

Modern Requirements4DevOps

Modern Requirements4DevOps 2020 Release Notes

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1. Introduction

This document contains the notes for the 2020 release of Modern Requirements4DevOps (MR4DevOps). It describes the key features and enhancements of each module in the Modern Requirements4DevOps application. They include Smart Docs, Smart Note, Alice (BA Assistant), FAQ, Diagram, Mock-up, Use Case, Review management, Trace Analysis, Baseline, Reporting, Smart Reporting and Impact Analysis.

2. System requirements

Software requirements

1. Operating system: Windows 7 or higher, Windows Server 2008 R2 or higher
2. Browser: Internet Explorer 10 or higher, Google Chrome and Mozilla Firefox47.0.1 or higher
3. Screen resolution: 1280x960 or higher
4. IIS 7 or higher
5. Microsoft .NET Framework 4.7.2 or higher
6. ASP.NET 4.5
7. Multilingual support – Language pack for IE & Save as Word

Please note the following:

- Both the 32-bit and 64-bit versions of the operating systems are supported.
- Credentials required for installing Modern Requirements4DevOps should have administrator rights on the computer. In other words, users installing Modern Requirements4DevOps on their machine should use admin credentials (or credentials that include administrator rights) for proper installation.
- For regular team projects, the user of a machine on which Modern Requirements4DevOps is deployed must have administrative rights on TFS Collection (or added in Application Domain in IIS).

Also note that to access GIT-enabled team projects, the logged-in domain user of a machine on which Modern Requirements4DevOps is deployed must have authenticated rights on TFS Collection (or added in the application domain in IIS).

Supported Team Foundation Server

1. Embedded build version
 - *Standard*: TFS 2015 update 2+ and higher
 - *Single Sign-on*: TFS 2017 update 3, 2018 update 1 and higher
2. Standalone build version: TFS 2013 and higher

Supported Microsoft Word versions for Word Import

1. Microsoft Word 2010 or higher (With the .docx file extension)

Hardware requirements

1. At least 12GB of memory is required - more memory is required if executing TFS work item queries greater than 100,000.
2. Hard drive space of 500 MB.

3. Application setup

Refer to the "Modern Requirements4DevOps Installation Guide.docx" for installing the application.

General

1. New Features

1. Rights Management:

Collection/Project Admins can now manage user access to both the modules of Modern Requirements4DevOps, and the features within each module.

Permissions can now be set for both the modules and their features by giving permissions to the predefined Azure DevOps teams or groups that the user is a part of. In order to access these settings, users can select the "Modern Requirements4DevOps" tab from their Project Settings. From this screen, they will be able to set the group and team permissions.

There is currently the ability to set permissions in the "Common Settings" and for Modern Requirements4DevOps modules individually.

The permissions options are as follows:

- i. Create/Edit Folder
- ii. Delete Folder
- iii. Create/Update Artifact
- iv. Delete Artifact
- v. Create/Update Meta Template
- vi. Save as Template
- vii. Smart Reporting
- viii. Report Designer

The "Permissions" tab consists of two panels. The left panel consists of all the Azure DevOps groups and teams of the respective connected project. The right panel consists of "Common Settings" & "Modern Requirements Modules" sections in which the permissions are set for the features of each module.

Currently, Rights Management is supported for three MR modules: Smart Docs, Baseline & Reporting.

Note: Refer to "Modern Requirements4DevOps Rights Management Guide.pdf" for detailed documentation on permissions feature. This guide can be directly accessed from above modules: <Smart Docs/Baseline/Reporting>/Discover/Rights Management.

2. Maintain Folders and Files in Alphabetical Order:

Users can now add folders and files in alphabetical order under the folder explorer providing better usability to all users. All folders and files under root folder or within the folder will be displayed in ascending order A-Z.

3. Improved 'Compare' Pop-up Functionality:

By default, 'Last Approved', 'Last Reviewed' and 'Last Approved/Reviewed' revision numbers of a work item will be shown respectively on top of the list in the 'compare' drop down and will be considered only when a review is closed but not when its state is cancelled or in progress. The other remaining revision(s) of a work item will be shown in descending order (i.e. from latest to oldest). Users can view additional information from the respective work item revision in the 'Review Status' column of the compare drop down.

4. Compare Tab Added Feature - show changes in work item link types:

When using the 'compare' tab, users will now be able to see how a given work item's link types have changed. Users can now see the work item comparison in the 'compare' popup, based on the link types configured in the admin panel.

Users can configure work item link type(s) which should be considered for comparison between work item revisions using the "Consider work item links for comparison" section. The "Consider work item links for comparison" section can be found in the 'General' tab of the Modern Requirements4DevOps admin panel.

