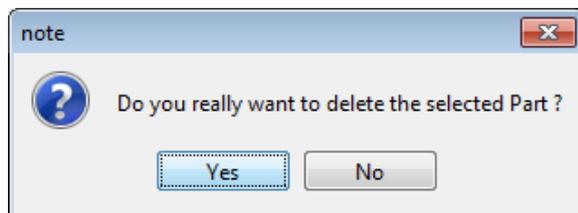


Figure 35 Confirmation of a deletion of a part

PLEASE NOTE: In case the datasheet is assigned to the part, it will be removed upon the deletion.

5.3.8.4.2 Delete link to VP

Selected linked VP can be removed from parent VP by click on the “**Delete link to VP**” button. A delete confirmation dialog is shown (see **Figure 36**). By click on the “**Yes**” button the link to the selected VP will be deleted. By click on the “**No**” button, the link to the VP will be kept.

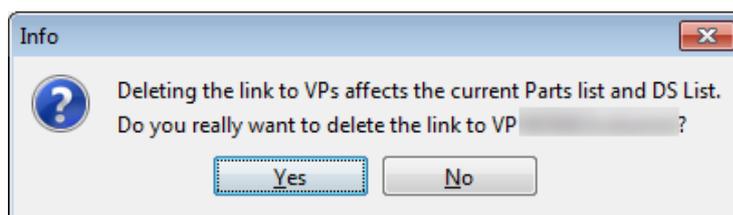


Figure 36 Confirmation of a deletion of link to VP

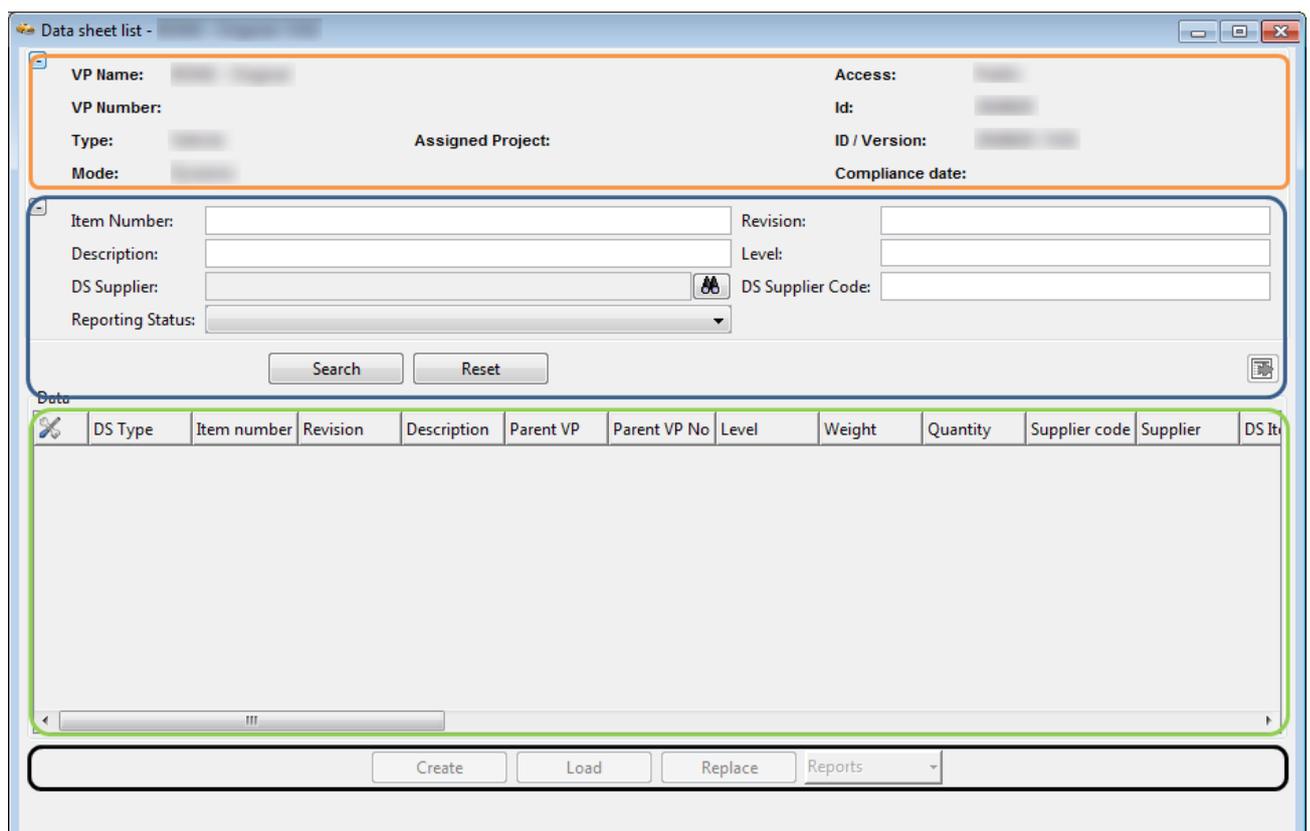
PLEASE NOTE: All the parts and datasheets linked for parts which are contained in the linked VP will be removed upon the deletion of a link to the VP.

5.3.9 DS List

The list of datasheets assigned to the parts and unreported parts in the selected VP can be accessed by click on the “**DS List**” button. This loads a new panel (see **Figure 37**).

The DS List panel is split into four areas:

1. Header (orange) - see **chapter 5.3.9.1**
2. Search mask (blue) - see **chapter 5.3.9.2**
3. Result list (green) - see **chapter 5.3.9.3**
4. Actions (black) - see **chapter 5.3.9.4**



DS Type	Item number	Revision	Description	Parent VP	Parent VP No	Level	Weight	Quantity	Supplier code	Supplier	DS It

Figure 37 DS List panel

PLEASE NOTE: For read-only access to the DS List, user needs to have granted activated permission “**VPM_DS_VIEW**”. All other permissions mentioned in the subchapters of chapter 5.3.9 are write permissions that cannot be combined with the read-only permission.

5.3.9.1 Header

Provides base information about a VP to which the opened DS List panel belongs to:

- **VP Name**
The name of a VP.
- **VP Number**
The number of a VP.
- **Type**
Type of the VP.
- **Assigned Project**
The project to which the VP is to be linked.
- **Mode**
The mode of the VP.
- **Access**
The access level of VP.
- **Id**
The ID of the VP is generated by the system.
- **ID / Version**
The ID and the version of the VP.
- **Compliance Date**
The compliance data used for the calculation of the compliance of the VP.
- **PDM System**
PDM System which is the source of the BoM used for creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **PDM Client**
PDM Client which is the source of the BoM used for creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Number**
Number of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Alternative**
Alternative of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.
- **BoM Type**
Type of the BoM used for the creation of the VP.
This item is shown only in case the VPM ERP/PDM BOM Interface module is licensed.

5.3.9.2 Search mask

Enables to search for datasheets or unreported parts in the VP based on defined search criteria.

The following search criteria are available:

- **Item Number**
The part number of the part.
- **Item Number Revision**
The revision level (change level, revision, index, etc.) of the part number.
- **Description**
The name/description of the entry.
- **Level**
The level of the VP structure where the part linked with a datasheet is located.
- **DS Supplier**
The supplier name which sent datasheets linked to the part(s) in the VP as defined in the BOM.
- **DS Supplier Code**
The supplier code of the supplier which sent datasheets linked to the part(s) in the VP as defined in the BOM.
- **Reporting Status**
Reporting status of the part:
 - Blank
Returns all records from the DS List
 - Reported
Returns those records from the DS List which have link to the datasheet (final or preliminary)
 - Reported as preliminary MDS
Returns those records from the DS List, which have link to the datasheet declared as a preliminary
 - Unreported
Returns those records from the DS List which do not have a link to the datasheet

5.3.9.3 Result List

The result list displays for datasheets or unreported parts in the VP as per defined search criteria. Each row represents one datasheet or unreported part.

The following columns are available:

- **DS Type**

Graphical symbol visualizing if the datasheet is matched for a part or not and if yes, which one it is:

-  - standard datasheet
-  - old version of datasheet
-  - standard datasheet and others from different sources are available
-  - old version of datasheet and others from different sources are available
-  - datasheet from IMDS pseudo company
-  - old version of datasheet from IMDS pseudo company
-  - datasheet from IMDS pseudo company and others from different sources are available
-  - old version of datasheet from IMDS pseudo company and others from different sources are available
-  - unreported part (datasheet is not available)

- **Item Number**

The part number of the part in the VP as defined in the BOM.

- **Revision**

The revision level (change level, revision, index, etc.) of the part in the VP as defined in the BOM.

- **Description**

The name of the part in the VP as defined in the BOM.

- **Parent VP**

The name of the VP underneath which is the entry is located.

- **Parent VP No**

The number of the VP underneath which is the entry is located.

- **Level**

The level of the VP structure where the part linked with a datasheet is located.

- **Weight**

The weight of the part in the VP as defined in the BOM.

Sorting in this column considers the defined UoM – weights are virtually recalculated. Values without defined UoM are shown as first/last (depending on the sorting order).

- **Quantity**

The quantity of the part in the VP as defined in the BOM.

Sorting in this column considers the defined UoM – weights are virtually recalculated. Values without defined UoM are shown as first/last (depending on the sorting order).

- **Supplier code**
The supplier code of the supplier of the part in the VP as defined in the BOM.
- **Supplier**
The supplier name of the part in the VP as defined in the BOM.
- **DS Item number**
The part number defined in the “**Part-/Item-No.**” field in the referenced datasheet.
- **DS Description**
The name defined in the “**Name**” field in the referenced datasheet.
- **ID / Version**
IMDS ID and version defined in the “**ID/Version**” field in the referenced datasheet.
- **DS Status**
The status of the referenced datasheet.
- **DS Transmission Date**
The date when the supplier made the submission of the datasheet.
This column is empty for own datasheets.
- **DS Supplier**
The supplier of the referenced datasheet shown in the format “**Company Name (Organization Unit Name [Company ID])**”
- **DS Supplier code**
The supplier code defined in the “**Supplier code**” field in the referenced datasheet.
- **DS Measured Weight [g]**
The weight (converted to grams) defined in the “**Measured Weight**” field in the referenced datasheet.
- **DS Total weight [g]**
The weight of the reported part calculated using the formula:
$$DS\ Total\ weight\ [g] = Quantity * DS\ Measured\ Weight\ [g]$$
- **Reporting Status**
Reporting status of the part:
 -  - datasheet is assigned to the part
 -  - datasheet declared as preliminary is assigned to the part
 -  - datasheet is not assigned to the part
- **Compliance Status**

Compliance status of the part against all CSI rule groups and compliance date assigned to the VP:

-  - datasheet is compliant
-  - datasheet is compliant but a warning or an information is raised
-  - datasheet is not compliant
-  - datasheet is not checked yet (not yet processed, CSI rule group and/or compliance date is not assigned or the datasheet is not assigned to part)

The compliance state is reset to  on a change of the assigned CSI rule(s) and on the change of the assigned compliance date. The new appropriate status is shown once the compliance check for the datasheet is finished.

- **Parts marking status**

Information whether the answers on parts marking questions in the datasheet are correct or not (if applicable):

-  - datasheet has all answers on polymeric parts marking question correct
-  - datasheet has at least one incorrect answer on polymeric parts marking question
-  - parts marking is not relevant to the datasheet
-  - datasheet is not checked yet (not yet processed or the datasheet is not assigned to the part)

This column is shown only in case the polymeric parts marking check is activated in the check configuration for VP (see **chapter 6.3.1**).

- **Metals [g]**

Weight (converted to grams) of the materials belonging to the “**Metals**” ISO material classification.

- **Polymers [g]**

Weight (converted to grams) of the materials belonging to the “**Polymers**” ISO material classification.

- **Elastomers [g]**

Weight (converted to grams) of the materials belonging to the “**Elastomers**” ISO material classification.

- **Glass [g]**

Weight (converted to grams) of the materials belonging to the “**Glass**” ISO material classification.

- **Fluids [g]**

Weight (converted to grams) of the materials belonging to the “**Fluids**” ISO material classification.

- **MONM [g]**

Weight (converted to grams) of the materials belonging to the “**MONM**” ISO material classification.

- **Others [g]**

Weight (converted to grams) of the materials belonging to the “**Others**” ISO material classification.

- **Last change date**
The date when the part was last time changed either by the user or by an automatic update.
- **Last change user**
Name of the user who last updated the part (iPCA user name).
Name of the user if part was last updated by an automatic update is “**IPCA**”.

PLEASE NOTE: ISO columns described above are shown only in case the ISO classifications check is activated in the check configuration for VP (see **chapter 6.3.1**). Quantities of parts are not considered for the calculation of the weight in ISO columns.

By selecting an entry and click on the right mouse button, the context menu is opened. For more details see **chapter 5.3.9.3.1**.

The order of the columns in the result list and columns displayed can be managed by the user. For more details see IHS user manual, **chapter 29**.

The content of the result list could be exported to CSV or XLS(X) format using the button .

5.3.9.3.1 Context menu functions

By selecting an entry and click on the right mouse button, the context menu is opened.

Following actions are available:

- **Copy**
Allows to copy the content of the selected cell to the clipboard (see **chapter 5.3.9.3.1.1**).
- **Replace missing position**
Allows to replace the mission position with the datasheet (see **chapter 5.3.9.3.1.2**).
- **Replace with missing position**
Allows to replace selected datasheet linked to the part with the missing position (see **chapter 5.3.9.3.1.3**).
- **Replace old version for IMDS MDS**
Allows to replace selected old version of the datasheet with new(er) one (see **chapter 5.3.9.3.1.4**).
- **Replace with Multi Sourced MDS/module**
Allows to replace selected datasheet with another one from the same or another source (see **chapter 5.3.9.3.1.5**).
- **Create SPM request**
Allows to create the SPM request for selected entry (see **chapter 5.3.9.3.1.6**).
- **Create SEP request**



Allows to create the SEP request for selected entry (see **chapter 5.3.9.3.1.7**).

- **Replace DS**

Allows to replace selected datasheet with another one (see **chapter 5.3.9.3.1.8**).

5.3.9.3.1.1 Copy

The content of selected cell in the result list is copied by click on the “**Copy**” option in the context menu.

This can be then used either in iPCA (e.g. for further searches) or in any other application for any purpose.

This option is always enabled.

5.3.9.3.1.2 Replace missing position

The datasheet can be linked to the unreported part by click on the “**Replace missing position**” option in the context menu.

The replacement process differs based on the mode of the VP and type of selected record:

- Reported and unreported position in VP in semi-dynamic or dynamic mode (see the details in **chapter 5.3.9.4.3.1**)
- Reported position in VP in static mode (see the details in **chapter 5.3.9.4.3.1**)
- Unreported position with datasheet candidate in VP in static mode (see the **chapter 5.3.9.4.3.2**)

The option is disabled in following cases:

- The selected entry is not a missing position or it is a missing position with the DS candidate assigned
- The selected VP is in “**Released**” mode

5.3.9.3.1.3 Replace with missing position

The datasheet linked to the part can be removed by click on the “**Replace with missing position**” option in the context menu.

The replacement of the datasheet triggers an automatic refresh of the result list in the DS List so the change is visible automatically.

The option is disabled in following cases:

- The selected entry is a missing position or missing position with DS candidate assigned
- The selected VP is in “**Released**” mode

5.3.9.3.1.4 Replace old version for IMDS MDS

The old version of the datasheet can be replaced with new(er) version by click on the “**Replace old version for IMDS MDS**” option in the context menu.



This loads the panel for managing this operation (see **Figure 38**). In this panel, all newer version of the selected IMDS ID are listed. Selected datasheet can be used instead of the original datasheet by click on the **“Replace selected in current version”** button.

