

# 07 Requirements Management Hands on

IBM Rational DOORS NG as a tool example

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Requirements Engineering  
ICT Doctoral School – 2015

# Outline

- 1 Basics
- 2 Traceability links
- 3 Evolve requirements
- 4 Way More Stuff

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  - *Vertical: inter-phase (e.g. requirement to test case)*

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## Traceability at the heart of evolution support:

- Link types: revision, variant, derivation, etc.
- Representations: hyperlinks, matrices, etc.
- Preferably pro-active: inform impacted people to take decisions

# Quick introduction to DOORS NG


IBM® Rational® DOORS® Next Generation

- Web-based requirements management tool

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<sup>1</sup><https://www.ibm.com/developerworks/downloads/r/rrp/>

<sup>2</sup><http://www-03.ibm.com/software/products/en/ratidoor>

<sup>3</sup><http://www-03.ibm.com/software/products/en/ratidoorng> 

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- 1 RequisitePro<sup>1</sup> (full, but 15 days trial)
  - 2 DOORS<sup>2</sup> (90 days trial, but install and not Mac)
  - 3 DOORS NG<sup>3</sup> (60 days trial, no install... but not full)

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<sup>2</sup><http://www-03.ibm.com/software/products/en/ratidoor>

<sup>3</sup><http://www-03.ibm.com/software/products/en/ratidoorng> 

# Quick introduction to DOORS NG

## Main interface:

The screenshot displays the main interface of DOORS NG, titled "Tableau de bord de Matthieu Vergne". The interface is organized into several sections:

- Header:** Includes the user name "Matthieu Vergne" and a search bar for "Personal Dashboards".
- Welcome Message:** A green banner with a checkmark icon stating: "Welcome to your newly created default personal dashboard. You can opt to replace this default with a dashboard from a template of your choice." Below this is a button labeled "Create Personal Dashboard from Template".
- Dashboard Title:** "Tableau de bord de Matthieu Vergne" with an "Auto-save" indicator and an "Add Widget" button.
- General Tab:** A dropdown menu currently set to "General".
- Blenvue Widget:** A yellow widget providing information about applications and navigation features. It includes a "welcome" page link and a video link titled "Access and Manage Your Work video".
- Personnalisation de votre tableau de bord:** A white widget with three numbered steps:
  - Add new widgets:** Using the "Add Widget" button in the upper right corner.
  - Drag widgets:** Moving widgets to different locations or copying them to other dashboards.
  - Add new tabs:** Organizing groups of widgets using the "Add New Tab" button.
- Mes projets (3):** A white widget listing project categories:
  - Change and Configuration Management (icm) (1):** Includes "vergne@fbk.eu Change" and "All Projects".
  - Design Management (idm) (0):** Includes "All Projects".
  - Quality Management (iqm) (1):** Includes "vergne@fbk.eu Testing" and "All Projects".
  - Requirements Management (irm) (1):** Includes "vergne@fbk.eu Requirements" and "All Projects".

The bottom of the interface shows the "CloudOne, 2014" logo and a set of navigation icons.

# Quick introduction to DOORS NG

## Artifacts interface<sup>1</sup>:

The screenshot shows the DOORS NG Artifacts interface. Key components are annotated with orange boxes:

- Project banner:** Located at the top, it displays the project name "Automated Meter Reader (Water) (Requirements Management)" and the user ID "JFSAdmin".
- Navigation menu:** Located below the project banner, it includes options like "Project Dashboard", "Artifacts", "Collections", "Modules", and "Reports".
- Current level (project) title bar:** A bar above the main table indicating the current filter level.
- Left sidebar:** A tree view on the left showing a folder hierarchy. The "01 Requirements" folder is selected, and its sub-items are visible.
- Content:** The main table displays artifacts matching the current filter. The table has columns for ID, Name, Artifact Type, Modified By, and Modified On.
 