2. Tool Enhancements

1. Performance optimized between Modern Requirements modules navigation:

Users will experience better usability and improved overall performance - including faster loading times when accessing various tabs.

2. MR Artifact enhancements – new columns and the ability to sort:

Users can now view "Created By" and "Created Date" of an artifact and can sort artifacts. The sorting options available are to sort in alphabetical order ('A to Z' or 'Z to A') or to sort according to the artifact's creation date ('old to new' or 'new to old'). Users can also view "Work Item ID", "Type" & "Title" in the "MR Artifacts" window. In the "Created By" and "Modified By" columns, the display name of the user will be shown. If a user does not exist on ADO/TFS server or is deleted from there, 'N/A' will be displayed under the "Created By" and "Last Modified By" columns. Also, "MR Artifacts" has been renamed to "Linked Artifacts".

3. Allow special characters in folder and file names:

Users can now use the following standard special characters when creating names for folders and files in Modern Requirements: (`` ~ ! @ # $ % ^ & () - _ = + [] { } ; ' , .`). Users will not be allowed to create folder or file if any invalid character is entered and will be notified with a corresponding message.

Currently, this functionality is only supported in the following modules: Smart Docs, Baseline, Review, Trace Analysis, Smart Report, and Smart Notes.

4. Work item configuration:

When clicking a work item title in Baseline View, Baseline Compare & Review tabs, it will be configurable from Admin panel that either opens the Azure DevOps standard Editor to show

a work item's latest revision or show the corresponding revision of a work item in Baseline/Review at Compare Popup. Users can configure this feature by selecting the "Open compare popup on clicking the work item title" option under the General tab of the admin panel.

5. **Renamed "Show all fields" button in compare pop up:**

'Show all fields' button is renamed to 'All Details'.

6. **UI updates:**

Users will now experience a better user interface throughout the application with updated icons and popups.

3. **Bug fixes**

1. Fixed an issue where invalid navigation was occurring when creating a baseline/review from the backlog view on Teams.
2. Fixed an issue where incorrect "Last Modified Date" was showing in "MR Artifacts" window on embed.
3. Fixed an issue where incorrect "Last Modified By" name was showing in "MR Artifacts" window.
4. Fixed an issue where compare pop up UI disturbed when comparing work item revisions of a work item containing huge numbers.
5. Fixed an issue where users were not able to navigate to the default team page while switching between different teams.
6. Fixed an issue where work items fields were not showing in alphabetical order under work item display fields section in the General tab of admin panel.
7. Fixed an issue where "Error Occurred" text was displayed on 'compare' pop-up instead of showing the work item fields.

Smart Docs

1. New Features

1. Full screen support

Users can now view smart docs in full screen mode in order to have better experience and larger display.

2. Tool Enhancements

1. Inherit parent properties in child work item

By default, the check box to inherit parent work item properties in child work item will be shown 'un-checked' and if no properties are selected from the "Properties Drop-down" then no property will be inherited in the child work item.

2. Right panel UI update

- i. Users can now close the right panel directly through the cross icon available at the top. Users can also expand/collapse the 'find query' area for a better user experience.
- ii. In order to provide better usability and to show more work items, "Add child/sibling" and "Select all/ unselect all" buttons have been removed.

3. Bug fixes

1. Fixed an issue where a hyperlinked work item was not opening in the new tab from Smart Editor.
2. Fixed an issue where after deleting a work item from TFS and opening that work item in Smart Editor, incorrect message was showing. The message has now been updated to "Work item <ID> does not exist on server."
3. Fixed an issue where after renaming a cloned Smart Doc, some issues were produced; new work items were not adding, compare drop down was not showing on creating review from Smart Docs, and the error message "Unable to get versions" showed when switching to the Compare Tab.
4. Fixed an issue that occurred when entering special characters in the title of clone document, error message was cutting down on clone window.
5. Fixed an issue where when importing Word document, 'Until Next' functionality was not working properly in cases where the same heading is applied on two different styles and work items were not mapped at the same level.
6. Fixed an issue that occurred when updating work item titles from Smart Editor using special characters, continuous loading was showing.
7. Fixed an issue where on adding "Recursive" work items in Smart Docs, some work item properties were not showing, '+' sign was not showing on recursive work item, and work item description updated from Standard Editor was showing on the grid after "Refresh".
8. Fixed an issue where links were not creating between root work item and newly added child work item after marking the root from "Ghost Link" to non-ghost and updating the template.
9. Fixed an issue where on horizontally scrolling through the large data in description, the horizontal scroll bar was going to the top on first click.

