# **IQ-Software Version 6.0 complete changelog**

Here you find an overview of all changes made in **IQ-Software version 6 for 0.0.9.6** and earlier.

Important information:

Before updating, please look up the current state of the software:

- state 0.0.8.1 or older: please install Service Pack 0.0.8.2

- state 0.0.8.2 or 0.0.8.3: please install Service Pack 0.0.8.9

#### Service Pack IQ Version 6.0 - 0.0.9.6

XML-Import/Export:

[x] IQ-1214: Types (in a type hierarchy) without instances were not exported. Therefore the type hierarchy was not properly reconstructed during import of an XML file. This is fixed.

#### Service Pack IQ Version 6.0 - 0.0.9.5

General:

[x] IQ-575: Issue fixed: A program error occurred when unsuccessfully opening the file that manages licenses to be checked out.

[x] IQ-1046: Issue fixed: There was an issue when globalising and deglobalising an action. Solution: The 'responsible/deadline' will always be applied when setting the globality of the action.

Date of Release:

2. 18-March 2016

# Service Pack IQ Version 6.0 - 0.0.9.4

General:

[x] IQ-1209: Double-click on the "A" Symbol für user-defined attributes did raise an error. This has been fixed.

Data Manager:

[x] IQ-1210: Teams and persons: Wrong translation in the dialog for creating a new person. The "Department"- column was labeled "Office". This has been fixed.

Form-Editor:

[x] IQ-1211: FMEA-Form with Bosch-Layout did have a wrong translation in the column "Actions R:/D:". This has been fixed.

Date of Release:

6. August 2015

#### Service Pack IQ Version 6.0 - 0.0.9.3

#### General:

[x] IQ-1207: If a none action was copied for one file to another file and the reference language was changed in the destination file, the none action was displayed in a wrong language for certain data constellations. This has been fixed.

#### XML interface:

[x] IQ-1204: With a conversion from version 6.5 to version 6.0 using the Draft version, the attributes "latent failure" (failure) and "Is safety goal" (function) couldn't be brought back. This is possible now.

#### Personal Information Manager (PIM):

[x] IQ-1205: If the public collection was saved with a lock, this lock couldn't be removed permanently anymore. This has been fixed.

#### DRBFM Form:

[x] IQ-1206: The command "Choose" has been included in the context menu again.

Date of Release:

2. February 2015

# Service Pack IQ Version 6.0 - 0.0.9.2

#### General:

[x] IQ-1189: An error occurred in the Deadline schedule with active display option "Show causes" and layout "Deadlines". This has been fixed.

[x] IQ-1181: When a document language (i.e. German) was deleted, the system created translation of the none action was also deleted. If the deleted document language was created again at a later time, the translation for the none action was not created automatically. From now on, system created translations will stay alive if a translation will be deleted and created again later on.

Structure Editor:

[x] IQ-1190: Searching with the Search dialog without any hits and after that scrolling in the list of the Search dialog did sometimes raise an error. This has been fixed.

[x] IQ-749: Synchronising from a filtered Structure Editor into another Structure Editor did not work properly, because the elements have not been highlighted. This has been fixed.

Date of Release:

17. July 2014

# Service Pack IQ Version 6.0 - 0.0.9.1

General:

[x] IQ-1169: Trying to add a graphic to a note raised the error

"UndefindedObject>>#getDeviceCaps: not understood". This has been fixed.

[x] IQ-1152: Trying to add a revision state to the 8D report via Drag&Drop raised the error

"MeasureChange>>#nameRaw not understood". This has been fixed.

[x] IQ-1156: In the area of the doucment settings "Default deadline status" the status "in revision" was added.

[x] IQ-1077: While exporting structures/variants with PIM-bookmarks, the PIM-bookmarks and their contents got lost. This has been fixed.

Interfaces:

[x] IQ-1170: Has a global action been changed in a structure interface, the change was not applied in the consolidation. This has been fixed.

**Object-Inspector:** 

[x] IQ-1166: Synchronizing an action into the object inspector multiple times did raise the error "EditableProtocolNode>>#object not understood". This has been fixed.

Data Manager:

[x] IQ-1151: Using the Terminology and translation editor the error

"FmeaRequirementTestSample>>#needsUserName: not understood", was raised. This did only occur with acive mode "All except notes" when trying to translate a sample size or a sample frequency. The error has been fixed.

[x] IQ-1138: The search criteria "Find exact match only" of the Teams and persons editor did return wrong results. This has been fixed.

User-defined views:

[x] IQ-1116: Opening the user-definded view raised the error "Strukturelement>>#deadline not understood". This has been fixed.

**IQ-CT** Analysis:

[x] IQ-1182: The HTML-Export of the deadline schedule does not export the appointed period, if it has been modified before. This has been fixed.

FMEDA:

[x] IQ-1179: It was difficult in certain situations in the FMEDA form to add values in the % Distr. column. This has been fixed. Now you can add fractions as well.

Consolidation: [x] IQ-1174: In certain situations the consolidation did loose valuations. This has been fixed.

Date of Release:

13. February 2014

# Service Pack IQ Version 6.0 - 0.0.9.0

General:

[x] Deadline Editor: If actions were faded in initial states, RPN Now was not displayed. This has been fixed.

[x] FMEA forms editor: Display options in the section "context information for causes and effects". The option "Specification of characteristics" was only displayed in combination with the option "Classification for function/characteristics". This has been fixed.

[x] Statistics: If a statistic (e.g. risk matrix) for an FMEA form had been opened, all failure modes were deleted in this FMEA form (2nd workspace) afterwards and the option "update automatically" was set, the error "UndefinedObject>>#removeAll not understood" occurred. This has been fixed.

[x] Structure Editor: The icon for deleting of objects in the toolbar didn't work. This has been fixed.

[x] Terminology/Translation: Under certain circumstances the command "Delete all types without instances" caused the error "UndefinedObject>>#bottom not understood". This has been fixed.

[x] "Vietnamese" is available as new document language now.

[x] Interface Management: If a partial structure interface was closed and the system element marked for the creation of the interface was deleted afterwards, the interface couldn't be deleted anymore. In these cases the error "UndefinedObject>>#isStructureInterfaceRoot: not understood" appeared. This has been fixed.

Customer specific enhancements:

[x] Bosch company: A new valuation catalog with the name "CDQ0305 FMEA Issue 6.0" has been included in the template file. Note: The new template is only available with new installations of the IQ software. Before executing a new installation, the currently installed version must be uninstalled and then eventually remaining folders in the programs directory must be deleted.

Date of Release:

4. November 2013

# Service Pack IQ Version 6.0 - 0.0.8.9

General:

[x] If the document setting "Display deadlines by week numbers" was set, completing an action set the actual date as completion date, regardless of the date entered by the user. This has been fixed.

[x] When an inspection was deleted in the Control Plan, it was still listed as an instance in the Data Manager in the administration for inspection equipment. This has been fixed.

[x] Through importing an EXP file missing translations in a translation language under certain circumstances were replaced by '???'. This has been fixed.

[x] If the name of a function was changed in an exported structure (EXP) and at the same time a new instance of this function was created at a different structure element, the renaming wasn't taken into account during the re-import. This has been fixed.

[x] The command "Tools|Create Function Nets [Database]" in the failure net also created function nets for structures that were in checkout status. The command has been modified now, so for such structures the nets are not being created anymore.

[x] Input Collector for Causes/Effects: In the select list more context information for the listed instances is available now. The function or structure element is displayed where the respective instance is anchored in the structure.

[x] Function Net: When the display of failures was active, they were only visible for the causes tree. This has been fixed.

[x] Merging of characteristics instances under certain circumstances did not bring together all failures. This has been fixed.

[x] Functional Safety: The sum of FIT values and the PMHF value were not calculated correctly (in the failure net), if
the failure net is structure spanning
a variant is active in the affected structures
root causes are excluded through the active variant
This has been fixed.

Date of Release:

14. August 2013

#### <h4Service Pack IQ Version 6.0 - 0.0.8.8

General:

[x] Extended functionality for customers with maintenance contract is available again for all licences with maintenance contract.

Date of Release:

21. May 2013

# Service Pack IQ Version 6.0 - 0.0.8.7

General:

[x] IQ-1057 Impact Analysis: Entries in the Impact Clarification Table were always displayed in German, regardless of the reference language. This has been fixed.

[x] Notes: References pointing to documents outside of the global reference path were not redirected to the alternatives (fme path) in cases where the global reference path was empty. This has been fixed.

[x] Update Program Version: The dialog asking whether the currently open file shall be saved, appears before the installation routine starts now.

[x] Filter: For a symbolic deadline also its concrete deadline can be used as filter criterion now. [x] IQ-953 When functions were merged, subordinate requirements were not displayed in the result anymore. This has been fixed.

# FMEA Forms Editor:

[x] IQ-1036 When synchronizing from the FMEA form into the Deadlines Editor, under certain circumstances more deadlines were marked than in the FMEA form. This has been fixed.[x] IQ-1080 Symbolic deadlines were not displayed in the R/D column. This has been fixed.[x] IQ-1089 Under certain circumstances, faded in actions in the FMEA form were displayed in Grey. It happened, although these were removed from the variant and the variant edit mode was switched off. This has been fixed.

Interfaces:

[x] IQ-1030 The translation export contained special characters in the names of notes categories, which could not be read with MSExcel 2010. This has been fixed.

[x] XML files that were created with version 6.5 can be imported now.

[x] During creating an import copy under certain circumstances the error

"UndefinedObject>>#get:from:for:" not understood" occurred. This has been fixed.

Structure Editor:

[x] Text search: If the object identity was used as search pattern, this didn't work for system elements. This has been fixed.

Customer specific modifications:

[x] IQ-1081 BOSCH: The Cover Sheet for the FMEA form was adopted according to the change request.

Date of Release:

17. May 2013

# Service Pack IQ Version 6.0 - 0.0.8.6

General:

[x] PIM Editor: When opening a new file the contents of the active tab were not updated. This has been fixed.

[x] During the initial assignment of a variant specific deadline, the standard deadline status "in revision" wasn't adopted. This has been fixed.

[x] After converting a Control Plan Version (from version 5.1), the specification wasn't displayed anymore. This has been fixed.

[x] During opening a Control Plan Version an error occurred. This has been fixed.

[x] The ID number for failures wasn't included in Structure Versions. This has been fixed

[x] Accidentally the command for creating PIM entries was also available for revision states. This has been fixed.

[x] notes field: The background color couldn't be assigned. This has been fixed.

# FMEA Forms Editor:

[x] With structure spanning nets and active variants in both structures, the display option "top effects only" partly ignored the not active variant edit mode. This has been fixed.

[x] The selection list of the Input Collector for causes and effects now shows context information for the listed entries. Instances of the same type can be distinguished more easily.

[x] Item codes of causes and effects can be displayed in FMEA Forms Versions now.

[x] Layout VDA96: The "R/D" column groups the deadline area, if the date is identical. So far the time was also taken into account for the comparison.

[x] Plan for Deadlines: Via a new display option the user can now decide, whether a global action is displayed only once or with all instances.

[x] Plan for Deadlines: 'Sum(F)=...' has been included in the status bar as additional information.

Functional Safety:

[x] LPFM calculation didn't take into account the FIT portion already used in the SPFM calculation.

Fault Tree:

[x] PPM calculation: big causes caused an overflow during the calculation. This has been fixed. [x] During the attempt to enhance the fault tree for an item already included in the failure net, a misleading message appeared. I warned that a circular net would be created and prevented the action. This has been fixed.

Function / Failure Analysis (FFA):

[x] When unanchored objects were moved into the structure list via Drag&Drop, the list wasn't redrawn. This has been fixed.

Simultaneous Engineering:

[x] Consolidation: Deletions of variant specific values in the Clone were not adopted in the consolidation result. This has been fixed.

[x] Consolidation: Breaking up cyclic nets now creates a PIM entry.

[x] Variant Interface: Consolidation of a Variant Interface under certain circumstances didn't split types. This has been fixed.

[x] Consolidation Desktop: Files to be consolidated are checked for their data version now.

Data Manager:

[x] Notes List: Object Icons are available for filters and bookmarks as well now.

Interfaces:

[x] XDI Interface: The order of subordinate objects is adopted with the import of update files now.

[x] Structure Interface: During creating a structure interface under certain circumstances the error "'UndefinedObject>>#category' not understood" appeared. This has been fixed.

[x] XML Interface: The export of cascading operating conditions in the failure net resulted in an invalid XML file. This has been fixed.

[x] Creating an export copy of a structure variant based on the Variants Transition Matrix could lead to unwanted copying of S-ratings. This has been fixed.

[x] Inserting an operating condition via structure ex-/import lead to a duplication of effects paths in the failure net. This has been fixed.

[x] Re-import of structures multiplied object types, if the respective type hadn't been exported completely. This has been fixed.

[x] XLS Import: Under certain circumstances line breaks weren't displayed correctly. This has been fixed.

[x] HTML Export of Tables: During the print of colored table contents wrong properties (size, bold) were set for the font. This has been fixed.

# Statistics:

[x] Under certain circumstances the filter settings for the effects column were ignored in the presentation print. This has been fixed.

[x] The structure based "Risk Matrix" could include S-ratings with 0. This has been fixed.

[x] The behavior of incompletely initialized Frequency Statistics in the Presentation Print/Web-Publisher has been improved.

Structure Editor:

[x] The display option for functions/failures at selected system elements didn't work correctly. This has been fixed.

Deadlines Editor: [x] A description that was entered in the Deadlines Editor for a global action, vanished after saving the file and opening it again. This has been fixed

CARM NG Server: [x] Action Tracking: Hierarchy of types could cause invalid XML being sent to the server. This has been fixed.

Date of Release:

28. March 2013

# Service Pack IQ Version 6.0 - 0.0.8.5

General:

[x] When a symbolic deadline is created, it's not possible to use an already existing name. It was possible to have identical names through subsequent renaming though. This has been prohibited now.

[x] 8D Report: Objects can be included in the 8D report editor now via Drag&Drop from the Personal Desktop.

[x] The item code of a system element was displayed at all times. This display can now be enabled or disabled with a display option.

[x] Copying of a system element didn't copy the Part Failure Rate (->Fault Tree). This has been fixed.

[x] Risk Priority List: The number of system elements in the status bar wasn't displayed correctly. This has been fixed.

