1. AUDIT TRAIL

Version	Change Description
Version 2.3 Update 2	2.3 Update 2 is an update of the 2.3 Update 1 release with a few bug fixes and improvements

2. REMARKS

3. SIGNATURES

Signature Meaning	Name	Role	Date	Signature
Author	Wolfgang Huber	Production Responsible		
Approver	Yves Berquin	Production Responsible, Operation Responsible		

4. PURPOSE

Documentation of verification and validation results of Matrix Requirements Release 2.3.12692.20229

5. SCOPE

This release with number 2.3.12692.20229 is an update of the 2.3,1 release it contains the changes listed in the "Appendix: Changes" below.

6. REFERENCES AND APPLICABLE DOCUMENTS

- **SIGN-342 Verification and Validation Plan, Ver. D**
- **SIGN-344 Software Development Plan, Ver.G**
- **SIGN-379 Project Kickoff Form**
- **SIGN-386 Release Notes 2.3.12692.20229**

7. RESPONSIBILITIES

Name	Responsibility
Wolfgang Huber	coding, creating tests, testing
Yves Berquin	coding, code review, testing
François Chasseur	coding, creating tests, testing
Aloïs Paulus	testing
Ann Vankrunkelsven	testing
Tilman Schlenker	testing

8. VERIFICATION AND VALIDATION SUMMARY

8.1. VALIDATION SUMMARY

No validation was required due to the scope of changes.

8.2. VERIFICATION SUMMARY

- The tests were executed using two builds (2.3.12647.20164 and 2.3.12692.20229).
- Testing the first build (2.3.12647.20164) one issue was found during testing and one independent of testing.
- Both were fixed.
- In the second build (2.3.12692.20229) both fixes were tested and no issue was found.

8.2.1. Testes Executed per Version

Tested version	Executed Tests	Passed	Failed
2.3.12647.20164	61	60	1
2.3.12692.20229	3	3	0

8.2.2. OS / Browser used for testing

OS / Browser	Number of tests
Windows / Firefox 93.0 (64-bits)	3
Mac Chrome 94.0.4606.81	7
Mac os / Brave Version 1.30.86 Chromium: 94.0.4606.61	17
MacOS / Version 1.30.86 Chromium: 94.0.4606.61 (Official Build) (x86_64)	3
Fedora 34 (Linux) Chrome Version 94.0.4606.71	27
Windows / Brave Version 1.30.89 Chromium: 94.0.4606.81 (Official Build) (64-bit)	5
Win 10 Version 1.31.87 Chromium: 95.0.4638.54 (Official Build) (64-bit)	2

8.3. FINAL VERDICT

The software build 2.3.12692.20229 can be released.

9. VERIFICATION DETAILS

All changes have been reviewed and tests have been executed to ensure they are working.
The traceability has been reviewed to make sure all changes have been implemented, reviewed and tested as planned.
Notes

- It was verified that above changes were all changes done to the source code (nothing else changed than the planned changes)
- tests were executed after the last code change
- all FEAT have been tested (see Appendix: Test Results)

10. VALIDATION DETAILS

n/a - see above

11. APPENDIX: CHANGES

FEAT-733 Bug when moving category position

When moving categories or fields, the final position was sometimes one off

Now moving works as expected

FEAT-728 Escaping of special characters in item titles

Special characters in item titles were escaped in smart links

For example a < in item titles are escaped to <

FEAT-730 Remove create project wizard from admin

Now the project creation wizard is only available in the app.

The project creation wizard was shown in the admin client even though it does not work there.

FEAT-732 Onboarding project creation didn't send email invitation

The project creation wizard does now send emails to the created users.

The project creation wizard did not sent emails to the created users.

FEAT-741 _id_ not replaced when creating SIGNs

Now the id macro is correctly replaced by the DOC id.

the id macro in the document number of DOCs was not replaced when creating a SIGN.

FEAT-742 Tree order changes in admin client

Now the reordering items in the admin client works as expected

Tree reordering in the admin client sometimes put the nodes in the wrong place.

FEAT-743 PRINT project created layouts with some unexpected characters

When creating PRINT items such as BLOCK or SEQUENTIAL, it was sometimes necessary to add a space after item ids if something else followed, if not the resulting document added sometimes some bad characters.

Now it is no longer necessary to add spaces.

FEAT-747 Capitalization of Risk Properties PRINT issue

Now it is possible to print risk properties independent of the capitalization.

