# IBM® Rational® DOORS® Requirements Management Framework Add-on 6.0

# **Release notes**

# **Compatibility Table**

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

# IBM® Rational® DOORS® Requirements Management Framework Add-on 6.0

July 16<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</u> <u>version of IBM® Rational® DOORS® Requirements Management Framework</u> <u>Add-on must be uninstalled before installing IBM® Rational® DOORS®</u>

Requirements Management Framework Add-on 6.0.

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

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

- ratlDOORS\_RequirementsFrmwork\_6-0\_setup83\_90.exe: for DOORS 8.3 and DOORS 9.0
- ratlDOORS\_RequirementsFrmwork\_6-0.exe: for DOORS 9.1 and DOORS 9.2

### Enhancements

## 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
- 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
  - (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
  - 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

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- Dashboard integration
- 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. <u>WEXP is disabled if RPE is installed</u>)

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**

Component	CR	Description
Module Create/Tag, Compare/Transfer	<u>907</u>	To avoid for the user to always have to close the log dialog box, a new option has been added allowing to close automatically the log dialog box when no error have been recorded during attribute and view definition creation or update.
RCM / Manage Objects, Select current CR	<u>909</u>	when clicking the "select CR" button, only the CR(s) that can be used with the current module should be displayed
Module Create/Tag, Compare/Transfer	<u>944</u>	Take into account the new display functionalities provided by the latest DOORS versions (discussions, indents in the main column, apply filtering to explorer,

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		ability to set a description to attributes,) The attribute of the generic project models are now documented.
Document Generation, WEXP	<u>945</u>	A regression has been detected. When an object template contains a table, an empty paragraph is added by the generation before the table. This has been corrected.
RCM Suspect Links, Explorer, Integrity Check	<u>946</u>	Objects with suspect links are not displayed if the PUID contains a character /. To be able to display the PUID in a DOORS TreeView, the / is replaced by a \ in the GUI. The same defect and correction is applicable to the Explorer Object Graph and to the Integrity Check GUI.
RCM, Suspect Links	<u>947</u>	The RCM suspect links detection is not operating on working objects. This anomaly has been corrected.
Word Importer	<u>948</u>	A VB exception is fired when using the option "Extract Words from OLE" with Word 2007.
WEXP	<u>949</u>	An error occurs when starting the Word generation on a non initialized module. The cause was a non protected access to an attribute. The defect has been corrected
RCM, Change Request	<u>951</u>	Accepting a Change Request when the impacted modules are opened in sharable mode may raise an anomaly; leaving the data in an inconsistent state. The defect has been corrected.
RCM, Close Trigger	<u>952</u>	Trying to close a baseline if the current module is till opened generates an infinite loop of close triggers. The reason was that the <i>module(Trigger)</i> dxl primitive always return the current module, not the baseline. This anomaly has been closed by using another primitive.
Dashboard	<u>953</u>	An anomaly has been detected when a module included into a dashboard scope is opened with showAncestors option turned on or has this option in the default view. The dashboard mechanism has been modified to avoid this problem.
Dashboard	<u>954</u>	When modifying dashboard scopes, the deleted objects corresponding to items removed from the scope are still taken into account when computing folders and projects values. This defect has been corrected.
Dashboard	<u>955</u>	The performance of the dashboard was very poor in case of RCM module, and if the number of metrics is high. The performance has been improved by optimizing the object scope mechanism and allowing reuse of scopes between different metrics.
Dashboard	<u>956</u>	The dashboard object scope GUI is too restrictive when working with metrics associated with "Any Module" or "Any RMF" types. This defect has been corrected. You can now enter any attribute name without any control.

(enhancement)		maximum exploration depth when building an object graph from an selected object
RCM, Manage Object	<u>958</u>	The Select CR operation from Manage Object was not able to differentiate two CRs associated with two modules in the same folder with similar names ("SSS" and "SSS2" for example). This defect has been corrected.
Exchange	971	On DOORS 8.3, importing with RMF Exchange a module with more than 500 links originating from one object fire an exception "stack overflow" and the operation is stopped. The problem has been solved by writing a more optimized code in the import operation.
WEXP, spooler	973	The export mode "As Book / As Table" selected in the GUI is not taken into transferred to the spooler, and only the default mode (As Book) was possible in batch mode. This option is now taken into account in interactive and batch mode.
Exchange	974	When using the option "move existing objects according source" on RMF 5.4.0.3 and all previous versions in Exchange import operation, the reorganization of the updated module structure may fail with a DXL error message display. The reorganization algorithm has been corrected to suppress this error.
RCM filtering	977	a DOC configuration whose version number would contain a "." in the suffix would not be displayed

### 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 if 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
  - o Merge
    - Contextual attributes are not handled
    - Child objects (of composite objects) are not handled