[x] Risk Priority List: After changing the option "Show System Elements without Failures" the editor wasn't updated automatically. This has been fixed.

[x] The item code was displayed in a wrong color occasionally. This has been fixed.

[x] Filtering in net editors: the level failure/failure mode is now applied to all levels (also if it's used in the effects or causes branch).

[x] Filtering in net editors: the levels "effect" or "cause" are applied to the effect or causes branch only.

[x] The control character "%s" had no effect on the "Evaluation" of the FMEA form in the presentation print. This has been fixed.

[x] When the Customization Manager was open during the termination of the software, the error "UndefinedObject>>#releaseToolCache" not understood appeared. This has been fixed.

[x] If a variant was active, creating a "None" action didn't bring a dialog asking in which variants the action shall be included. This has been fixed.

[x] Copying under certain circumstances caused the error

"TreeListPaneTKB>>#export:type:keepFolding: not understood". This has been fixed.

[x] Synchronizing from table editors didn't always work. This has been fixed.

[x] Inserting new effects in the Cause and Effect Diagram (structure) caused an error if the display option for "functions" was switched off. This has been fixed.

[x] Switching to a different variant in the first workspace (structure editor) didn't update the header of the second workspace (deadline editor). This has been fixed.

[x] When a table was scrolled during printing (e.g. FMEA form), under certain circumstances the error "OrderedCollection (x items) - index: y is outside of collection bounds" appeared. This has been fixed.

[x] Process Flow Diagram: After inserting a new row/column, the selection is now on the newly added row/column.

[x] Full Screen toggle (F8) didn't redraw the Personal Desktop correctly. This has been fixed.

[x] Special Drag: The special drag command 'Replicate function' didn't replicate possibly defined dependent requirements. This has been fixed.

[x] Notify People Responsible (HTML) with several people and preset filter included only the first selected persons deadlines in the email attachment. This has been fixed.

[x] Deadline Editor – Display Options "Group identical causes". This option wasn't saved permanently. This has been fixed.

[x] When the properties dialog of several objects has been opened to change the rating, the maximum rating of all the objects is suggested initially. If the maximum rating is being selected, this wasn't taken as change so far and a click on OK didn't propagate it to all the objects. This has been changed, so that a click on an already chosen rating is taken as a change.

[x] Object Inspector: The error that occurred during writing into the field "Action results" has been fixed.

[x] Filtering: The criterion "number auf causes/effects (same for all causes/effects)" is also available for functions now.

[x] Filtering: The arrangement of filter criteria has been reworked/standardized (User defined attributes, rating etc.).

[x] When symbolic deadlines were merged and saved, the affected actions lost their deadlines. This has been fixed.

[x] Deleting a variant specific specification in the object inspector was not possible. This has been fixed.

[x] Filter criteria on the status of "None" actions are going to be ignored now.

[x] Drag&Drop: It wasn't possible to move a failure from a function to a subordinate requirement. This has been fixed.

[x] Notes with embedded objects can be copied between FME files again.

[x] The module properties of a system element with used module under certain circumstances can't be displayed in "Info | Details. This has been fixed.

[x] Presentation Print: "Hot Click Symbols" are available as display options for the structure tree now. They can be enabled or disabled for the print according to requirements.

[x] With a multi selection the command "remove from all nets" should ask for confirmation only once. This has been implemented.

[x] During Copying of a variant, symbolic deadlines were duplicated. This has been fixed.

[x] Structure Editor: When problems with system resources occurred during copying, this wasn't handled correctly. This has been fixed.

[x] After creating a variant from filtered contents in the Structure Editor, the content of the drop down lists in the Extended Toolbar was not updated. This has been fixed.

[x] If a structure contained action types with deadlines, copying and pasting of that structure in another file caused an error. This has been fixed.

Data Manager:

[x] Terminology/Translation: With the merging of objects under certain circumstances the name assigned consisted of three question marks. This has been fixed.

[x] Renaming of system defined categories for revision states was not possible under all circumstances. This has been fixed.

[x] During assigning a concrete deadline to a symbolic deadline under certain circumstances an error occurred. This has been fixed.

[x] Teams and Persons: There was a duplicate command in the right click menu, but only one of the entries was active. This has been fixed.

[x] Catalogs: The function "undo" didn't work correctly after restructuring via Drag&Drop or cursor keys. This has been fixed.

[x] Terminology/Translation: filtering in the table now works case insensitive.

[x] Export from Terminology/Translation: export comments as HTML is set as default now.

Failure Net Editor:

[x] If an error detection or error response was selected in the failure net, the commands "Connect Causes from Function Net" and "Connect Effects from Function Net" caused an error. This has been fixed.

[x] If the font type or size was changed when the editor for minimal cut sets was open, an error occurred. This has been fixed.

[x] Creating function nets based on failure nets now miss out the operating conditions.

[x] S Maximum wasn't displayed correctly in structure spanning nets if variants were involved. This has been fixed.

[x] Filtering: If the filter dialog was opened with disabled mechatronics feature and after that the mechatronics feature was enabled, the mechatronics system filters were not available. This has been fixed.

FMEA forms Editor:

[x] The display option "Show specifications for characteristics" didn't work for requirements in the FMEA form.

[x] The error appearing with opening of the auto complete list for operating conditions has been fixed.

[x] When new causes were inserted in the FMEA form in a second workspace, the structure editor wasn't updated. This has been fixed.

[x] The focus in the FMEA form was lost when new effects were inserted. This has been fixed.

[x] Focus is lost with duplicate connection: If a classification was defined for an effect that also appears as effect somewhere else in the same FMEA form, this other effect was focused after confirmation of the change. This has been fixed.

[x] The color for all fields of abandoned actions is consistent now.

[x] When the print preview was opened via the file menu and the print was started from this dialog, the error "receiver is not a Boolean" occurred. This has been fixed.

[x] The right click menu for fading columns in and out is available again.

[x] With certain combinations the auto filter for S rating didn't work in the Bosch/Mil layout. This has been fixed.

[x] The reference language is no longer selectable for the translation export.

[x] Copying of revision states in the FMEA form (with identical causes) may lead to great amount of confirmation requests. This has been fixed.

[x] User defined settings in the Parameters for Color Coding were not taken into account.[x] If an auto complete window was open, doing Drag&Drop caused an error. This has been fixed.

IQ Explorer:

[x] Notify people responsible (HTML): People from different FME files are being listed only once if they have the identical name and email address.

[x] Notify people responsible: If more than one FME file was involved, the number of emails was calculated wrongly. This has been fixed.

[x] Notify people responsible: If no user is logged in, 'NoCurrentUser' is added to the file name of the ICS attachments

[x] Search filter: People responsible, who were not included in the template file under certain circumstances, were not kept in search filters. This has been fixed.

[x] results list: A document search didn't display the results in the current document language, but in the interface language. This has been fixed.

# Interfaces:

[x] XML Interface (Official Version): Quotes were missing at the item code. This has been fixed.[x] XML Interface: fm-history-states are not allowed at the action sequence. Therefore they are prohibited.

[x] XML Export: If no responsible person was assigned for a deadline change, an error occurred. This has been fixed.

[x] XML Interface: The ID number for failures was included in the interface.

[x] Invalid XML (V2.1.2) for User Defined Attributes at action groups/revision states has been fixed.

[x] XML export of global actions with variant specific deadlines caused an error. This has been fixed.

[x] XML Interface: Character Codes that are coded in Hex are now interpreted correctly.

[x] Invalid XML in connection with inconsistent variants and quantitative requirements has been fixed.

[x] Export/Import: The import under certain circumstances didn't take on "error responses" and "error detections". This has been fixed.

[x] Export-/Import: Operating Conditions that were newly created in the failure net in an EXP file are taken on with the import now.

[x] Export/Import (EXP): The re-importation of EXP files now also takes into account the references of the Variants Transitions Matrix.

[x] Export-/Import: If actions were turned into global actions in an EXP file, this information was lost during the re-importation. This has been fixed.

[x] Export/Import (EXP): During the import of an EXP file under certain circumstances the names of operating conditions were lost. This has been fixed.

[x] The import of filters now displays the right version number, if the data format for the import is not supported.

[x] Web Publisher/HTML Export: Plan for Deadlines – faulty display in the browser. The HTML export didn't take the correct field width for the date fields. This has been fixed.

Services Manager:

[x] In the editors "CSS Functional Safety" and "CSS Module Usage" an error occurred during printing the matrix areas. This has been fixed.

Analysis Desktop:

[x] After changing a deadline an error occurred during redrawing the table. This has been fixed.[x] Task List: During assigning a responsible person for an action sequence in the properties dialog, an error occurred. This has been fixed.

[x] Task List: When the table was sorted for certain criteria, an error could occur. This has been fixed.

Date of Release:

3. December 2012

# Service Pack IQ Version 6.0 - 0.0.8.2

General:

[x] The command "File|Properties" caused an error. This has been fixed.

[x] Filtering with subordinate filter: When a filter is being evaluated for the context information of an object, a possible subordinate filter is going to be executed immediately now.

[x] An error occurred during importing of a structure if certain preconditions were fulfilled: In the target file structures had been deleted which contained elements, linked in the failure net of the exported structure. This has been fixed.

[x] Consistency check for the variant transitions matrix has been enhanced.

[x] The attribute for display in the FMEA form had not been assigned/read out. This has been fixed.

[x] During copying of multiple part structure with identical net transitions under certain circumstances a function with identical name was created multiple times at the target. This has been fixed.

[x] The comparison under certain circumstances did not take into account descriptions. This has been fixed.

[x] Mechatronics FMEA: performance for calculating the paths and accordingly ratings to be displayed in gray has been enhanced.

[x] Poster print of trees – beginning fro the 3rd page header and footer were missing. This has been fixed.

[x] When deadlines are being created via copy/paste, an already existing deadline is going to be initialised again.

Data Manager:

[x] If the concrete deadline of an already used symbolic deadline had been changed, it was not updated. This has been fixed.

[x] Projects Management: Import of structure is no longer allowed for Clone files and Interface files.

[x] During deleting of people and symbolic deadlines references at catalog entries were not updated. This has been fixed.

Fault Tree Editor:

[x] Display of minimal cut sets caused an error if certain display options were active. This has been fixed.

FMEA Forms Editor:

[x] FMEA Form: If entries were made during Drag&Drop an error occurred. This has been fixed.[x] FMEA Coversheet: The field "Follow-up Page(s)" is being displayed dependent on the set document language.

[x] Context menu in the structure and the BOSCH form has been unified.

[x] Behaviour at creating of a new action in the BOSCH form has been adapted to the behaviour in V5.1

[x] During printing of forms with watermarks an error occurred. This has been fixed.

[x] Plan for Deadlines: Display Option "Numbering for all objects" is available now.

IQ-Explorer:

[x] Document Search in FMEA forms in combination with variants available now

[x] When column contents in the list were cut due to length and the contents displayed in a different font (translation not up to date), an error occurred and the software was terminated. This has been fixed.

[x] IQ-Explorer | search result for actions: accidentally the specification of the characteristic was displayed beneath the actions, this has been fixed.

Interfaces:

[x] XML-interface: The history of changes for global actions (fm-action) is being exported now.[x] XML-interface: The attribute "is global action" for actions (fm-action) is now also being exported in official DTD-Standard V2.1.2.

[x] XML-interface: During export of a variant an inconsistent XML file was created if a faded in action was excluded from this variant. This has been fixed.

[x] RIF-Import: Modifications concerning the import of names, responsible people and status. [x] XDI-interface: structurespanning connections are also exported now if the corresponding workstation setting is active.

[x] ODBC-Export: Additional export option to be able to remove HTML tags available now

Simultaneous Engineering:

[x] Consolidation Desktop: With double click on a special change in the top area an error occurred. This has been fixed.

[x] During the comparison of file copies an error occurred ("nil - system primitive failed"). This has been fixed.

[x] During the comparison of variant interfaces certain problems appeared concerning deadlines, status and responsible people. This has been fixed.

[x] Comparison of variant interface file: reasons for deadline changes were recognized properly under certain circumstances. This has been fixed.

Statistics:

[x] Frequency Analysis: If 2 identical categories were defined within the same analysis an error could occur. This has been fixed.

Table editors:

[x] If the print preview was cancelled, the dialog with the progress display was not closed. This has been fixed.

[x] Print of tables: If page break cannot be done, there is going to be a message now.

[x] Print of tables: Failure during print of extra large tables (infinite loop) has been fixed.

Deadlines Editor:

[x] Enhancement regarding filter with subordinate filters (child filter)

[x] Responsibility and deadline could not be assigned variant specific. This has been fixed.

[x] Deadlines Editor – reason for deadline change: If no translation exists the entry of the reference language is going to be displayed.

Date of Release:

21. May 2012

# Service Pack IQ Version 6.0 - 0.0.8.1

[x] Interface languages for Italian, French and Spanish have been updated.

[x] Notify People Responsible (HTML): the option 'All displayed deadlines (uses current filter)' is not set permanently. With reopening the dialog, this option has been reset.

[x] When the query for instances was canceled during deleting a failure, an error occurred. This has been fixed.

Data Manager:

[x] Terminology/Translation: The translations export always exported German and English, regardless of the selected translation language. This has been fixed.

Extended DRBFM:

[x] Awareness Sheet: catalog entries for DRBFM product modifications are write protected by default now.

[x] Concern Points Table: Blank lines in Review Print Mode are being divided column by column now.

Export/Import (EXP): [x] Unanchored characteristics were disregarded during the import. This has been fixed.

Fault Tree Editor:

[x] Display of "Unavailability", "Frequency" and "Failure rate in ppm" is now also being adopted for display of minimal cut sets.

FMEA Cover Sheet Editor:[x] The command "column/entry label" in the right click menu did not work. This has been fixed.

FMEA Forms Editor:

[x] People responsible at overdue deadlines are no longer being displayed in Red.[x] Requirements are only being displayed now if the attribute "will be included in the FMEA form" is set.

Function Net Editor:

[x] During selection of the filter "Changes of structure version" an error occurred. This has been fixed.

Function/Failure Analysis:

[x] The problem concerning printing with folded nodes has been fixed.

IQ Explorer:

[x] If not available Severity (Maximum) is no longer being displayed with 0 in the results list.[x] When filters are being applied to variants (Document Search) multiple results are being displayed again (one per variant)

**Presentation Print:** 

[x] Under certain circumstances numbers of the (extended) Risk Matrix were unreadable. This has been fixed.