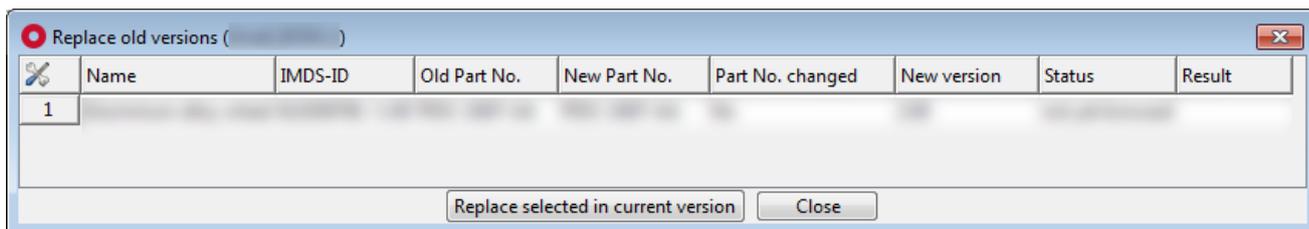


Figure 38 Panel for replacement of the old version of the datasheet with new(er) one

The replacement of the datasheet triggers an automatic refresh of the result list in the DS List so the change is visible automatically.

The option is disabled in following cases:

- The selected entry is a missing position or missing position with DS candidate assigned
- The selected entry is reported position without datasheet marked as old version
- The selected VP is in **“Released”** mode

5.3.9.3.1.5 Replace with Multi Sourced MDS/module

The selected datasheet can be replaced with another one from another source by click on the **“Replace with Multi Sourced MDS/module”** option in the context menu.

This loads the panel for managing this operation (see **Figure 39**). In this panel, all MDS for part number are listed. Selected datasheet can be used instead of the original datasheet by click on the **“Apply”** button.

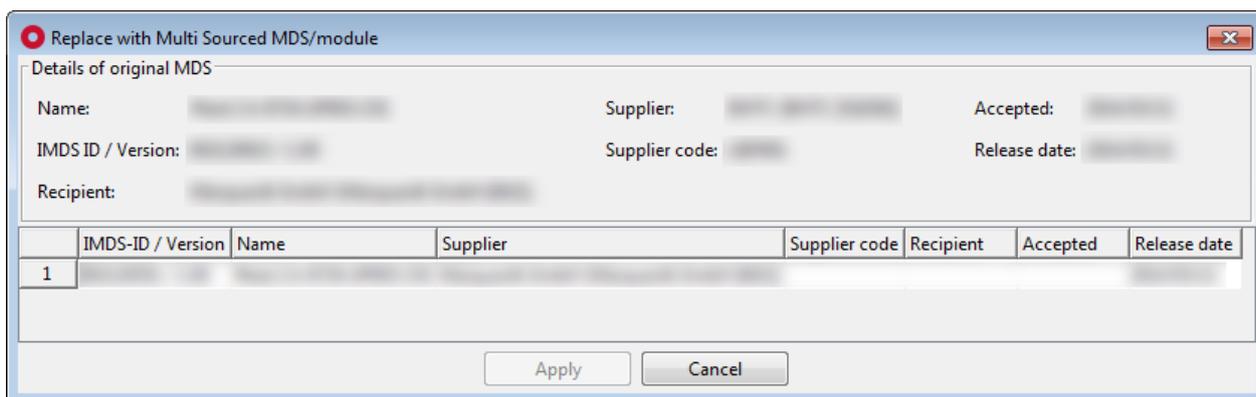


Figure 39 Panel for replacement of the datasheet with multi sourced one

The replacement of the datasheet triggers an automatic refresh of the result list in the DS List so the change is visible automatically.

This option is not displayed in case that the Multi Sourced Parts module (MSP) is not licensed.

The option is disabled in following cases:

- The selected entry is a missing position or missing position with DS candidate assigned
- The selected entry is reported position without datasheet marked as multi sourced
- The selected VP is in “**Released**” mode

5.3.9.3.1.6 Create SPM request

The SPM request can be created for selected entry by click on the “**Create SPM request**” option in the context menu.

In case new the SPM request was created for unreported part, the SPM request dialog window is populated with following details:

- Part number
- Supplier (if defined for a part)

In case new the SPM request was created for reported part, the SPM request dialog window is further populated with following details:

- Description
- Recipient
- MDS Type
- Supplier

For details about SPM request, please refer to the SPM user manual.

This option is not displayed in case that the Supply Part Management module (SPM) is not licensed.

The option is disabled in case the selected VP is in “**Released**” mode and selected entry is reported position.

5.3.9.3.1.7 Create SEP request

The SEP request can be created for selected entry by click on the “**Create SEP request**” option in the context menu.

For details about SEP request, please refer to the SAM-M user manual.

This option is not displayed in case that the Supplier Entry Portal module (SEP) is not licensed.

The option is disabled in case the selected VP is in “**Released**” mode and selected entry is reported position.

5.3.9.3.1.8 Replace DS

The datasheet linked to the part can be replaced by click on the “**Replace DS**” option in the context menu.

This will open standard search mask based on the type of the matched datasheet.

For details about standard search screens please refer to IHS user manual.

5.3.9.4 Actions

The following actions are available:

- **Create**
Allows to create a new datasheet for an unreported part (see **chapter 5.3.9.4.1**).
- **Load**
Loads the datasheets for selected reported part (see **chapter 5.3.9.4.2**).
- **Replace**
Allows to replace existing datasheet for selected reported part with another datasheet (see **chapter 5.3.9.4.3**).
- **Reports**
Allows to perform different analysis for selected entries (see **chapter 5.3.9.4.4**).

5.3.9.4.1 Create

The datasheet can be created for an unreported part by click on the “**Create**” button. Upon click on it, the dialog for selection of a datasheet type is shown (see **Figure 40**).

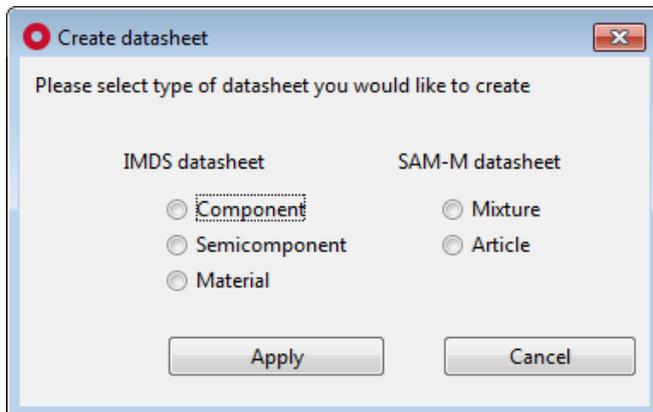


Figure 40 Dialog for selection of a datasheet type

The options in the panel are visible depending on the licensed module(s):

- “**IMDS datasheet**” options are displayed if IMDS module is licensed
- “**SAM-M datasheet**” options are displayed if SAM-M module is licensed

Additionally, the options in the panel are enabled or disabled, depending on the user permissions and source type defined for the part:

- “**IMDS datasheet**” options are enabled if the source type of the part is “**IMDS**” or is not defined and the user has activated permission “**VPM_DS_CREATE_IMDS_MDS**”



- **“SAM-M datasheet”** options are enabled if the source type of the part is **“SAM-M”** or is not defined and the user has activated permission **“VPM_DS_CREATE_SAMM_MDS”**

By selection of an appropriate type of the MDS and by click on the **“OK”** button the panel for creation of the selected MDS type is opened. By click on the **“Cancel”** button, datasheet creation for an unreported part is cancelled.

Few attributes in the created MDS are populated, depending on the information defined for the part and type of created MDS (see **Table 2**).

PLEASE NOTE: The **“Measured Weight”** and **“Measured Weight UoM”** attributes in created MDS for component or article are populated only if **“Weight (UoM)”** defined for the VP part is either **“MG”** or **“G”** or **“KG”**.

MDS Type	Populated attributes
Component	Name: Description of the VP part Part-/Item-No.: Item Number of the VP part IHS-Item-No.: Item Number of the VP part Measured Weight: Weight of the VP part Measured Weight UoM: Weight UoM of the VP part
Semicomponent	Name: Description of the VP part Part-/Item-No.: Item Number of the VP part IHS-Item-No.: Item Number of the VP part
Material	Name: Description of the VP part Material No.: Item Number of the VP part IHS-Item-No.: Item Number of the VP part
Article	Primary Name: Description of the VP part Article no.: Item Number of the VP part IHS no.: Item Number of the VP part Measured Weight: Weight of the VP part Measured Weight UoM: Weight UoM of the VP part
Mixture	Primary Name: Description of the VP part Article no.: Item Number of the VP part IHS no.: Item Number of the VP part

Table 2 Attributes populated in MDS created from unreported part in the VP

For details about work with the panel for creation of component and article please refer to IHS manual. The type of created IMDS component can be changed by the iPCA company administrators by changing configuration of the configuration parameter **“VP_IMDS_DATASHEET_TYPE”**:

- **MDS**
The datasheet will be created.
- **MODULE**
The module will be created.

The “**Create**” button is disabled in following cases:

- no entry is selected in the result list in the DS List
- the selected entry is not direct part of the VP for which the Parts List panel is opened but the entry belongs to linked VP
- multiple entries are selected in the result list
- the selected VP is in “**Released**” mode

PLEASE NOTE: Only user with activated permission “**VPM_DS_CREATE_IMDS_MDS**” and/or “**VPM_DS_CREATE_SAMM_MDS**” can create a new datasheet from the DS List.

5.3.9.4.2 Load

The datasheet for an entry selected in the result list can be loaded by click on the “**Load**” button. This loads standard datasheet edit panel.

The button is disabled in following cases:

- no entry is selected in the result list in the DS List
- the selected entry is unreported part with or without datasheet candidate so it does not have a link to the datasheet
- multiple entries are selected in the result list

PLEASE NOTE: Only user with activated permission “**VPM_DS_LOAD**” can load the datasheet.

5.3.9.4.3 Replace

The unreported part or a datasheet for an entry selected in the result list can be replaced by click on the “**Replace**” button.

The replacement process differs based on the mode of the VP and type of selected record:

- Reported and unreported position in VP in semi-dynamic or dynamic mode (see the details in **chapter 5.3.9.4.3.1**)
- Reported position in VP in static mode (see the details in **chapter 5.3.9.4.3.1**)
- Unreported position with datasheet candidate in VP in static mode (see the **chapter 5.3.9.4.3.2**)

5.3.9.4.3.1 Standard replacement

The datasheet can be created for an unreported part by click on the “**Replace**” button. Upon click on it, the dialog for selection of a datasheet type is shown (see **Figure 41**).

The replacement process described below is valid in general except for the case of a replacement of an unreported position with datasheet candidate in the VP in static mode.

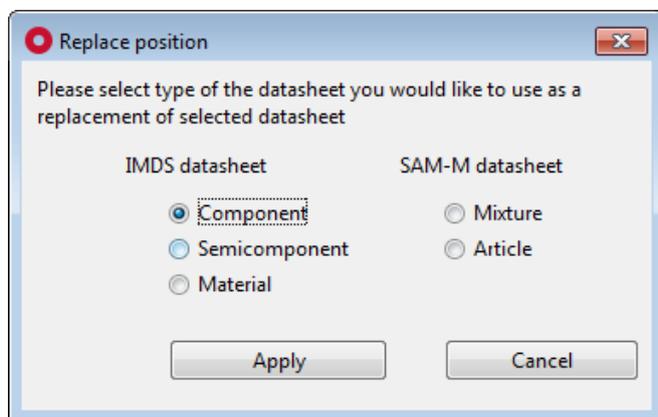


Figure 41 Dialog for selection of a datasheet type to be search for replacement

The options in the panel are visible depending on the licensed module(s):

- “**IMDS datasheet**” options are displayed if IMDS module is licensed
- “**SAM-M datasheet**” options are displayed if SAM-M module is licensed

By selection of a wished type of the MDS and by click on the “**Apply**” button the appropriate search panel is opened. By click on the “**Cancel**” button, datasheet replacement is cancelled.

For details about standard search screens please refer to IHS user manual.

The button is disabled in following cases:

- no entry is selected in the result list in the DS List
- multiple entries are selected in the result list

PLEASE NOTE: Only user with activated permission “**VPM_DS_REPLACE**” can replace the datasheet.

5.3.9.4.3.2 DS candidate replacement

The replacement process described below is valid only for replacement of an unreported position with datasheet candidate in the VP in static mode.

Unreported position with datasheet candidate is characterized by below listed icons displayed in the column “**DS Type**” in the “**DS List**”:

- 

At least one datasheet with the same part number as the unreported position has is available.
- 

All the datasheets with the same part number as the unreported position has were rejected for use for this unreported position in the VP.

- ?...

At least one datasheet with the same part number as the unreported position has been rejected for use for this unreported position in the VP but there is still at least another.

On selection of a single unreported position with any of the icons listed above in the result list in the “**DS List**” and click on the “**Replace**” button, the panel displaying replacement candidates is loaded (see **Figure 42**).

This is split into two areas:

1. List of datasheet candidates (orange) - see **chapter 5.3.9.4.3.2.1**
2. Actions (blue) - see **chapter 5.3.9.4.3.2.2**

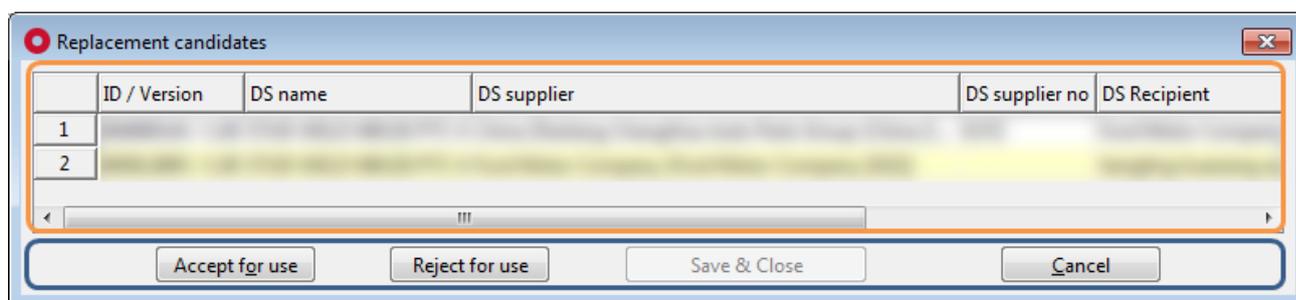


Figure 42 Replacement candidates panel

5.3.9.4.3.2.1 List of datasheet candidates

The list displays all datasheets with the same part number as is the part number of the unreported position. Each row represents one datasheet.

The following columns are available:

- **ID / Version**
IMDS ID and version defined in the “**ID/Version**” field in the datasheet candidate.
- **DS Name**
The name defined in the “**Name**” field in the datasheet candidate.
- **DS Supplier**
The supplier of the datasheet candidate shown in the format “**Company Name (Organization Unit Name [Company ID])**”.
- **DS supplier no**
The supplier code defined in the “**Supplier code**” field in the datasheet candidate.
- **DS Recipient**
The recipient to which the datasheet candidate was sent by the supplier.
- **DS status**
The status of the datasheet candidate.

- **Date**
The date when the supplier made the submission of the datasheet candidate.
This column is empty for own datasheet candidate.
- **Rejected for use**
The date and time when the datasheet candidate was rejected for use including the user who did the rejection.

5.3.9.4.3.2.2 Actions

The following actions are available:

- **Accept for use**
Accepts selected datasheet candidate for replacement of the unreported position.
The button is active only if exactly one datasheet candidate is selected.
- **Reject for use**
Rejects selected datasheet candidate(s) for replacement of the unreported position.
The button is active if at least one datasheet candidate is selected.
- **Save & Close**
By click on this button all “**Reject for use**” and “**Accept for use**” decisions will be saved and the panel will be closed. Then, if a datasheet candidate is accepted for replacement of an unreported position, the physical replacement is done. Otherwise the icon for the missing position is changed either to ?~~x~~ or to ?... based on the decisions made.
- **Cancel**
By click on this button the panel will closed. In case any of the datasheet candidates was accepted or rejected for use, the dialog is shown (see **Figure 43**). By click on the “**Yes**” button the panel is closed without saving the changes. By click on the “**No**” button, the dialog is closed and replacement candidates panel is kept opened.