When printing RISKs the capitalization of the risk property variables was taken into account.

FEAT-749 Risk Zones in Documents showed the zone id instead of label

Now the risk zone labels are rendered in the risk analysis section.

Risk analysis section was rendering the zone ids instead of the labels of the zone.

FEAT-754 PRINT WORD/PDF Numbered lists rendered as bullets

Numbered lists rendered as bullets in PDF/Word DOCs

Instead of printing numbered lists with numbers, a change in 2.3 would turn all lists into bullets. This has been fixed in 2.3 and can be manually fixed by adding the following in the default CSS:
```
ol { list-style-type: decimal !important; } ol > li { list-style-type:
decimal !important; }
```

FEAT-731 PRINT - TABLE with with empty rows can't save

Now an error is shown to prevent the user to save.

It was impossible to save PRINT items with tables which were only partly filled. There was no explicit error shown.

FEAT-744 Table render bug

Some cells in the column editor where sometimes a bit truncated

This has been fixed by adding some padding.

FEAT-753 After visualizing a SIGN item (not yet signed) you get a pop up to merge changes

When creating a sign and previewing it before trying to sign it, there was a wrong message saying it was changed.

The message was shown, because the pdf html or docx created was attached to the SIGN and created a new version.

FEAT-755 Use risk zone name in risk analysis report for "Risk by Zones"

The risk zones distribution in the risk analysis section now uses the risk zone names.

Before it used the risk zone ids.

FEAT-736 Redlining of DOCs vs SIGN did not take filters into account

When redlining DOC items against SIGN it now takes the document filters into account.

When redlining DOC items against SIGN it ignored the document filters set for the DOC item.

FEAT-739 QMS template approval used reject option

If a the document reject option was enabled in the admin, templates could no longer be approved.

Now the reject option for SIGN documents has no impact on template approval.

FEAT-759 Signature meaning in DOC tables was not properly displayed when readonly

Now the correct text is displayed

When a DOC item contained a signature meaning in a signature table, the table showed the id of the selected option rather than the display value.

FEAT-760 Project creation wizard was displayed in the admin

The project creation wizard is not shown in the admin UI anymore.

The project creation wizard was shown in the admin UI.

FEAT-734 New Print system doesn't cope with terms and abbreviation

Terms and Abbreviations used in Custom Elements are now tracked correctly and the Terms and Abbreviation table and handle custom formatting correctly

Terms and Abbreviations used in Custom Elements (or in items included in Custom Elements) would not appear in the Terms and Abbreviations table in the document.
In addition, custom formatting in Richt Text replacements was not handled correctly, instead showing escaped HTML. This is working as expected now.

FEAT-735 Risk Distribution Chart Legend in Risk Analysis Section is Ugly

Pie Chart labels no longer show ugly artifacts

Pie Chart labels in generated documents were showing some text that should be hidden. These are removed now.

FEAT-762 DOCUMENT FILTER not applied in the Custom section

The layouter now takes the document filters into account.

The layouter of a custom print section did not use the document filters when creating a preview of the document section.

FEAT-751 Custom section could not render fields from folders

Now custom sections can also show fields from folders.

The new custom section did not show fields from folders.

FEAT-768 Label Filter in Dashboards

The label filter did not filter the TRACE or TEO dashboard.

Now it filters

FEAT-740 Allow to select SIGN and DOC in custom sections

Now it is possible to select DOC and SIGN items in custom sections of DOC items.

Custom sections did not allow to select DOC and SIGN items as input.

FEAT-745 PRINT allow to iterate over tables in items

It is now possible to create sub tables enumerating and filtering rows from tables.