Simultaneous Engineering:

[x] Significant speedup of performance regarding the comparison of clones (for certain extensive data combinations)

[x] With comparing structure versions an error occurred. This has been fixed.

Deadline Editor:

[x] During printing with applied highlight filter an error occurred. This has been fixed.

XML Export/Import:

[x] Speedup of performance for XML import

[x] ppm rate was imported faulty in the format V2.1.2. This has been fixed.

[x] The option "XmlUseUTF8Encoding" enables to operate UTF8 encoding for the XML export. Note: This option has to be set by the user in the Windows Registry.

Date of Release:

14. March 2012

# Service Pack IQ Version 6.0 - 0.0.7.9

General:

[x] After deleting a palette entry, the contents were not updated. This has been fixed.

[x] With copying of part structures between two files, the names of catalog entries with multiple instances were not applied correctly. This has been fixed.

[x] Access rights dialog: The displayed access rights were not updated after certain actions. This has been fixed.

[x] Reorganize document: The last set options for reorganizing are being conserved as document setting now.

[x] The command "Fade in actions at connected causes" is not available, if the failure of the selected action has no causes.

[x] Command "Tools | Workstation Settings | Install Language...": all available languages are being displayed in the respective national languages and in the language of the operating system now.

[x] Objects information: characteristics are listed separately as product or process characteristics.

[x] The IQ Object ID is included in the objects info now in Base35 and xml notation. It can be switched on or of by option.

[x] Assistant rules (filter): the selection for people now suggests the same as the IQ-Explorer (selection has to be file spanning).

[x] Notify people responsible (HTML): setting for the folding of deadlines is being saved correctly and reinitialized.

[x] Multiple copying of a structure tree incidentally caused the error "UndefinedObject>>#pen not understood". This has been fixed.

[x] Dialog for fonts and colors: The height of the select list for background colors has been adjusted.

[x] Merging of persons / symbolic responsibles caused a loss of standard values. This has been fixed.

[x] Merging of persons / symbolic responsibles was not working continuously if they were assigned to global actions. This has been fixed.

[x] Copying a structure from a different file changed the structure type. This has been fixed.

[x] In the lists of the input collector, objects were not displayed in the respective objects color. This has been fixed.

[x] In certain situation the meeting log was not saved automatically. This has been fixed.

[x] Under certain circumstances deleting failures didn't bring any warning message. This has been fixed.

[x] Multiple selection remains untouched after redraw (F5) now. The display option for 'Faded In Actions' is going to be activated after the fading in of actions if necessary.

[x] The command "Paste text" now continues with a dialog, asking in which variants the new objects shall be included.

[x] Modules: info tables for module search results in the IQ-Explorer are being displayed with categories info now.

[x] Notes List: Now it's also possible to sort links and references

[x] Print Dialog: It was not possible to select the font for header and footer. This has been fixed.

Assistant:

[x] Clicking on a link on the Assistant tab in the properties dialog now always opens an entry or selection dialog.

[x] When a properties dialog is opened already, it is going to be activated with the tab, which is relevant for entering the necessary value.

[x] Assigning S-values is not going to be suggested for root causes any more.

Notes fields:

[x] Link to an IQ-Object: the software tries to create a shortlist for the following selection dialog

based on the marked text.

[x] When the clipboard contained a file name in Double Quotes (e.g. Win7), the command Paste Special was not working (-> File not found). This has been fixed.

[x] Embedding of documents is available for clones/interface files now.

[x] The shortcut Ctrl+M can be used to insert the logged in users name. (Remember: Ctrl+T inserts the current date)

[x] The executing of links (in edit mode with pressed Ctrl key) has been enhanced.

[x] During inserting of graphics (via Insert/edit Image...) there is an option in the properties dialog, which allows direct embedding.

Drag & Drop:

[x] Anchoring/Creating of objects via D&D could under certain circumstances create "Dead objects". This has been fixed.

[x] Moving of functions on characteristics (and vice versa) within the same anchor with D&D is possible now.

[x] If the selection includes independent and dependent objects (i.e. a failure and actions defined at this failure) objects were copied twice. This has been fixed.

Fault Tree Editor:

[x] For the logic gates the user can now choose between the symbols according to IEC 60617-12 (1997) or ANSI/IEEE 91-1984 (View|Format|FTA Symbols)

FMEDA Form:

[x] With multiple selection the calculated FIT values are being propagated to all marked structure elements.

# FMEA Forms Editor:

[x] The shortcut Ctrl+M now stands for the command "Find actions for the selected failure".[x] FMEA forms versions: During sorting of symbolic deadlines (without concrete deadline) an error occurred. This has been fixed.

[x] When only root causes were displayed in the FMEA form and such a root cause was deleted, under certain circumstances the error 'UndefinedObject >> #editRemoveCause:prepareUndo: not understood' occurred. This has been fixed.

[x] The auto filter menu contains the entry "Status = open" only, if the selected entry is in the "open".

[x] For causes, mechatronics objects (error detection, error response, operating condition) are no longer shown in a cell. They can be shown as context information for a cause. The display option "Mechatronics context" can be used to activate/deactivate this option.

Functions- and Failure Analysis:

[x] The command "Search again" in the text search now works again also in the list of unanchored failures.

[x] With closing the file also the contents of the list with unanchored failures are displayed no longer.

[x] When a variant is active, in the administration it is displayed in the right color now.

[x] When a filter was applied, a previously applied variant was reset and the mother structure was displayed instead. This has been fixed.

[x] If a filter was applied for the graphical print, folding conditions were not taken into account.

This has been fixed.

[x] The display of action groups can switched on or off via the display option now.

FSM Interface:

[x] FMS Interface: if an interface can not be imported into a target document because it contains objects that already exist in the target, a PIM entry linked to this object will be created in the PIM and the user will be notified

Impact Analysis:

[x] "Impact Analysis" can now be activated in the Workstation Settings. The Impact Analysis is an extended DRBFM Analysis. During this analysis product changes are being introduced as new data objects.

IQ-Explorer:

[x] The command "Find actions for the selected failure..." now works again.

[x] The button "Search" was too small for several languages. The size has been adjusted.

[x] The header line was not updated correctly. This has been fixed.

[x] Search result: the causes column is always filled when only one cause exists.

[x] The selection of FMEA forms in the Document Search was lost with refreshing. This has been fixed.

[x] The results list of characteristics/requirements can now also be opened in the User View editor.

[x] For modules the filter criterion "Module category contains..." is available now.

[x] With the key F6 a previously reset filter can be applied again now.

[x] Found variants are, if necessary, being limited to selected structures (Document Search)

[x] If no manual selections were made in the tab Document Search, no selection exists there (i.e.

the search is executed for the whole database regardless of structures/projects/variants).

Object Inspector:

[x] On the tab Variants the context menu includes a command to declare a value as standard (the value is assigned to the master and ALL variant specific values are going to be deleted)

PIM Editor:

[x] In the menu Edit there is a new command for saving text (Save text > Alt + S). During leaving the editor changed texts are being saved automatically.

Projects Management:

[x] When a structure version was dragged on project for copy an error occurred

(UndefinedObject>>#parent not understood). This has been fixed.

[x] During the export of a variant the following error occurred: UndefinedObject >> #initializeCarryover" not understood. This has been fixed.

Statistics:

[x] Risk Matrix: Selection of causes levels is available now (analysis of FMEA forms only)[x] The previously set analysis type (Analysis of form sheets or structures) is being saved and reestablished during the opening.

[x] Responsibility Analysis: A new display option "Show latest deadline of person responsible" is available now.

[x] All analysis: automatic recalculation can be switched on and off now via the menu "View".

[x] The placeholder %e in the header and footer of the statistics showed a wrong result. This has been fixed.

[x] Presentation Print/Web Publisher (all analysis): User defined color selection is now taken into account in the printing batch.

[x] With a change of the analysis scope in the dialog the risk matrix now also updates display options for causes.

[x] Difference Analysis: When using the data set "Last completed/last rated state" under certain data combinations the color (legend) has not been assigned correctly. This has been fixed.

[x] When a filter is being applied a dialog for the recalculation of the analysis appears. When this is negated, the filter was misleadingly displayed as active and e.g. pasted in the header/footer of prints. This has been fixed.

Structure Editor:

[x] When a node in the structure tree was clicked while the list was in edit mode, the change in the structure list was not adopted. This has been fixed.

Search/Filter:

[x] The forms filter "Find actions for the selected failure" (context menu) works again.

[x] The system filter "Changes of structure version" in the FMEA from was faulty. This has been fixed.

[x] Copy of filter nodes: Nodes "has ... with" without further children were not copied. This has been fixed.

[x] Similarity match has been enhanced.

[x] The criterion "Is last rated action group" at the revision state was renamed to "Is last rated revision state".

[x] User view: new criterion "FMEA form equals existing"

[x] User view: new criterion "Controlplan equals existing"

[x] User view: new criterion "will be included in the Control Plan"

[x] FMEA forms filter for faded in actions works again

[x] Structure filters: The criterion "has action with..." for structure elements, functions, characteristics and failures works again.

[x] Autofilter (Deadline Editor, Forms Editor): For the status an additional criterion "status = open" is available now. This brings an autofilter for the status untouched, in revision or under consideration as and additional help for "Notify people responsible (HTML)".

[x] The auto filter for inspection equipment, size and frequency for the editors User View, Control Plan, FMEA Form Sheet and Deadlines didn't work properly under certain circumstances. This has been fixed.

XML Export/Import:

[x] Under certain data combinations an error occurred during the import of action types. This has been fixed.

[x] Special characters are exported in UTF-8 mode now.

[x] XDI-Interface: If the replace mode is active, information from the revision states and action groups are adapted during the import of failures with revision states and action groups in an already existing FME file.

Maintenance Customers:

[x] New command in the special drag menu "Create bookmark with reflex": The connection is established in both directions. If the bookmark already exists at the target object, there is going to appear a dialog, asking whether the existing bookmark shall be removed.

Date of Release:

31. January 2012

# Service Pack IQ Version 6.0 - 0.0.7.6

General:

[x] If a document is being created automatically during the start of the IQ software, an S value of 10 is going to be initialized for the effect only.

[x] Bookmarks with reflex (special drag) are available for all editors now.

[x] When a variant is being selected via the drop down list, the question concerning the variants transitions matrix appears (associated variants)

[x] Notify People Responsible (HTML): In the selection dialog, the tab "Something else" now contains the option "All displayed entries". When this is inactive (default value), a possibly applied filter is going to be reset and a filtering for the selected person(s) is going to be executed. When the option is active, no filtering for persons is going to be executed. All selected persons get a notification with the same content.

[x] Printing of big FMEA forms with many (embedded) graphics has been reworked. Thereby, problems with Windows resources are being reduced significantly.

[x] Print preview: If Portrait and Landscape are being used within the same print job, this was not taken into account for the preview. This has been fixed.

[x] For the creation of the start document the interface language of the IQ software is being taken as reference language. If the interface language is not available as document language, the

language of the Windows settings is going to being used. Additionally the start document is being created with the document languages (DE, EN, FR, IT) by default.

[x] Enhanced recognizing of cycles: When fault trees were extended without extending the failure net as well, these fault tree connections were not taken into account during subsequent connection of failure nets. This has been fixed.

[x] During the insertion of a structure element in a file with a different reference language, a note, copied in the original, was not transferred to the new reference language. This has been fixed.

[x] Inserting objects bookmarks: it is being checked now, whether the target editor is capable to display the object. The Structure editor is used as default editor.

[x] Presentation Print in combination with variants was incorrect. This has been fixed.

[x] When automatically generated names are being overwritten in a translation language during direct insert, the new name is also being adopted for the reference language.

[x] DVP&R: The selection of objects was faulty. This has been fixed.

Notes entry fields:

[x] Notes entry fields (properties dialog, tables, etc.): connections can be marked and edited with

the normal text cursor. To execute a connection in the edit mode the Ctrl key has to be pressed. These changes are only effective in the edit mode. In all further cases the previous behaviour remains untouched.

Data Manager | Terminology and Translation:

[x] If a translation language is already set, this language is used for the export.

[x] Sorting under certain circumstances caused an error. This has been fixed.

[x] During the export of translations the user was not asked to choose a translation language. This has been fixed.

[x] The selection of IQ objects was extended for "All except notes". That facilitates the search for not translated entries from all object categories.

[x] The toolbar now also contains the possibility to filter with the same options, which previously were only available as highlight.

# Failure Net Editor:

[x] Instead of "PMHF (LF)", "PMHF (SPF)" was displayed at the latent failure. This has been fixed.

[x] During Drag&Drop of an error detection (connected as cause) to the effects area, an error occurred. This has been fixed.

# FMEDA Form:

[x] During opening the dialog "Determine component type and fit value" an error occurred. This has been fixed.

# FMEA Forms Editor:

[x] The display option " Object type symbol" is switched off now by default.

[x] When the user synchronizes multiple times on a certain object (e.g. cause), which is also included multiple times in that very FMEA form, the synchronization focuses on the respectively next instance each time. As soon as the last of these objects is reached, the line starts again. The synchronization can be executed with pressing Ctrl+Q or with activating automatic synchronization combined with multiple clicking on e.g. a cause.

[x] FMEA Cover Sheet: Structure type and "Confidential" in the header are being displayed according to the current document language now.

[x] A new display option offers the opportunity to display the IQ objects ID now. In "Workstation Settings|System Optimization" the number of displayed characters can be set.

# Functions- and Failure Analysis:

[x] The display of the differences sometimes modified display options. This has been fixed.

[x] Display of differences under certain circumstances showed false results for the same objects. This has been fixed.

[x] A new display option offers the opportunity to display the IQ objects ID now. In

"Workstation Settings|System Optimization" the number of displayed characters can be set.

# HTML Export:

[x] During the export, embedded documents are being extracted into the target directory.

[x] Icons for bookmarks are not exported by default, as they indicate a feature, that can not be implemented in HTML.

[x] Printer fonts were adapted to new display options (User defined attributes etc.)

IQ Explorer:

[x] Searching for action on the CARM NG Server

The following 3 system defined filters are available now:

- All actions from the current fme-document

- Unfinished actions (all users)

- Deadlines Overdue (current user)

[x] Info table => Variant comparative presentation: In certain cases the error ,,UndefinedObject excludes:" not understood occurred. This has been fixed.