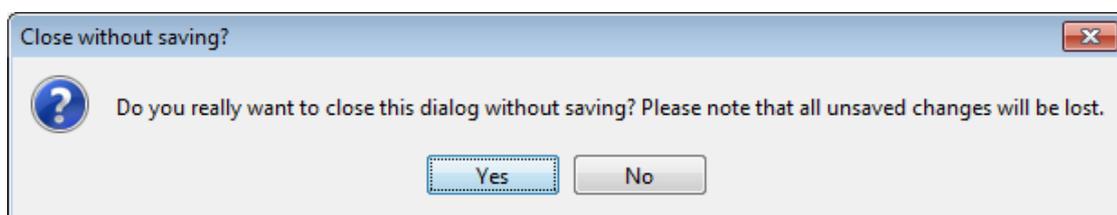


Figure 43 Confirmation of closure of replacement candidates panel without save

5.3.9.4.4 Reports

Datasheets for entries selected in the result list can be analyzed using button shown in the **Figure 44**.

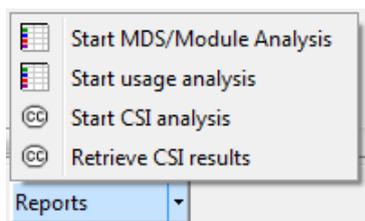


Figure 44 Analysis options in DS List

The following actions are available:

- **Start MDS/Module Analysis**
Shows details about the materials, substances, classifications, etc. for selected datasheets.
For more details about the MDS/module analysis refer to the IHS user manual.
- **Start usage analysis**
Allows to start the usage analysis for selected datasheets.
For more details about the usage analysis refer to the IHS user manual.
- **Start CSI analysis**
Allows to start the CSI analysis for selected datasheets.
For more details about the CSI analysis refer to the IHS user manual.
- **Retrieve CSI results**
Allows to view results from the CSI analysis for selected datasheets.
For more details about the CSI analysis refer to the IHS user manual.

PLEASE NOTE: Only user with activated permission “**VPM_DS_ANALYSIS**” can do the analysis from the DS List.

5.3.10 Add rule groups

A compliance of VP according to wished CSI rule group(s) can be calculated. For this, appropriate CSI rule group(s) needs to be assigned to the selected VP by click on the **“Add Rule Group”** button. This load a panel listing all CSI rule groups activated in the check configuration for VP (see **chapter 6.3.2**). (see **Figure 45**).

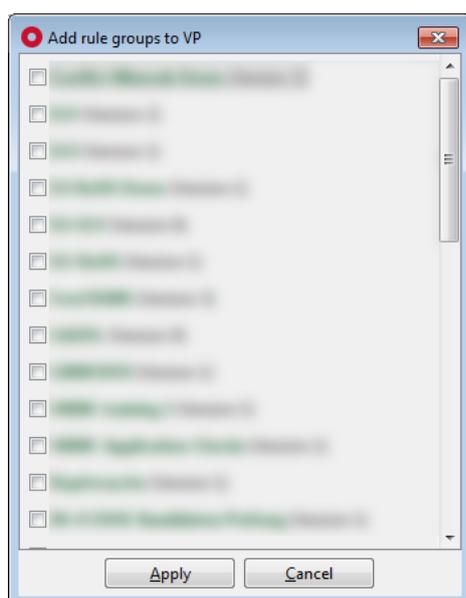


Figure 45 Addition of CSI rule group(s) to VP

The selection of wished CSI rule group(s) can be confirmed by click on the button **“Apply”** or cancelled by click on the **“Cancel”** button.

Once at least one CSI rule group is assigned to the VP the system will calculate the compliance of VP as soon as also a compliance date is defined for the VP and at least one reported part exists in the VP.

In case a compliance rule assignment is changed for a VP, the dialog is shown to the user (see **Figure 46**).

On click on the **“Yes”** button, the compliance state is set to . If the VP has compliance date assigned as well as it has assigned compliance date, the VP is then processed by the background process that is running every 15 minutes. This sets the compliance status of the VP to . Afterwards, the DB job for calculation of the compliance is created. Once this job is finished, the VP will be again processed by the background process which sets the appropriate compliance state for the VP. On click on the **“No”** button, changes in CSI rule group assignment are cancelled.

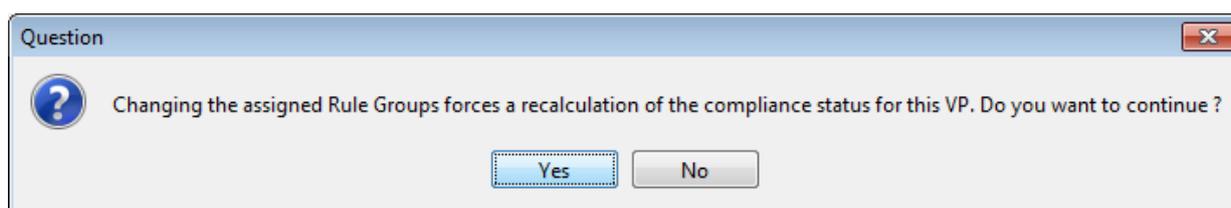


Figure 46 Confirmation of a change of assignment of CSI rule groups for VP

5.3.11 Reports

By click on “**Reports**” button, following actions can be performed:

- **Start RRR analysis**
Allows to convert selected VP to RRR product model and then calculate and see RRR reports for it (see **chapter 5.3.11.1**).
- **Start usage analysis**
Allows to run usage analysis for selected VPs (see **chapter 5.3.11.2**).
For more details about the usage analysis refer to the IHS user manual.
- **Start CSI analysis**
Allows to run CSI analysis for selected VPs (see **chapter 5.3.11.3**).
For more details about the CSI analysis refer to the IHS user manual.
- **Retrieve CSI result**
Allows to retrieve results from CSI analysis for selected VPs (see **chapter 5.3.11.4**).
For more details about the CSI analysis refer to the IHS user manual.
- **Create Reach Letter**
Allows to create Reach letter for selected VPs (see **chapter 5.3.11.5**).
- **Create RoHS Letter**
Allows to create RoHS letter for selected VPs (see **chapter 5.3.11.6**).

5.3.11.1 Start RRR analysis

New RRR analysis and see results of existing RRR analysis for a single VP with at least one part that is selected in the result list can be done by click on the “**Start RRR analysis**” button. Then the RRR analysis overview panel is shown (see **Figure 47**).

This is split into two areas:

1. Overview of RRR analysis (orange) - see **chapter 5.3.11.1.1**
2. Actions (blue) - see **chapter 5.3.11.1.2**

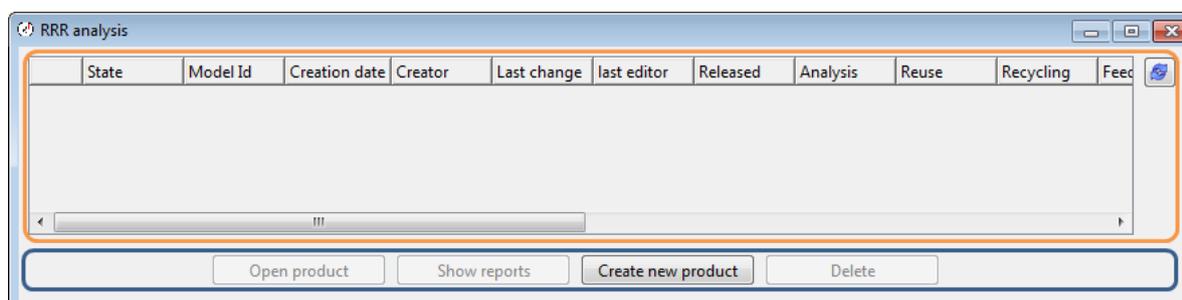


Figure 47 RRR analysis overview panel

PLEASE NOTE: This button is displayed only if in case the RRR module is licensed.

5.3.11.1.1 Overview or RRR analysis

The list of preparations for RRR analysis and RRR analysis is shown upon load of the RRR analysis overview panel. In case no RRR data preparation was done yet, the panel is empty. To proceed with RRR analysis, new data preparation must be done by click on the “**New data preparation**” button.

Following information is available:

- **State**
State of the data preparation:
 - Ready for RRR: data preparation ready for RRR analysis
 - RRR analyzed: RRR product model created and RRR analysis done
- **Model Id**
ID of the data preparation.
- **Creation date**
Date and time of the creation of the data preparation.
- **Creator**
Name of the creator of the data preparation.
- **Last change**
Date and time of the last change of the data preparation.
- **Last editor**
Name of the last editor of the data preparation.
- **Released**
Information if the product model is released or not.
- **Analysis**
Name of the analysis.
- **Reuse**
Share [%] of reusable material.
- **Recycling**
Share [%] of recyclable material.
- **Feedstock recycling**
Share [%] of feedstock recyclable material.
- **Recovery**
Share [%] of recoverable material.
- **Disposal**
Share [%] of disposal material.
- **Hazardous disposal**
Share [%] of hazardous disposal material.

- **m_P [kg]**
Mass of material taken into the account at the pre-treatment step.
- **m_D [kg]**
Mass of material taken into the account at the dismantling step.
- **m_M [kg]**
Mass of material taken into the account at the metal separation step.
- **m_{Tr} [kg]**
Mass of material taken into the account at the non-metallic residue treatment step and which can be considered as recyclable.
- **m_{Te} [kg]**
Mass of material taken into the account at the non-metallic residue treatment step and which can be considered as energy recovery.
- **m_v [kg]**
Mass of material taken into the account at the disposal.

PLEASE NOTE: Majority of the columns is populated only when user saves the results from RRR. For more details please refer to the RRR user manual.

5.3.11.1.2 Actions

The following actions are available:

- **Open product**
Opens selected RRR product model (see **chapter 5.3.11.1.2.1**).
- **Show reports**
Displays RRR reports uploaded from RRR (see **chapter 5.3.11.1.2.2**).
- **Create new product**
Creates new RRR product model (see **chapter 5.3.11.1.2.3**).
- **Delete**
Deletes selected record including all its reports and calculation results (see **chapter 5.3.11.1.2.4**).

5.3.11.1.2.1 Open product

By selection of a record and by click on the “**Open product**” button selected RRR product model will be loaded and opened in the RRR application.

The button is active only in case a record is selected in the “**RRR analysis**” panel.

5.3.11.1.2.2 Show reports

List of the RRR reports assigned to the record selected in the “RRR analysis” panel (see **Figure 48**) can be displayed by click on the “Show reports” button.

The report can be opened or saved using appropriate buttons.

The button is active only in case a record is selected in the “RRR analysis” panel.

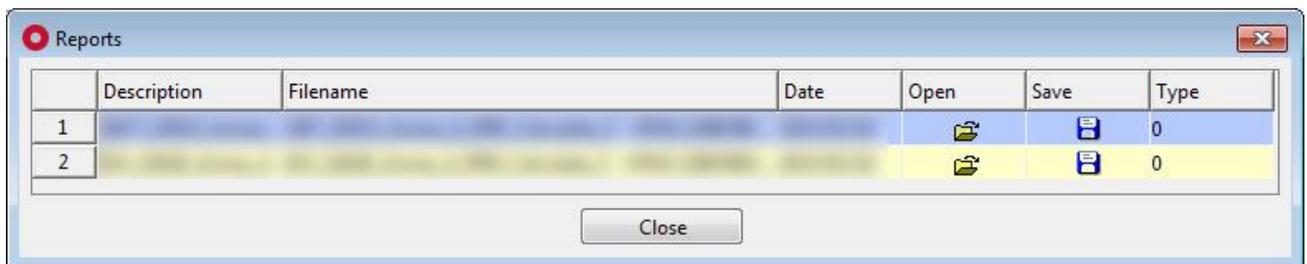


Figure 48 Reports panel

5.3.11.1.2.3 Create new product

New RRR product model can be created by click on the “Create new product” button.

In case at least one part in the selected VP has undefined quantity (i.e. it is “0”), the dialog is shown to the user (see **Figure 49**). User can decide whether to continue with RRR analysis (by click on the “Yes” button) or not (by click on the “No” button).

PLEASE NOTE: The RRR weight of parts with quantity “0” will be “0” which will have an impact on the total RRR product model weight.

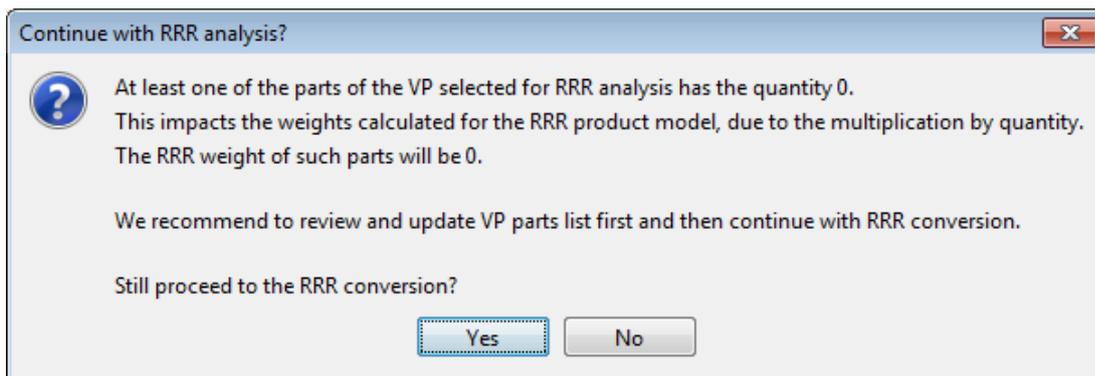


Figure 49 Confirmation of continuation with RRR analysis with part(s) with quantity 0

Next, the dialog is shown to the user (see **Figure 50**). User can decide whether to perform the new RRR product model creation in direct mode (user must wait until the process is finished and iPCA client responds) or via the database job. In case of the database job, the notification is shown to the user (see **Figure 51**). This allows user with the permission “JOB_ADMIN” to monitor the status of the new RRR product model preparation job.

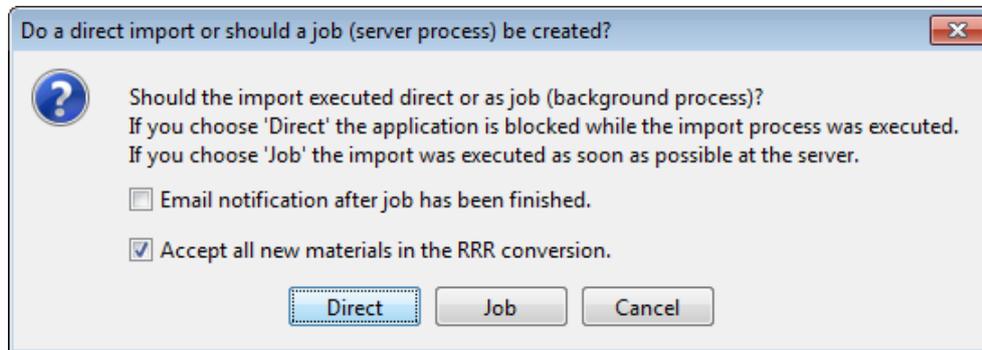


Figure 50 Dialog for selection of way of preparing of the new product module

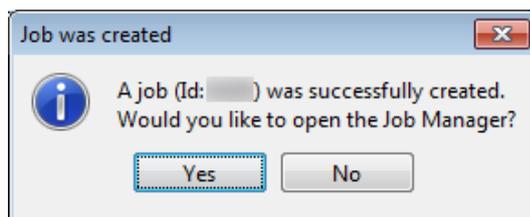


Figure 51 Notification that DB job for creation of new product model was created

PLEASE NOTE: On this action, the VP is converted to the format required for RRR conversion. Depending on the amount of parts in the VP and system performance this action may take several minutes up to close to an hour.

5.3.11.1.2.4 Delete

Selected record including all its reports and calculation results can be deleted by click on the “Delete” button.

A delete confirmation dialog is shown (see **Figure 52**). By click on the “Yes” button the selected record will be deleted. By click on the “No” button, the selected record will be kept.

The button is active only in case a record is selected in the “RRR analysis” panel.