In SUBTABLEs and TRACES it is possible to select a table row iterator

SUBTABLE-11 Failed Test Steps

ITERATOR
This function describes how to fill the table, enu
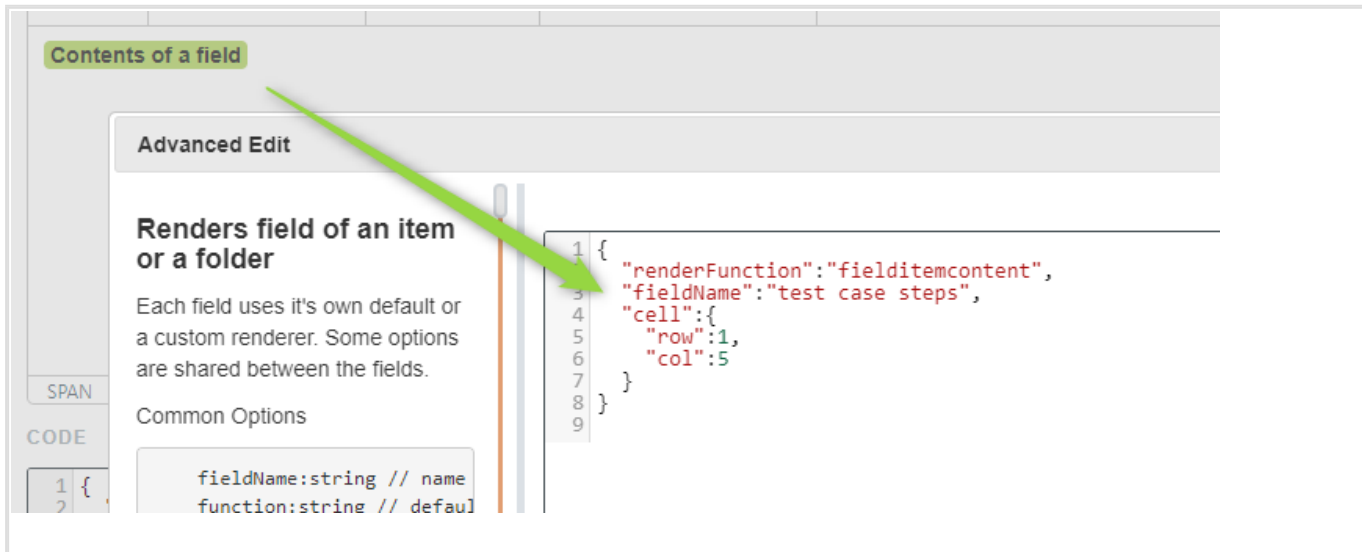
Table Row Iterator

edit parameters

In the parameters you need to specify the table and optionally add a filter for some of the columns of the table.

```
{
  "fieldName":"TEST CASE STEPS",
  "showRowsMatching":{
    "result":"^f$"
  }
}
```

The BLOCK element showing the table cell, also needs to specify the table name and the cell. The row parameter will be overwritten by the table row iterator.

FEAT-746 Design review usability

When opening dialogs in design review items, the page does not scroll anymore.

When opening dialogs from a design review table, the table scrolled to the top of the page. Now the page does not scroll anymore.

FEAT-748 Allow non-admin users to merge

Now all users with the specific right to merge can merge the branch into the mainline if they have write access in the mainline and readonly or more in the branch.

It was only possible for users with admin rights to merge a branch into the mainline.

FEAT-757 Possibility to really delete notifications (and trainings)

Now it is possible to delete trainings and notifications.

It was not possible to delete notifications and trainings before. Specifically for trainings it meant the trainings were marked as done rather than removed if you deleted them.
You can delete trainings

FEAT-765 Richtext cell editor should focus and go the end of the text when hitting SHIFT + ENTER

When editing a a cell in a table, if the cell type is richtext, when you hit SHIFT + ENTER on the keyboard, it : Focus the text editor, mouve the caret to the end of the text.

Before, the text editor wasn't focused.

FEAT-767 Summarize table columns

Individual rows of a Table can be summarized by row count, average, median, or sum.

It is possible to use a Print function to summarize the column of a table, based on the current item. For example when displaying a REQ it is possible to display the count of SPECs linked to by the REQ by building a table which follows the downlinks, then adding a table summary function which:
- Renders the table using each REQ as the input
- Counts the rows in the SPEC column
- Returns this number to display in the REQ table

In addition, if the table used for summaries has numeric values, these can be summarized as a sum, average, max, min, or median.

FEAT-766 Auto show abbreviations and terms used

There is an option to show terms and abbreviations even if the macros are not explicitly used. This option can be enabled in the admin by editing the terms and abbreviations setting, adding a flag to each which should be shown
```
, "tableNoUnderscore": true
```

If there is for example a terms abc defined, when just typing abc somewhere in the text, the term will not be shown as used without setting this option for the term. By default the term will only be included in the terms and abbreviation table, if the actual macro is inserted.

FEAT-737 QMS module: Ability to use groups for multiple published categories

In the QMS module published processes can be grouped. Now the same groups can be used for multiple published categories.