[x] The list for file search contained false entries. This has been fixed.

Ishikawa Editor:

[x] Connections between two failures can be removed now.

[x] New causes/effects can be created now

[x] Icons for causes and effects are being displayed now.

[x] After the moving of revision states the content of the editor was not updated correctly. This has been fixed.

#### Modules:

[x] With inserting a module, under certain circumstances the connections to the superordinate element were not established correctly. This has been fixed.

#### Net-Editors:

[x] Function Net/Failure Net: Sorting for the name of the structure element is available now.

[x] A new display option offers the opportunity to display the IQ objects ID now. In

"Workstation Settings|System Optimization" the number of displayed characters can be set.

# PIM Editor:

[x] Text modifications can be done via the text properties dialog again.

# Projects Management:

[x] After renaming a structure, the content of the dialog was not updated. This has been fixed. [x] Active variants are being displayed in blue color now. Especially during working with the Variants Transitions Matrix the user can recognize quickly, which variants are the currently active ones.

# Process Flow Diagram:

[x] When the application of a filter would cause "empty lines" in the diagram, these are faded out automatically now.

Simultaneous Engineering:

[x] Clearing of the clone status now also removes a possibly existing embedded clone original.

[x] Customer requirements can also be consolidated now.

[x] During the consolidation under certain circumstances the error

"StructureVersionsManager>>#addCycleCandidate:" not understood occurred. This has been fixed.

[x] During the consolidation of interface elements under certain circumstances the error

"TypeRelocation>>#doDifferences:" not understood occurred. This has been fixed.

Statistics:

[x] Top effects and indirect effects in the analysis of FMEA forms are being marked with ">>" or rather ">" like in the FMEA forms editor.

[x] Display option "numbering for all objects" is working correctly again.

[x] Synchronization of the content of the filter selection with the current analysis type (FMEA form/structure)

[x] Frequency Analysis: The display option 'Suppress empty classes' deleted empty categories. This has been fixed.

[x] The placeholder #%s' in the head/foot (Print, Presentation Print, WebPublisher) is now also available in the Measure Tracking Analysis.

[x] Difference Analysis: The indication for the boundary of the y-axis is working correctly now

[x] In the dialog for column width the buttons were not labeled correctly. This has been fixed.

Structure Editor:

[x] Refinement for "fade actions in": A new command "Fade in action at connected causes" is available in the right click menu of selected actions now. In that case the selected action is faded in at all connected causes.

[x] A new display option offers the opportunity to display the IQ objects ID now. In "Workstation Settings|System Optimization" the number of displayed characters can be set.

Search/Filter:

[x] Node specific "depth of recursion" for failure nets (context menu in the filter dialog for "has effect/cause with...") is available now.

[x] FMEA form: the context search for actions (e.g. cause has action with...) now ignores the NONE actions like the filter in the Structure Editor and the Functions-/Failure Analysis.

[x] Context search for system elements (e.g. action is anchored at system element with...) now takes the option for recursive search in nets/structures (filter dialog>>properties>>attributes) in account for all filter contexts (also FMEA form).

[x] Search/filter for IQ objects ID is available now.

[x] Filter for characteristics: criterion "Value contains..." has been renamed to "Specification (Value) contains...

[x] Filter dialog: operators can now also be changed with multi selection (limited to the same kind of nodes).

[x] The bug in the assignment of criteria values during the filter import has been fixed.

[x] Auto filter: To refine the readability, the names of the criteria for specification in the context menu were extended for "Specification".

[x] "Negate kinds" can also be done with multi selection now.

[x] Criterion "Appears in variant with name contains..." is also available for forms filters (Extended) now

[x] Filtering for symbolic deadlines now works as follows:

- If a concrete date is selected as comparative value, actions with symbolic deadlines are being compared according to their existing concrete deadline. Actions without symbolic deadline are being compared according to their possibly assigned concrete deadline.

- If a symbolic deadline is selected as comparative value, the comparison is made according to symbolic deadlines only (that means their names, no matter, whether a concrete deadline has been assigned or not). The behavior has changed here. Previously this filtering also showed actions, which did not have any symbolic deadline at all, but had the same concrete deadline as the symbolic deadline.

[x] Filter dialog: In the selection of filters, Systemdefined filters, which can be parameterized via their properties, are displayed with the appendix [p] now.

Variants:

[x] A connection at an operating condition, which was removed from a variant, was not drawn correctly. This has been fixed.

[x] When a filter was applied, adding an object to a variant caused an error. This has been fixed.

# XML Export:

[x] XML Interface: the undefined XML characters with the ANSI codes 127 - 159 (e.g. ,  $\dots$   $( ' "" \bullet - - )$  are being replaced by their equivalents.

[x] XML Export: if mechatronics objects were removed from variants, this possibly caused a validation error during the export. This has been fixed.

[x] XML Ex/Import: if specifications existed in multiple languages, they were not exported completely. This has been fixed.

Analysis Desktop:

[x] Under certain circumstances an error occurred during switching the interface language. This has been fixed.

[x] All the contents of each analysis are always being displayed in the respective reference language now.

[x] The deadline markers sometimes were drawn at the wrong position. This has been fixed.

IQ CT Analysis:

[x] Analysis Project Status: The numerical value is only being displayed, if the column width is big enough. (screen and print!).

Date of Release:

31. October 2011

# Service Pack IQ Version 6.0 - 0.0.7.0

General:

[x] Changes in the Java subsystem caused an error with certain hardware configurations when starting the IQ software. This has been fixed.

Date of Release:

26. May 2011

#### Service Pack IQ Version 6.0 - 0.0.6.9

General:

[x] Presentation Print and WebPublisher batches are displayed alphabetically now.

[x] Variant / Structure Interface: With closing and deleting of the interfaces the original information was not removed from the fme file. This has been fixed.

[x] With copying a valuation catalog, also the standard assignment was copied. This has been fixed.

[x] If a new created file was saved for the first time, the files history was not updated during termination of the program. This has been fixed.

[x] During opening an fme file there is going to be an extra check now. If the file is in the format of FMEAPlus, an accordant message is going to be displayed.

[x] If a "direct add" was interrupted with the ESC key, the newly created object will be removed again.

[x] Direct add: The dialog, asking which variants shall contain the new objects, now also appears, if the suggested text was not changed and also for all object types.

[x] Resetting the configuration had no effect. This has been fixed.

[x] Dialog for the Parameters for color coding: Additional numeric entry fields for changing the limits are available now.

[x] During the adding of new objects, the user can decide, which variants shall include them. In the used dialog the list of structure variants can now be limited, according to their User defined attributes.

Control Plan Editor:

[x] The hot click icon for the function net can now be activated or deactivated in the display options.

Failure Net Editor:

[x] The sorting of causes/effects with active variant showed not consequences. This has been fixed.

[x] If the wrong contents were chosen for the failure net editor, an error occurred. This has been fixed.

Function Net-Editor:

[x] Additional display of the functions failures is available now via the display options.

FMEA Forms Editor:

[x] When opening versions of FMEA forms the error

"Message(TypedObjectFormSubst>>significanceRagardingMustBeGrayed)" occurred. This has been fixed.

IQ-Explorer:

[x] Sorting the results list sometimes caused an error. This has been fixed.

Process Flow Diagram:

[x] In the display options the hot click icon for the function net can now be activated or deactivated.

[x] Process elements can now also be inserted in the table part with Drag&Drop. For the new element a new row is being inserted.

Print:

[x] FMEA forms print: The list of responsible team members in the appendix only contains the persons, which are included in the FMEA form.

[x] FMEA forms print – list of Symbolic Responsibility: Beneath the name of a symbolic responsible the concrete responsible person (if available) is being displayed additionally in brackets now.

Functional Safety:

[x] FMEDA Form: in the header the sum of all FIT values is going to be displayed now.

Interfaces:

[x] FSM interface: The connection of a basic failure to a top failure can change now.

[x] FSM interface: Basic failures can be removed from the interface later. So they become obsolete and are deleted from the target document.

[x] FSM interface: for each basic failure all top failures matching the filter are taken into the interface.

[x] When creating an interface, the reference language was not taken into account. This has been fixed.

[x] When a variant is active, the command for creating structure interface is disabled.

Simultaneous Engineering:

[x] During the selection of a document for the comparing of file copies an error occurred. This has been fixed.

[x] For the object comparer the new display option "Show only differences" is available now.

[x] The PIM entries for special cases now include the change history for the primary object and its clone whenever possible.

# Structure Editor:

[x] The graphical structure tree was not updated after adding a automatically anchored cause in the FMEA form. This has been fixed.

# PIM:

[x] PIM entries: the message for automatically created bookmarks now also shows the objects kind.

Statistics:

[x] The maximum width for subtitles in the graphics has been augmented.

[x] After switching from a Risk Matrix with applied color filter to another analysis, a failure occurred. This has been fixed.

[x] More stable behavior of analysis schemes concerning undefined color codes.

[x] Action Tracking: The time period for the analysis can now also be saved and passed to the CSA.

[x] Action Tracking: sample rate and target date can now also be saved and passed to the CSA.

[x] Pareto Analysis: in the C-column for the failure mode, the classification for the cause was displayed accidentally. This has been fixed.

[x] Analysis of FMEA forms: The place holder '%s' (structure) in the header/footer now also works for form related evaluations.

[x] Wrong RPN in the Risk Matrix, when filter for revision state was applied. This has been

fixed.

[x] Removing of a Risk Matrix from the history when the result is empty (e.g. caused by applying a filter)

Table Editors:

[x] In the header label fields of the tables placeholders, like they are available in the header/footer, can be applied now.

Deadline Editor:

[x] After deleting a faded in action, the content was not updated. This has been fixed.

[x] In the print the folding condition (when view was grouped) was not kept. This has been fixed.

Administration:

[x] During opening the editor for the administration of the catalogs an error occurred. This has been fixed.

[x] Project Management: During creating a variants export copy with certain data combination, an error occurred. This has been fixed.

[x] In the projects management the delete button was disabled for structure versions. This has been fixed.

[x] FMEA Forms Management: FMEA forms can also be sorted by numbering and item code.

XML interface:

[x] During the export of variants under certain circumstances an error occurred. This has been fixed.

Analysis Desktop:

[x] When no contents were loaded, the message "No data available..." is being displayed.

[x] Task List Editor: Status and deadline are being updated correctly.

CARM Server:

[x] During the insertion of a module with global actions and symbolic deadlines an error occurred. This has been fixed.

[x] Web Interface: The button "Install Language" now affects interface language and document language

[x] CSS Module Access Rights: the color for inherited rights was changed to light green.

[x] CSS Module: The command "Replace by Module" only found modules, whose top element had the status "released". This has been fixed.

[x] CSA (Web & PDF): For structure related statistics the wrong (=FMEA form) filter was applied. This has been fixed.

[x] CSS Module/Web Interface – results list: all FMEA forms, Process Flow Diagrams and Control Plans included in the module, are displayed now for the selection (so far this was only offered for the root element of the module)

Date of Release:

25. May 2011

# Service Pack IQ Version 6.0 - 0.0.6.4

General:

[x] If the template file was faulty, an error occurred during writing the template file an error occurred. This is being checked now.

[x] In the administration dialogs for FMEA Forms, Control Plans, DRBFM Forms and Process Flow Charts the item code for structure elements is displayed now.

[x] The display of characteristics in the Control Plan can now be influenced via an attribute (Properties Attributes).

[x] After activating the Extended Toolbar the drop down lists were empty. This has been fixed.[x] A double click on a notes icon with pressed alt key opens the note in an extra sticky notes window.

[x] The attribute "Error detection required" is visualized with an icon. The display is linked with the display option "object attributes". A double click on the icon opens the properties dialog.

[x] Projects Management: During creating a variant export copy with certain data combinations an error occurred. This has been fixed.

[x] Presentation Print and Web Publisher batches are going to be listed alphabetically now.

[x] Workstation Settings: A new option "Direct insert: Confirm inheritance of multiple instances" is available now. If this option is active, the software asks during creating of new failures, which instances of the functions shall inherit the new failures.

Failure Net Editor:

[x] Error detections/Error responses are taken into account at causes/effects from function net [x] With the command "Connect causes from function net" an error occurred. This has been fixed.

[x] The width of additionally displayed values has been optimized.

[x] The sorting of causes/effects had no effect, when a variant was active. This has been fixed.

FMEA Forms Editor:

[x] The right click command "Fade actions in" caused an error. This has been fixed.

[x] The behavior at inserting new objects while a filter is being applied, has been adapted to the behavior in the structure editor.

IQ-Explorer:

[x] In the IQ-Explorer there is an new possibility now, to insert a depth for the analyzed failure, via the display options (Options) in the entry field "Fill the column for top effects with the effects of this depth".

The semantics for this are the same, like they are used for the searching of nets:

- positive number: distance to the analyzed failure in effects direction

- negative number: distance to the top effect of the analyzed failure

- empty or 0: top effects (according to the set max. depth of the nets

[x] With click on the button "Result-List as autofilter for [Editor]" (icon with downwardly error) an error occurred. This has been fixed.

Statistics:

[x] The statistics now use the fonts of the configuration file.

[x] Frequency Analysis: Bounds of axes are available again.

[x] Measure Tracking: In the WebPublisher/Presentation Print certain display options (e.g. start,

end) were not set up. This has been fixed.

[x] Enhanced display of 3D graphics.

[x] In the Statistics Management always a scheme that matches the analyze type is selected (irrespective from the statistics editors content)

[x] Difference Analysis: When the data set "first and last revision state" was selected the last revision state was not displayed correctly in some parts. This has been fixed.

[x] Risk Matrix: The button for editing the risk classes has been adapted in its size for the Web Publisher/Presentation Print. The button is omitted for the CSA batches.

[x] Title and subtitle of the analysis are both being switched with the document language.

[x] Measure Tracking: The special actions "none" are generally no longer counted.

[x] The command "Edit | Copy graphics in table form to the clipboard" is only available in the Frequency Analysis now.

[x] Frequency Analysis: The command "Edit | Copy graphics in table form to the clipboard" showed a faulty amount of analyzed causes, when the analysis was structure based. This has been fixed.