ID	Name	Artifact Type	Modified By	Modified On
13242	AMR Hazards and Risks	Register	Jianoula Papadakis Kantos	Jul 8, 2014, 11:15:04 AM
13407	Requirements for Reuse	Requirements Specification	Jianoula Papadakis Kantos	Jul 8, 2014, 11:19:16 AM
13489	AMR Stakeholder Requirements Specification	Stakeholder Specification	Jianoula Papadakis Kantos	Jul 8, 2014, 11:21:06 AM
13557	AMR System Requirements Specification	System Specification	Jianoula Papadakis Kantos	Jul 8, 2014, 11:23:24 AM
- Right sidebar:** A panel on the right showing "Recent Artifacts" with a list of items and their modification dates.

<sup>1</sup>Picture from the DOORS NG tutorial.



# Case Study (reqs docs)

Project<sup>2</sup>: fictional company JK-Meters Corp

- Build an automated meter reader (AMR)
  - *Solution to read water meters and provide service in an electronically automated and cost-effective manner.*

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- Build an automated meter reader (AMR)
  - *Solution to read water meters and provide service in an electronically automated and cost-effective manner.*
- AMR intended to help water providers
  - *lower cost, accurate measures of water usage, quick data gathering.*

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# Case Study (reqs docs)

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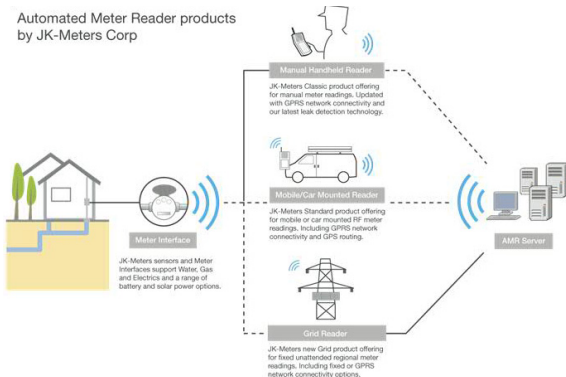
- Build an automated meter reader (AMR)
  - *Solution to read water meters and provide service in an electronically automated and cost-effective manner.*
- AMR intended to help water providers
  - *lower cost, accurate measures of water usage, quick data gathering.*
- Uses existing infrastructure of meters
- But might require enhancements for flexibility
  - *handheld devices, mobile/car mounted readers, or grid readers.*

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# Case Study (reqs docs)

Result: a Word document

The screenshot shows a Microsoft Word document titled "AMR Stakeholder Requirements Specification" dated March 23, 2015. The document is displayed in a multi-page view with six pages visible. The first page is the title page, the second is the Table of Contents, the third is the Introduction, the fourth is the Configuration section, and the fifth is the Reliability and Service section. The sixth page is partially visible.

**Page 1: Title Page**

March 23, 2015

## AMR Stakeholder Requirements Specification

Project requirements Requirements  
Printed by  
March 23, 2015, 4:18:58 PM CDT

Page 1 of 6

**Page 2: Table of Contents**

- 1 Introduction 1
- 1.1 Purpose of the Document 1
- 1.2 Definitions, Acronyms, and Abbreviations 1
- 2 General Description 4
- 2.1 Scope of the System 4
- 2.2 Product Purpose Use 4
- 2.2.1 Configuration 4
- 2.3 Modeling and Research 4
- 2.4 User Change Details 4
- 2.4.1 Mobility 4
- 2.4.2 Mail and by and Service 4
- 2.5 Operation of the System 4
- 2.7 Requirements 4
- 2.8 Assumptions and Dependencies 4
- 3 Specific Description 7
- 3.1 Security 7
- 3.2 Hardware of device 7
- 3.3 User Interface GUI 7
- 3.4.1.1 Network Architecture Mail Reading System 7
- 3.4.1.2 Control Computer and related systems 7

**Page 3: Introduction**

### 1 Introduction

Introduction

AMR (2015) User Interface (UI)

1.1 Purpose of the Document

Purpose of the Document

The document provides a detailed description of the user interface (UI) for the AMR (2015) system, including the user interface design and the user interface design process. The document is intended for the user interface design team and the system developers.

1.2 Introduction

Introduction

The AMR is intended for getting work together with the user interface design team and the system developers. The document is intended for the user interface design team and the system developers.