10. Fixed an issue where when using the default font size and family "Calibri Light 14", text was showing with different font size and family "Segoe UI 12" in Smart Editor and grid.
11. Fixed an issue where extra line space was showing between bullets on the grid whereas no extra space was showing in Smart Editor.
12. Fixed an issue where continuous loading was showing on clicking "Save" when '@' is used in comments on Smart Editor.
13. Fixed an issue where scroll bar was going on top when work items were added through '+', right panel, on drag & dropping work items or on editing the title of any work item.
14. Fixed an issue where file of large size was not uploading in word import.
15. Fixed an issue where on cloning a document, previously deleted work item from TFS was showing as new work item with the title "This work item has been moved or deleted".
16. Fixed an issue where on importing a word document 'Paragraph' tag functionality was not working properly as a result of which, bulleted data was not showing in the description of work item.
17. Fixed an issue where on importing a word document, only bulleted data of work item was showing and the other text was not showing.
18. Fixed an issue where on importing a word document, the table under heading mapped to work item define in rule set was also mapping to heading's work item description field.

Review Management

1. New Features

1. Read-only rights to non-participants of review

Users who are not a participant of a review, i.e. they are neither approver nor reviewer, can now view review details in read-only mode. This can be configured from the admin panel.

2. Bulk Review(s) Data migration

Users can migrate all legacy reviews of a project to new approach which were created using previous approach either in bulk or project wise from admin panel.

3. Bulk generation of review Audit Reports

Users can generate Audit Reports of all reviews in a project at once in bulk or project wise from admin panel.

Additionally, users can now view the review fields in generated Audit Reports after migration which were not supported in legacy reviews mentioned below:

- Created by Initiator
- End on
- Name and Response Date/Time in Decision table

2. Tool Enhancements

2. Alternate Credentials replaced with Personal Access Token (PAT):

With 'Alternate credentials' being made obsolete by Microsoft, users must now use 'Personal Access Token' when doing an approval of a work item in the Review module. This will be seen when a user is prompted with an 'Authentication Required' pop-up after trying to Approve or Reject a work item.

3. Review Auto-Close

Review will auto-close as soon as either all responses have been completed on all work items and conditions have been met, or when the due date expires.

On closing, an auto-comment is added to the Feedback Request work item to notify users that the review has been auto-closed.

Users can configure this feature by using the 'Show Auto-close review' and 'Check Auto-close review' options from the Modern Requirements admin panel. When the option 'Check Auto-close review' is unchecked, the review will not close automatically on due date expiry, even when the conditions are met. The review can only be closed manually by the initiator. Additionally, audit reports will generate and attach automatically in Feedback request work item when the review gets auto-closed.

4. Review Due Date

Users can now set default due date of a review and set permissions whether this default date is editable or visible when creating review.

In addition, you can now allow the extending and removing of a review's due date. This option is available in the 'Review' tab of the Modern Requirements admin panel.

When extending due date, a comment is added in the Feedback Request work item. In addition, users can also extend the due date of an auto-closed review.

5. Review Audit Reports

Along with MS word format, users can now generate audit reports in PDF format as well. Users can configure this option by selecting the option for 'MS Word' or 'PDF' from the 'Review' tab of the Modern Requirements admin panel.

Previously, if a response was not provided for a work item during the review, then only the table header would be shown in the created audit reports. In order to make this less misleading, if data does not exist in a table, <N/A> will be written in empty rows.

For better understanding, label is changed for 'Start on' and 'End on' fields to 'Start on (UTC)' and 'End on (UTC)' respectively in Review results report and Approval audit reports.

All auto-comments will now be included in the 'Review Details' section of audit reports stated below:

- Stakeholder marks 'Review Completed'
- Review Closed Manually
- Review Auto-Close (when conditions meet)
- Review Auto-Close (when Due Date expire)
- Review Due Date extended by initiator

6. Auto-Comments

i. Expired Review:

When a review gets expired, a comment is added to the Feedback Request work item to notify users that the review has been expired.

ii. Closed Review:

When manually closing review, a comment is added to the Feedback Request work item to notify users that the review has been closed.

3. Bug fixes

1. Fixed an issue where reviews created from Smart Doc was showing incorrect numbered hierarchy.
2. Fixed an issue where review initiator was getting an error message when review opened from email link or navigating to other team from team drop down.
3. Fixed an issue where due date expiry reminder email was not sending to review initiator.
4. Fixed an issue where 'Decision' field in audit report does not show latest review action when review is approved/rejected again.
5. Fixed an issue where unknown text gets visible in review work item title when using special character '>' in work item title.