[x] Risk Matrix: The RPN column did not show the corresponding RPN for the selected data set. This has been fixed.

[x]The maximum width for subtitles in the graphics has been enlarged.

Print:

[x] Structure Tree: In the Header/Footer the item code of the structure can now be inserted via "%i".

Functional Safety:

[x] If a failure is connected to a latent failure, this is being visualized with an icon now.

[x] Failure Net Editor: the right click menu now contains a command to remove the relation of a failure as latent failure.

[x] For each failure a value for DCSPF and a value for DCLF can be entered.

[x] The Functional Safety Failure Table has been extended and revised.

Simultaneous Engineering:

[x] The logging with the aid of PIM bookmarks has be changed, so that now a separate Pim tree is being created for the consolidation. This appears in a new tab and is structured according to date.

[x] In the grouped view of "Difference Details" a right click on the grouping caused an error. This has been fixed.

[x] Under certain circumstances and error occurred during the consolidation of variant interfaces. This has been fixed.

[x] Under certain circumstances an error occurred during creating a structure interface. This has been fixed.

[x] Differences Overview: While jumping from one difference to the next via the "View" menu, an error occurred. This has been fixed.

Structure Editor:

[x] In the structure tree also requirements can be displayed now.

[x] In the structure list and in the structure tree the font, set for User defined Attributes, was not used. This has been fixed.

[x] When both characteristics and requirements were displayed, certain data combinations caused

an error. This has been fixed.

[x] When a structure was copied from a different file via Drag&Drop, under certain

circumstances the structure type was not set up correctly. This has been fixed.

[x] If a single form already existed for a system element, the command "->FMEA Forms Editor"

was not available in the context menu with a multi selection. This has been fixed.

[x] "Search and Replace" did not work properly under certain circumstances. This has been fixed.

# PIM

[x] During the creating of new bookmarks an error occurred. This has been fixed.

# Search/Filter:

[x] At the failure there are now three possible conditions available for the attribute "No error detection required" (true, false, unknown).

[x] IQ Explorer: In the export of a results list with additional info into the format CSV, a column was missing. This has been fixed.

[x] Values for FSM (Functional Safety management) values (e.g. Desired SFF) are only being displayed, if such values have been assigned.

# Administration:

[x] Terminology and Translation: The translation language is being managed by the editor and is now independent of the set database language (the translation language can be set via double click on the column label).

[x] Symbolic Responsibility/Deadlines: During the creating of new symbolic deadlines, the setting of a concrete deadline can also be done by selection in the calendar view now.

# XML interface:

[x] The contents of the field "FMEA number" in the header data or the Cover Sheet is included as simple text (not in HTML) additionally.

Analysis Desktop:

[x] Status Trend: With certain data combinations the bars on the time axis were displayed slightly out of alignment. This has been fixed.

Maintenance Customers (new functionality which is available for maintenance customers only) [x] A new workstation setting is available now. "Manage variants when working within the master structure" asks during the creation of new objects in the master structure, in which variants these objects shall be visible.

# CARM Server:

Note: The following CARM Server functionalities are available within the IQ software. They require a valid installation of the CARM Server V3.6 - 0.0.0.6.

[x] CSA Web Publisher / CSA PDF Publisher: At a time period of 0 the publisher is being deactivated.

[x] CSA PDF Publisher: If printers or fonts are not available on a server, a warning is being displayed at the closing of the PDF batch.

[x] CSA PDF Publisher: It is possible to select multiple export batches in the configuration

dialog, which are executed one after the other.

[x] CSA PDF Publisher: If more that one batch is selected, in the directory for the PDF files a new folder with the name of the respective batch is going to be created, and the exported files are stored there.

[x] PDF Publisher: The printer fonts set on the CARM Server, are being used for the PDF export now.

[x] CSS Module: Embedded documents, that are being referred within a module, are being transferred to the CARM Server and are updated again at the module usage places.

[x] CSS Module: A document setting (fme file) can be assigned, to configure, whether the name of a structure element is kept, if a module is going to be replaced or updated.

[x] Configuration: on the tab "Backup" an extended error protocol for the next run of the CARM Server Agent (CSA Module, CSA PDF Publisher, CSA Web Publisher) can be activated. If an error occurs during the export, it is going to be recorded in the file ERRORS.LOG. This file is stored in the "LOG" directory (in the subfolder Wokgroup) of the CARM Server. Note: This option is reset with each start of an agent or new start of the server.

Date of Release:

1. March 2011

# Service Pack IQ Version 6.0 - 0.0.5.9

General:

[x] If a file was read from a network drive and the network connection got lost, an error occurred when closing the user info file. This has been fixed.

[x] If data is automatically loaded on starting the IQ software and if the option "Show deadlines in revision on start" is active, an error occurred in case the last used file was not available anymore. This has been fixed.

[x] Occurrence and detection ratings were initialized with 10 during start if no rating was assigned explicitly and the workstation setting "Set initial O/D values to 10" was activated. From now on ratings will be initialized with 10 when creating new actions (groups) if the setting is activated.

[x] Workstation Settings | System Optimization: the maximum height or width of an embedded image can be specified here.

[x] If the file link of an object bookmark was not found, two error messages were shown. This has been reduced to one error message!

[x] When opening the version of a Control Plan based on a Function/Characteristics Net, an error occurred. This has been fixed.

[x] LDAP: The limitation of the length of the LDAP password was removed. Advice: an already existing password will be invalid in the new version! A new LDAP password needs to be created.[x] File | Properties: file name, creation date and the date of the last modification were added.

[x] When changing from Full Screen to regular view, the toolbars and status bar were not displayed correctly. This has been fixed.

[x] General: IQ functionalities, which are not part of the current version, can be activated for testing via the workstation settings. This activation needs to be executed on every program start.[x] Update program version: the error message "Java io FileNotFoundException" was displayed

if other languages than "German" or "English" had been set as interface language. This message will not be displayed anymore.

CARM-Server - Administration:

[x] CSS Modules: different module categories must not have the same name. During input and update the names will be checked.

# Drag&Drop

[x] When copying header information in the FMEA form sheet, the deadlines (M2010 form sheet) will be adopted to the target.

[x] When copying functions/characteristics, their order will be kept.

# Fault Tree Editor:

[x] If the fault tree was extended after the creation of minimal cut sets, these minimal cut sets were not updated. This has been fixed.

[x] Minimal cut sets can be exported into an XLS file (File|Export|Export minimal cut sets).[x] During Drag&Drop of a logical node, an error occurred. This has been fixed.

[x] It is possible now to simultaneously enter values for multiple elements (multiple elements are selected).

# FMEDA Form Sheet:

[x] When entering a FIT value for a failure, an error occurred if the FIT value of the related structural element was 0. This is fixed.

Filter & Search:

[x] Functional safety criteria are now available for the form sheet.

[x] "S rating (max)" can now be used for failure effects.

[x] New filter criterion "Begin date" was introduced for actions.

[x] Remove Filter (F6) works as a toggle now and reactivates the previously used filter.

Filter Dialog:

[x] When adding filter criteria, the criteria list may not have been updated correctly. This has been fixed.

[x] For changeable system filter, the level button will open the respective properties dialog.

[x] The button "Save" was renamed to "Accept" because the button "Save" incorrectly implied the saving of the filter into an own file.

[x] Via drag & drop, "child filters" can become "root filters" again if they are dropped to "Userdefined filters".

[x] Detail filters: the command "Negate criterion" was renamed to "Negate level" since negating refers to levels (e.g. "has failure effect with..." or "is anchored at...") and does not refer to a criterion.

[x] The command "Negate criterion" is now available in the context menu and as a button (in the left-hand area).

# FMEA Forms Editor:

[x] If an action is selected, the context menu contains an entry "Fade-in actions". Using this entry will open a selection list that contains the effects tree for the selected failure

cause. Here the selection can be made to which effect the action is to be anchored. The action will be moved to this effect and will be faded in with the current cause.

HTML Notes:

[x] The calculation error, which led to a distance between bigger images, has been fixed.

[x] Using the context menu, embedded documents/images can be updated (replaced with their original) in the opened note.

[x] Templates can be exported and imported via administration (Right mouse-click -> templates - > administration).

[x] The value of the option "Cache images embedded in HTML" is set active by default.

Import of Filters:

[x] Already existing filters will be imported with a new ID. The existing filters remain untouched. [x] Previously deleted filters with the same ID remain deleted; the import filter will be imported instead.

[x] Already existing names will be provided with a counter in order to prevent the mixing-up of names.

IQ-Explorer:

[x] Searching for operating conditions did not lead to a result if a selection (e.g. structures) was specified in the document search. This has been fixed.

[x] Changing the option "additional info" led to the redundant display of top failures, operating conditions and user-defined attributes. This has been fixed.

[x] Cells of objects, which are not contained in the structure of the relevant variant, will be greyed-out in the "Variant comparative presentation" view.

[x] If a structure is selected for the document search, only the variants of the selected structures will be displayed when opening the "Variant comparative presentation" view.

[x] Via the file list the option "Info and summary" can be accessed for the selected file using the context menu. This will provide a text summary of the FME file.

[x] File size and time stamp will be displayed right-justified.

[x] The error that occurs when searching and replacing over multiple files has been fixed.

[x] The view "Variant comparative presentation" only contains lines with variant-specific assigned (or hidden) information.

Modules:

[x] In modules, notes will be taken for machines and inspection equipment.

Net Editors:

[x] Printing of nets – folded nodes in the left branch were not printed folded. This has been fixed.

Presentation Print/Web Publisher:

[x] Now it is possible to copy a Presentation Print batch and paste it as a Web Publisher batch (and vice versa). The commands are located in the context menu (via the node) in the respective dialog.

[x] Mechatronical objects were incorporated into navigation and text search of the Web Publisher.

Input collector with catalog:

[x] In the menu "Catalog", the commands "Set filter" and "Remove filter" were merged to one command "Set Filter/Remove Filter". That way, the behavior is analogous to the filtering symbol in the toolbar of the input collector. Furthermore, the last used search pattern will be used as initial value for a new filtering.

[x] When adding new causes using the input collector with catalog, an error occurred if an entry was used from the catalog. This has been fixed.

Statistics:

[x] Structure-related analyses: mechatronical objects can be displayed in the column for failures.

[x] All analyses: if multiple analysis schemes exist for one analysis type, the currently opened scheme will be selected in the selection dialog for statistics.

[x] Pareto analysis: during a structure-related analysis, the actions level is not correctly displayed in some cases in the context with a filter. This is fixed.

[x] Structure-related analyses: one filter for the actions level was not correctly applied for Difference and Frequency Analyses. This is fixed.

[x] Risk Matrix/Extended Risk Matrix: the auto filter for colored areas was improved.

[x] Difference Analysis: "Last completed state" and "Last revision state" can be selected as data sets.

[x] The analyses "Action Tracking" and "Responsibility Analyses" can be executed structure-related.

[x] The labeling of the X-axis for "Action Tracking" was improved.

[x] Action Tracking: Action properties (responsible, deadline) can be selected for the analysis.

[x] Actions/Responsibility: The presentation of the deadline display was adjusted.

[x] The representation of an analysis scheme is always the same (name + data set + factors).

[x] Risk Matrix/Extended Risk Matrix: the representation of 4 colored areas is possible.

Structure Editor:

[x] The contents in a form sheet were not correctly updated after deleting an action in the structure editor if this action was a faded-in action. This has been fixed.

[x] In the extended tool bar, a drop-down-list for filters has been added.

[x] Concerning characteristics, it is possible to explicitly filter the attributes "is process characteristic", "is product characteristic" and "is requirement" (Advice: is to be found under "extended").

Assistant:

[x] If a rule was deactivated for an object, this was not recognized. This has been fixed.

Variants:

[x] The date of the revision state can now be assigned variant-specifically.

Analysis Desktop:

[x] Analysis "Project State": the counter for abandoned actions is deactivated, the color coding for abandoned actions will not be displayed in the legend.

[x] "Status of failures": An existing form sheet can be opened from the results table via the context menu.

[x] Project State: Optionally, HTML export can now be optimized for representation in Excel.

Maintenance Customers (new functionality which is available for maintenance customers only)

[x] Hierarchical representation of filters: A user-defined attribute can be assigned to a filter using the context menu. This user-defined attribute becomes the "father" of the filter. Other filters can be assigned to this user-defined attribute using drag & drop. In order to remove the user-defined attribute, a command also exists in the context menu.

Advice: Filters can have other filters as children. This, however, means a filter cascade will be created from which the root filter will be applied first and then the subordinate filter. This criterion will be fulfilled only, if it is fulfilled for all filters.

[x] Sorting filters in filter cascades and user-defined attributes via Drag&Drop was improved.

Date of Release:

19. October 2010

# Service Pack IQ Version 6.0 - 0.0.5.2

Statistics:

[x] In some cases actions are not shown correct for structure based analysis. This has been fixed.

Simultaneous Engineering:

[x] A special data compilation leads to an error, when consolidating the primary document with the secondary document (clone). This has been fixed.

Date of Release:

16. July 2010

#### Service Pack IQ Version 6.0 - 0.0.5.1

General:

[x] The Dialog in the menu "File | Reorganize Document..." now additionally includes the option "Update embedded documents and graphics"

[x] Links in notes and bookmarks: When a link pointing to an embedded document is going to be executed, a dialog asks, whether the original file shall be opened (if available) or the embedded document with reading access.

[x] Deadlines for global actions can now also be assigned variant specifically.

[x] Copy/Insert/Drag&Drop: If objects with embedded documents (e.g. in notes) were copied into another file, the original file names in the embedded documents were lost. This has been fixed.[x] The structure type "Logistics" is available now.

[x] The attribute "ID number" of the failure is now available in all IQ products.

[x] For the conversion of names, under certain circumstances the wrong code page was used. This has been fixed.

[x] Notes that were copied via special drag were not saved. This has been fixed.

[x] If objects with notes are copied, the embedded documents from the notes are adopted.

Workstation Settings:

[x] For the access to the LDAP-Server a user and password can be set in the workstation settings now.

CARM-Server Interaction:

[x] In the CARM Server Administration the document language can be set. For "CSS Catalogues" this can be done for client and server data separately.

[x] Remote Configuration: Test emails are always going to be sent by the CARM Server now. (Precondition for this is a CARM Server version greater than 0.0.0.1)

[x] CSS Module: Uploading of modules to the CARM Server did not include the classification of functions. This has been fixed.