Page 3 of 6

**Page 4: Configuration**

### 3.1 Configuration

Configuration

3.1.1 Configuration

3.1.2 Performance

Performance

The system will meet the following objectives:

- User interface design and development
- A system goal of 100% accuracy, 100% uptime, 100% of the time

Page 4 of 6

**Page 5: Reliability and Service**

### 2.1 Reliability and Service

Reliability and Service

The AMR system will be able to handle the system with the user interface design team and the system developers.

2.1.1 Operational Environment

Operational Environment

The user interface design team will be able to handle the user interface design team and the system developers.

Page 5 of 6

**Page 6: Definitions, Acronyms, and Abbreviations**

### 3.3 Definitions, Acronyms, and Abbreviations

Definitions, Acronyms, and Abbreviations

Term	Definition
AMR	Approve Item Request
UI	User Interface
GUI	Graphical User Interface
UI/UX	User Interface/Experience

Page 6 of 6

# Import reqs docs (Word/CSV)

Import option from the creation menu:

The screenshot displays the CloudOne Requirements Management web application. The user is logged in as 'vergne@fbk.eu'. The main view is 'Artifacts', showing a list of 7 artifacts. The 'Create New Actor' menu is open, highlighting the 'Import Artifact...' option.

ID	Name	Artifact Type	Modified By
818206	AMR Hazards and Risks	Register	Matthieu Ver
818345	Requirements for Reuse	Requirements Specification	Matthieu Ver
818427	AMR Stakeholder Requirements Specification (option 1)	Stakeholder Specification	Matthieu Ver
818495	AMR System Requirements Specification	System Specification	Matthieu Ver
900467	The human reader shall be able to locate the handheld unit.	Stakeholder Requirement	Matthieu Ver
900469	Marketing and Research	Heading	Matthieu Ver
912046	My new requirement	Stakeholder Requirement	Matthieu Ver

Showing 7 of 7 Artifacts

# Import reqs docs (Word/CSV)

Results in a document in DOORS, with each requirement:

The screenshot displays the CloudOne Requirements Management interface. The main window shows a document titled "818427: AMR Stakeholder Requirements Specification". The document content is structured as follows:

ID	Contents
818349	-1 Introduction
818351	ANSI 1252 Latin 1 for CSV Export
818381	-1.1 Purpose of the Document
818397	The Stakeholder requirements describe the needs of the user for a water meter reading system (AMR) including the meter, the method of collecting data from the device, and the means by which the customers will be billed for usage.
818361	The AMR product is intended to allow water providers to lower their cost of operation by more accurately measuring consumption and more quickly gather data.
818407	-1.2 Intended Use
818372	The AMR is intended for gathering and

The interface also shows a sidebar with navigation options like "Views", "Gap Analysis", and "Trace to System Requirements". A right-hand pane displays metadata for the selected artifact, including description, project name, team ownership, creation/modification dates, and type/format.



# Import reqs docs (Word/CSV)

Hide side panels to have a better view:

The screenshot shows the CloudOne Requirements Management interface. The main content area displays a document titled "818427: AMR Stakeholder Requirements Specification". Below the title is a table of contents with the following items:

ID	Contents
818349	-1 Introduction
818351	ANSI 1252 Latin 1 for CSV Export
818381	-1.1 Purpose of the Document
818397	The Stakeholder requirements describe the needs of the user for a water meter reading system (AMR) including the meter, the method of collecting data from the device, and the means by which the customers will be billed for usage.
818361	The AMR product is intended to allow water providers to lower their cost of operation by more accurately measuring consumption and more quickly gather data.
818407	-1.2 Intended Use
818372	The AMR is intended for gathering and reporting of water consumption data to facilitate measurement of residential and business customers.
818410	

At the bottom of the document, there is a diagram titled "Automated Meter Reader System" which is partially visible as a rectangular box.

The interface also shows a search bar at the top right with the text "Search Artifacts" and a status bar at the bottom left indicating "Showing 94 of 94 Artifacts".

