# IBM® Rational® DOORS® Requirements Management Framework Add-on 6.0.0.1

## Release notes

### **Compatibility Table**

	DOORS				MS WORD						
	v 8.3	V 9.0	V 9.1	V 9.2	V 9.3	W97	W2000	W XP	W2003	W2007	W2010
IRDRMFAO 6.0	Х	Х	Х	Х			Х	Х	Х	Х	
IRDRMFAO 6.0.0.1	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х

# IBM® Rational® DOORS® Requirements Management Framework Add-on 6.0.0.1

December 17<sup>th</sup>, 2010

Some previous versions of this product were delivered by Telelogic as a PS Asset named DOORS T-REK. <u>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 6.0.0.1.</u>

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 8.3, DOORS 9.0, DOORS 9.1, DOORS 9.2 and DOORS 9.3 (new).
- 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 (new).

Because of the new encryption used since DOORS 9.1, two different setup programs are provided:

- ratlDOORS\_RequirementsFrmwork\_6-0-0-1\_setup83\_90.exe: for DOORS 8.3 and DOORS 9.0
- ratlDOORS RequirementsFrmwork 6-0-0-1.exe: for DOORS 9.1 up to 9.3

#### **Enhancements implemented in RMF 6.0**

#### 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 derive the actual products (or systems) from it.

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

This version includes the following functionalities:

- Manage a product line
  - Ability to create
    - Generic packages and sub-packages
    - Private/shared/public criteria

- Sets of criteria
- Private/shared/public parameters
- o Reorganize the product line
  - Move packages and sub-packages
  - Move criteria and parameters from one (version of) package to another
- Baseline configurations
  - Integration with DOC
- o (Compare and) Synchronize configurations
  - Add/remove/modify criteria and parameters
  - Apply Change Requests created in a configuration into another configuration
  - Merge the parallel versions of requirements that may have resulted from a synchronisation
- Write generic specifications
  - o Either under RCM control or not
  - Specify configurable requirements with parameter(s) either defined locally (in the object itself) or at the package level.
  - Attach applicability conditions to individual requirements or whole chapters
- Miscellaneous
  - o Dashboard integration
  - o WEXP integration

#### 2) DOORS 8.2 and DOORS 9 enhancements

All the view configuration options added by DOORS 8.2 and DOORS 9 are now supported. This includes:

- Main column autoindent
- Module explorer filtering
- Discussion columns
- Description of attributes and views

The generic model and the example project are now delivered in two different versions, one for DOORS 8 and the other for DOORS 9. For example the DOORS 9 example includes the RMF default data model descriptions for attributes and views. Some view names in the templates have been renamed to be more consistent. A script is also provided in the "Misc" folder to allow people to write their own descriptions and to add it into the existing DOORS data.

#### 3) Menus

RMF 6.0 provides a means to easily disable and hide the functionalities that are unused in each project independently.

The functionalities that can be disabled and hidden are:

- RCM,
- PFM,
- DOC
- WEXP
- CHECK (of Integrity)
- Dashboard
- Exchange

These settings are done in the configuration of the project, in a new tab named "VISIBILITY". Each functionality can have one status out of the following 3:

• **Show**: The functionality is visible, provided the current user has the

required role and is in the relevant context

• **Hide**: The functionality is hidden

• **Default**: The functionality is visible unless another equivalent tool is

installed (e.g. WEXP is disabled if RPE is installed)

The whole logic is implemented into non encrypted DXL files, allowing users to redefine this behaviour.

For instance the way the status "Default" is handled is implemented in the new file: \$TREKHOME/lib/dxl/addins/irdrmfao/startup/usercallouts/fctusercallouts.inc

#### 4) Explorer

Some menu evolutions have been done, to increase the ergonomy of the tool. A new capability has been added: the explorer is able now to be dynamically synchronised with DOORS, without having to stop and restart it. The operation "Refresh project content" is able to update all Explorer project data.