[x] CSS Module: If a certificate is sent via "CSS Module Access Rights", the certificate is going to be created automatically, provided that it does not exist (anymore).

[x] Enhanced error handling for the sending of emails

[x] If the setting "Create html export files for all languages available in the fme document" was applied on the CARM Server, the document setting "Create Web Publisher export files" was not taken into account in the CSA Web Publisher. All FME documents were always exported. This has been fixed.

[x] The new document settings for the CSA PDF Publisher ("Create PDF Publisher export files" and "Copy database to archive domain") are available now.

[x] Navigation in the Web Publisher result has been changed:

- Documents: Failure and function nets are divided into two separate topics now

- In the topics "Failure Net", "Function Net", "Fault Tree" and "Cause and Effect Diagram" the objects are listed in grouops, for structures and system elements

- Objects: In the object index of objects that are typified the system element is added in brackets (given that only one instances exists) to facilitate the orientation. If there are multiple instances, a tabular list with the anchoring follows on the next page.

[x] If a problem occurs with the configuration file during the start of the CARM Server, the

CARM Server is always going to be terminated. The possibility to choose another configuration file has been removed.

[x] CSA Module: When a module is being updated, Control Plans are going to be versioned only once.

[x] A search in the IQ-Explorer with "CARM-Server | Find newer modules..." did not have any results on the first attempt. This has been fixed.

[x] If "Search within the CARM-Server (CSS Module)" is used in the IQ-Explorer, the CSS Module Access Rights are taken into account.

Data Manager:

[x] Merging of symbolic deadlines is available now.

[x] User Defined Strings: If a string was inserted for one language (not reference language), this string was adopted automatically in the reference language, preconditioned that no entry existed there so far. This has been fixed.

**Document Settings:** 

[x] The creation of PDF documents for the current FME file through the CSA PDF Publisher can now be configured via the Document Settings (Tools | Document Settings | CSS/CSA)

Editors (general):

[x] The status bar has been enhanced with a mouse sensitive area, which shows the condition of the variant edit mode and with which the variant edit mode can be activated or deactivated.

Failure Net Editor:

[x] Functional Safety: A new display option "SIL/ASIL (Maximum)" is available now.

FMEA Forms Editor:

[x] Bosch Layout: during assigning of notes for S-values at an error detection or error response an error occurred. This has been fixed.

[x] Creating of new "none" actions:

- a new "none" action is being created and the attribute "will be included in the FMEA form" is set

- if a "none" action already existed in the structure, the attribute is set.

[x] Filtering of Requirements is possible now.

## FMEDA Form:

[x] Validity checks in the areas "% Distr." and "FM FIT" (additional yellow and red coloring)

[x] To avoid a redundant display, the FIT column has been moved left to the system element.

[x] The right section (SD, SU, DD, DU) can no longer be edited.

[x] Non relevant entries in the columns (SD, SU, DD, DU) are displayed in gray color.

FMEA Forms Management:

[x] After copying the command "Adopt header data" is available. This command adopts the header data of the copied FMEA form to all the marked FMEA forms.

IQ-Explorer:

[x] Layout of the HTML export of the results list and info table has been reworked.

[x] The available interface languages are now being adopted in the search filter database as database languages. This is relevant for the translation of the names and notes of the search filters.

[x] During deleting single entries in the results list (Shift + Delete) an error could occur (index out of collection bounds). This has been fixed.

[x] The operation philosophy for the info table in the IQ-Explorer has been changed as follows:

- Info table now always displays the info table for the selected object (in most of the cases a display similar to VDA)

- The option "Show measures and requests as a deadline table" has been removed.

Instead of that, additionally to the normal info table via the right click menu ("Info table"), also different tables are available for the results:

- Deadline table: lists a deadline table for actions (or, if a customer requirement was selected, for customer requirements) similar to the deadline editor.

- The option "Display columns for actions and causes in the result list like in the form" affects the columns in the results list as well as this deadline table for actions, so that here the columns for causes, failure modes and effects are faded in.

- Variant comparative presentation: lists for all objects of the results list (that have the same database as the selected object) (rows) and all according variants (columns) the variant specific information. This table can be especially helpful in combination with the system filter "Variant specific defined Object attributes".

- Table with work out state (Assistant): lists for all objects of the results list the consistency criteria that are violated according to the assistant rules.

[x] Results list (grouped): for failures/operating conditions/error detections/error responses, the column "operating conditions (effects)" is included (via display options "show the grouped result list with additional information (notes, user defined attributes, top effects)") in the grouped results list (and with that implicitly also in the export).

[x] When a variant is active, during a search the variant edit mode is taken into account (works like no variant was active).

Project Management:

[x] In the Project Management dialog a filter can be selected directly now, which is executed during the opening of the structure.

## Statistics:

[x] Changes at certain display options were not adopted for the print / presentation print. This has been fixed.

[x] Responsibility Analysis: If a 'real' responsible is assigned for a symbolic responsible, the actions are counted at the 'real' responsible. The bar for the symbolic responsible is left out then. [x] Responsibility Analysis: Display of persons in the table according to the settings in "Tools | Document Settings | Person View".

[x] When clicking the button "Reset" in the display options (Axes) under certain circumstances an error occurred. This has been fixed.

[x] Difference Analysis: When the user cut the X-axis, with this, also the maximum number of revision states was reduced (only in the graphics). This has been fixed.

[x] The display options (tab "Settings") the settings for causes sometimes were showed wrong. This has been fixed.

[x] Pareto Analysis: The display of the set causes (direct or root causes) in the table header was not correct. This has been fixed.

[x] Pareto, Frequency, Difference: For the analysis of FMEA forms, different options for causes are available now.

# Structure Editor:

[x] Search: When the user searched again after the first match, further results were not displayed. This has been fixed.

# Search/Filter:

[x] Autofilter in Structure Editor/FFA/Net editors: The filter context menu now includes, in analogy to the FMEA form, the command to remove a filter.

[x] The criterion "Status" is now also available for action groups.

[x] The criterion "contains not", in combination with (e.g. responsible), works again now.

[x] The criterion "Severity (Maximum) is now also available for causes and effects (except table

editors).

[x] Filters can be cascaded now with Drag&Drop. They are executed in the given order then, so that the object has to match both/all filters.

[x] The criterion "DC value" is now available for effects, failure modes (failures), causes and actions (except table editors).

[x] The criterion "DC-Value" is initialized with the value 0. This is also the reference value for not assigned DC-values.

[x] The build-up of the filter details information in the properties dialog has been reworked.

[x] New filter criterion: actions, action groups and revision states for "Debased after reevaluation

(D or O)" [x] New filter criterion: Structure by "Degree of progress of Structure"

[x] Interface filters cannot be deleted after they were used.

[x] Filters, that are subordinate to an interface filter, cannot be deleted or copied.

[x] Mechatronics specific criteria were moved into an own section beam (Mechatronic criterias)

[x] The reference to mechatronic levels (failure mode has error detection with...) is now complemented with the name "effect", because this reference is defined, always to refer to the effects tree.

[x] New criterion "Failure net component equals failure | error detection | error response | operating condition" for the causes and effects level. This enables a determination within the causes or effects column.

[x] ID-Number as criterion for failures is always available now.

[x] In the filter dialog only "Root filters" can be selected with OK. Filters, which were made subordinate via Drag&Drop can not be chosen with OK.

[x] For system elements, functions, characteristics and failures the new criterion " is in interface with name contains ..." is available now. It enables filtering of objects that are included in an interface with a certain name.

[x] The selection list of criteria now apart from the main criteria also contains the subcategories Mechatronic criterias, Functional safety, DRBFM and Extended.

[x] DRBFM specific criteria are only available in the DRBFM editor and in the IQ-Explorer.

[x] The error "isFilterForServer not understood" has been fixed.

[x] Criterion "Classification" for levels below system element refers to the actual level, where the criterion is assigned.

Table editors:

[x] In the edit mode the background color of the cell was defective. This has been fixed.

XML-Interface:

[x] XML data that was created with nation ISO character sets (ANSI), are, now in version 6, converted to the right Unicode characters under consideration of the code page.

[x] The Project Number has been included in the XML-Interface.

[x] The ex-/import of the automatic classification parameters works again (for DTD V 2.2.0)

[x] If the first and last name contains the same text, only the last name is going to be imported.

[x] If no type is set at typified objects, the import merges instances under a possibly existing type with the same name.

[x] Additional options are now ex-/imported for FMEA forms (e.g. which effects shall be displayed).

[x] For the import of languages a text comparison is used now.

[x] For the assignment of the structure type a text comparison is used now.

[x] The dialog box for the creation of FMEA forms (if none exists so far) was extended for the

structure elements, which have failures with effects without further effects. [x] FMEA forms can now also be created as group or single form (selection via dialog option)

Analysis-Desktop:

[x] Editor "Failure Status": Under certain circumstances an error occurred with the command "->FMEA forms editor" in the context menu. This has been fixed.

Maintenance Customers (new functionality, that is available only for maintenance customers)

**IQ-Explorer**:

[x] New command "Result-List as autofilter for..." in the right click menu available now. It opens the editor that can be selected in a submenu, with an autofilter. This ensures, that only objects from the results list are displayed.

Date of Release:

15. July 2010

## Service Pack IQ Version 6.0 - 0.0.4.2

General:

[x] If the write back of a temporary working copy of an FME file from the network (Tools | Workstation Settings | Settings | Personal Desktop | Create a temporary working copy of the opened file) fails, the user has the option to save the file on the local drive.

[x] Notify people responsible (HTML): All email addresses which are entered into the cc field of the configuration dialogue will be transfered to the cc of the email.

[x] Clone Management: When the last open clone info is deleted, the clone status of the FME file will be reset.

[x] Control Plan: When a control plan version is created and a variant is active, then the variant specific values of the characteristics will be used in the control plan version.

#### Workstation Settings:

[x] CARM Server: For the CARM NG Server the ip address and the port number can now be entered into two separate entry fields.

# CARM Server:

[x] The command "CARM Server | CSS Module | Install Certificate for CSS Module" copies the certificate file (module.icq), which was sent by email, into the environment directory.

#### Drag&Drop:

[x] When a structure element is added to an FMEA form sheet using D&D (Copy), then the new structure element will also be added to the structure.

FMEA Forms Editor:

[x] Auto Highlight Filter now also available for mechatronic objects (operating conditions, error

detections, error responses).

[x] HTML Export: Soft line breaks remains if the appropriate option is active.

[x] HTML Export: Existing files of a previous export will be deleted before the new export will be performed.

[x] AIAG Layout: An additional classification column can be displayed (-> Display Options | Options III Show classification column for requirements/characteristics). This column is located between the columns "S" and "Potential Cause(s)" and shows the classification symbol of the reuqirement/characteristics/function.

[x] AIAG-Layout: Product and process characteristics can be displayed in the column "Requirement" (instead of the column "Function"). This can be controlled by the display option "Display options | Options III | Show characteristics in column Requirement"

Function and Failure Analysis (FFA):

[x] A new display option named "Counter of effects and causes" is available.

[x] New entered actions will not be included in the control plan by default. To make them appear in the control plan (control method, reaction plan) the attribute "will be included in the Control Plan" must be set (Properties Dialogue).

Mechatronics FMEA:

[x] If an error detection has two error responses as effects with different severities, then the maximum of these two severities will be used for S-Max calculation.

Net Editors

[x] The user defined attributes are shown in alphabetical order

# ODBC Export:

[x] Unicode content will be exported as unicode in the PRO versions of IQ. If the odbc driver does not support unicode this feature can be disabled by the user.

[x] The tables fmea002/003/004/005 were extended by the column "category". This category specifies the type of the object (characteristics type, function type, ...)

[x] The table fmea007 was extended by the columns "fax" and "email"

[x] The table fmea026 was introduced to store the user defined attributes (including all translations)

[x] The table fmea027 was introduced. It contains the mapping of object-ids and uda-ids (user defined attributes).

# PIM Editor:

[x] The content of the editor was not updated correctly when bookmarks were reordered. This has been fixed.

Presentation Print, Web-Publisher, CSA-Publishing:

[x] Meta infomations, captions and other labels will be exported in the appropriate language. [x] Statistics / Action Tracking: The action tracking graphics was printed two times in some special causes. This has been fixed.

# Simultaneous Engineering:

[x] The process of searching for or selecting a secondary document (clone, interface document) for a given primary document has been redesigned for easier use.

Statistics Editor:

[x] Error detections and error responses causes an error

("FmeaErrorDetection>>#hNameFunction" not understood) when listed in the table. This has been fixed.

[x] Extended Risk Matrix: In some cases the assignment of values for the y axis was incorrect. This has been fixed.

[x] Risk Matrix and Extended Risk Matrix: An Auto-Filter for the red, the yellow and the redyellow area is available now. This filter will be applied to the table.

[x] Action Tracking: In some cases the graphics was to small. This has baeen fixed.

[x] The filters for the structural analysis has been revised.

[x] The difference analysis and the frequency analysis now supports 3D diagrams

Structure Editor:

[x] The structure list now supports the following new display options :

- Faded In Actions

- Mark faded in actions with colour

- Failure for faded in actions

[x] Actions can be faded in via special drag

[x] The option "Align levels" is now available in the display options dialogue

[x] The user defined attributes are shown up in alphabetical order

[x] A new display option named "Counter of effects and causes" is available.

[x] New entered actions will not be included in the control plan by default. To make them appear in the control plan (control method, reaction plan) the attribute "will be included in the Control Plan" must be set (Properties Dialogue).

Search/Filters:

[x] "Severity (Maximum)" is now available as search criterion for action groups and revision states.

[x] The attribute "Search nets/structures up to depth" for structure filters is set by default.

[x] The criteria "has cause with..." and "has effect with..." now also available for structure and net filters.

[x] The Auto-Filter for "sample size" and "sample frequency" in control plans and process flow diagrams were revised.

[x] For a detail filter the kinds "Structure" and "Project" are no longer available within control plans and process flow diagrams.

[x] The format and input of the values for Functional Savefty now is the same as in the Properties Dialogoue

[x] For a detail filter the kind "Structure" and "Project" are only available within the IQ-Explorer and the User Defined View.

[x] The order of the filter criteria were revised.