# Import reqs docs (Word/CSV)

Good to know:

- Requirements should be: clear, technically accurate, complete, and verifiable

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- You can tag the content
- You can reorganize the document

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- Requirements are better managed if they are atomic (each can be tested separately)
- You can focus on specific parts by collapsing the ones you don't need to see
- You can display the attributes you need by changing the columns
- You can tag the content
- You can reorganize the document
- You can export the document (e.g. Word/PDF)

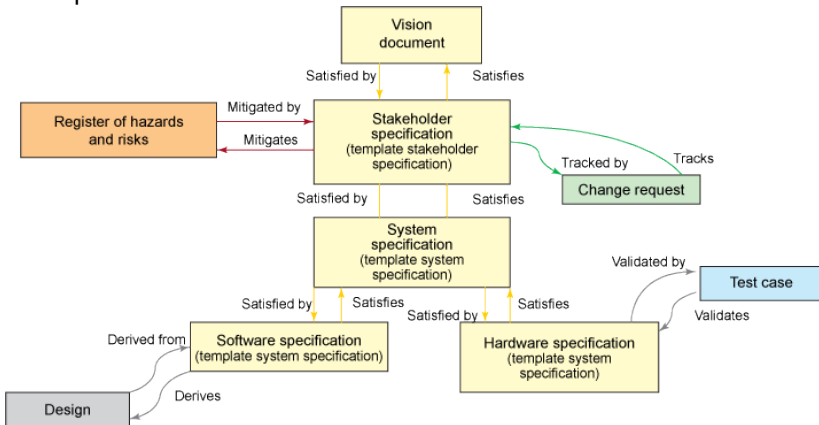


# Outline

- 1 Basics
- 2 Traceability links
- 3 Evolve requirements
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# Which use?

Examples of links between artifacts:



# Displaying links

Document-centered (direct links for each requirement):

The screenshot displays the CloudOne Requirements Management interface. The main view is titled "818495: AMR System Requirements Specification". It features a table with columns for ID, Satisfies, Contents, and Satisfied By. The table lists three requirements, each with a direct link to its corresponding artifact.

ID	Satisfies	Contents	Satisfied By
818479	818421: The meter interface shall detect water leaks and record leak status with the account data. (AMR Stakeholder Requirements Specification (option 1))	The meter interface shall detect water leaks and record leak status with the account data.	818290: monitorPressure Meter Interface Subsystem Requirements Specification) 818284: detectLeak Meter Interface Subsystem Requirements Specification)
818449		The meter interface unit shall sample water flow every 15 minutes in a 24 hour period to determine leakage.	818290: monitorPressure Meter Interface Subsystem Requirements Specification)
818484		- 3.1.3 Fixed Network Automated Meter Reading	

The interface also includes a sidebar with navigation options like "Views", "Gold Plating", and "Trace to Stakeholder Requirements". A right-hand pane shows details for the selected artifact, including project information, creation/modification dates, and approval status.

# Displaying links

Analysis:

- No outgoing link → forgotten work?

# Displaying links

Analysis:

- No outgoing link → forgotten work?
- No incoming link → useless work?

# Displaying links

## Analysis:

- No outgoing link → forgotten work?
- No incoming link → useless work?
- Both links → fully traced

# Displaying links

## Analysis:

- No outgoing link → forgotten work?
- No incoming link → useless work?
- Both links → fully traced
- Click on a link to move to the corresponding artifact

# Displaying links

Artifact-centered (all links for specific requirement):

The screenshot displays the CloudOne Requirements Management interface. The main window shows a list of artifacts under the requirement '818495: AMR System Requirements Specification'. A context menu is open over the selected artifact, listing various actions such as 'Insert New Artifact', 'Open Artifact', 'Cut Artifact', 'Copy Artifact', 'Paste Artifact', 'Remove Artifact...', 'Comments', 'Other Actions', 'Add a Link to the Artifact', and 'Show Permalink for this Artifact...'. The 'Open Links Explorer' option is highlighted, showing a list of linked artifacts: '818290: monitorPressure Meter Interface Subsystem Requirements Specification', '818294: detectLeak Meter Interface Subsystem Requirements Specification', and '818290: monitorPressure Meter Interface Subsystem Requirements Specification'. The main view shows the following artifacts:

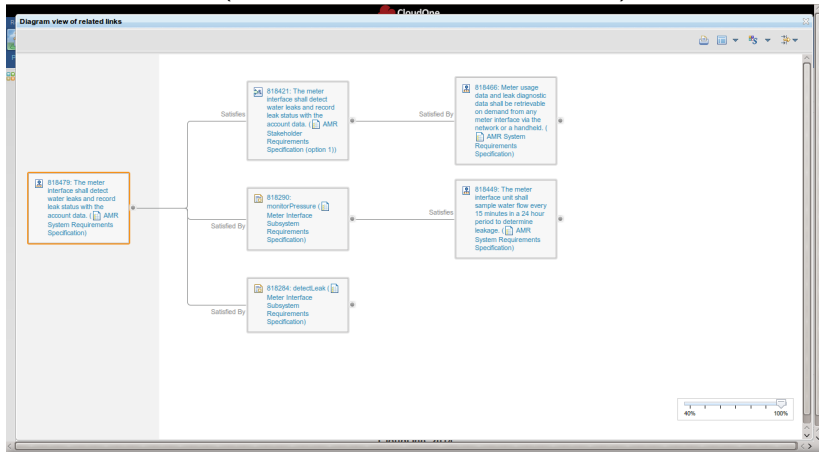
ID	Description	Linked Artifacts
818449	Interface unit shall wake up and communicate for 4 seconds every 30 minutes, synchronizing all clocks and configuration information. Between these transmissions, the unit remains in a low power state, conserving battery life.	
818454	The meter interface shall detect water leaks and record leak status with the	818290: monitorPressure Meter Interface Subsystem Requirements Specification
	3.1.3 Fixed Network Automated Meter Reading	818294: detectLeak Meter Interface Subsystem Requirements Specification 818290: monitorPressure Meter Interface Subsystem Requirements Specification

The interface also shows a sidebar with navigation options like 'Project Dashboard', 'Artifacts', 'Collections', 'Modules', and 'Reports'. The top navigation bar includes 'vergne@fbk.eu Requirements' and 'CloudOne'. The bottom status bar indicates 'Showing 72 of 72 Artifacts' and '1 selected (Clear All Selected)'.



# Displaying links

Artifact-centered (all links for specific requirement):



# Creating links

Select one requirement to link:

The screenshot shows the CloudOne Requirements Management interface. The main title is '818495: AMR System Requirements Specification'. Below it is a table of requirements:

ID	Contents
818492	-1 Introduction
818441	-1.1 Purpose of the Document
818443	This document describes the specific functionality of the Automated Meter Reader system. The system is currently available with a handheld collection device. The mobile and fixed network methods of data collection are outside the scope of this system.
818477	-2 General Description
818444	-2.1 Functions and Purpose
818487	The AMR system is used to determine water service / consumption for the more than 79,000 meter connections to residential, commercial and industrial customers inside a 72 square mile area.
818458	In handheld AMR, a meter reader carries a handheld computer with a built-in or attached receiver/transceiver (radio frequency or touch) to collect meter readings from an AMR capable meter. This is sometimes referred to as "walk-by" meter reading since the meter reader walks by the locations where meters are installed as they go through their meter reading route. Handheld computers may also be used to manually enter readings without the use of AMR technology as an alternate but this will not support comprehensive data which can be accurately read using the meter reading electronically.
818433	<AMR Artist Rendition>
818139	Automated Meter Reader System

At the bottom of the interface, it says 'Showing 72 of 72 Artifacts' and '1 selected (Clear All Selected)'.

# Creating links

Drag it to the other:

CloudOne

Requirements Management (rnm)

vergne@fbk.eu Requirements

Matthieu Vergne

Project Dashboard Artifacts Collections Modules Reports

Search Artifacts

vergne@fbk.eu Requirements > 01 Requirements >

No Tags Defined

818495: AMR System Requirements Specification

ID	Contents
818492	-1 Introduction
818441	-1.1 Purpose of the Document
818443	This document describes the specific functionality of the Automated Meter Reader system. The system is currently available with a handheld collection device. The mobile and fixed network methods of data collection are outside the scope of this system.
818477	-2 General Description
818444	2.1 Functions and Purpose
818487	The AMR system is used to determine water service / consumption for the more than 79,000 meter connections to residential, commercial and industrial customers inside a 72 square mile area.
818458	In handheld AMR, a meter reader uses a handheld computer with a built-in or attached receiver/transceiver (radio frequency or touch) to collect meter readings from an AMR capable meter. This is sometimes referred to as "walk-by" meter reading since the meter reader walks by the locations where meters are installed as they go through their meter reading route. Handheld computers may also be used to manually enter readings without the use of AMR technology as an alternate but this will not supply comprehensive data which can be accurately read using the meter reading electronically.
818433	<AMR Artist Rendition>
818139	Automated Meter Reader System

