



IT632 Software Engineering

Autumn 2010-11

LAB 2 Requirements Management

Objective:

To learn the Requirements Management

Special Requirements:

Rational Unified Process, Rational Requisite Pro

Lab content:

Part 1. Individual Efforts

1. Exercise 1 : Explore Requirement Discipline in RUP
2. Exercise 2 : Document types in Requirement Discipline

Part 2. Team Efforts

3. Exercise 3 : Determine Project
4. Exercise 4 : Preparing Team Environment
5. Exercise 5 : Configuring Requisite Pro Project
6. Exercise 6 : Working in Team Environment
7. Exercise 7 : Team Communication
8. Exercise 8 : Handling Requirement
9. Exercise 9 : Requirement Types
10. Exercise 10: Traceability

Appendix

Part I: Individual Effort

Exercise 1: Explore Requirement Discipline in RUP

[1.1] Explore Disciplines Page

 [Disciplines](#)

[1.2] Open Requirements Discipline

 [Disciplines](#) >  [Requirements](#) >  Introduction

Discipline	Contribution to Requirements Discipline	Contribution from Requirements Discipline
Business Modeling		
Analysis and Design		gets its primary inputs <ul style="list-style-type: none">• Use-Case model• Glossary
Test		
Configuration and Change Management		
Project Management		
Environment		




[1.3] Explore Activity-Role View

 [Disciplines](#) >  [Requirements](#) >  Activity Overview

[1.4] Explore Artifact- Role View

 [Disciplines](#) >  [Requirements](#) >  Artifact Overview

[1.5] Explore Requirements Workflow

 [Disciplines](#) >  [Requirements](#) >  Workflow

[1.6] Identify sequence, actors and artifacts of given activities:

Sequence	Activity	Role	Artifact
	Capture a Common Vocabulary		
	Develop Requirements Management Plan		
	Detail a Use Case		
	Detail the Software Requirements		
	Develop Vision		
	Elicit Stakeholder Request		
	Find Actors and Use Cases		
	Manage Dependencies		
	Model the User Interface		
	Prioritize Use Case		
	Prototype the Use Interface		
	Review Requirements		
	Structure the Use Case Model		

Exercise 2: Document Types in Requirements Discipline

[2.1] Vision Document

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  Vision

Template : HTML Template: Vision

Sample : Vision, the Course Registration System example

[2.2] Glossary

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  Glossary

Template : HTML

Sample : Glossary, from the Course Registration System

[2.3] Use Case

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  [Use-Case Model...](#) >  Use Case

Template : HTML

Sample : Use Case, for the Course Registration System

[2.4] Requirement Management Plan

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  [{More Requirements Artifacts}](#) >

 Requirements Management Plan

Template : HTML

Sample : [Requirements Management Plan](#), from the [Wylie College Process Web Site](#)

[2.5] Stakeholder Request document

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  Stakeholder Requests

Template : HTML

Sample : -

[2.6] Software Requirement Specification

Link :  [Artifacts](#) >  [Requirements Artifact Set](#) >  [More Requirements Artifacts](#) >

 Software Requirements Specification

Template : HTML Template: SRS traditional

HTML Template: SRS w/ Use-Cases

Sample : -

Part II: Team Effort

Exercise 3: Determine Project

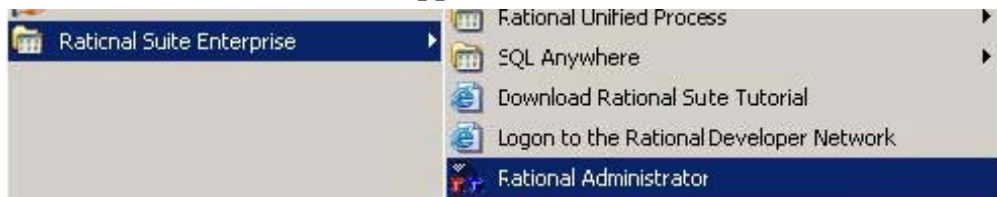
[3.1] Name the team project of <TeamID>

[3.2] Allocate Activities to Team Members

Activity	Assigned to	Note
Capture a Common Vocabulary		
Develop Requirements Management Plan		
Detail a Use Case		
Detail the Software Requirements		
Develop Vision		
Elicit Stakeholder Request		
Find Actors and Use Cases		
Manage Dependencies		
Model the User Interface		
Prioritize Use Case		
Prototype the Use Interface		
Review Requirements		
Structure the Use Case Model		