[x] The criteria "secured cause" and "unsecured cause" will only be applied to root causes.

Table Editors:

[x] The width of pictures within small form sheet columns were calculated wrong. This has been fixed.

[x] New icons for faded in actions

[x] Icons for object attributes will be displayed (if they were activated via the display options). The colour of the icon indicates if the attribute is active or inactive.

[x] The kind of line breaks within a table can be specified via the workstation settings (sinple / simple with dash / by word / use hyphenation).

Managemant Dialogues:

[x] FMEA form sheets / Control Plans / Process Flow Diagrams: Commands to "copy" and "paste" those documents are available in the right click menu of the dialogues.

XML Import/Export:

[x] If an import xml file contains more than one language and the used version of IQ does not support multiple languages, then the user can select one of the available languages to be used for the import.

[x] The validation of the xml import was revised.

[x] &-characters (i.e. part of the item code) were not quoted for the xml. This leads to a validation error. This has been fixed.

[x] The meeting log will now be a part of the xml export.

[x] XML export is now available in two different formats:

--- Export based on data format as defined in MSRFMEA-DTD 2.1.2. This is the official released standard and also supported by version 5.1 of IQ.

--- Export based on the data format as defined in MSRFMEA-DTD 2.2.0 Draft. This format is adapted to current standards and supported by version 6 of IQ. Not yet released.

Analysis Desktop:

[x] When selecting criteria for detail filters an error occurred. This has been fixed.

Maintenance Customers (new functionality, that is available only for maintenance customers)

**PIM-Editor:** 

[x] fmx bookmarks are now visible in the PIM editor.

[x] Right click menu for fmx bookmarks: Bookmarks can be opened, deleted and imported

Project Management:

[x] The right click menu offers the command "Freeze object numbers". The current object number will be frozen.

[x] The right click menu offers the command "Reset user defined number strings". All number strings defined by the user will be rejected.

Presentation Print:

[x] The button "Languages" (Settings | Printer Settings) allows the user to select the languages for the presentation print.

# Structure Interfaces:

[x] It is now possible to create an interface document from a structure or part of a structure contained in a source document. The interface document and the source document can then be changed independently and the changes can be combined using the process of consolidation.

# Variant Interfaces:

It is now possible to create an interface document based on a variant in a source document. The interface document will only contain the data and attributes specific for the selected variant (the

"interface variant"). The source document and the variant document can then be changed independently and the changes can be combined using the process of consolidation. During consolidation, all changes in the interface document are interpreted as variant specific changes: - a change in an attribute is always a change a variant specific change if this attribute can be variant specific. That means for example the changing the significance of a failure only changes the significance in the interface variant

- Objects that are deleted in the variant interface will only be excluded from the interface variant in the consolidated document. They are not deleted in the master

- new objects will only be visible in the interface variant and the master after consolidation. He will not be visible in any other variants of the source document

Date of Release:

15. March 2010

# Service Pack IQ Version 6.0 - 0.0.3.6

General:

[x] Table Editors: Columns can now be faded out with right click on the column label.

[x] Cover Sheet: the caption of the company logo is treated like field names.

[x] If an object has neither an entry in the current language, nor an entry in the reference language, the description of the interface language is used as far as possible.

Notes List:

[x] The command "Purge unused documents/graphics" in certain data constellations deleted still used embedded documents. This has been fixed.

Notes:

[x] Empty paragraphs between paragraphs with different formats can possibly vanish. This has been fixed.

Data Manager | Terminology/Translation:

[x] The display of objects can now be limited to projects or structures (Menu "View | Limit to projects/structures"). The limitation affects the display in the editor, the print and the (Excel-) export.

Note: Entries that have no instances or objects that can not be assigned to a structure or project are always displayed.

Drag&Drop:

[x] Copy/move of requirements in the FMEA form has been revised.

FFA:

[x] Table Print: The folded levels were not taken into account, when variants/filters were active. This has been fixed.

[x] When the user synchronizes into the FFA from an editor where a variant is active, the variant is assumed there.

# FMEA Form:

[x] Moving and fading in of global actions with a symbolic deadline caused an error. This has been fixed.

HTML texts:

[x] Tool Tips (short info) for links on FMEA objects work again properly.

[x] If the HREF of Image/Anchor tags included a "#", the reference did not work. This has been fixed.

IQ Explorer:

[x] The option "Search within all structure variants of the specified IQ-document" causes, that it is always search in all variants and eventually search results are listed multiple times. When the option is active, in the tab "Document Search" all variants are marked permanently. This option can also be activated/deactivated via the status bar.

[x] After changing the interface language the display of the filters in the extended toolbar was faulty. This has been fixed.

[x] Additional info for print/export has been supplemented by adding the top effects.

Object Info:

[x] The missing translation in the area "Functional Safety" has been completed.

Fonts and Colors:

[x] Setting the "Systemwide selection color highlight" works again.

Statistics:

[x] Extended Risk Matrix: In the summary sums > 999 (red area, yellow ...) are displayed again.[x] Responsibility Analysis: Th colored text display has been adapted to the other analyses.

[x] If notes contained embedded graphic files, the graphics were not displayed in some columns. This has been fixed.

Search/Filter:

[x] Via the right click menu in the filter dialog also context criteria (e.g. appears in form sheet at system element with...) can be negated now.

[x] The auto filters for O or E now take the value, in analogy to the RPN, always from the selection (not as hitherto the minimum).

[x] New mechatronic filter criteria for failures:

- Is fully and exclusive save within the context of the causes

- Exclusive secured cause

Variants:

[x] Machines that were excluded from a variant, could not be included in the variant again. This has been fixed.

Web Publisher:

[x] Before the export the fault tree is recalculated

[x] Statistics: Colored display of table entries is supported now.

XML Interface: [x] The export has been complemented for additional header data.

Maintenance Customers (new functionality, that is available only for maintenance customers)

# FMX bookmarks:

[x] Via the menu "Edit|bookmarks" bookmarks can be saved as FMX file now. With a double click on an FMX file the IQ software is going to be started and a synchronization to the object is going to be executed. Furthermore there is an entry in the menu with a list of all FMX bookmarks. This is saved in the configuration file. Single entries can be deleted. If an FMX bookmark cannot be found anymore, the entry is also deleted from the list. With OK the user can synchronize to the bookmark.

Date of Release:

7. December 2009

# <u>Service Pack IQ Version 6.0 - 0.0.3.1 (17.11.09) - Update vom 18.11.2009 Service Pack V6 - 0.0.3.2</u>

Update from/vom 18.11.2009 (Service Pack V6 - 0.0.3.2):

A bug in the variant interface was fixed. This bug could happen if the primary document contained more than one variant.

General:

[x] Notify People Responsible with HTML (as MAPI): The entry field for CC has been filled in wrong. Depending from the Mail Client (e.g. Outlook) this caused an error message. This has been fixed.

[x] For characteristics it is now possible to define via attributes, whether they shall be included in the FMEA form or not.

[x] For actions and characteristics additional Hotclick Icons that signalize the attributes "will be included in the FMEA form" and "will be included in the control plan" were established
[x] With the start of the IQ software the name of the computer is written into the file "userreg.log". As soon as the maximum number of users is reached and the software cannot be started anymore, this file can be displayed on the users wish. So it's visible on which workstations the IQ software is currently running. The file "userreg.log" is included in the Workgroup Directory. To be able to use this feature, writing access to this file has to be ensured.
[x] For process elements a further Hotclick Icon has been established. This icon is displayed whenever the process element is connected to a machine. The display can be activated or

whenever the process element is connected to a machine. The display can be a deactivated via the Display Options.

[x] For characteristics an additional Hotclick Icon has been established. This icon is displayed whenever the characteristic is connected to an inspection equipment. The display can be activated or deactivated via the Display Options.

[x] File-Bookmarks: With the display of embedded bookmarks under certain circumstances an error occurred. This has been fixed.

[x] Enhancement of the LDAP import for persons (administration for "Teams and Persons": File | Import... | Import Persons (LDAP)). In the dialog for the import there is now a button "Mapping", where it can be defined, which LDAP fields shall be assigned to which persons attributes.

Notes list:

[x] To be able to delete a note in all languages and all categories, there is now the command "Delete notes completely with all translations" in the Edit menu.

## Control Plan:

[x] New display option "Show version index in header". If this option is active, in the field "Control Plan Number" the version index is displayed additionally (so far it was only visible in the properties dialog of the control plan).

Data Manager:

[x] Symbol Palettes: With exporting the symbols as HTML, the symbols were not written into the HTML file correctly. This has been fixed.

**Document Settings:** 

[x] Person View: When the dialog was left with Cancel, eventually prepared changes in the person view were assumed nonetheless. This has been fixed.

Drag&Drop:

[x] Via Special Drag now also connections from and to mechatronical objects (error detection/error response/operating condition) can be made

[x] When an action is copied/moved into an FMEA form, the action attribute "will be included in the FMEA form" is set accordingly.

[x] The classification of/for functions/characteristics can now be assigned with Special Drag.

Properties Dialog:

[x] The variant specific selection of machines with activated variant did not work. This has been fixed.

Export/Import:

[x] The export/import (EXP file) now also includes requirements.

# FFA:

[x] An existing selection remains after activation/deactivation of variants or switch on/off of the variant edit mode, if possible.

# Filter Dialog:

[x] Drag&Drop of filter criterions: If criterions can not be anchored at the target, they are listed in a info dialog with an accordant message.

[x] The buttons "New" and "Copy" now open a dialog, where apart from the name entry it can also be defined whether the new filter should be an easy or detail filter. Depending from this choice, after that the dialog for the selection of criteria or kinds.

[x] For effects also the kind "has actions with..." is available now.

[x] Help: The help within the filter dialog could not be displayed. This has been fixed.

[x] The value of a filter criterion can now also be inserted with multiple selection (if all selected

are the same criterion, e.g. name).

[x] The value can now also be deleted if there is a multiple selection.

[x] When criteria are deleted, the list keeps the scroll position.

## FMEA form:

[x] Autofilter: the criterion "classification" is now also available for failure modes

# Functional Safety:

[x] For error detections and error responses also a DC value can be assigned. The properties dialog now also contains the tab "Functional Safety" for these object types.

[x] FMEDA form: This form is opened for a structure. It lists all basic elements (basic level, component level) of this structure. With this form all parameters that are necessary for functional safety can be entered easily.

# HTML notes:

[x] The background color can now be chosen from a color dialog.

IQ-Explorer:

[x] the setting whether background search shall be applied is now saved in the configuration file (CFG file) and so continues also after termination of the program.

[x] In the background search additionally to the progress bar also the name of the currently searched file is displayed.

[x] The list for the object types is updated correctly now after switching the interface language.

[x] The Systemdefined Filter "Variantspecific defined Objectattributes" at failures also takes into account causes/effects.

[x] The info table for the System Filter "Variantspecific defined Objectattributes" is printed with header data on each page. Fonts and columns widths remain untouched.

[x] Right Click Menu: if objects of different variants are marked in the results list, always the properties dialog for all objects of the same variant is opened at once. The prepared changes refer to exactly this variant then.

[x] When the display option "Open the databases to search with read-write mode" is active, search results from any database (Extended Search) can be edited (so far this was confined to the Document Search).

[x] The text search in the results list and info table has been improved.

[x] In the right click menu the entries "Add to variant" and "Remove from variant" are available now. In the subsequent dialog it can be chosen to which variants the marked search results shall be added or from which they shall be removed (note: only available for Document Search).[x] If a search result was created variantspecific, in the column structure/variant a "V" is prefixed. In this case the changes in the properties dialog are also executed variantspecific (note: only

available for Document Search).

[x] When changes are made directly in the results list, the entries in the results list are updated immediately.

[x] The results list can now be extended for the following columns with values for Functional Safety:

- \* DC value
- \* FIT value
- \* lambdaD

\* lambdaU
\* Desired SFF
\* Desired PFH
\* SIL/ASIL value

IQ Service Packs via the command "Help|Update Program Version":

[x] If it is a network license, after the download of the update – in case that it's not available – a batch file (for msi or msp) with the name INSTALLUPDATE.BAT is created and executed. This batch file can also be executed, if the update file is dragged onto the batch file, e.g. in the Windows Explorer. The batch file executes the two steps with the parameters that are described in the installation manual. If only one user is logged in, the IQ software is terminated and the batch file with the update is executed. In all other cases a message pops up with the notice, that the update should be started manually later.

**Customer Requirements:** 

[x] Notify People Responsible: During the creation of the ICS file an error occurred. This has been fixed.

Object Info:

[x] for inspections/tests in the info the anchor points are displayed.

#### **PIM Editor:**

[x] The error "nodesOnLevel: not understood" that occurred during fold/unfold of single levels has been fixed.

#### Presentation Print/Web Publisher:

[x] The data set for Working Instructions was not saved in the batches. This has been fixed.

[x] During the export, scant system resources possibly caused a General Protection Fault (GPF). This has been fixed.

[x] For the statistics standard layouts for Graphics and Table have been included.

[x] The new FMEA form AIAG (4th edition, E) has been included.

[x] Some display options for the statistics were not saved or assumed. This has been fixed.

# Process Flow Diagram:

[x] For connecting cells in the graphical area the last used line width and type is used.

[x] The column labels are adjusted, when columns are inserted or deleted (move right/left)

# Spell Check:

[x] Entries with multiple lines in tables were switched to single-lined ones. This has been fixed.[x] In the checking procedure of words with succeeding punctuation mark, the mark was included in the check. This has been fixed.

Input collector for requirements:

[x] The selection list was empty, regardless of requirements that were already defined in the document. This has been fixed.

# Statistics:

[x] In the structure related Pareto Analysis an error occured, if causes with abandoned revision

states were included. This has been fixed.

[x] The display options for the results list of causes in the Risk Matrix were completed (display of numbering, system element and function).

[x] During the start of the Risk Matrix and error occured, if another analysis was in the statistics history. This has been fixed.

[x] Extended Risk Matrix can be configured now (DOxS, SDxO, SOxD)

[x] Extended Risk Matrix: The display of effects in the table of the extended risk matrix was faulty. This has been fixed.

[x] The filter dialog includes the filters that are relevant for the analysis (structure related/form related).

[x] In the Statistics Management now also new filters can be created.

[x] Under certain circumstances, actions in initial states were not taken into account for the analysis. This has been fixed.