Showing 72 of 72 Artifacts 1 selected (Clear All Selected)

# Creating links

## Finalize the link:

CloudOne

Requirements Management (min)

vergne@fbk.eu Requirements

Matthieu Vergne

Project Dashboard Artifacts Collections Modules Reports

vergne@fbk.eu Requirements > 01 Requirements >

818495: AMR System Requirement

ID	Contents
818492	1 Introduction
818441	1.1 Purpose of the System
818443	This document describes the specific functionality of the Automated Meter Reader system. The system is currently available with a handheld collection device. The mobile and fixed network methods of data collection are outside the scope of this system.
818477	2 General Description
818444	2.1 Functions
818487	The AMR system is used for commercial and industrial applications.
818458	In handheld AMR, a meter reader walks by the locations to collect meter readings. The handheld meter reader is used to manually enter readings to be accurately read using a handheld computer.
818433	<AMR Artist Rendition>
818139	Automated Meter Reader System

Showing 72 of 72 Artifacts 1 selected (Clear All Selected)

**Create Link**

Artifact to link from: 818443: This document describes the specific functionality of the Automated Meter Reader system. The system is currently available with a handheld collection device. The mobile and fixed network methods of data collection are outside the scope of this system.

Artifact to link to: 818458: In handheld AMR, a meter reader carries a handheld computer with a built-in or attached receiver/transceiver (radio frequency or touch) to collect meter readings from an AMR capable meter. This is sometimes referred to as "walk-by" meter reading since the AMR System Requirements Specification)

Link type: Satisfies

Select the link type

- Satisfied By
- Satisfies
- Mitigates
- More...

# Creating links

Alternatively, add link through requirement properties:

The screenshot displays the CloudOne Requirements Management interface. A context menu is open over a requirement artifact, listing various actions. The 'Add a Link to the Artifact' option is highlighted, and a sub-menu is visible showing 'Satisfies By' and 'Satisfies' as available link types. The background shows a requirement specification document with sections like 'the Document' and 'Description and Purpose'.

**Context Menu Options:**

- Insert New Artifact
- Insert Existing Artifact
- Upload New Artifact
- Open Artifact
- Edit Attributes...
- Edit Artifact Row
- Set as Heading or Content
- Promote Artifact (Alt+Shift+←)
- Demote Artifact (Alt+Shift+→)
- Manually Lock Artifact for Editing
- Cut Artifact (Ctrl+X)
- Copy Artifact (Ctrl+C)
- Paste Artifact
- Paste as Link... (Ctrl+Shift+V)
- Paste Special...
- Remove Artifact... (Del)
- Comments
- Other Actions
- Add a Link to the Artifact**
- Show Permalink for this Artifact...

**Sub-menu for 'Add a Link to the Artifact':**

- Satisfies By
- Satisfies
- Mitigates
- More...

**Requirement Artifact Details:**

- ID: 818433
- Text: <AMR Artist Renditor
- ID: 818139
- Text: Automate

**Document Content:**

**the Document**

es the specific functionality of the Automated Meter Reader system. The system is currently available with a ... and fixed network methods of data collection are outside the scope of this system.

**Description and Purpose**

ed to determine water service / consumption for the more than 79,000 meter connections to residential, ... rital customers inside a 72 square mile area.

eter reader carries a handheld computer with a built-in or attached receiver/transceiver (radio frequency or touch) ... as from an AMR capable meter. This is sometimes referred to as "walk-by" meter reading since the meter reader ... use of AMR technology as an alternate but this will not support comprehensive data which can ... eading electronically.