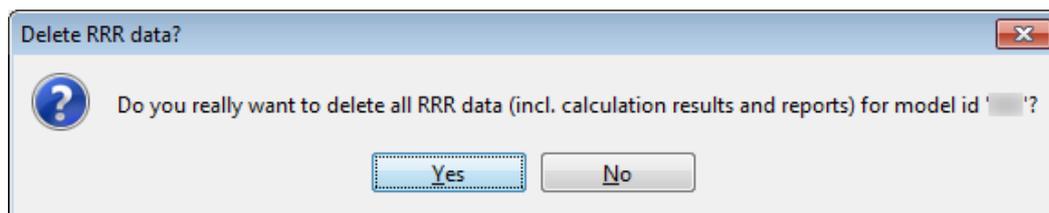


Figure 52 Confirmation of a deletion of selected record

5.3.11.2 Start usage analysis

New usage analysis for VP(s) selected in the result list can be done by click on the “**Start usage analysis**” button.

- In case of the IMDS system, the usage analysis can be done for all options that are available for usage analysis in standard analysis panel. Also the Step 1 – 3 in the usage analysis wizard are available.
- In case of the SAM-M system, the usage analysis is limited only to basic substances and application codes and the analysis is started directly upon selection of the basic substance(s) or application code(s) as the step 3, used for refinement of the datasheets in VPs that are to be analyzed, is not available.

PLEASE NOTE: This button is disabled in case that the VP has either no part or none of the parts is reported.

5.3.11.3 Start CSI analysis

New CSI analysis for VP(s) selected in the result list can be done by click on the “**Start CSI analysis**” button.

In both, IMDS and SAM-M systems, the CSI analysis is done for all the datasheets that are referenced in the selected VP(s), regardless of their origin (IMDS or SAM-M).

The button is enabled also in case that the search in VP panel was not done. In such case, upon click on the button, the dialog is shown to the user asking if the CSI analysis should be started for all VPs matching search criteria defined in the search mask (see **Figure 53**). Upon click on the “**Yes**” button and selection of the due date and CSI rule group(s), the appropriate CSI analysis will be started.

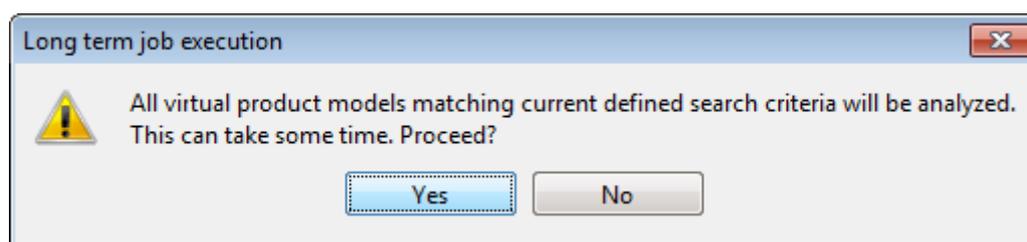


Figure 53 Dialog asking the user if the CSI analysis should be started for all VPs matching defined search criteria

5.3.11.4 Retrieve CSI results

Results from the CSI analysis for VP(s) selected in the result list can be retrieved by click on the “**Retrieve CSI result**” button, selection of wished due date and CSI rule group(s) and datasheets.

5.3.11.5 Create Reach Letter

A Reach letter for VP(s) selected in the result list can be created by click on the “**Create Reach letter**” button.

PLEASE NOTE: This button is displayed only if in case the Reach letter module is licensed.

5.3.11.6 Create RoHS Letter

A RoHS letter for VP(s) selected in the result list can be created by click on the “**Create RoHS letter**” button.

PLEASE NOTE: This button is displayed only if in case the RoHS letter module is licensed.

6 Master data, parameters, checks, reports and configuration parameters

6.1 Master data

6.1.1 Virtual product type

To manage the virtual product types, panel for management needs be opened by navigation to the menu “Extras → Master data → Virtual product type”.

PLEASE NOTE: Only user with activated permission “VPM_ADMIN” can access Virtual product type master data.

The panel management of the virtual product type is split into four areas:

1. Overview of virtual product types (orange) - see **chapter 6.1.1.1**
2. Virtual product type details (blue) - see **chapter 6.1.1.2**
3. Change log (green) - see **chapter 6.1.1.3**
4. Actions (black) - see **chapter 6.1.1.4**

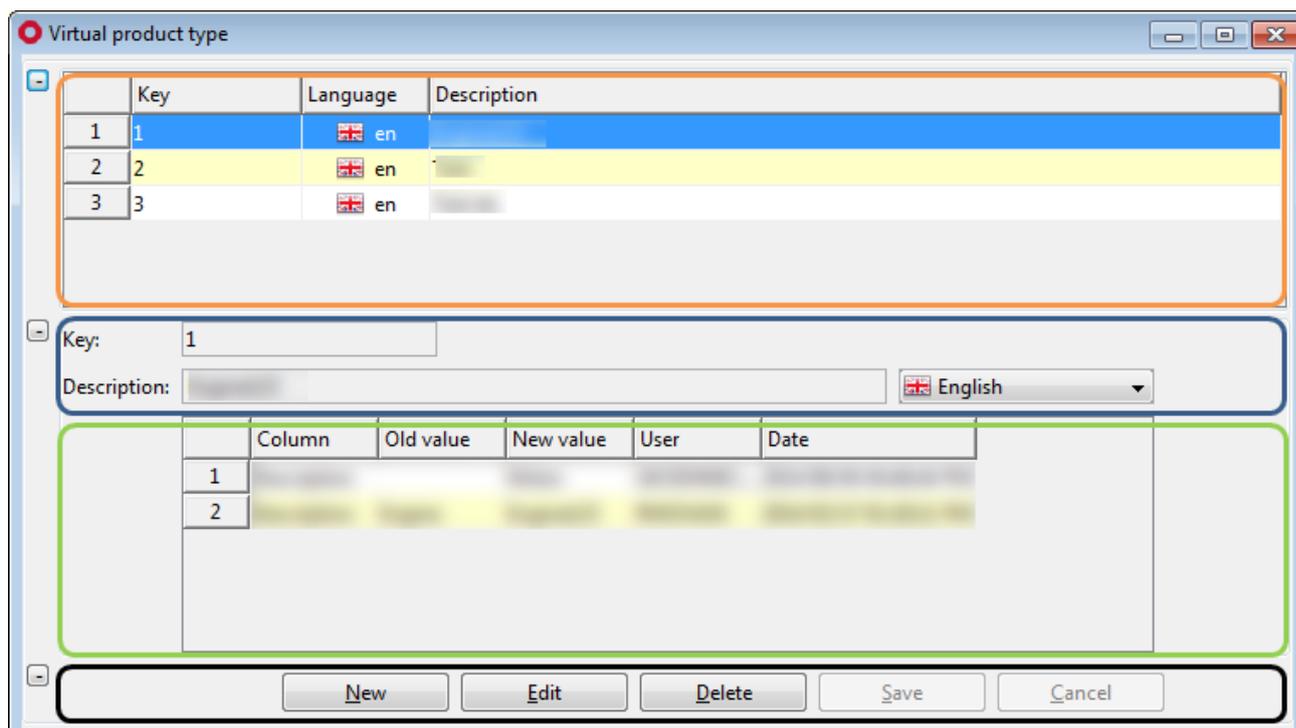


Figure 54 Virtual product type management panel

6.1.1.1 Overview of virtual product types

The list of virtual product types is shown upon load of the virtual product type management panel.

Upon selection of the virtual product type, all its details are displayed in the virtual product type details area below.

Following information is available:

- **Key**
Internal ID of the virtual product type generated upon first save of the virtual product type
- **Language**
Language flag of the virtual product type description shown
- **Description**
Description of the virtual product type shown in the language of the application
In case the description of the virtual product type is not defined in a language, a value “--- Missing <language_name> translation! ---“ is displayed.

6.1.1.2 Virtual product type details

Display the details of the selected virtual product type or allow definition of a new virtual product type.

6.1.1.3 Change log table

This table displays change log for a virtual product type selected in the list of virtual product types.

Following information is displayed:

- **Column**
Name of the detail of the virtual product type defined or changed.
- **Old value**
Previous value of the detail of the virtual product type detail displayed in the first column of the change log table.
If this is empty, the value was defined for the first time so the old value did not exist.
- **New value**
Actual value of the detail of the virtual product type detail displayed in the first column of the change log table.
- **User**
iPCA username of the user who defined new or changed existing value.
- **Date**
Date and time when the change was done.

6.1.1.4 Actions

The following actions are available:

- **New**
Empties and activates fields in the details of virtual product type area and wished virtual product type can be defined (see **chapter 6.1.1.4.1**).

- **Edit**
Enables modification of the selected virtual product type (see **chapter 6.1.1.4.2**).
- **Delete**
Deletes selected virtual product type (see **chapter 6.1.1.4.3**).
- **Save**
Saves the new or updated virtual product type (see **chapter 6.1.1.4.4**).
- **Cancel**
Cancels the creation or edit of the virtual product type (see **chapter 6.1.1.4.5**).

6.1.1.4.1 New

New virtual product type can be created by click on the “**New**” button.

This activates the details of virtual product type area.

Following information must be defined:

- **Description**
Description of the virtual product type.
Multiple languages are supported.
It is mandatory to define the description of the virtual product type in the language, in which the application is started. To define description of the virtual product type in different language, first the language needs to be selected and then the description is to be added.

PLEASE NOTE: Newly added virtual product type is not automatically shown in the “**Type**” drop-down list in different areas, e.g. VP main search panel, VP creation panel, etc. For this, either the iPCA client must be restarted or iPCA cache must be cleaned by click on the  button in the iPCA icon bar.

6.1.1.4.2 Edit

The details of the selected virtual product type can be modified by click on the “**Edit**” button.

Once all changes are done, virtual product type can be saved by click on the “**Save**” button. To cancel changes, click the “**Cancel**” button.

PLEASE NOTE: Updated virtual product type is not automatically shown in the “**Type**” drop-down list in different areas, e.g. VP main search panel, VP creation panel, etc. For this, either the iPCA client must be restarted or iPCA cache must be cleaned by click on the  button in the iPCA icon bar.

6.1.1.4.3 Delete

An existing virtual product type can be deleted upon its selection and click on the “**Delete**” button. This will bring up a small pop-up window (see **Figure 55**). By click on the “**Yes**” button the virtual product type will be deleted. By click on the “**No**” button, the virtual product type will be kept.

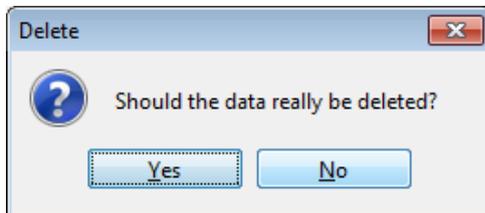


Figure 55 Confirmation of deletion of the virtual product type

6.1.1.4.4 Save

The button is active only in case the virtual product type is being created or edited.

By click on it new or updated virtual product type is saved.

Upon save, change log table is updated with new or updated values.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 56**).

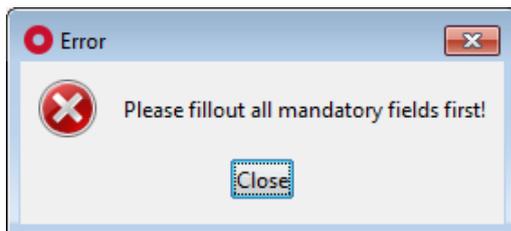


Figure 56 Error message shown on save of a virtual product type

6.1.1.4.5 Cancel

The button is active only in case the virtual product type is being created or edited.

By click on it creation or edit of the virtual product type is cancelled.

6.1.2 CSI Due Dates

To manage the CSI due dates which can be set as compliance dates for VP, panel for management needs be opened by navigation to the menu “**Extras → Master data → CSI Due Dates**”.

PLEASE NOTE: Only user with activated permission “**CC_MANAGEMENT**” can access CSI Due Dates master data.

The panel management of the CSI due dates is split into four areas:

1. Search mask (orange) - see **chapter 6.1.2.1**
2. Result list (blue) - see **chapter 6.1.2.2**
3. CSI due date details (green) - see **chapter 6.1.2.3**
4. Actions (black) - see **chapter 6.1.2.4**

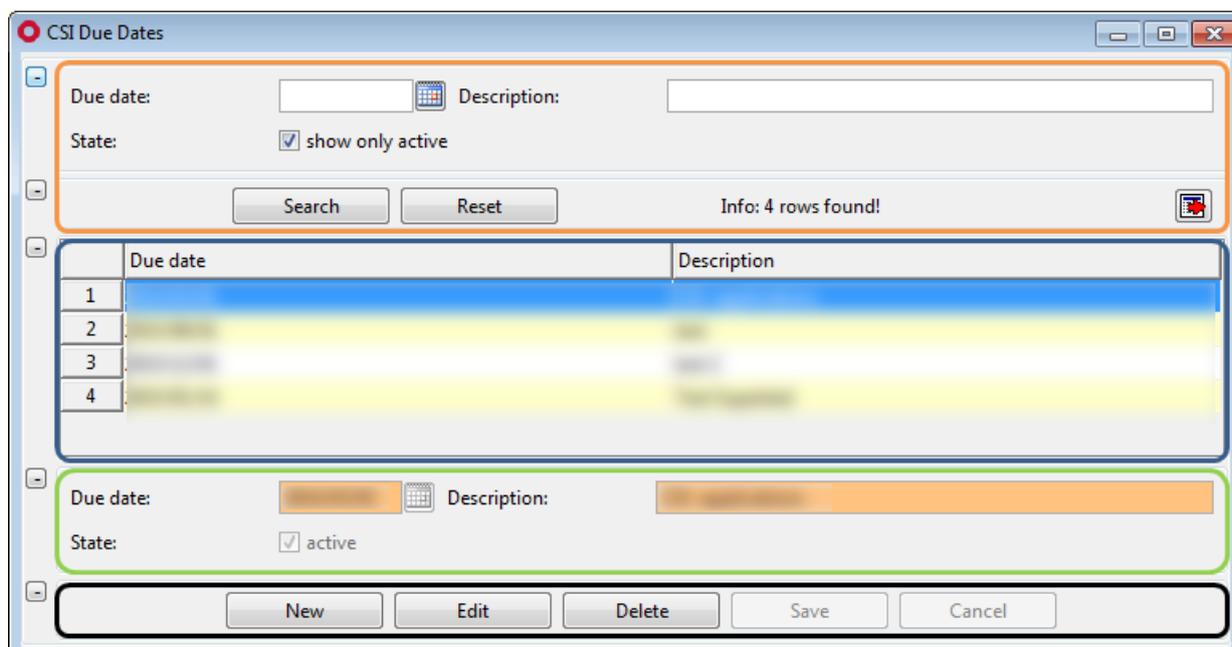


Figure 57 CSI Due Dates management panel

6.1.2.1 Search mask

Enables to search for CSI due dates based on defined search criteria.

The following search criteria are available:

- **Due Date**
Date of the CSI due date.
This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.
- **Description**
Description of the CSI due date.

- **State**

If the checkbox “**show only active**” is checked, only active CSI due dates are found, otherwise all are listed.

The following actions are available:

- **Search**

Perform searches based on criteria entered into the search fields

- **Reset**

Remove entered search criteria from search fields

6.1.2.2 Result list

The result list displays CSI due dates as per defined search criteria. Each row represents one due date.

Upon selection of the CSI due date, all its details are displayed in the CSI due date details area below.

Following information is available:

- **Due Date**

Date of the CSI due date.

- **Description**

Description of the CSI due date.

6.1.2.3 CSI due date details

Display the details of the selected CSI due date or allow definition of a new CSI due date.

6.1.2.4 Actions

The following actions are available:

- **New**

Empties and activates fields in the details of CSI due date area and wished CSI due date can be defined (see **chapter 6.1.2.4.1**).

- **Edit**

Enables modification of the selected CSI due date (see **chapter 6.1.2.4.2**).

- **Delete**

Deletes selected CSI due date (see **chapter 6.1.2.4.3**).

- **Save**

Saves the new or updated CSI due date (see **chapter 6.1.2.4.4**).

- **Cancel**
Cancels the creation or edit of the CSI due date (see **chapter 6.1.2.4.5**).

6.1.2.4.1 New

New CSI due date can be created by click on the “**New**” button.

This activates the details of CSI due date.

Following information must be defined:

- **Due Date**
Date of the CSI due date.
This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.
- **Description**
Description of the CSI due date.
- **State**
Definition if the CSI due date is active or inactive.
By default, the checkbox “**active**” is checked.