If there are for example PROC and WI items being classified as "Design Control" group, they can now share the same label. In the past they needed to be in two different groups (e.g. Design Control PROCs and Design Control WIs).

FEAT-752 Improved word template

The word template with explanations was improved.

The word template with explanations was improved.

FEAT-758 Reversed order "Risks by Zone before control"

The risk analysis section shows the risk zone before controls before the risk zones after controls

Before the before and after was reversed.

FEAT-756 Order of published items is same order as in tree

Now the order of published items in the QMS portal is the same as in the tree,

Before the last published items where at the end of the publication

FEAT-761 Doc sections are now visible in the history if collapsed

DOC section are now always expanded in history.

DOC sections were only expanded in history if they were in the editor.

FEAT-763 Pending Template Approvals in My Work

The my work dashboard now shows pending template approvals.

Template approvals were not shown in the My Work dashboard

FEAT-769 Print Pre Pro processing of mf / generated html

This adds a possibility to add some pre and post processing scripts to the PRINT engine

The pre processing scripts allow you to manipulate the filter.xml using JQuery (e.g. deleting nodes, reordering, changing titles etc.)
The post processing scripts allow you to manipulate the rendered html.

12. APPENDIX: TEST RESULTS

Item	Tested By	Execution Date	Last Modification	Test Result
FEAT-733 Bug when moving category position	**XTC-2597 Reordering of categories and fields in Admin Client (TC-279)**	2021/10/18	2021/10/18 15:26:37	passed
FEAT-728 Escaping of special characters in item titles	**XTC-2592 Smart links and breadcrumbs (TC-94)**	2021/10/18	2021/10/20 14:43:01	passed
FEAT-730 Remove create project wizard from admin	**XTC-2596 Onboarding test (TC-278)**	2021/10/18	2021/10/21 11:31:53	passed
FEAT-732 Onboarding project creation didn't send email invitation	**XTC-2596 Onboarding test (TC-278)**	2021/10/18	2021/10/21 11:31:53	passed
FEAT-741 _id_ not replaced when creating SIGNs	**XTC-2585 Controlled Documents (TC-9)**	2021/10/12	2021/10/21 11:25:46	passed
FEAT-742 Tree order changes in admin client	**XTC-2584 Lock Test (TC-57)**	2021/10/12	2021/10/12 13:33:07	passed
FEAT-743 PRINT project created layouts with some unexpected characters	**XTC-2589 Print-Conditional Blocks (TC-249)**	2021/10/15	2021/10/21 11:26:55	passed
FEAT-747 Capitalization of Risk Properties PRINT issue	**XTC-2590 Print-Advanced Risk Values (TC-252)**	2021/10/18	2021/10/21 10:52:10	passed

Item	Tested By	Execution Date	Last Modification	Test Result
FEAT-749 Risk Zones in Documents showed the zone id instead of label	**XTC-2613 Risk zone rendering (TC-296)**	2021/10/19	2021/10/21 11:07:34	passed
FEAT-754 PRINT WORD/PDF Numbered lists rendered as bullets	**XTC-2643 PRINT Bullets and Numbered Lists (TC-300)**	2021/10/18	2021/10/21 11:27:03	passed
FEAT-731 PRINT - TABLE with with empty rows can't save	**XTC-2599 PRINT - Saving Incomplete Tables (TC-282)**	2021/10/18	2021/10/18 16:08:12	passed
FEAT-744 Table render bug	**XTC-2582 Table Configuration Test (TC-59)**	2021/10/11	2021/10/11 17:17:04	passed
FEAT-753 After visualizing a SIGN item (not yet signed) you get a pop up to merge changes	**XTC-2587 Cache signed SIGN documents (TC-151)**	2021/10/19	2021/10/19 10:32:31	passed
FEAT-755 Use risk zone name in risk analysis report for "Risk by Zones"	**XTC-2600 Risk Zone Test (TC-283)**	2021/10/18	2021/10/20 14:25:15	passed
FEAT-736 Redlining of DOCs vs SIGN did not take filters into account	**XTC-2602 Redlining Label Test (TC-285)**	2021/10/18	2021/10/19 09:30:58	passed
FEAT-739 QMS template approval used reject option	**XTC-2603 QMS Template Rejection Test (TC-286)**	2021/10/19	2021/10/21 11:28:35	passed
FEAT-759 Signature meaning in DOC tables was not properly displayed when readonly	**XTC-2584 Lock Test (TC-57)**	2021/10/12	2021/10/12 13:33:07	passed
FEAT-760 Project creation wizard was displayed in the admin	**XTC-2596 Onboarding test (TC-278)**	2021/10/18	2021/10/21 11:31:53	passed
FEAT-734 New Print system doesn't cope with terms and abbreviation	**XTC-2605 PRINT - smart text test (TC-288)**	2021/10/18	2021/10/18 17:02:44	passed
FEAT-735 Risk Distribution Chart Legend in Risk Analysis Section is Ugly	**XTC-2608 Risk Pie Chart Labels are clean (TC-291)**	2021/10/18	2021/10/18 14:04:00	passed
FEAT-762 DOCUMENT FILTER not applied in the Custom section	**XTC-2607 PRINT custom section document filter test (TC-290)**	2021/10/19	2021/10/21 11:33:09	passed
FEAT-751 Custom section could not render fields from folders	**XTC-2611 Folder content display (TC-294)**	2021/10/18	2021/10/18 16:09:42	passed