# Creating links

Which is better?

- Drag & drop better if both artifacts open (tabs/windows)

---

<sup>2</sup><http://open-services.net/software/>

# Creating links

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Only between requirements?

- DOORS exploit OSLC
  - *Open Services for Lifecycle Collaboration*
- Can interact with other OSLC-based tools<sup>2</sup>
- Deal with requirements, diagrams, tests, etc.

---

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# Break

Break? Comments? Questions?

Go ahead!

# Outline

- 1 Basics
- 2 Traceability links
- 3 Evolve requirements**
- 4 Way More Stuff

# Create a requirement

Add a new artifact:

The screenshot displays the Requirements Management (RM) application interface. The main window shows a requirement specification for '818427: AMR Stakeholder Requirements'. The left sidebar contains navigation options like 'Project Dashboard', 'Artifacts', 'Collections', 'Modules', and 'Reports'. The top navigation bar includes the user name 'vergne@fbk.eu Requirements' and a search bar.

A context menu is open over the requirement, listing various actions such as 'Insert New Artifact', 'Open Artifact', 'Edit Attributes...', and 'Set as Heading or Content'. A sub-menu is also visible, showing options like 'After', 'Before', and 'Below (as a Child)' with keyboard shortcuts.

The requirement specification includes a description: 'The document describes the needs of the user for a water meter reading the meter, the method of collecting data from the device, and the customers will be billed for usage. It is intended to allow water providers to lower their cost of operation by reducing consumption and more quickly gather data. The system is for gathering and reporting of water consumption data to facilitate residential and business customers.' Below the text is a diagram titled 'Automated Meter Reader System' showing a central box connected to 'Water Meter' and 'Meter Reader' actors, with a note 'Upload Usage Data Locally'.

The right sidebar shows the 'Module' and 'Selected Artifact' details, including the project name, team ownership, content folder, creation and modification dates, and the user 'Mathieu Vergne'.

At the bottom of the application window, it says 'Showing 94 of 94 Artifacts 1 selected (Clear All Selected)' and 'CloudOne, 2014'.

# Create a requirement

## Redact the artifact:

Requirements Management (Free) CloudOne

vergne@fbk.eu Requirements Matthieu Vergne

Project Dashboard Artifacts Collections Modules Reports

vergne@fbk.eu Requirements > 01 Requirements

818427: AMR Stakeholder Requirements Specification (option 1)

Create New Heading

Views

Search Views

Gap Analysis

Trace to System Requirements

Upstream and Downstream Traceability (Sa)

ID	Contents
818349	-1 Introduction
818351	ANSI 1252
818381	-1.1 Pu
818397	1.1.1 My new requirement
818397	The Stakeholder requirements describe the needs of the user for a water meter reading system (AMR) including the meter, the method of collecting data from the device, and the means by which the customers will be billed for usage.
818361	The AMR product is intended to allow water providers to lower their cost of operation by more accurately measuring consumption and more quickly gather data.
818407	-1.2 Intended Use
818372	The AMR is intended for gathering and reporting of water consumption data to facilitate measurement of residential and business customers.
818410	

Showing 95 of 95 Artifacts 1 selected (Clear All Selected)

CloudOne, 2014

Module Selected Artifact

818427: AMR Stakeholder Requirements Specification (option 1)

Description:

Project: vergne@fbk.eu Requirements

Team Ownership: vergne@fbk.eu Requirements

Content Folder: 01 Requirements

Created On: Mar 9, 2015, 3:40:51 PM

Created By: Matthieu Vergne

Modified On: Mar 21, 2015, 9:30:36 PM

Modified By: Matthieu Vergne

Is Suspect: Select a profile

Type: Stakeholder Specification

Format: Module

Approved By:

Approver Position:

Module Baselines

Module Comments

Module Links

Where Module Used

# Create a requirement





Select the type of requirement:

The screenshot displays the CloudOne Requirements Management application. The main window shows a list of requirements under the heading "818427: AMR Stakeholder Requirements Specification (option 1)". The selected requirement, ID 912046, is titled "My new requirement" and is of type "Stakeholder Requirement". The interface includes a left sidebar with navigation options like "Views" and "Gap Analysis", a central workspace with a rich text editor and a diagram showing actors interacting with an "Automated Meter Reader System", and a right sidebar with metadata and search options. The bottom status bar indicates "Showing 95 of 95 Artifacts" and "1 selected (Clear All Selected)".