6.1.2.4.2 Edit

Following details of the selected CSI due date can be modified by click on the “**Edit**” button:

- **Description**
Description of the CSI due date.
- **State**
Definition if the CSI due date is active or inactive.

Once all changes are done, CSI due date can be saved by click on the “**Save**” button. To cancel changes, click the “**Cancel**” button.

6.1.2.4.3 Delete

An existing CSI due date can be deleted upon its selection and click on the “**Delete**” button. This will bring up a small pop-up window (see **Figure 58**). By click on the “**Yes**” button the CSI due date will be deleted. By click on the “**No**” button, the CSI due date will be kept.

PLEASE NOTE: On deletion of the CSI due date also all results from the CSI analysis and all compliance results for VPs where this date was used as compliance date will be deleted.

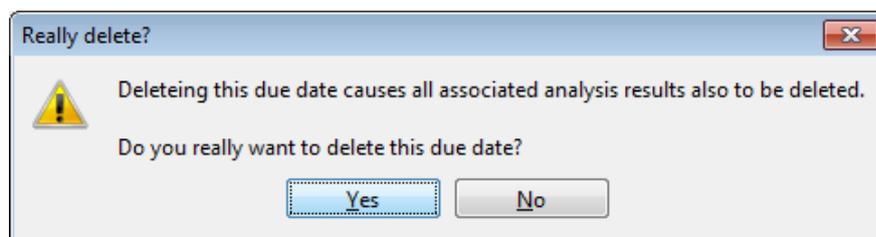


Figure 58 Confirmation of deletion of the CSI due date

6.1.2.4.4 Save

The button is active only in case the CSI due date is being created or edited.

By click on it new or updated CSI due date is saved.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 59**).

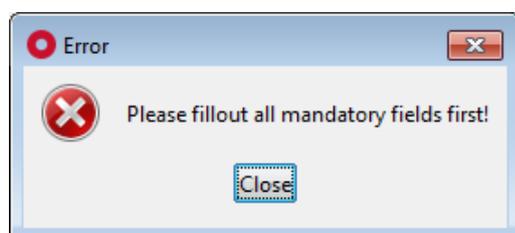


Figure 59 Error message shown on save of a CSI due date

6.1.2.4.5 Cancel

The button is active only in case the CSI due date is being created or edited.

By click on it creation or edit of the CSI due date is cancelled.

6.2 Parameters

6.2.1 VP Parameter

VP parameters can be configured using the “**VP Parameter**” screen, which is accessible from menu “**Options → Parameter → VP Parameter**”.

VP parameter currently allows to control automatic deletion of VPs upon expiration and email notification prior and on the deletion to the creator and VP company managers.

PLEASE NOTE: Only user with activated permission “**VPM_ADMIN**” can access VP parameter panel.

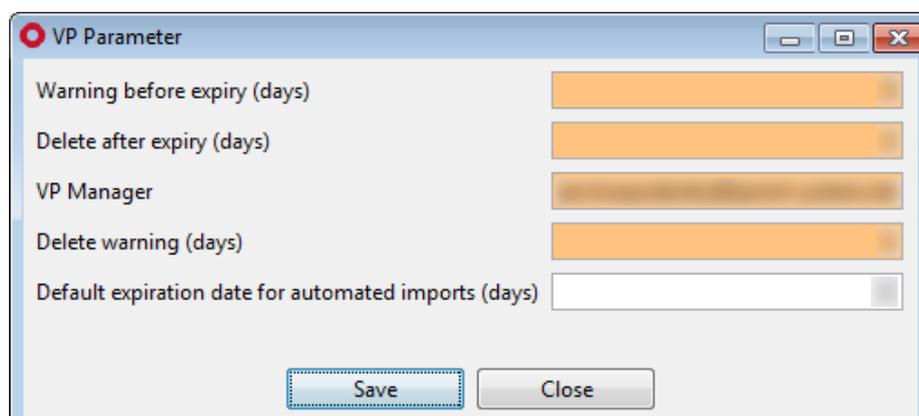


Figure 60 VP Parameter panel

Following information must/could be defined:

- **Warning before expiry (days)**
Defines the number of days before prior the expiration VP in which the email with VP expiry notification is to be send to the email address defined in the iPCA user profile of the user who created the VP.
In case the email address format is not correct, email notification is sent to the email address(es) defined in the "**VP Manager**" field.
Possible values are from 0 to 99.
- **Delete after expiry (days)**
Defines number of days after the expiration of the VP when the VP is deleted.
Possible values are from 0 to 99.
- **VP Manager**
The email addresses of VP company administrators who receive an email upon deletion of the VP(s). Email separator is a semicolon ";".
- **Delete warning (days)**
Defines the number of days before prior the deletion of the expired VP in which the email with VP delete notification is to be send to the email address(es) defined in the "**VP Manager**" field.
Possible values are from 0 to 99.
- **Default expiration date for automated imports (days)**
Is used for calculation of the expiry date set for VP created by background import.
Possible values are from 0 to 99.
The expiry date is calculated using formula:
$$\text{Expiry Date} = \text{Today} + \text{Default expiration date for automated imports (days)}$$

Once all changes are done, VP Parameters can be saved by click on the "**Save**" button. To cancel changes, click the "**Cancel**" button.

6.2.2 PDM Configuration

To manage the VP PDM/ERP BoM Interface configuration, panel for management needs be opened by navigation to the menu “**Options** → **Parameter** → **PDM Configuration**” and then the “**PDM VP Import Configuration**” tab needs to be activated.

PLEASE NOTE: This panel/tab is shown only in case the VPM ERP/PDM BOM Interface module is licensed. Only user with activated permission “**VPM_PDM_ADMIN**” can manage the data in the PDM configuration parameter panel.

The panel is split into four areas:

1. Search panel (orange) - see **chapter 6.2.2.1**
2. Result list (blue) - see **chapter 6.2.2.2**
3. PDM VP import configuration details (green) - see **chapter 6.2.2.3**
4. Actions (black) - see **chapter 6.2.2.4**

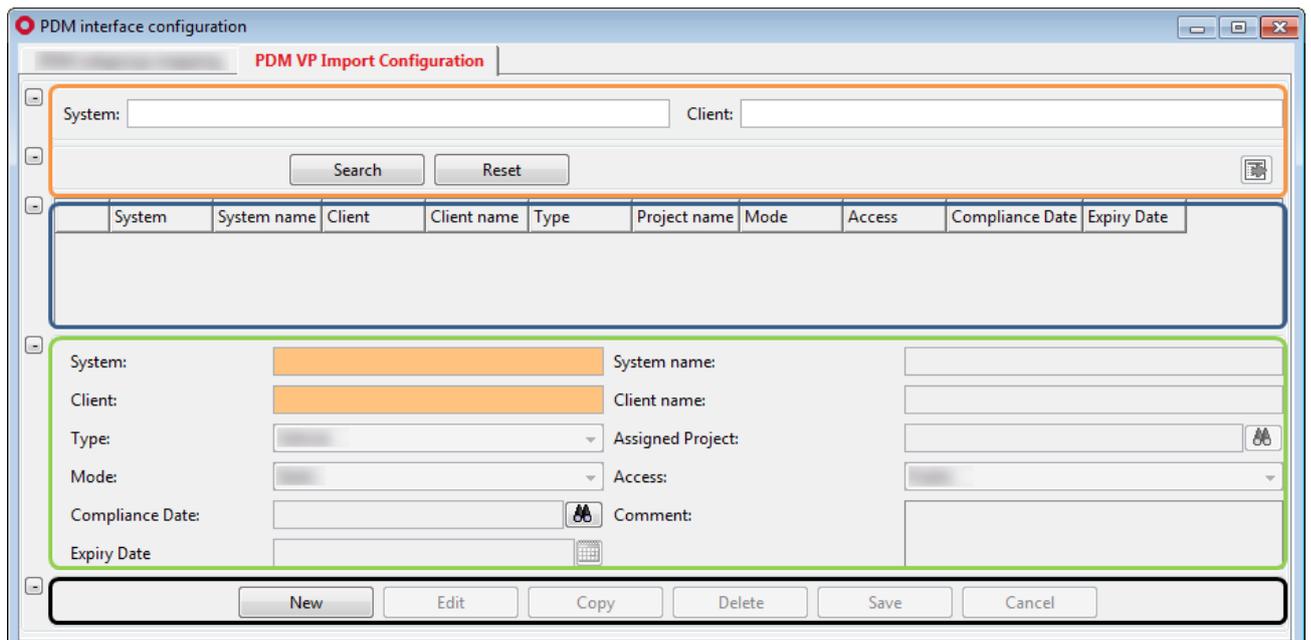


Figure 61 PDM interface configuration panel

6.2.2.1 Search mask

Enables to search for PDM VP import configuration based on defined search criteria.

The following search criteria are available:

- **System**
PDM system which is the source of the BoM used for creation of the VP.
- **Client**
PDM client which is the source of the BoM used for creation of the VP.

The following actions are available:

- **Search**
Perform searches based on criteria entered into the search fields.
- **Reset**
Remove entered search criteria from search fields.

6.2.2.2 Result list

The result list displays PDM VP import configurations as per defined search criteria. Each row represents one configuration.

Upon selection of the PDM VP import configuration, all its details are displayed in the PDM VP import configuration details area below.

Following information is available:

- **System**
PDM system which is the source of the BoM used for creation of the VP.
- **System name**
PDM system name which is the source of the BoM used for creation of the VP.
- **Client**
PDM client which is the source of the BoM used for creation of the VP.
- **Client name**
PDM client name which is the source of the BoM used for creation of the VP.
- **Type**
Type of the VP.
- **Project name**
The project which the VP is linked to.
- **Mode**
The mode of the VP.
- **Access**
The access level of VP.
- **Compliance Date**
The compliance data used for the calculation of the compliance status of the VP.
- **Expiry Date**
The date when the VP expires and will be automatically deleted.

6.2.2.3 PDM VP import configuration details

Display the details of the selected PDM VP import configuration or allow definition of a PDM VP import configuration.

6.2.2.4 Actions

The following actions are available:

- **New**
Empties and activates fields in the details of PDM VP import configuration area and wished PDM VP import configuration can be defined (see **chapter 6.2.2.4.1**).
- **Edit**
Enables modification of the selected PDM VP import configuration (see **chapter 6.2.2.4.2**).
- **Copy**
Copies selected PDM VP import configuration (see **chapter 6.2.2.4.3**).
- **Delete**
Deletes selected PDM VP import configuration (see **chapter 6.2.2.4.4**).
- **Save**
Saves the new or updated PDM VP import configuration (see **chapter 6.2.2.4.5**).
- **Cancel**
Cancels the creation or edit of the PDM VP import configuration (see **chapter 6.2.2.4.6**).

6.2.2.4.1 New

New PDM VP import configuration can be created by click on the “**New**” button.

This activates the details of PDM VP import configuration.

Following information can be defined:

- **System**
PDM system name which is the source of the BoM used for creation of the VP.
This field is mandatory.
- **System name**
PDM system name which is the source of the BoM used for creation of the VP.
- **Client**
PDM client which is the source of the BoM used for creation of the VP.
This field is mandatory.
- **Client name**
PDM client name which is the source of the BoM used for creation of the VP.

- **Type**
Default type of the VP created for BoMs imported from defined system and client.
This field is mandatory.
- **Assigned Project**
Default project linked to the VP created for BoMs imported from defined system and client.
- **Mode**
Default mode of the VP created for BoMs imported from defined system and client.
This field is mandatory.
- **Access**
Default access of the VP created for BoMs imported from defined system and client.
This field is mandatory.
- **Compliance Date**
Default compliance date of the VP created for BoMs imported from defined system and client.
- **Expiry Date**
Default expiry date of the VP created for BoMs imported from defined system and client.
If the expiry date is not defined the value defined in the “**Default expiration date for automated imports (days)**” at VP Parameters.
- **Comment**
Default comment defined for the VP created for BoMs imported from defined system and client.

PLEASE NOTE: In case that there is already defined PDM VP import configuration for defined system and client and error message is shown (see **Figure 62**) and the record is not saved.

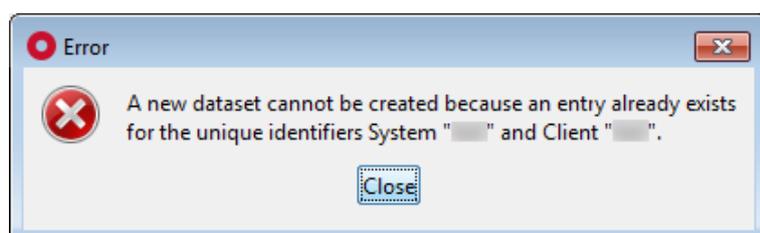


Figure 62 Error message if PDM VP import configuration already exists

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 63**).

PLEASE NOTE: Before importing a VP from an external PDM system, it needs to be ensured that at least on CSI rule group is checked at the VPM check configuration (see **chapter 6.3.2**).

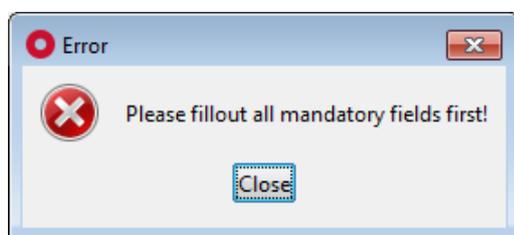


Figure 63 Error message shown on save of a PDM VP import configuration

6.2.2.4.2 Edit

The details of the selected PDM VP import configuration can be modified by click on the “**Edit**” button. Once all changes are done, they can be saved by click on the “**Save**” button. To cancel changes, click the “**Cancel**” button.

PLEASE NOTE: In case that there is already defined PDM VP import configuration for defined system and client and error message is shown (see **Figure 62**) and the record is not saved.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 63**).

6.2.2.4.3 Copy

A new PDM VP import configuration can be created by copying an existing PDM VP import configuration selected in the result list by click on the “**Copy**” button. This will activate the PDM VP import configuration area populated with data from the original PDM VP import configuration.

Once all changes are done, new PDM VP import configuration can be saved by click on the “**Save**” button. To cancel changes, click the “**Cancel**” button.

PLEASE NOTE: In case that there is already defined PDM VP import configuration for defined system and client and error message is shown (see **Figure 62**) and the record is not saved.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 63**).

6.2.2.4.4 Delete

An existing PDM VP import configuration can be deleted upon its selection and click on the “**Delete**” button. This will bring up a small pop-up window (see **Figure 64**). By click on the “**Yes**” button the PDM VP import configuration will be deleted. By click on the “**No**” button, the PDM VP import configuration will be kept.

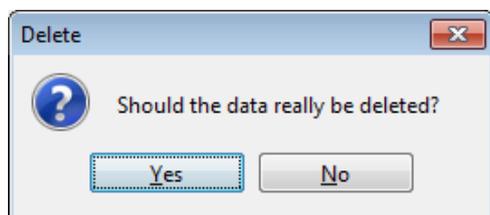


Figure 64 Confirmation of deletion of the PDM VP import configuration

6.2.2.4.5 Save

The button is active only in case the PDM VP import configuration is being created or edited.

By click on it new or updated PDM VP import configuration is saved.

PLEASE NOTE: In case that there is already defined PDM VP import configuration for defined system and client and error message is shown (see **Figure 62**) and the record is not saved.

PLEASE NOTE: In case that the not all mandatory fields are populated an error message is shown (see **Figure 63**).

6.2.2.4.6 Cancel

The button is active only in case the PDM VP import configuration is being created or edited.

By click on it creation or edit of the PDM VP import configuration is cancelled.

6.3 Checks

To manage the check configuration for VP, panel for management needs be opened by navigation to the menu “**Options** → **Checks** → **Check configurations...**”.

PLEASE NOTE: Only user with activated permission “**ADMIN_CHECK_CONFIG**” can access and modify check configurations.