## Search/Filter:

[x] Deadlines now can also be search in relation to the current date, e. g. all actions, whose deadlines are due in 8 days. Negative figures show the number of days in the past.

[x] Structure filters: for criteria "is anchored at system element with..." the criterion is now applied on the direct system element. If superordinate system elements shall also be included, the option "Search nets/structures" must be activated in the properties of the filter.

[x] When the system filter "Variantspecific defined Objectattributes" was applied on FMEA forms, an error occured. This has been fixed.

[x] Autofilter for RPN in the FMEA form: if a criterion for RPN exists already, the software asks, whether the new RPN should be added to the filter. So far only the smaller one of the two was used. This has been changed and now for the RPN criteria always the value of the current selection is assumed.

[x] For Automatic Structure filters now also the dependent information for intermediate system elements (actions etc.) is displayed, even if they don't match the filter.

[x] For system elements now also the level "has system element with..." can be included.[x] The criteria OxD, SxO and SxD are available for revision states, actions groups and actions now.

Terminology and Translation:

[x] "Requirements" were included in the list of objects.

Deadline Editor:

[x] Faded in actions are displayed in color, if the option "Use colored text" is active (analog to the FMEA form)

[x] Failures are displayed as context information at faded in actions, if the option "Failure for linked actions" is active (analog to the FMEA form)

Variants Matrix:

[x] Double filter icon has been removed from the toolbar.

XML interface:

[x] Entries in valuation catalogs were not imported correctly. This has been fixed.

[x] The export now also includes variantspecific inspections/inspection equipment.

[x] Possibly faulty XREFS have been fixed.

[x] During the import informations are not taken from the template file (normal.fmt), if they are included in the XML file (e.g. persons, valuation catalogs, etc.)

[x] The LDAP ID of persons is included in the XML interface now.

[x] Under certain circumstances embedded documents could not be imported correctly from the XML file. This has been fixed.

[x] During the import of an XML file the creating of meeting log entries is disabled now.

[x] Actions of the initial state are exported without status/responsible, if the document setting "Initial state should have a deadline/responsible" is inactive.

[x] If the option Validate is active and no DTD exists in the target folder so far, this file is copied from the installation directory (...\Data\XML) into the target folder.

[x] The characteristics attribute "will be included in the FMEA form" has been included in the interface.

[x] If a variant was active during the export, references to not exported variants were exported, which lead to an XML parser failure. This has been fixed.

Maintenance Customers (new functionality, that is available only for maintenance customers)

Dialog for Fonts and Colors:

[x] The color code for the risk classes (I - III) can now be defined by the user himself. (The color code is used in the FMEA form at the valuations, if the corresponding display option is set).

Dialog "Parameters for Color Coding":

[x] The color coding for the risk classes can be defined by the user via the buttons "Color Code II", "Color Code II" and "Color Code III". (The Color Code is used in the FMEA form at the valuations, if the corresponding display option is set.

Process Flow Diagram:

[x] Filtering is also possible in the Process Flow Diagram now.

Structure Editor / FFA:

[x] Extended Toolbar: The selection of structures and variants can be done via two drop down lists.

Automatic calculation of classification for characteristics:

[x] In the dialog "Rules and Symbols for Auto-Classification" (Tools|Parameters for Classification Calculation) now also rules for the automatic calculation of the characteristics or functions classification can be defined.

8D Report:

[x] At "Tools|Forms/Reports|8D Report" now an editor for creating and editing 8D reports is available. 8D reports are stored at the project. The number of 8D reports is not limited. The fields of the 8D report can be filled with HTML contents, graphics and other documents can be included. The fields "Containment Action(s)", "Causes", "Chosen Permanent Corrective Action(s)" and "Implemented Permanent Corrective Action(s)" can be linked to FMEA objects (failures or actions) directly (right click menu "Select...").

Analysis Desktop:

[x] Deadline Markers have been adjusted to the new data model.

[x] Status of the failures: In the table in the right click menu the command "->FMEA form" is available now. For the selected failure mode an FMEA form is opened.[x] If the bounds of the evaluation parameter is still exceeded after the implementation of the currently still uncompleted actions, the affected cause is still taken into account for the analysis.

Date of Release:

17. November 2009

# Service Pack IQ Version 6.0 - 0.0.1.7

Cause and Effect Diagram: [x] Filters are supported in the Cause and Effect Diagram now.

FMEA Form:

[x] The order of the columns in the AIAG Layout has been adapted according to the sample: so far: "O – Preventive Action – Detection Action - D"

now: "Preventive Action - O – Detection Action - D"

[x] Automatic calculation of the classification: automatic calculation was not executed for root causes. This has been fixed.

[x] Notify People Responsible (HTML): In analogy to the "normal" notification now a dialog is opened, which offers several settings for the mail, the responsible, etc.

Control Plan:

[x] The display of versions of control plans based on the characteristics net had been incorrect. This has been fixed.

Deadline Editor:

[x] Notify People Responsible (HTML): In analogy to the "normal" notification now a dialog is opened, which offers several settings for the mail, the responsible, etc.

Search/Filter:

[x] New Systemdefined Filters in the Failure Net: Secured/Partially Secured/Unsecured Cause[x] New filter criterion "Secured/Partially Secured/Unsecured Cause" for Failures

[x] System defined mechatronic filters are grouped as an own category within the filter dialog

[x] System defined mechatronic filters are only available, if the mechatronic feature is active.

[x] Automatic filters work again for structures

[x] System defined filters now also have a description. This description is displayed in the middle of the filter dialog by default instead of the criteria. Optional the user can switch into the "Details" or "Description" mode via the context menu.

[x] In the details mode or in case of notes at userdefined filters an Infobubble is displayed that contains the description or note.

[x] Administration of catalogues. Search again (F3) is only active, when a textsearch has already been executed and results are still cached (behaviour like in the other editors)

[x] Selection of User defined attributes, operating conditions, etc. is now made with an extra dialog. There the user can choose from a list or insert a search pattern.

[x] Filter dialog. The size of the the filter list can now be changed by splitting.

[x] Automatic filter in structure lists/trees/nets. In analogy to the other object types a part of the available citeria is now also included for the failures (only criteria that are not listed at extended in the criteria selection dialog).

Failure Net editor:

[x] The display of "O-Max" can be activated and deactivated in the Display Options.

IQ-Explorer:

[x] Background search: Button for Cancel is now positioned on top, to be visible from each tab.[x] File selection in the file search: When a manual selection has been made in the file list and the recursive search is active, the manual selection is considered despite the recursion.

[x] Failure with Infobubble staying open has been fixed.

[x] Background Search through the own "process"

[x] Extended Toolbar: Selection of files/forms via the selection menu on the tabs Document Search and Extended Search.

[x] Notify People Responsible (HTML): In analogy to the "normal" notification now a dialog is opened, which offers several settings for the mail, the responsible, etc.

XML interface:

[x] Document Settings for the C column in the FMEA form is ex- and imported.

[x] Failure during attempted import of a not MSR compliant XML format has been fixed.

[x] If an XML contains metadata, the ones that have come via the normal.fmt are neglected for the import.

[x] Import of responsibles from structure variants were incorrect. This has been fixed.

Web-Publisher:

[x] Extended textsearch in the Web Publisher result (can be accessed via the index page|home|>> To the extended text search...)

General:

[x] Valuation Catalogues: A valuation catalogue can now be used as standard catalogue for more than one FMEA structure type.

[x] Project Management: With copying a structure variant via the buttons "copy" and "paste" excluded objects were not considered. This has been fixed.

[x] If no dictionary file is existing, it is created automatically with opening the spell check.

[x] Notes/HTML fields: Color and other text attributes were applied to the whole word and not only to the marked part. This has been fixed.

[x] With opening the text dialogue the table editor lost ist focus and with that the edit mode. This has been fixed.

Object info CARM-Server modules:

[x] Object info for modules has been reworked (predecessor/successing modules, text format, etc.)

Date of Release

21. August 2009

# Service Pack IQ Version 6.0 - 0.0.1.0

Filters:

[x] Forms filter "Changes of structure version": effects were not shown correct. This has been fixed.

[x] Filter dialog: after a drag&drop action the collapsed items will be kept.

[x] Filter dialog: filters can be copied into the clipboard in one editor via context menu and can be pasted in another editor.

[x] A new criterion for failures "is within the context of an error detection/error reaction with name contains/contains not..." is available now

[x] FFA / Structure Editor: AutoFilters also show context information for the levels that match the filter criteria (e.g. actions for system elements).

[x] Characteristics can also be searched/filtered for relational operators now.

## Web Publisher:

[x] Text search is now also available for the network environment (UNC names) and the internet browsers Internet Explorer, Firefox and Opera.

[x] Sometimes hyphens and their subsequent character were not exported. This has been fixed.

[x] For certain terms, translations were not exported. This has been fixed.

[x] If only functions were chosen within "Function- and Failure Net|Fault Tree" an error occured. This has been fixed.

HTML entry fields:

[x] Copy and paste of embedded documents is now also supported database spanning.

Fonts and Colors:

[x] As labels in the lists and tables can only be displayed with a reduced number of colors, the color assortment only lists the colors which can be displayed.

# XML-Export:

[x] When the validation test (Workstation Settings "Validate XML export file") is activated and fails, a reference a link to the exported file remained. This has been fixed.

# FFA:

[x] When a variant is active locally in the FFA, now also the properties dialog for this "local" variant is opened.

# **IQ-Explorer:**

[x] In "Display options|Options" there is a setting about whether the file search starting from the marked folder shall be continued recursive ("During the Extended Search recurse the subdirectories of the selection"). This setting is active by default. Depending from this option the folders are always or never searched recursive.

[x] Column widths of the results list can now be set in the display options.

[x] If "All Languages" is chosen as setting for the search, implicitly also all notes categories are searched now.

Excel Import:

[x] If the rating within the list of a causes actions changes, a new measure state is created to save the new rating. (So far as rating for all actions of one cause the respective maximum for O and D was taken).

Fault Tree:

[x] In interlaced fault trees some elements were displayed, although they were not included in the active variant. This has been fixed.

Project Management:

[x] During pasting of a copied structure with variants a failure occured. This has been fixed.[x] Creating of structure version did not include classifications of functions. This has been fixed.

# FMEA Forms Management:

[x] It is possible to choose a filter in the management now. The selected filter is applied during the opening of the QM document.

## **I-CALENDAR Support:**

[x] The problem with the import of I-calendar informations in MS Outlook has been fixed.

Date of Release:

8. June 2009

# Availability of IQ-Software Version 6 (Updated: 2009-09-30)

# **APIS IQ-Software Version 6 - What's New**

Unicode

In IQ Version 6 the data within an fme file can be stored in unicode format. Therefore the restriction to ANSI characters is no longer inevitable. Complete unicode functionality is only available in APIS IQ-FMEA PRO and APIS IQ-RM PRO. These flavors also include Chinese as interface language.

# VDA / AIAG

VDA FMEA (2nd edition) and AIAG FMEA (4th edition) are supported by new valuation catalogs, new form layouts, new statistical analysis types, and action state categories.

Categories for action states:

- Development
- Customer operation
- Service

The list of categories can be extended by the user.

New possible value for the status of an action:

- untouched
- in decision (*new*)
- in revision
- finished
- irrelevant

# **Global Action**

Actions now can be defined as "global". If responsibility, status, or deadline of a global action is modified, then all occurrences of this global action will be modified..

# Filter

IQ Version 6 now supports filter for structures, lists, function nets, and failure nets.

Filters can be used in the following editors:

- Structure Editor
- Function Failure Analysis (FFA)
- Function Net Editor
- Failure Net Editor

# **Mechatronics FMEA**

The analysis of modern systems including error detections and error responses requires an advanced causality approach. Beyond this, operating conditions should be considered in a mechatronical system. Version 6 of the APIS IQ Software offers functionality to deal with these mechatronical systems.

It's possible to integrate operating conditions, error detections, and error responses into the failure net. Error detections and error responses are derived from previously defined functions. It's also possible to define failures for error detections and error responses. This is necessary because error detections and error responses themselves can be deficient. Therefore this also must be regarded for the risk analysis.

# **Objekt Inspector**

The Object Inspector was revised and extended in the following ways:

- Objects can be modified
- Data structures can be built
- Object attributes are grouped by tabs
- Modifying object attributes and defining new objects can be done easily
- An explanation of the object attributes can be shown
- Variant specific attributes of the inspected object are shown in detail

# **Template File**

The template file (NORMAL.FMT) was extended to include the following options:

- Symbolic deadlines
- Notes categories
- Function categories (DRBFM)
- Operationg conditions
- Product modification categories (DRBFM)
- Action state categories
- Statistical analysis schemes

# **Traffic Light Colors for FMEA Form Sheet**

- Highlighting of critical regions using appropriate colors
- Ranges for each color can be defined by the user

# User Defined Configuration (Customization Manager)

The Customization Manager offers the possibility to customize the IQ software to the users needs. Different configurations can be defined and saved. When starting the IQ software the user can select one of the defined configuration for the current session.

# Hybrid Arrangement of Functions and Characteristics

Functions and characteristics of a system element can be arragent in mixed order.

## **Simultaneous Engineering**

The differences of a file and the copy of this file can be shown using the Consolidation Desktop.

#### **Extended Risk Matrix**

The extend risk matrix shows the number of causes within a matrix. All possible combinations of O\*D and S will be counted. The cells of the matrix are classifed using the colors red, yellow and green. For each cell an RPN can be calculated. The number of occurrences of a certain RPN is shown in the cell.

## **Statistical Evaluations**

IQ Version 6 supports the following structure based statistical evaluations:

- Pareto analysis
- Frequency analysis
- Difference analysis
- Risik matrix

The FMEA form sheet based Pareto Analysis now offers the possibility to schoose between "Direct causes only" and "Root causes only" (-> Analysis scheme | Edit)

# **Spell Check**

IQ offers a dictionary, which can be used for spell checking. (Tools | Spell check...). The initial dictionary (located in the workgroup directory) can be extended by the user.

# XML Interface MSR)

The XML interface was adjusted to the data model of Version 6. XML files will be written according to the current definition (msrfmea\_2\_2\_0.ml.dtd). Furthermore, unicode encoding (UTF-8) will be used.

Date of Release/Datum der Veröffentlichung:

30. April 2009