6. Fixed an issue where audit reports did not get attached on feedback request work item when review gets closed automatically on expiration.
7. Fixed an issue where 'Comment' field in 'Approval Details' section of audit reports was not showing column details. This issue occurred when copying text from MS Excel and pasting it to subject and purpose field of review request pop-up.
8. Fixed an issue where review ID, title and response count were missing in legacy audit report.
9. Fixed an issue where UI disturbed when clicking on user, tagged in response comment.
10. Fixed an issue where 'Failed to get work item' error was showing in review 'Smart doc view' tab when creating a review from it having a duplicate work item.
11. Fixed an issue where on opening an audit report an error was showing. This issue occurred when formatting is applied in purpose field while initiating a review consisting of 10,000 work items.
12. Fixed an issue where Approved/Rejected icon not showing beside the work item title when approve/reject all work items except one from smart docs view tab and approving/rejecting remaining work item from review tab.
13. Fixed an issue where different Date/Time format was displaying in an audit report.
14. Fixed an issue where review fields and data not showing when user login with Stake holder License.
15. Fixed an issue where work item was linked to respective Feedback Request work item in 'Linked Work items' section of audit reports (cyclic reference).
16. Fixed an issue where incorrect name and date time is showing under 'Decision' table in those audit reports whose reviews migrated from a non-participant user.
17. Fixed an issue where for legacy review wrong username was showing in review 'Details' tab right panel of an auto-comment when review was manually closed.
18. Fixed an issue where review title was showing in review initiator name field in the audit reports.

Smart Report

1. Tool Enhancements

1. Upload Macro-Enabled Word template:

Users can now upload and execute Macro-Enabled Word document (.docm) as well as Macro-Enabled Word Template (.dotm) files in Smart Report through "Upload word template" in Smart report.

2. Retain selection of last Uploaded Word template:

Modern Requirements4DevOps now allows users to view their last selected uploaded Word template on reopening the "Upload word template" popup.

3. Retain selection of last Smart Part:

Modern Requirements4DevOps now allows users to view their last selected Smart Part when reopening the Smart Report window. Moreover, if users switch from designer tab to report tab and select any other smart part, the same smart part will be shown selected in the designer tab to minimize unnecessary selections.

2. Bug fixes

1. Fixed an issue where empty space was showing when users scroll down in the designer tab.
2. Fixed an issue where 'One or more error occurred' message was showing when generating a smart report from smart docs view containing duplicate work item.
3. Fixed an issue where 'Sort by' was not working when section type is form/table and work item type is set to 'Any' with hierarchy marked as checked.

Baseline

1. New Features

1. Retain work item selection on tab switching:

Modern Requirements4DevOps now allows users to remember the last work item selection when switching between different tabs within the baseline module.

If a user navigates between view tab and compare tab, or compare tab to details tab, or vice versa, it remembers the last selected work item in the grid. Users can also get the latest changes by clicking the refresh button provided at the tool bar on the compare tab.

2. Tool Enhancements

1. View proper comparison ID on Baseline comparison:

Users can now view work item revisions only where work items exist within both baselines being compared. If a work item doesn't exist in one of the baselines, no revision ID will be displayed, instead "-" will be displayed in Rev.ID or Comp.Rev.ID column and in the difference report.

3. Bug fixes

1. Fixed an issue where difference report was showing "no change" status as compared to the "change" status shown on the grid on adding tag field in the work item.
2. Fixed an issue where difference report was showing unnecessary change in test case steps while only changing any other work item property.
3. Fixed an issue where difference report was showing "Deleted" status instead of showing "added" status according to the grid.
4. Fixed an issue where deleted work item was showing twice in difference report.
5. Fixed an issue where "work item type" along with work item ID was not showing in difference report if comparison status is added/removed.
6. Fixed an issue where on doing Merge baseline failed if done from project to team.
7. Fixed an issue where copy baseline was showing some error when doing copy baseline from team to project.
8. Fixed an issue where links were not showing on compare pop up due to the time zone difference on local VM and Azure DevOps.
9. Fixed an issue where "null" value was displaying under the following work item fields: 'ID', 'Title', 'Revision ID', 'Compare Revision ID' when comparing two baselines and apply sorting on field column.
10. Fixed an issue where invalid comparison result was showing in baseline difference report when first work item is edited and last work item is deleted from the created baseline.
11. Fixed an issue where links were not showing on compare pop-up when links were added on the same revision id after creating baseline.