The check configuration relevant for VP has following attributes:

- Configuration No.: 6
- Description: Compliance Checks (used for Virtual Product Model)

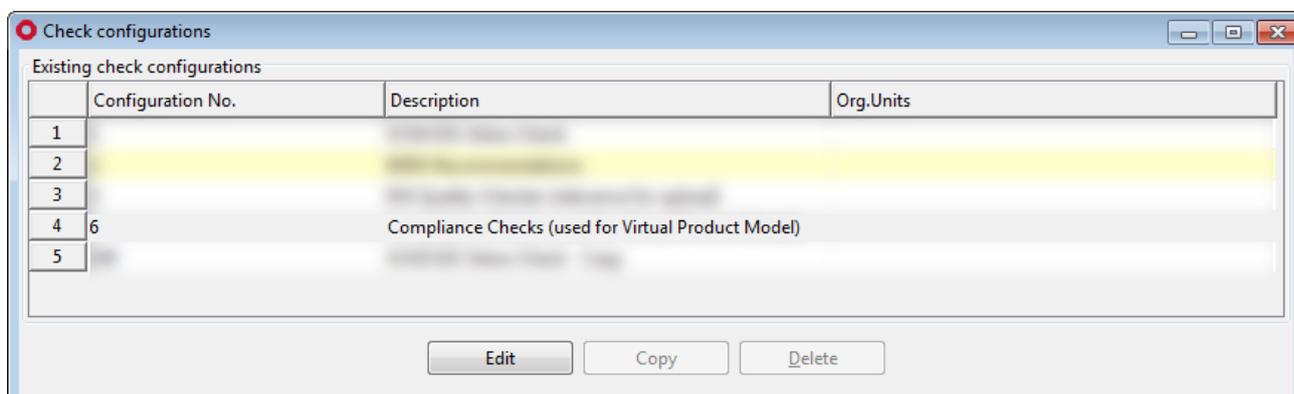


Figure 65 Check configuration panel

The panel for this check consists of:

- General Checks tab (see **chapter 6.3.1**)
- CSI Checks tab (see **chapter 6.3.2**)

6.3.1 General Checks

This tab allows activating or deactivating two checks for VPs:

- Polymeric parts marking
- ISO classifications

Activation of these checks will enable display of appropriate columns in main VP and DS List result lists (see **chapters 5.2** and **5.3.9.3**). These columns then display the relevant data.

PLEASE NOTE: Calculation of the data for display is done in the background and the initial calculation may take several hours until done.

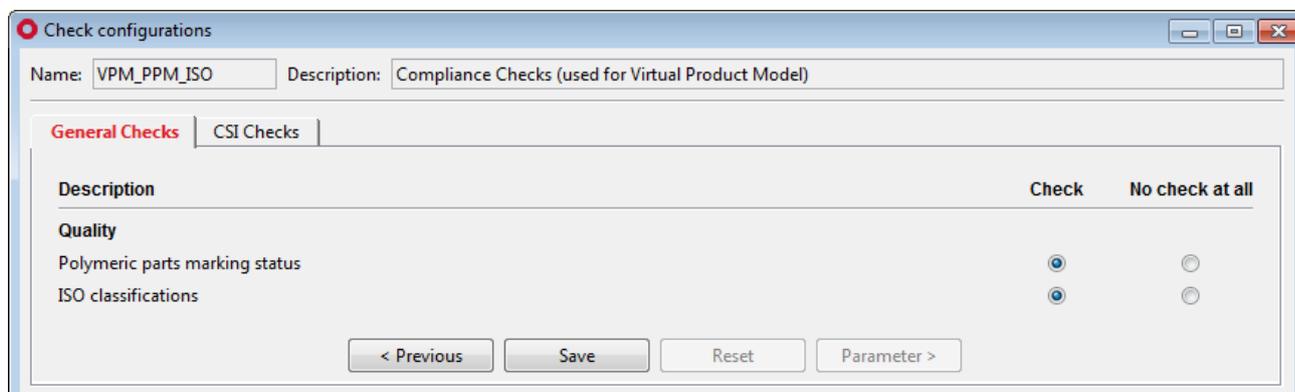


Figure 66 VP check configuration – general checks

6.3.2 CSI Checks

This tab allows activating or deactivating CSI rule groups for use in VP compliance checks.

All CSI rule groups set to the check category “**Check**” are assigned to all newly created VPs (created either manually (see **chapter 5.3.1**) or by the import (see **chapter 7.1.2**)).

PLEASE NOTE: Only CSI rule groups released productive and allowed for the “**Compliance Checks (used for Virtual Product Model)**” check configuration is listed here.

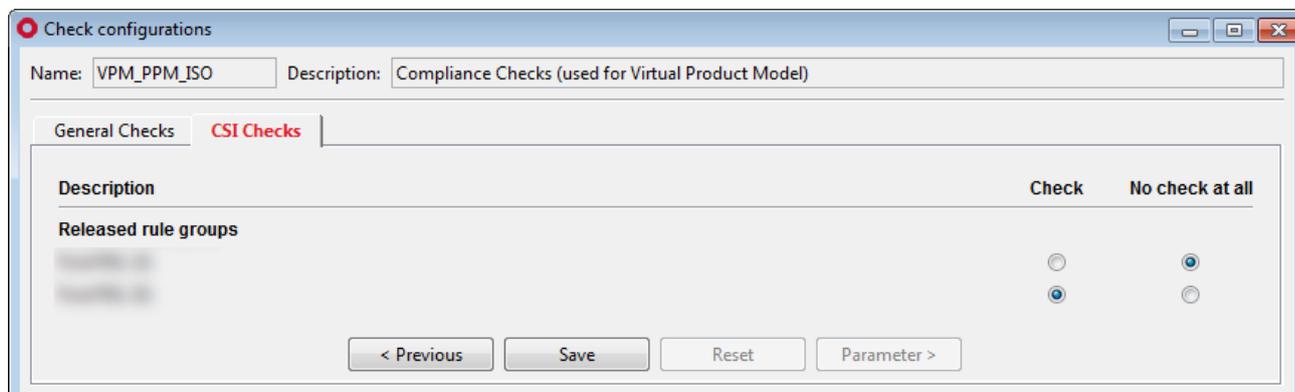


Figure 67 VP check configuration – CSI checks

6.4 Reports

Currently the deleted VP report is only available report for VPs.

6.4.1 Deleted VP report

The report can be triggered by clicking on  button in the main button bar in iPCA or in menu via “Data → Analysis” and then navigating to “Reports” tab.

Then, the option “Deleted VP report” needs to be selected in the drop-down list for the report type.

PLEASE NOTE: Only user with activated permission “VPM_DELETED_VP_REPORT” can access this report.

The panel for deleted VP report is split into two areas:

1. Search mask (orange) - see **chapter 6.4.1.1**
2. Result list (blue) - see **chapter 6.4.1.2**

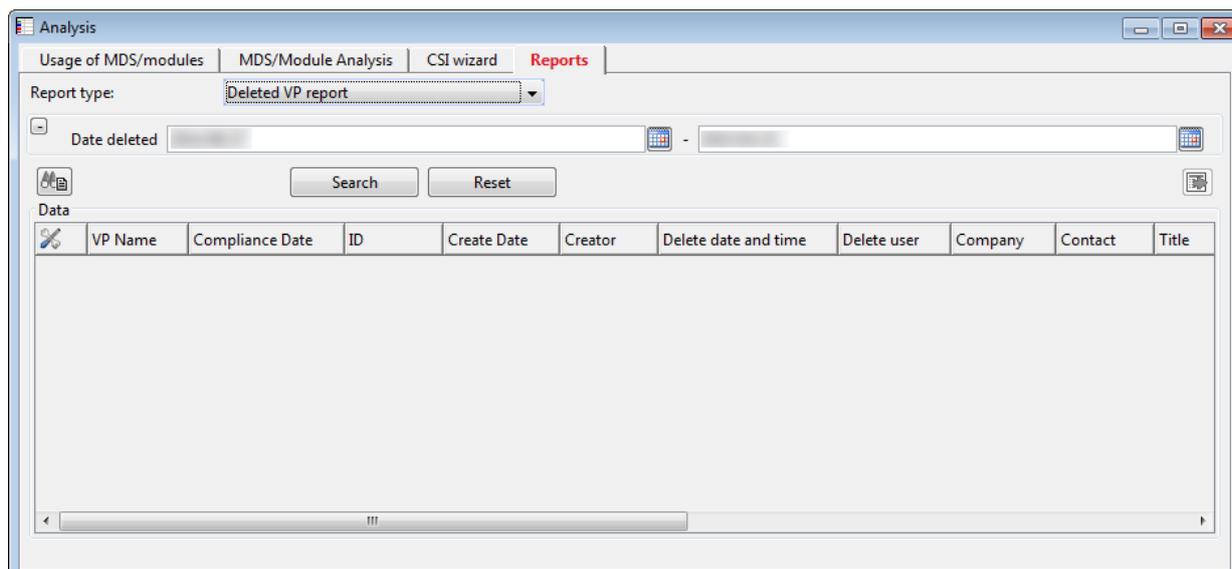


Figure 68 Deleted VP report

6.4.1.1 Search mask

Enables to search for records for deleted VPs based on defined search criteria.

The following search criteria are available:

- **Date deleted**

Period of time in which the VP was deleted.

This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.



6.4.1.2 Result list

The result list displays deleted VPs as per defined search criteria. Each row represents one deleted VP.

The following columns are available:

- **VP Name**
Name of the VP.
- **Compliance Date**
The compliance data used for the calculation of the compliance status of the VP.
- **ID**
The ID of the VP.
- **Create Date**
The date of the creation of the VP.
- **Creator**
Name of the user who created the VP (iPCA user name).
Name of the user of a VP created by a system (e.g. by import) is “**IPCA**”.
- **Delete date and time**
The date and the time of the deletion of the VP.
- **Delete user**
Name of the user who deleted the VP (iPCA user name).
Name of the user of a VP deleted by a system (e.g. expired VP) is “**IPCA**”.

The order of the columns in the result list and columns displayed can be managed by the user. For more details see IHS user manual, **chapter 29**.

The content of the result list could be exported to CSV or XLS(X) format using the button .



6.5 Configuration parameters

To manage VPM configuration parameters, management panel needs be opened by navigation to the menu “**Extras** → **Management**” and “**Configuration**” tab needs to be activated.

Wished configuration parameter can be found easily by entering its name into the “**Key**” search field and click on the “**Search**” button.

Configuration parameter name	Supported values and their meaning	Comment
VP_ACCESS_MODES	Defines which of supported VP access modes will be available for use: <ul style="list-style-type: none">• PUBLIC (enables display of "Public" value)• PRIVATE (enables display of "Private" value)• PROJECT (enables display of "Project" value)• ORG_UNIT (enables display of "Org. Unit" value) And combinations which are separated by a semicolon.	See chapter 4.2.3
VP_IMDS_DATASHEET_TYPE	Defines what type of datasheet is created by click on the " Create " button in the " DS List ": <ul style="list-style-type: none">• MDS (datasheet is created)• MODULE (module is created)	See chapter 5.3.9.4.1
VP_MODEL_CSI_FORCE_SKIP_RECALC_DELAY_DAYS	Defines whether the value set in the configuration parameter VP_MODEL_CSI_RECALC_DELAY_DAYS should be considered for the (re)calculation of the VP compliance status or not	
VP_MODEL_CSI_RECALC_DELAY_DAYS	Defines the delay (in days) between individual runs of the VP compliance status	
VP_MODES	Defines which of supported VP modes will be available for use: <ul style="list-style-type: none">• STATIC (enables display of "Static" value)• SEMIDYNAMIC (enables display of "Semi-dynamic" value)• DYNAMIC (enables display of "Dynamic" value)• RELEASED (enables display of "Released" value)	See chapter 4.2.2



Configuration parameter name	Supported values and their meaning	Comment
VPM_BOM_IMPORT_DS_PARTNO_ACCEPTED_LENGTHS	<p>And combinations which are separated by a semicolon.</p> <p>Defines the length of the part number in datasheets that is considered for matching during the standard VP BOM import:</p> <ul style="list-style-type: none">-1 (datasheets with part number of any length will be matched)Any other number (datasheets which have specified part number length will be matched)	
VPM_BOM_IMPORT_PART_NUMBER_MANIPULATION	<p>And combinations which are separated by a semicolon.</p> <p>Defines rules for part number manipulation from BOM before the matching to MDS is done. The rules are defined in regular expression language (e.g. ^.* will keep the value from BOM intact)</p>	
VPM_BOM_IMPORT_WILDCARD_MATCH	<p>Defines if the standard VP BOM import will search for datasheets using wildcard or not</p> <ul style="list-style-type: none">FALSETRUE	
VPM_DS_LIST_MATCHING_FORWARDED_MDS	<p>Defines if the standard VP BOM import will consider own MDSs created by forwarding of received accepted MDSs or not</p> <ul style="list-style-type: none">FALSETRUE	
VPM_DS_LIST_MATCHING_SOURCE_IMDS	<p>Defines which origin(s) of IMDS datasheet are considered for matching:</p> <ul style="list-style-type: none">RECEIVED (received MDS)EXTERNAL (received and published MDS)OWN (own MDS)OWNRECEIVED (received and own MDS)ALL (published, received and OWN)	



Configuration parameter name	Supported values and their meaning	Comment
	MDS)	
VPM_DS_LIST_MATCHING_STATE	Defines status of the IMDS datasheets for automatic matching process <ul style="list-style-type: none">• ALL (the datasheets are matched regardless of their status, i.e. datasheets in status accepted, rejected, cancelled by sender, not yet browsed, browsed, IHS ready, edit, etc.)• RELEASED (only internally released datasheets (own and accepted) are matched)	
VPM_SPM_REQUEST_RELEVANT_RECIPIENT_STATUS	Defines rules when the SPM request should be created during the matching (based on recipient status of received MDS): <ul style="list-style-type: none">• REJECTED (SPM request is created only if received MDS in recipient status "rejected" was found)• MODIFIED (SPM request is created only if received MDS in recipient status "modified" was found)• CANCELLED (SPM request is created only if received MDS in recipient status "cancelled by sender" was found)• BROWSED (SPM request is created only if received MDS in recipient status "browsed" was found)• NOT_YET_BROWSED (SPM request is created only if received MDS in recipient status "not yet browsed" was found)• ACCEPTED (SPM request is created only if received MDS in recipient status "accepted" was found)• NONE (this special process will not be taking place at all) And combinations which are separated by a semicolon.	

Table 3 List of VPM configuration parameters

7 Other ways of creation of the VP

7.1 VP Import

The VP can be created also by the import. This is preferred option in case of very complex BOMs.

7.1.1 Import file format

For the VP import the standard BoM import format is supported.

The import file must comply with the requirements detailed in the **Table 4**.

Column	Content	Reference	Format	Remark
1	Part number	Head	50(alpha)	Part number of the component
2	Name, Description	Head	255(alpha)	Name of the component
3	Plant	Head	4(alpha)	Number of the plant (must be unique for complete BoM)
4	Base quantity	Position	17(num)	Quantity, to which the amount is given (must be 1 currently)
5	Position-No.	Position	4(num)	Position-No. of the child (e. g. 0010, 0990)
6	Child part number	Position	50(alpha)	Part number of the used assembly/material
7	Name, Description	Position	255(alpha)	Name of the sub-component
8	Component weight/amount	Position	17(num)	Amount or weight of the sub- component. This field contains 3 decimal places (must be given including the decimal separator, e.g. 1.010).
9	Unit of Measure (UoM)	Position	4(alpha)	The Unit of measure related to column 8. Value list: ST: (piece) EA: (piece) KG: kilogram G: Gram M: M M2: M2 M3: M3
10	Flag: assembly	Position	1(alpha)	If the child is an assembly and specified further it must be set to "X", otherwise: empty
11	Flag: saleable product	Head	1(alpha)	If the head is a saleable product, it



Column	Content	Reference	Format	Remark
				must be set to "X", otherwise: empty (When "X" is given, a MDS will be created, otherwise a module will be created)
12	Flag: Purchase position	Position	1(alpha)	If the child is a purchase part or material, it must be set to "X", otherwise: empty
13	Supplier number of the sub-component	Position	18(alpha)	The PDM-supplier number of the child (if purchase part) This entry is optional
14	Head weight	Head	17(num)	Amount or weight of the head node. This field contains 3 decimal places (must be given including the decimal separator, e.g. 1.010). This entry is optional
15	Head Unit of Measure (UoM)	Head	2(alpha)	The Unit of measure regarding column 14. Value list: KG, G, MG This entry is optional

Table 4 VPM BOM import format

PLEASE NOTE: Columns 14 and 15 are required in the VP import file only in case they are supported based on the configuration of the BOM import which is done by iPoint during the installation of iPCA. If VP import file with incorrect number of columns is selected, the user is notified (see **Figure 69**).