Exercise 4: Preparing the Team Environment

[4.1] Start Rational Administrator Application



[4.2] Open Project



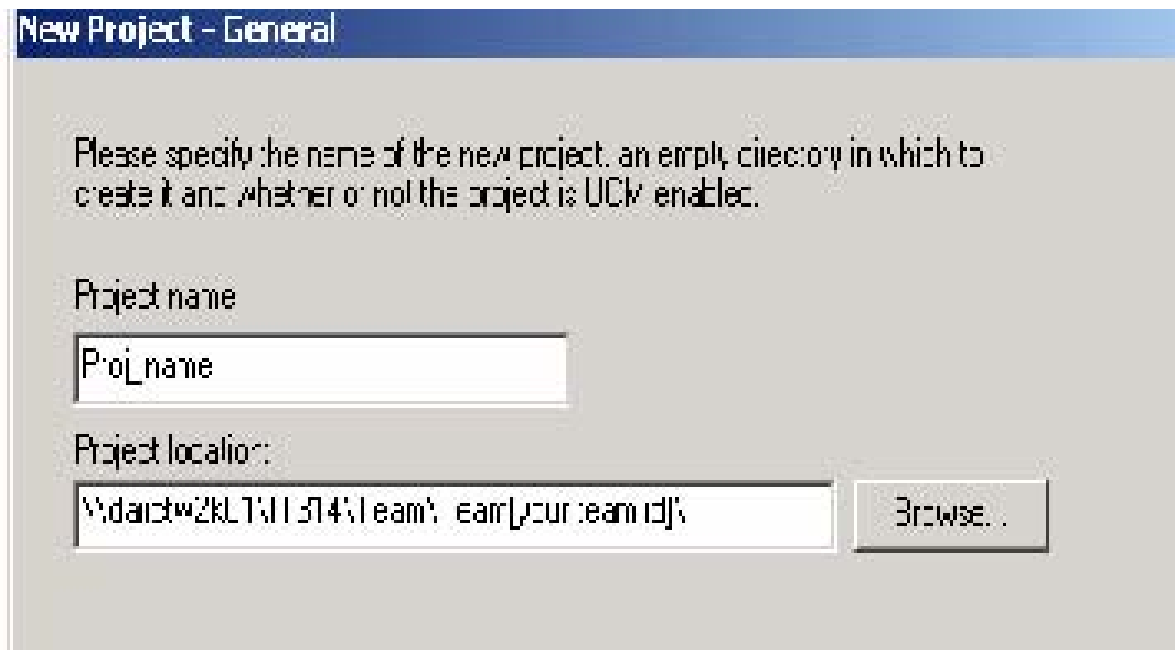
[4.3] Click on New Project




[4.4] Create Appropriate Project Directory

\\daiictw2k01\IT632\Team\Team[**your team id**]\<PROJECT Dir>

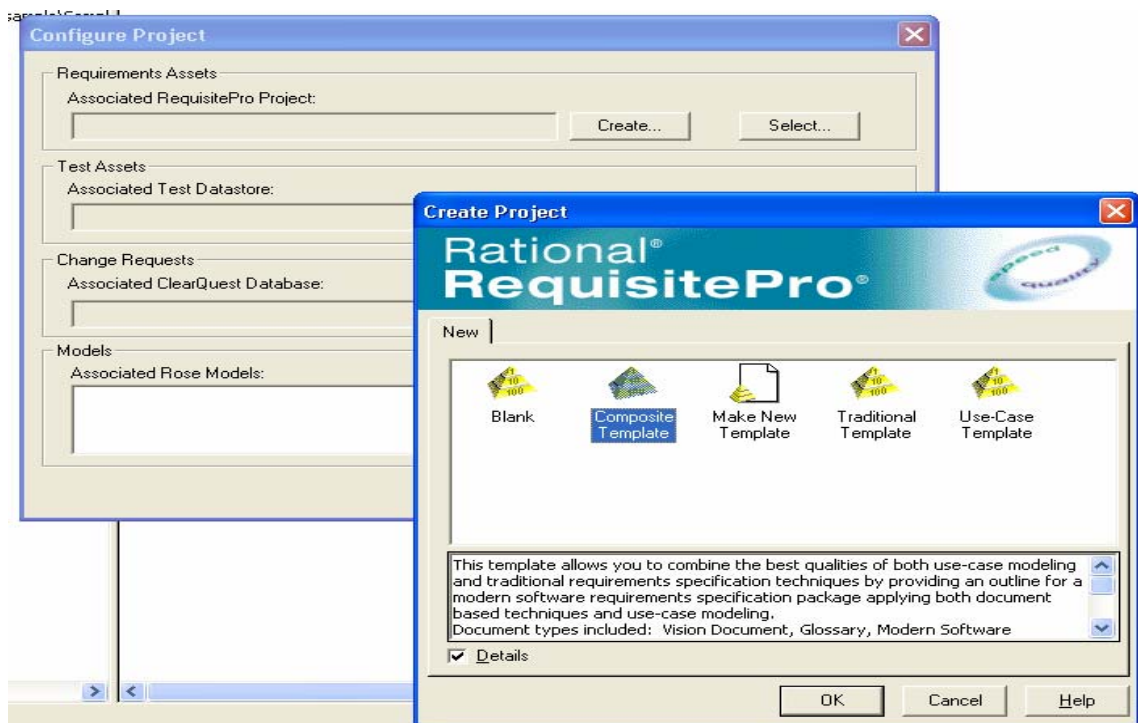
[4.5] Browse to the Project Location

A screenshot of the 'New Project - General' dialog box. The title bar is blue with the text 'New Project - General'. The main area is light gray. It contains the following text: 'Please specify the name of the new project, an empty directory in which to create it and whether or not the project is UCM enabled.' Below this, there are two fields: 'Project name' with a text box containing 'Proj_name', and 'Project location:' with a text box containing '\\daiictw2k01\IT632\Team\Team[your team id]\'. To the right of the 'Project location:' text box is a 'Browse...' button.

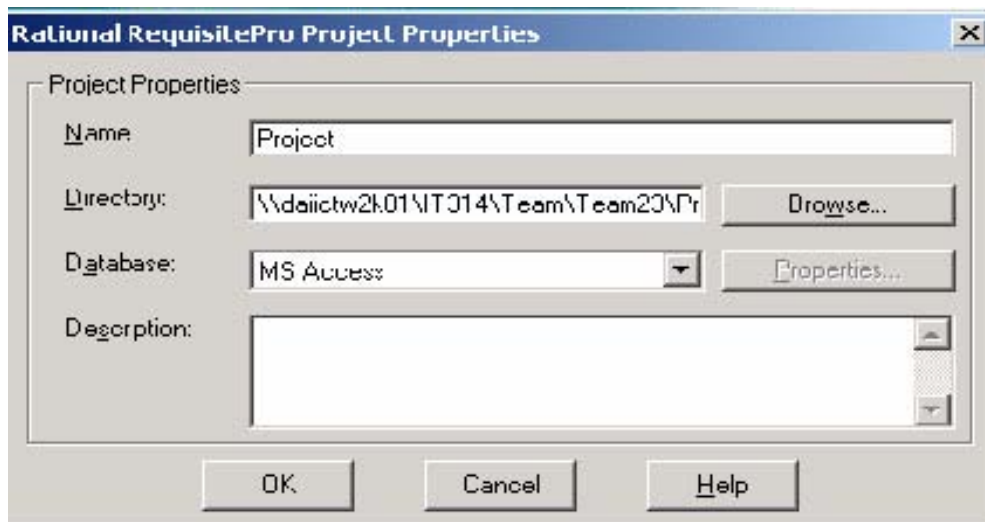
[4.6] Set the project password