Smart Note

1. Bug fixes

1. Fixed an issue where PDF file was not displaying properly in full screen mode.
2. [Mozilla Firefox] Fixed an issue where close button was not showing properly in "Insert Hyperlink" and "Insert image" window.
3. Fixed an issue where container was also deleting from the editor when text was selected and deleted through "Delete" key.
4. Fixed an issue where "Insert Table" button was showing enabled when focus was on the image on the editor.
5. [IE] Fixed an issue where selection was lost after inserting any type of file is inserted on the editor through the "Attach file" option on the tool bar.
6. Fixed an issue where same size table was not inserting properly within the same table.
7. Fixed an issue where images were not adding on the editor in the same sequence in which they were applied and spacing was also disturbed when multiple images are added on the editor.
8. Fixed an issue where cursor position was disturbed due to which the order of the multiple files added was also disturbed.
9. Fixed an issue where "Cut", "Copy", and "Delete" options were showing enabled in case of an empty editor.
10. Fixed an issue where copied tags were not pasting from one place to another on the editor.
11. Fixed an issue where text selection was lost on selecting "Cut", "Copy" or "Paste" option from toolbar and clicking on "OK" on the "Use Shortcut Keys" pop-up.
12. Fixed an issue where "Add to Library" was showing enabled and last added image was adding when no image is searched from "Web Search".
13. [IE 11] Fixed an issue where "Out dent" was not applying on the selected text.
14. [Edge] Fixed an issue where on adding the hyperlink within a table, it was not navigating to the respective web address on clicking the hyperlink.
15. Fixed an issue where on applying bullets to multiple line text and then selecting "Cut" from toolbar, one bullet was still showing on the editor.
16. Fixed an issue where "CTRL+A" functionality was not applying on the text in the editor.

Trace Analysis

1. Bug Fixes

1. Fixed an issue, where query name was showing instead of work item type in Show details pop-up while selecting "Multi Query" in the horizontal matrix.
2. Fixed an issue where work items were not showing in Horizontal Matrix from Query containing "In" operator in team project field.

Diagram

1. Tool Enhancements

1. Drill down options in context menu:

Users can now perform edits, change links, and break links on any drill down shape through the context menu.

2. Bug fixes

1. Fixed an issue where connectors were lost on connecting shapes manually in a swim lane diagram while switching between diagram and analysis tab.
2. Fixed an issue where resizing shape was not working if done more than once inside a swim lane diagram.
3. Fixed an issue where switching to analysis tab from diagram tab was very slow on inserting BPMN shapes in a swim lane diagram.
4. Fixed an issue where file name was showing instead of shape name on applying drilled down functionality.
5. Fixed an issue where locking was also applying to attribute if only applied on entity through property pop-up.
6. Fixed an issue where sentence inside a shape was not wrapping in a swim lane diagram.
7. Fixed an issue where proper message was not showing on creating a diagram file mapped to a work item with mandatory field.

Simulation

1. Bug fixes

1. Fixed an issue where controls and text were distorted while doing save as image.
2. Fixed an issue where users were unable to set table height while using table control.
3. Fixed an issue where proper message was not showing on creating a mockup file mapped to a work item with mandatory field.
4. Fixed an issue where continuous loading occurred on creating a request feedback from simulation mock-up file.

Use Case

1. Bug fixes

1. Fixed an issue where on creating use case file first and then mockup file and navigating back to the use case file, continuous loading appearing on doing file check-in.
2. Fixed an issue where "revert changes" functionality was not working after making changes in the use case diagram.
3. Fixed an issue where delete button was showing disabled after applying merge, smart tag and branch functionality.
4. Fixed an issue where proper message was not showing on creating a use case file mapped to a work item with mandatory field.

Impact Analyzer

1. Bug fixes

1. Fixed an issue where user was unable to delete or add any new/existing linked work items.

Licensing

1. New Features

1. Support for node-lock license:

Users can now activate their MR4DevOps license using a closed network that can work without any external access. This is a web based interface that allows MR to generate unique activation key for on-prem node locked license. It supports user management, login window and activity log.

MR Agent

1. New Features

1. MATCAL:

MR MatCal is a component of MR Agent that is used to perform/execute mathematical expressions on work item(s) field(s) and reflect its output on defined field(s) of same work item. The MatCal allows user to define nested expressions for calculation as well in which output of one expression could be input for another.

Appendix A: Hardware Requirements for Redis

According to Modern Requirements4DevOps, approximate memory usage per user is 477.8495 KB (0.4666 MB). Maximum hard drive space required is $1.5 * (\text{memory size})$. For instance, in case of an 8 GB RAM, the maximum hard drive space occupied by Redis would be 12 GB.