#### Corrections implemented in RMF 6.0.0.1 (as compared to RMF 6.0)

Component	CR	Description
RCM	972	Error when assigning a CR to a user that belongs to the group of CR managers: ERROR: Cannot modify the access rights of 'CR': The user 'admin TREK' doesn't have control access
Dashboard	980	Updates and exports fail in batch
Dashboard	982	The scope of a metric may not be recorded properly
RCM triggers	984	the RCM object trigger should prevent from creating a new version if the module is not set up for PFM
Module synchronization	985	while synchronizing a view the justification of the columns is ignored
Convert rows to Objects	986	Running "RMF/Convert rows to Objects" with the option "Delete table after conversion" enabled, generates a runtime error in DOORS 9.2.0.4

Configure module	1004	cannot modify the list of the rules to be checked	
Startup	1003	RPE fails to open a DOORS session if RMF is installed	
WEXP	1002	when exporting using the current filter some objects may not be exported (the one that would not have been visible if the filter of the view had been used instead)	
Project upgrade	1001	error while upgrading a project from TREK 5.2 (or earlier) to RMF: "invalid default value 'RMF Objects' for attribute 'RCM Control Mode'"	
PFM	1000	Ability to add user-defined commands into the PFM browser (in the 'tools' menu)	
PFM	999	the value of a contextual attribute of type 'text' may be altered	
WEXP	998	When using MS Word 2000, isolated OLE are magnified by 33%	
PFM	997	the PFM setup should be able to convert the DXL columns created by the traceability wizard	
RCM	996	add a new group of users allowed to create Change Requests (but not to review and manage them)	
RCM	995	add a new status "to be reviewed" in the lifecycle of a Change Request	
PFM / PFM information window	994	editing or creating a parameter with the 'PFM information' window makes the window of the current formal module stay on top of all the other DOORS windows	
Exchange	993	deleted objects cannot be moved during an import (ERROR: Cannot move object xxx after/below object YYY)	
WEXP	992	when exporting a document with a PFM filter, WEXP records in a custom property of the generated MS Word document the name of the selected PFM configuration (this property is named "PFM Configuration" and it is created if needed)	
Manage Objects	991	a DXL error "Canvas not realized" may occur on DOORS 9.2.0.2 (and over) if PFM is used	
PFM / Insert DXL column	990	the 'insert DXL column' command shall take into account the limit to 32 columns only in a view	
PFM	989	if PFM is ON, when displaying a traceability column, you may get a RCM message "ERROR ASSERTION FAILED: the configuration () is not available in descriptor () at"	
Project Configuration	988	The Project Configuration may crash if it is run in a row just after upgrading the project	

Explorer	1005	DXL error when selecting a view in the "Model" tab (on the left) and then running the command "Edit item in Profile"	
Configure module	1006	1) grey out the RCM option "Repair out-link modification of an object in reference" if "Change control mode"="not formal authorized" (also implemented in the dialog box 'configure project') 2) close the dialog box if the user closes the module 3) enable to open the dialog box even if the module is not in exclusive edit mode, but disable the dialog box if so	
WEXP	1007	WEXP does not export the text "A = B << 5 and C>>2" correctly, it renders "A = B 2" except if the usercallout "usercallout_executePostProcessModAttrs" is modified to return false (in the file wexp/include/usercallouts.inc)	
WEXP	1009	WEXP: the text exported using object templates may be truncated (if it contains line breaks and the option "Treat line breaks in Object Text as new paragraphs" is not equal to "Always")	
RCM suspect links	1013	display the text of the child objects of the current and proposed targets	
WEXP	1014	the references to module attributes < <attr>&gt;&gt; located in headers or footers are not correctly processed if the option "Do not strip unsupported RTF markers before copy/paste" is ON and the option "Treat line breaks in Object Text as new para" is not equal to "Always"</attr>	
WEXP	1015	MS Word may hang when processing an inserted view in RTF format if the option "Do not strip unsupported RTF markers before copy/paste" is enabled	
Silent uninstallation	1016	some files are not removed while uninstalling RMF in silent mode (among which the uninstall EXE file and the files named 'irdrmfao.dxl' located in the HOME directory of DOORS)	
RCM close trigger	1018	if a controlled module is closed while editing in place an attribute, the modification is saved without confirmation message and the module is closed	
RCM	1020	when creating a new object version, the previous one should not remain selected	

#### **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.
- o RCM is not able to control table elements (tables, rows, columns or cells), even in "All objects" mode. The only supported case if when a table is a part of a composite RMF object.
- o 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
- o Merge
  - Contextual attributes are not handled
  - Child objects (of composite objects) are not handled