# Change a requirement

DOORS allows to identify “suspects”:





<input type="checkbox"/>	ID	Name	Suspicion	Satisfied By	Satisfies
<input type="checkbox"/>	357	 Similar customer experience		 310: Improve customer experience	
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(The first depends on the second, which has changed.)

<sup>3</sup>[https://jazz.net/help-dev/clm/index.jsp?re=1&topic=/com.ibm.rational.rrm.help.doc/topics/t\\_view\\_suspect\\_trace.html&scope=null](https://jazz.net/help-dev/clm/index.jsp?re=1&topic=/com.ibm.rational.rrm.help.doc/topics/t_view_suspect_trace.html&scope=null)

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Suspicion profiles<sup>3</sup>:

- Help manage requirements dependencies

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Suspicion profiles<sup>3</sup>:

- Help manage requirements dependencies
- Also for other artifacts (e.g. test failures)
- Suspect profiles are customizable

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# Check history

Open the history:

The screenshot displays the CloudOne Requirements Management (RM) interface. The browser address bar shows the URL `vergne@fbk.eu Requirements`. The page title is `818427: AMR Stakeholder Requirements Specification`. A red circle highlights the 'Open History' button in the top right corner of the artifact view. The main content area shows a table of requirement contents:

ID	Contents
818361	The AMR product is intended to allow water providers to lower their cost of operation by more accurately measuring consumption and more quickly gather data.
818407	<b>- 1.2 Intended Use</b>
818372	The AMR is intended for gathering and reporting of water consumption data to facilitate measurement of residential and business customers.
818410	

Below the table, a Use Case diagram is shown for the 'Automated Meter Reader System'. It features two actors: 'Water Meter' and 'Meter Reader'. Both actors are connected to a central use case labeled 'Upload Usage Data Locally'.

Showing 94 of 94 Artifacts

# Check history

Check the audit:

The screenshot displays the CloudOne Requirements Management interface. The main header shows the user 'vergne@fbk.eu' and the project 'Requirements'. The breadcrumb trail indicates the current view is for the requirement '818427: AMR Stakeholder Requirements Specification' (March 23, 2015 11:05 PM). Below the header, there are tabs for 'Revisions' and 'Audit History', with 'Audit History' being the active tab. The audit history is presented in a table with columns for time periods: Today (0), Yesterday (0), Past Week (0), Past Month (0), and Earlier (0). The history shows three entries:

- Matthieu Vergne changed on Mar 21, 2015, 9:20:43 PM:**
  - Module Structure moved: 818374: The AMR system shall be able to operate in the market environments for which it is targeted and approved.
  - Module Structure added: https://www.doorsng.com/irm/resources/\_cpeyIeNAIEeSudNNp7FbmeA
- Matthieu Vergne changed on Mar 21, 2015, 9:25:33 PM:**
  - Artifact Primary Text Title 900467: The human reader shall be able to locate the handheld unit. (with links for 'Show changes' and 'The human reader shall be able to locate the handheld unit')
- Matthieu Vergne changed on Mar 21, 2015, 9:24:59 PM:**
  - Module Structure added: 900467: The human reader shall be able to locate the handheld unit.

# Outline

- 1 Basics
- 2 Traceability links
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# Dashboards customization

Adapt dashboards to your way to work:

- Many widgets:
  - *Projects list*



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  - *and more than 100 others*
- Organize widgets depending on your needs
- Add dashboards for different perspectives

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- E-mail notifications

# Going further

## Relevant tutorials:

- Main tutorial: most of the presented features
  - *<http://www.ibm.com/developerworks/rational/library/rational-doors-next-generation-getting-started/tutorial/index.html>*
  - *Provide further links for details.*
- Software architecture and design management
  - *<https://jazz.net/wiki/bin/view/Main/DesignManagement>*
- Tests and builds
  - *<https://jazz.net/products/rational-team-concert/>*