

IBM® Rational® DOORS® Requirements Management Framework Add-on 6.1

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Some previous versions of this product were delivered by Telelogic as an Asset named DOORS T-REK.

Any installed version of DOORS T-REK or previous version of IBM® Rational® DOORS® Requirements Management Framework Add-on must be uninstalled before installing IBM® Rational® DOORS® Requirements Management Framework Add-on 6.1.

Whenever RCM was used, please remove all the RCM triggers before uninstalling DOORS T-REK.

The FLEXLM feature required to execute IRDRMFAO is different from the DOORS T-REK license feature. The new feature is “IRDRMFAO” (instead of “DTREK”).

Compatibility

- This version is compatible with DOORS 9.1 , DOORS 9.2, DOORS 9.3 and DOORS 9.4.
- It is also compatible with the different versions of DOORS WEB ACCESS.
- This version is compatible with Office 2000, Office XP, Office 2003, Office 2007 and Office 2010.

Enhancements implemented in RMF 6.1

1) PFM (Product Family Management)

PFM is a solution to manage requirements in a Product Line Engineering context. PFM enables to create a generic definition of a product (or system) with optional parts, alternatives and configurable requirements, and then to derive the actual products (or systems) from it.

PFM also manages parallel developments and synchronization between the generic definition of the product and the actual products.

This version includes the following enhancements :

- Formal Change management over configurable requirements
 - Parameters can optionally be under change control
 - The modification requiring a Change Request are :
 - creation,
 - deletion,
 - modification of the name, value or unit
 - The change requests used must be accepted (or rejected) before a package version can be baselined.

- Business logic exceptions
 - Some consistency check errors can now be discarded by creating exceptions for more flexibility :

<i>Type</i>	<i>Property</i>	<i>message</i>
Criterion	Contraint	"violated constraint"
Criteria set	Mandatory ?	"at least one criterion must be selected"
	Multi-valued ?	"at most one criterion can be selected"
Parameter	Values	"<value> is not a valid value for the parameter <name> because the condition of the range <range> is not true"

- Those exceptions are duly managed:
 - the person, date, rationale, error description are recorded
 - exceptions are automatically deleted whenever the related errors disappear
- Reporting the differences between configurations
 - Creates a report showing the differences between two configurations or more
 - The result of the comparison is a MS Excel report, displaying:
 - The objects that are used in one configuration and not the other(s), and
 - a matrix showing (for all the configurations)
 - the status of the criteria, and
 - the value of the parameters
 - Some metrics (number of RMF objects per type in each module of each package)
- Renaming tool
 - As modules can contain references to Criteria and Parameters, PFM now offers to update those references whenever a Criterion or a Parameter is renamed
 - scans the modules that may contains references
 - displays a report listing all the references found, that can be exported to MS Excel.
 - optionally updates the references. At the end, the report displays a status for each reference, with an error message if the update failed.
- new command “Edit > Move” in the PFM Browser enabling to move items from one package version to another easily :
 - criteria

- criteria sets (new)
- parameters
- Performances
 - PFM browser :
 - the PFM browser starts up faster when many data are loaded
 - the window comparing two configurations is displayed faster when many data are displayed
 - for performance reason, parameters are no longer displayed in the treeview but only in the right list when selecting the node "Parameters". The 'Properties' window must be opened to display all the properties of the selected parameter.
 - when modifying parameters from outside the PFM browser (using the PFM info GUI), the changes are saved faster.

2) RCM

- When entering in edition mode, RCM now warns that the modification of a semantic attribute will be rejected only if the user has double-clicked a column that actually displays a semantic attribute.
NB: You need to delete and recreate the RCM triggers to benefit from this improvement
- In the previous versions, only semantic links could be suspect. It is now possible to define links in the Project Profile so that they are not semantic but can be suspect though. (Please refer to the user manual §7.3.4 "Add a new relationship" for more details)