Item	Tested By	Execution Date	Last Modification	Test Result
FEAT-768 Label Filter in Dashboards	**XTC-2616 Dashboards and filter (TC-299)**	2021/10/18	2021/10/21 11:22:30	passed
FEAT-740 Allow to select SIGN and DOC in custom sections	**XTC-2588 Table rendering tests - TABLE tests (TC-247)**	2021/10/15	2021/10/21 11:26:49	passed
FEAT-745 PRINT allow to iterate over tables in items	**XTC-2598 PRINT - Table Row Iterator (TC-280)**	2021/10/18	2021/10/18 16:07:22	passed
FEAT-746 Design review usability	**XTC-2583 Design Review Control (TC-87)**	2021/10/12	2021/10/21 09:40:27	passed
FEAT-748 Allow non-admin users to merge	**XTC-2644 Merge Access Right Test (TC-293)**	2021/10/21	2021/10/21 10:21:36	passed
FEAT-757 Possibility to really delete notifications (and trainings)	**XTC-2595 QMS Training Dashboard (TC-272)**	2021/10/19	2021/10/20 10:15:17	passed
	XTC-2604 Delete of notifications and trainings (TC-287)	2021/10/18	2021/10/21 11:28:47	passed
	XTC-2594 Notification Management (TC-125)	2021/10/18	2021/10/21 11:28:27	passed
FEAT-765 Richtext cell editor should focus and go the end of the text when hitting SHIFT + ENTER	**XTC-2612 Shift ENTER in a table cell (TC-295)**	2021/10/13	2021/10/13 08:46:15	passed
FEAT-767 Summarize table columns	**XTC-2615 Create table summaries in custom elements (TC-298)**	2021/10/19	2021/10/20 14:58:36	passed
FEAT-766 Auto show abbreviations and terms used	**XTC-2614 Test legacy options for terms/abbreviations (TC-297)**	2021/10/18	2021/10/18 16:16:42	passed
FEAT-737 QMS module: Ability to use groups for multiple published categories	**XTC-2609 Publication with shared groups (TC-292)**	2021/10/19	2021/10/19 13:49:33	passed
FEAT-752 Improved word template	**XTC-2586 Controlled Documents Customization (TC-41)**	2021/10/12	2021/10/13 11:26:15	passed
FEAT-758 Reversed order "Risks by Zone before control"	**XTC-2600 Risk Zone Test (TC-283)**	2021/10/18	2021/10/20 14:25:15	passed
FEAT-756 Order of published items is same order as in tree	**XTC-2601 Published Item Order (TC-284)**	2021/10/18	2021/10/18 16:37:40	passed
FEAT-761 Doc sections are now visible in the history if collapsed	**XTC-2606 DOC History Test (TC-289)**	2021/10/19	2021/10/19 09:54:10	passed

Item	Tested By	Execution Date	Last Modification	Test Result
FEAT-763 Pending Template Approvals in My Work	**XTC-2593 Dashboard "MyWork" (TC-168)**	2021/10/13	2021/10/21 10:59:19	passed
	XTC-2594 Notification Management (TC-125)	2021/10/18	2021/10/21 11:28:27	passed
FEAT-769 Print Pre Pro processing of mf / generated html	**XTC-2647 Pre Post Processing of Custom Section (TC-301)**	2021/10/24	2021/10/24 11:39:37	passed