7.1.2 Frontend import (done via iPCA application)

Import screen can be accessed via "Data → PDM BoM Import (VP)".

This loads a dialog window (see **Figure 70**). First at least one CSV import file in supported format must be selected for the import. This is done by click on the  button, which will display import file selection dialog (see **Figure 71**). The VP type needs to be selected using the drop-down list and import file needs to be selected by click on the  button. This loads standard open dialog window. Wished file can be confirmed by click on the "Save" button and taken over into the files for the import by click on the "Add" button.

PLEASE NOTE: In case that the select file does not have supported format as per **Table 4**, the error message is shown (see **Figure 69**).

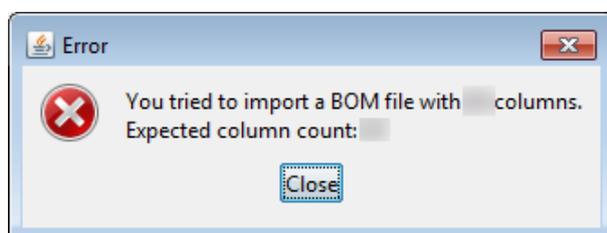


Figure 69 Error message shown if the selected import file is not correct in respect to head weight

Following information must/could be defined:

- **VP Name**
Name of the VP.
This is mandatory field.
- **VP Number**
Number of the VP.
- **Type**
Type of the VP.
This is mandatory field.
Only defined VP types can be used. These can be managed as detailed in the **chapter 6.1.1**.
- **Assigned Project**
The project to which the VP is to be linked.
Project can be chosen using the  button, which will load standard project search window.
Wished project can be then confirmed by click on the “**Apply**” button.
Projects are managed in the “**Projects**” master data.
- **Mode**
The mode of the VP.
This is mandatory field.
Only enabled modes can be used. These can be managed as detailed in the **chapter 4.2.2**.
- **Source**
The source of the VP.
This is by default empty but upon selection of the standard CSV BOM import file, it is automatically populated with value “**Manual – Standard BOM**”.
This field is read-only and cannot be modified by the user.
- **Access**
The access level of VP.
This is mandatory field.
Only enabled access modes can be used. These can be managed as detailed in the **chapter 4.2.3**.
- **Id**
The ID of the VP is generated by the system.

This field is read-only and cannot be modified by the user.

- **Compliance Date**

The compliance data used for the calculation of the compliance of the VP.

Compliance date can be chosen using the  button, which will load standard compliance due date search window. Wished compliance date can be then confirmed by click on the “**Apply**” button.

Only defined compliance dates can be used. These can be managed as detailed in the **chapter 6.1.2**.

- **Expiry Date**

The date when the VP expires and will be automatically deleted.

This can be defined either manually in the text fields or by using  button and selecting the date from the calendar shown.

- **BOM created**

The date when the BOM was created/generated/exported.

This can be defined either manually in the text field or by using  button and selecting the date from the calendar shown.

- **Comment**

The comment for a VP.

- **Email notification after job has been finished**

If checked and the import is done by job, the email notification is send to upon completion of the import to the user who started the import.

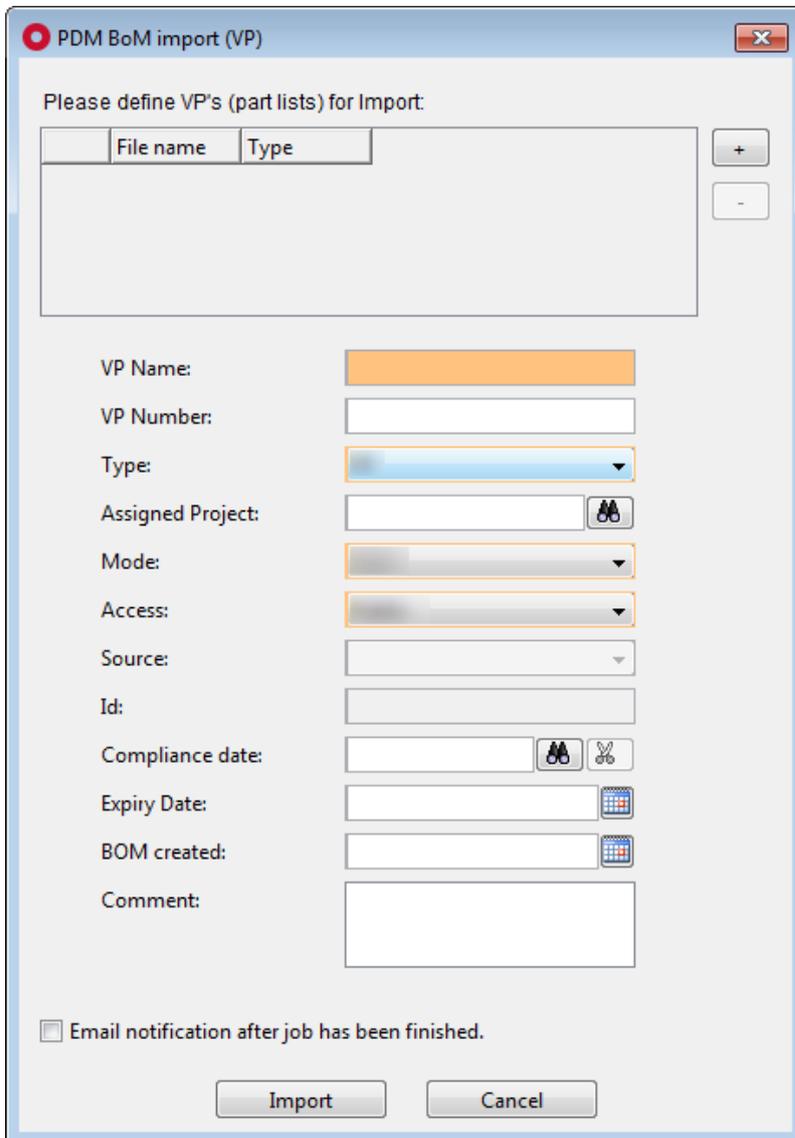


Figure 70 VP import panel

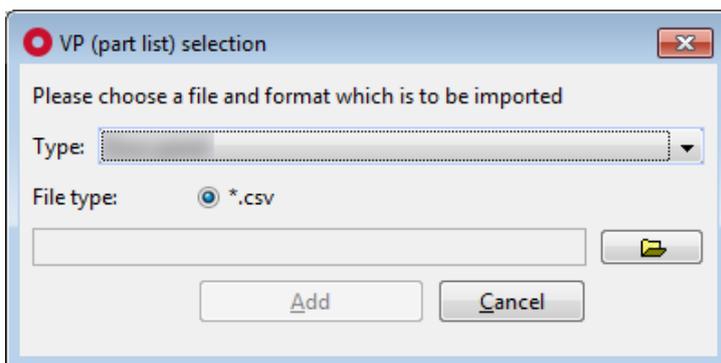


Figure 71 VP file selection panel



Once all details are defined, import of the VP can be started using “**Import**” button. To cancel import of the VP, the “**Cancel**” button is used.

Then the dialog window is shown (see **Figure 72**). This informs user that the database job was created. The ID of the job is included in the message. Additionally, by click on the button “**Yes**”, it is possible to open DB-Job Manager to monitor the actual status of the import. By click on the “**No**” button, the dialog window is closed.

For more details about working with DB-Job Manager, please see IHS user manual, **chapter 21**.

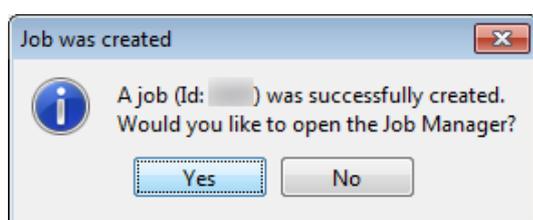


Figure 72 Dialog window with ID of the job for the import

PLEASE NOTE: In case that no CSV file is selected for the import an error message is shown (see **Figure 73**). Also in case not all mandatory fields are populated an error message is shown (see **Figure 74**).

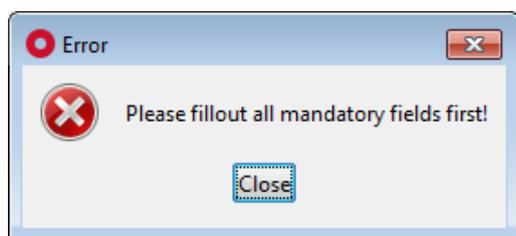


Figure 73 Error message shown on save of VP if not all mandatory VP details are defined

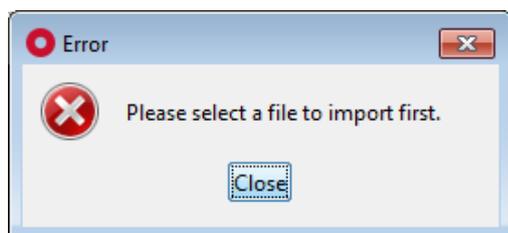


Figure 74 Error message shown on save of VP if import file is not select for VP import

PLEASE NOTE: Only user with activated permission “**VPM_IMPORT**” can access VP import panel.

7.1.3 Backend import (done via iVCA mission) (optional)

A new VP can be created also by the backend import.

The BOM import files must be stored into the defined folder on the application server and the background process, monitoring this folder, will process the import files and create VPs.

This BOM import uses standard BOM import file which format is defined in the **chapter 7.1.1**.

The BOM import files need to be stored on a defined location on the server. The files are then fetched by the automatically in the background process and the VPs are created.

One VP per each import file is created.

The BOM import uses records defined in the “**PDM VPM Import Configuration**” panel (see **chapter 6.2.2**). During the installation of this feature, the default record is inserted into this table. It is recommended not to delete this record. If deleted, recreate it as per below details (last three attributes listed below can be set/changed as per your requirements)

Attribute	Default Value	Comment
System	VP_IMPORT	This value should not be changed as the VP standard backend import will not work.
Client	VP_IMPORT	This value should not be changed as the VP standard backend import will not work.
Type	VP	This is default VP type inserted into the “ Virtual Product Type ” during the installation of this feature (see chapter 6.1.1).
Mode	Dynamic	
Access	Public	

Table 5 Default configuration for VP standard backend import

The attributes of created VP are as per the above configuration defined in the **Table 5** or as per own configuration.

It is possible to create also own PDM VPM import configuration entries.

The attributes “**System**” and “**Client**” need to hold the same value and this value needs to be then used in the BOM import file name after the hashtag sign “#”.

For example if the BOM import file name has the file name “**BOM_12345#DOOR_PANEL.csv**”, then the BOM import algorithm checks if there is a PDM VPM import configuration with attributes “**System**” and “**Client**” set to “**DOOR_PANEL**”. If yes, the attributes in created VP are as per this configuration, otherwise the VP is created as per the default configuration “**VP_IMPORT**”.

The name of the VP is set as per value defined in the **column 1** of the BOM import file in the record for the root node.

The import status and log file can be seen in the “**Data → Import/Export Overview**” panel. Records have the type “**Virtual Product**”.

This functionality is available only in case that this optional feature is licensed.

7.2 Creation of VP from CSI results (optional)

A new VP can be created also from results of the CSI analysis. This is to enable further tracking of MDSs/modules/articles/mixtures of interest in a consolidated way.

7.2.1 General

A VP can be created from results of the CSI analysis in following CSI result view options:

- All
- All MDS/modules
- Received
- Sent
- All (Article/Mixture)
- Article
- Mixture

7.2.2 Creation of VP

VP creation is triggered by a click on the “**Create VP**” button. In case that no MDSs/modules/articles/mixtures is selected in the result list, a dialog window is shown (see **Figure 75**) asking if all MDSs from the result list are to be used to create a VP. This can be either confirmed by click on the “**Yes**” button or cancelled by click on the “**No**” button. Then, user can select wished MDSs/modules/articles/mixtures in the result list and click on the “**Create VP**” button again.

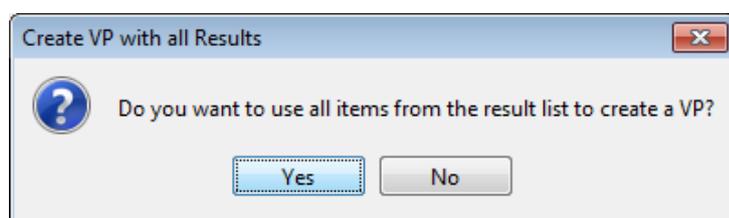
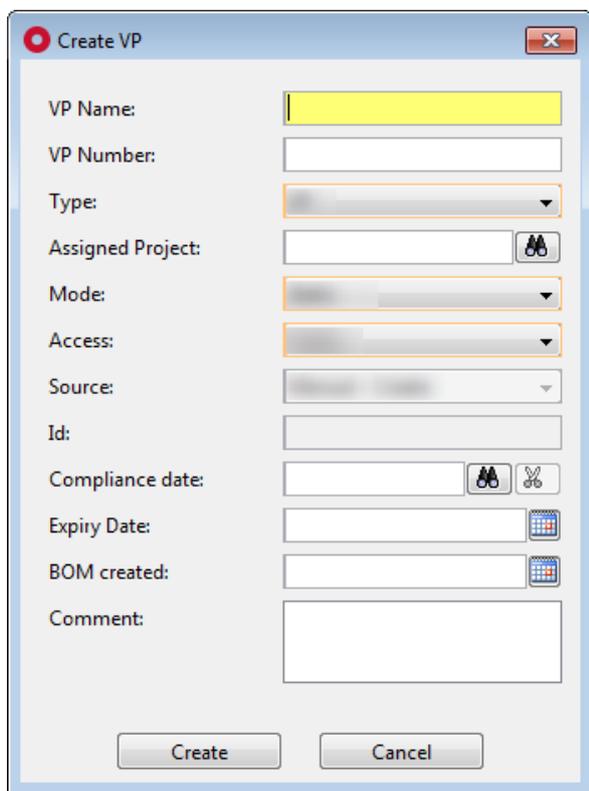


Figure 75 Dialog for confirmation of usage of all records for creation of VP

PLEASE NOTE: The “**Create VP**” button is by default inactive in panel “**All**” for viewing CSI results. To activate this button, at least one IMDS or SAMM records must be selected. The button is inactivated in case that a combination of IMDS and SAMM records is selected.

Either upon confirmation of the dialog detailed in **Figure 75** or upon selection of wished MDSs/modules/articles/mixtures and click on the “**Create VP**” button, the VP creation dialog is opened to enter attributes of the VP (see **Figure 76**).



The 'Create VP' dialog box contains the following fields and controls:

- VP Name: Text input field with a yellow highlight.
- VP Number: Text input field.
- Type: Dropdown menu.
- Assigned Project: Text input field with a person icon.
- Mode: Dropdown menu.
- Access: Dropdown menu.
- Source: Dropdown menu.
- Id: Text input field.
- Compliance date: Text input field with person and scissors icons.
- Expiry Date: Text input field with a calendar icon.
- BOM created: Text input field with a calendar icon.
- Comment: Text area.
- Buttons: 'Create' and 'Cancel' at the bottom.

Figure 76 VP creation dialog

Upon click on the “**Create**” button, the VP creation job will start and notification is shown to the user (see **Figure 77**).

This allows user with appropriate permission to monitor the status of the creation of VP.

For more details about working with DB-Job Manager, please see IHS user manual, **chapter 21**.

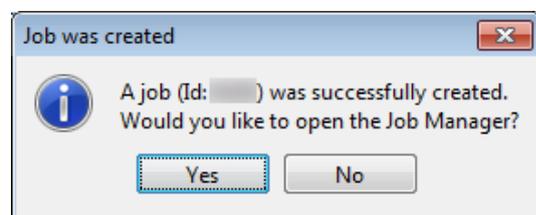


Figure 77 Notification that job for creation of VP from CSI was created

PLEASE NOTE: For VP creation, a unique list of MDSs/modules/articles/mixtures selected in the Step 3 is created. The reason is that the same items could be listed multiple times in the result list (e.g. in case if multiple CSI rule groups were selected for the analysis). This is to prevent the same MDSs/modules/articles/mixtures will be present several times in the created VP.