Corrections implemented in RMF 6.1

Component	APAR	Description
Dashboard		A DXL error may occur in the file dashboard/layout/statusAlarm.dxl at line 58 using RMF 6.0.0.4 when displaying a view that shows alarms. A workaround consists in running the command "Configure Dashboard" once.
		At the end of an export, Excel is sometimes not refreshed.
		The computation of a metric of type "Evolution" may be incorrect if the ending date is not specified.
DOC		The script "Generate doc history" is not restricted to master modules any more.
		An error may occur when clicking the "Module Parameters" button in the "Generate" window : -R-E- DXL: <addins/irdrmfao/plm/gui/DocWexplnit.inc:1156> null Module

		parameter was passed into argument position 1
Exchange		An error may occur when importing a module with readonly access rights : addins\irdrmfao/startup/exchange/xmldefs.inc:2469> An unexpected error has occurred
PFM		When a new configuration is created, the value of its parameters is empty. They should be equal to those of the previous version instead.
RCM		Changing the status of a Change Request to "Cancelled" fails if at least one impacted object is not composite (has no descendants) with the following error : "addins\irdrmfao\startup\rcm\rcmimpact.inc:977
		When changing the status of a CR to "Cancelled", RCM should check also if the descendants of the impacted object have incoming links and display an error message easier to understand if so.
		When a non-privilege user run the command "set to be reviewed" in "manage CR" and does not confirm the action, then the CR is left open in edit mode and not visible.
		When changing the status of a CR check if the CR has been opened in exclusive edit mode successfully.
		To change the status of a CR from "to be reviewed" to "in progress", the "CR manager" role is sufficient: do not require the "RCM admin" as well.
		When changing the status of a CR from "in progress" to "to be reviewed", do not open the impacted modules (in exclusive edit mode) as it is useless.
		When changing the status of a CR, if an impacted modules cannot be opened in exclusive edit mode, do not display an error message for as many times as there are impacted objects, but only once.
		When changing the status of a CR, make sure first that the impacted modules and the CR are not modified so that they can be closed down to abort the transaction should an error occur. If such a module is modified, let the user decide wether saving it or aborting.
		When an error occur while changing the status of a CR, close down all the modified modules without saving in all cases.
		Whenever the status of a CR has changed in another session, RCM may not be aware of it and therefore may not prevent a user from modifying an object whose CR is now "to be reviewed" for instance.
		The RCM check may fail with a DXL error message "null LockRef".
		Let CR modules be resilient to a change in the name of the impacted modules to prevent error when displaying view "11. Delta highlights".
		The code of the RCM triggers can now be edited. It is available in the file startup/usercallout/rcmusercallouts.inc.
		If the user double-clicks a column displaying a semantic attribute (not the main column) and a new version is created, then the value of the semantic attribute is reset for the new version. The RCM triggers need to be deleted and recreated to fix this issue.
WEXP		The UI "Manage WEXP jobs" now displays detailed information

		about the jobs that are inconsistent and allow to delete them instead of simply displaying the error "Some errors occurs when extracting data on waiting/in progress/completed jobs".
		When the export is sent to the spooler, WEXP should close the process winword.exe spawned when starting up WEXP.

Known limitations

- Explorer
 - The explorer is not able to manage a RMF project with too many items inside. The display of projects with more than 500 items will take too many time and memory resources. To cope with this limitation in the context of big projects, you should use the Scope concept to limit the size of the Explorer database, according to the part of the project you want to display.
 - The object graph view may need a large amount of memory and time resources to be processed. You should use this feature only after having filtered the visible items to limit the number of objects to process.
 - The explorer is not dynamically refreshed when database modifications (item creation, deletion, renaming, moving) are done outside of the tool.

- Exchange
 - The XML format processing used by Exchange is not very efficient because of the use of DXL script programming and not compiled code. The import operation may take a lot of time and memory resources to process the dataset. For example, the processing of 5000 objects to import will take several hours.

- Word generation
 - Because of the architecture of the DOORS to Word generation operation, that needs an instance of Word to process the data, the export of large amount of data may take a lot of time and resources. The amount of resources used is also dependent of the used formats. In case of memory or time limit, you should process incrementally by exporting several smaller dataset.

- RCM
 - You should avoid putting under RCM control too many modules within the same operation, because this operation may use a lot of memory. 10 modules should be a maximum, except if you can test before that you may supersede this limit without any trouble.
 - RCM is not able to control table elements (tables, rows, columns or cells), even in “All objects” mode. The only supported case is when a table is a part of a composite RMF object.
 - RCM is not able to control heading objects, even in “All objects” mode or if embedding of RMF objects is allowed.

- PFM
 - When creating an insulated package version, the inner traceability links (as opposed to the links with other packages) may be recorded in the same link modules (instead of a copy located in the new workspace) if those link modules are not located in the hierarchy of the package version
 - Merge
 - Contextual attributes are not handled
 - Child objects (of composite objects) are not handled