PLEASE NOTE: VP created from the CSI results has value “**Not available**” in “**Source**” attribute.

7.2.2.1 Creating VP with IMDS data

A VP containing IMDS data can be created from following CSI result view options:

- All
- All MDS/modules
- Received
- Sent

PLEASE NOTE: The button “**Create MDS**” is visible only to the user with activated permission “**CC_RESULT_TO_VPM**” located under “**iMDS_IHS → COMPLIANCE_CHECKER**”.

7.2.2.1.1 Parts List

Parts added to the “**Parts List**” have the attributes populated as defined in the **Table 6**.

No	Name	Populated with
1	Item Number	Component: Part-/Item-No. Semicomponent: Part-/Item-No. Material: Material No.
2	Item Number Revision	n/a
3	Description	Component: Name Semicomponent: Name Material: Name (English)
4	Level	Always populated with "1"
5	Weight (UoM)	Component: Measured Weight / Measured Weight UoM Semicomponent: empty / empty Material: empty / empty
6	Supplier Name	Supplier of MDS
7	Quantity (UoM)	n/a
8	Supplier Code	Value from " Supplier code " field in the Recipient data page (for virtual holdings, the first recipient record found is used)
9	Source type	Always populated with " IMDS "

Table 6 Population of part attributes in case VP is created from CSI results for IMDS nodes

7.2.2.1.2 DS List

Addition of MDSs/modules to the “**DS List**” is according to the standard process for VPM creation.

7.2.2.2 Creating VP with SAM-M data

A VP containing SAM-M data can be created from following CSI result view options:

- All
- All (Article/Mixture)
- Article
- Mixture

PLEASE NOTE: The button “**Create MDS**” is visible only to the user with activated permission “**CC_RESULT_TO_VPM**” located under “**SAMM → COMPLIANCE_CHECKER**”.

7.2.2.2.1 Parts List

Parts added to the “**Parts List**” have the attributes populated as defined in the **Table 7**.

No	Name	Populated with
1	Item Number	Article: Article no. Mixture: Mixture no.
2	Item Number Revision	n/a
3	Description	Article: Primary Name Mixture: Primary Name
4	Level	Always populated with "1"
5	Weight (UoM)	Article: Measured Weight / Measured Weight UoM Mixture: empty / empty
6	Supplier Name	Article: Supplier Mixture: Supplier
7	Quantity (UoM)	n/a
8	Supplier Code	n/a
9	Source type	Always populated with " SAM-M "

Table 7 Population of part attributes in case VP is created from CSI results for SAM-M nodes

7.2.2.2.2 DS List

Each entry from the unique list of articles/mixtures is taken into the created VP.

7.2.2.3 Log

Upon completion of the DB job for creation of a VP, the log is available in DB-Job Manager.

Following information is displayed:

- VP Name
- VP ID / Version
- Total number of items
- Number of IMDS DS available
- Number of SAM-M DS available
- Number of unreported items
- Number of MDSs not taken into the VP

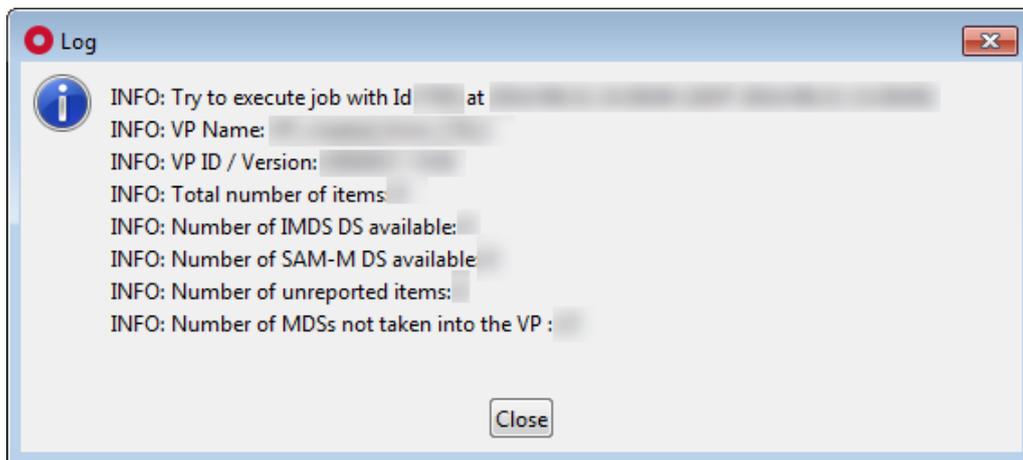


Figure 78 Sample of the log file from creation of the VP from CSI results

8 Requests

In case of manual addition of new or in case of edit or copy of an existing part where the datasheet does not exist for the defined part number defined, the part is created as unreported and depending on the configuration and licensed module, the request can be created for it automatically.

The same process is valid for parts added to the VP by the BOM import (see **chapter 7**).

The request is created if below rules are met:

- **SPM request**

Is created in case that the configuration parameter “**PDM_CREATE_SPMREQUEST**” is set to “**TRUE**” and Supply Part Management module (SPM) is licensed and the SPM request with part number of the new part does not exists yet

- **SEP request**

Is created in case that the configuration parameter “**PDM_CREATE_SEPREQUEST**” is set to “**TRUE**” and Supplier Entry Portal module (SEP) is licensed and the SEP request with part number of the new part does not exists yet

9 Appendix

Supported weight unit of measures

- g
- kg
- kt
- lb
- mg
- oz
- t
- t
- tn. sh.
- µg

Supported quantities

- EA
- cl
- cm
- cm²
- cm³
- dl
- dm
- dm²
- dm³
- fm
- ft
- ft²
- ft³
- g
- in
- in²
- in³
- kg



iPoint

iPCA

VPM

V13.22 onwards

- kt
- l
- lb
- m
- m²
- m³
- mg
- ml
- mm
- mm²
- mm³
- nm
- oz
- pm
- t
- tn. sh.
- µg
- µm



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12 Change History

Version	Date	Description
9.05	29.05.2012	First release
9.07	12.06.2013	Updated screenshots
10.16	25.02.2015	Complete rework of the user manual
10.22	18.06.2015	Added hint at what circumstances some options in the context menu in DS List can be hidden (chapters 5.3.9.3.1.5 & 5.3.9.3.1.6 & 5.3.9.3.1.7)
10.23	28.07.2015	Added details about new VP attribute “Source” and replaced figures, etc. (chapters 4.2.4 & 5.1 & 5.2 & 5.3.1 & 5.3.2 & 5.3.3 & 5.3.4 & 5.3.5 & 7.1.2) Improved details and fixed some typos in chapter for VP import (chapter 7 and all its subchapters)
10.25	13.08.2015	Updated big number of figures (due to change of the iPoint logo in iPCA) Fixed some typos
11.00	21.09.2015	Updated some based on the change of the wording (Development sample report MDS -> Preliminary MDS)
11.03	17.11.2015	Added a question after change of the VP compliance date (chapter 5.3.2) Renamed button “Delete” to “Delete part” (chapter 5.3.8.4) Renamed chapter to “Delete part / Delete link to VP” (chapter 5.3.8.4.4) Renamed chapter to “Delete part” (chapter 5.3.8.4.4.1) Updated figure 31 (chapter 5.3.8.4.4.2) Moved check for parts with 0 quantity prior to RRR analysis (chapter 5.3.11.1 & 5.3.11.1.2.3) Updated some figures
11.04	23.11.2015	Added column “Last change user” to the VP result list (chapter 5.2) Added columns “Last change date” and “Last change user” to the Parts List result list (chapter 5.3.8.3) Added columns “Last change date” and “Last change user” to the DS List result list (chapter 5.3.9.3) Added hint about configuration parameter for IMDS component creation in the DS List (chapter 5.3.9.4.1) Added hint about head weight columns in the VP import file (chapter 7.1.1) Added an error message shown on usage of incorrect VP import file regarding the head weight columns (chapter 7.1.2)
11.05	13.01.2016	Updated Figure 36 (chapter 5.3.9) Changed the name of one of the buttons (chapter 5.3.9.4)



Version	Date	Description
		Changed name of the chapter (chapter 5.3.9.4.4) Updated Figure 43 (chapter 5.3.9.4.4) Fixed several typos Added note about possibility of export of result list to the XLSX format
11.06.000	19.01.2016	Updated Figure 36 (chapter 5.3.9) Updated labels and description of search criteria for supplier and supplier code (chapter 5.3.9.2)
11.07.000	02.03.2016	Added a hint about double-click action in Link VP panel (chapter 5.3.6)
11.09.000	30.03.2016	Changed order of subchapters in chapter 4.2 Added new search criteria "VP Number" and updated Figure 1 (chapter 5.1) Added new column "VP Number" and PDM columns (chapter 5.2) Added new field "VP Number" and updated Figure 3 (chapter 5.3.1) Updated Figure 5 (chapter 5.3.2) Updated Figure 9 (chapter 5.3.3) Updated Figure 10 (chapter 5.3.4) Updated Figure 11 (chapter 5.3.5.1) Updated Figure 19 (chapter 5.3.6) Added notification if already linked VP is selected for linkage (chapter 5.3.6) Updated Figure 25 (chapter 5.3.7) Added new field "VP Number" and PDM details (chapter 5.3.8.1) Added new column "VP Parent no" (chapter 5.3.8.3) Updated Figure 37 (chapter 5.3.9) Added new field "VP Number" and PDM details (chapter 5.3.9.1) Added symbols for article and mixture for "DS Type" column and added new column "VP Parent no" (chapter 5.3.9.3) Added details about the VP PDM Import Configuration parameter panel (chapter 6.2.2) Added new field "VP Number" and updated Figure 70 (chapter 7.1.2)
V11.11.000	28.06.2016	Added new search criteria "Reporting Status" and "Compliance Status" and updated Figure 1 (chapter 5.1) Improved descriptions for "Compliance Status" and "Reporting status" (chapter 5.2) Updated Figure 2 and added information about the date of the last run of the VP compliance check (chapter 5.2)
V11.12.000	30.06.2016	Added hint about visibility of the "Number of IMDS DS available" column (chapter 5.2)
V12.00.000	22.09.2016	Updated Figure 1 (chapter 5) Added value "Compliance status is being calculated" to the



Version	Date	Description
		<p>“Compliance Status” (chapter 5.1) Renamed search criteria “Create date” to “Creation date” Added new search criteria “Date (last change)” and “Last change user” (chapter 5.1) Renamed column “Compliance State” to Compliance Status” (chapter 5.2) Update of possible compliance states and minor improvements of the text (chapter 5.2) Renamed button “Edit VP” to Edit VP / Show” and renamed button “Reports/Analysis” to “Reports” (chapter 5.3) Renamed chapter “Edit VP” to “Edit VP / Show” and added details to it (chapter 5.3.2) Updated Figure 19 (chapter 5.3.6) Added details about the permission “VPM_DS_VIEW” (chapter 5.3.7) Renamed search criteria “Revision” to “Item Number Revision” (chapter 5.3.8.2) Renamed column “Revision” to “Item Number Revision” (chapter 5.3.8.3) Added reference to chapter 0 (chapter 5.3.8.4.1) Added reference for “Weight (UoM)” and “Quantity (UoM)” to chapter 9 (chapter 5.3.8.4.1) Added reference to chapter 0 (chapter 5.3.8.4.2) Added reference to chapter 0 (chapter 5.3.8.4.3) Added details about the permission “VPM_PARTS_VIEW” (chapter 5.3.9) Updated Figure 60 (chapter 6.2.1) Added chapter 0 Added chapter 9</p>
12.03	09.11.2016	<p>Updated Figure 1 (chapter 5) Added chapter 5.3.7 Updated Figure 40 (chapter 5.3.9.4.1) Extended and improved description for panel for creation of the MDS for unreported part (chapter 5.3.9.4.1) Updated Figure 41 (chapter 5.3.9.4.3.1) Extended and improved description for panel for replacement of the MDS or unreported part (chapter 5.3.9.4.3.1) Updated Figure 44 (chapter 5.3.9.4.4) Added information about automatic assignment of CSI rule groups set to newly created VPs (chapter 6.3.2)</p>
12.04	15.11.2016	<p>Improved description for the “Compliance Status” column (chapter 5.2) Adjusted description for copy of the part as per improvements done in the process (chapter 5.3.8.4.3)</p>



Version	Date	Description
12.05	07.12.2016	Improved description of the functionality upon definition/change of the VP compliance date (chapter 5.3.2) Added chapter 5.3.8.3 with subchapters – for context menu in Parts List Improved description of the functionality upon definition/change of the rule group(s) assigned to VP (chapter 5.3.10)
12.08	22.02.2017	Corrected formula for calculation of the weight displayed in the “VP calculated weight [g]” column (chapter 5.2) Added a note about automatic population of the unit of measure for weight (chapter 5.3.8.4.1) Added a note about automatic population of the unit of measure for quantity (chapter 5.3.8.4.1) Updated Figure 39 (chapter 5.3.9.3.1.5)
12.12	26.04.2017	Updated Figure 1 (chapter 5) Updated Figure 3 and added description about button for compliance date removal (chapter 5.3.1) Updated Figure 5, added Figure 7 and added description about button for compliance date removal (chapter 5.3.2) Updated Figure 9 (chapter 5.3.3) Updated Figure 11 (chapter 5.3.4) Updated (chapter 5.3.5) Update description for “Weight” and “Quantity” columns (chapter 5.3.8.3) Update description for “Weight” and “Quantity” columns (chapter 5.3.9.3)
12.13	09.05.2017	Addition of the note regarding “Access” drop-down list (chapter 5.3.2)
12.18	19.07.2017	Updated Figure 69 (chapter 7.1.2) Updated Figure 76 (chapter 7.2.2)
12.19	16.08.2017	Added chapter 6.5
12.20	25.08.2017	Added new parameters to chapter 6.5
12.24	10.10.2017	Added chapter 5.2.1 (and its subchapters)
12.25	27.10.2017	Updated some details in chapter 5.3.7 Update description for the “Supplier Code” search criteria (chapter 5.3.8.2) Update description for the “Supplier Code” column (chapter 5.3.8.3) Update description for the “Supplier Code” attribute (chapter 5.3.8.4.1) Updated Figure 47 (chapter 5.3.11.1) Added column “Released” in the result list (chapter 5.3.11.1.1) Updated description in chapter 5.3.11.1.2 Renamed and updated text in chapter 5.3.11.1.2.1

Version	Date	Description
		Renamed and updated text in chapter 5.3.11.1.2.3 Added Figure 50 and Figure 51(chapter 5.3.11.1.2.3)
13.00	15.12.2017	Added configuration parameter "VPM_DS_LIST_MATCHING_FORWARDED_MDS" (chapter 6.5)
13.00	10.01.2018	Added configuration parameters into chapter 6.5 <ul style="list-style-type: none"> VP_MODEL_CSI_FORCE_SKIP_RECALC_DELAY_DAYS VP_MODEL_RECALC_DELAY_DAYS
13.10	03.05.2018	"Weight" column split into "Weight" and "Weight UoM" and "Quality" column split into "Quantity" and "Quantity UoM" (chapter 5.3.8.3) Improved text in chapter 5.3.11 Added chapters 5.3.11.2, 5.3.11.3, 5.3.11.4, 5.3.11.5 and 5.3.11.6
13.11	11.05.2018	Search criteria "Reported" for the "Reporting Status" in the DS List of the VP returns all records linked with datasheets (final or preliminary) (chapter 5.3.9.2)
13.19	25.07.2018	"Start usage analysis" button is disabled if VP has no part or none of the parts is reported (chapter 5.3.11.2)
13.22	25.10.2018	Added new attribute "BOM Create Date" (chapter 5.2) Updated Figure 3 (chapter 5.3.1) Updated Figure 5 (chapter 5.3.2) Updated Figure 9 (chapter 5.3.3) Updated Figure 10 (chapter 5.3.4) Updated Figure 11 (chapter 5.3.5.3.1) Added chapter 7.1.3 Updated Figure 70 (chapter 7.1.2) Updated Figure 76 (chapter 7.2.2)