A screenshot of the 'New Project - Security' dialog box. The title bar is blue with the text 'New Project - Security' and standard window controls. The main area is light gray. It contains the following text: 'Each Rational Project may be associated with a password. This password is required to connect to, configure or delete the project.' Below this, there are two fields: 'Password:' with a text box containing 'xxxx', and 'Confirm:' with a text box containing 'xxxx'.

[4.7] Create Rational Requisite Pro Project with New Project Wizard



[4.8] Supply Project Name



[4.9] Observe the Requisite Pro Project associated with Rational Administrator Project. Test Assets, Change Request and Models will be introduced later. Accept current configuration by pressing OK.\

Requirements Assets

Associated RequisitePro Project:

\\dalictw2k01\IT314\Team\Team22\proj_name\proj_name.rqs

Test Assets

Associated Test Datastore:

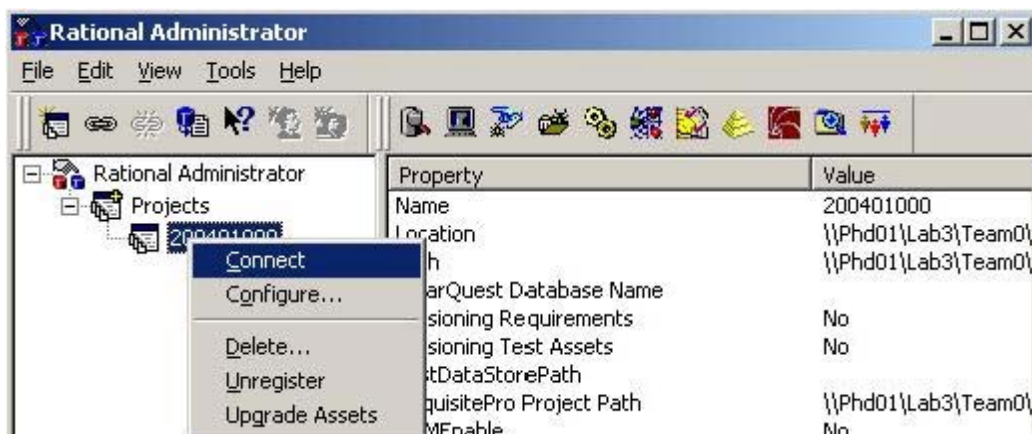
Change Requests

Associated ClearQuest Database:

Models

Associated Base Models:

[4.10] Connect to the project by providing password as supplied in step [2.6]

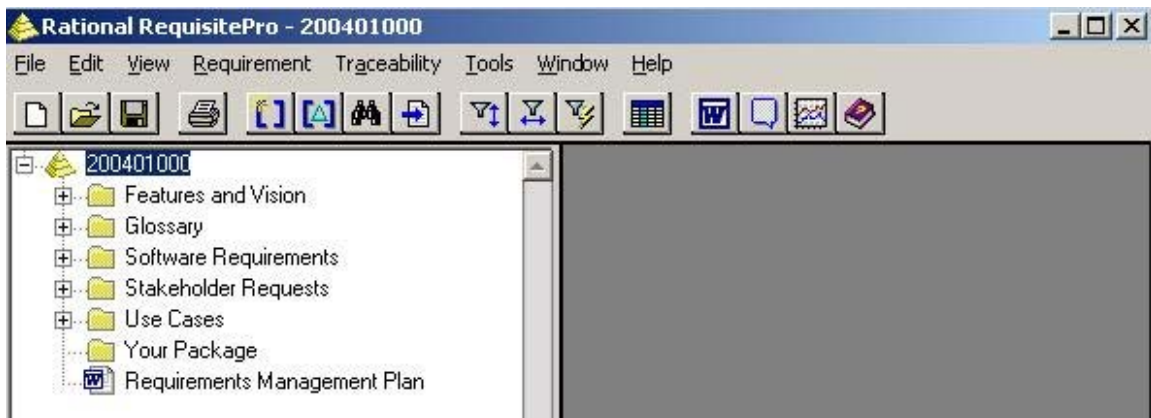


Exercise5: Configuring Requisite Pro Project

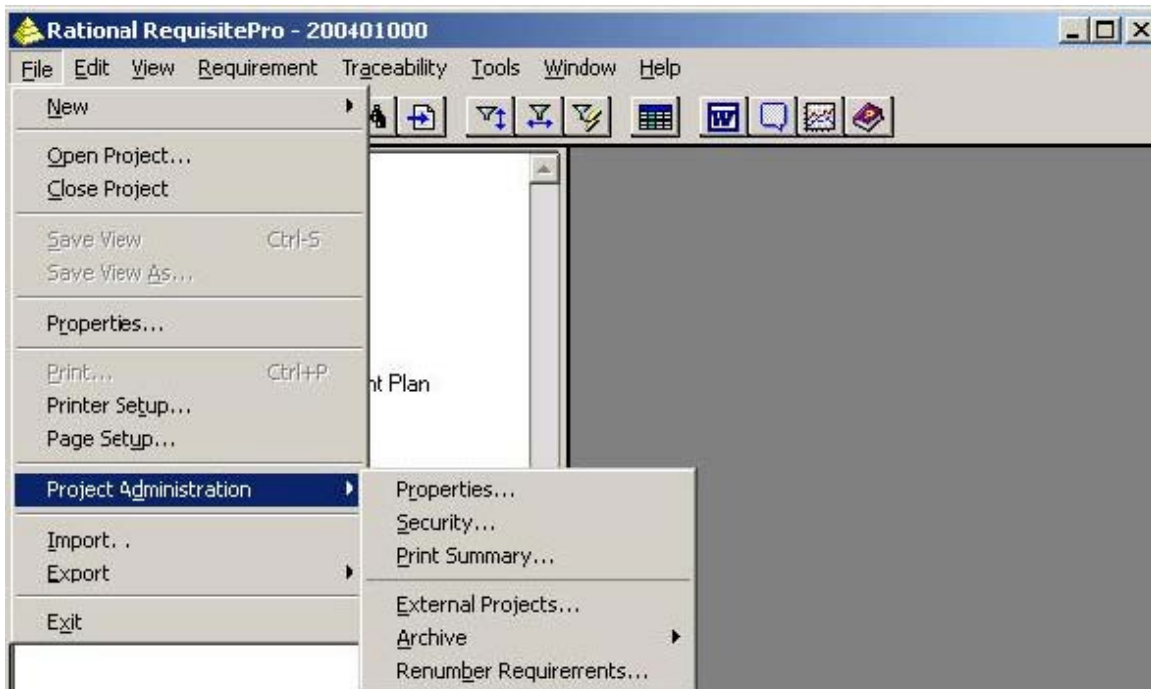
[5.1] Open Associated Requisite Project



[5.2] View the project content



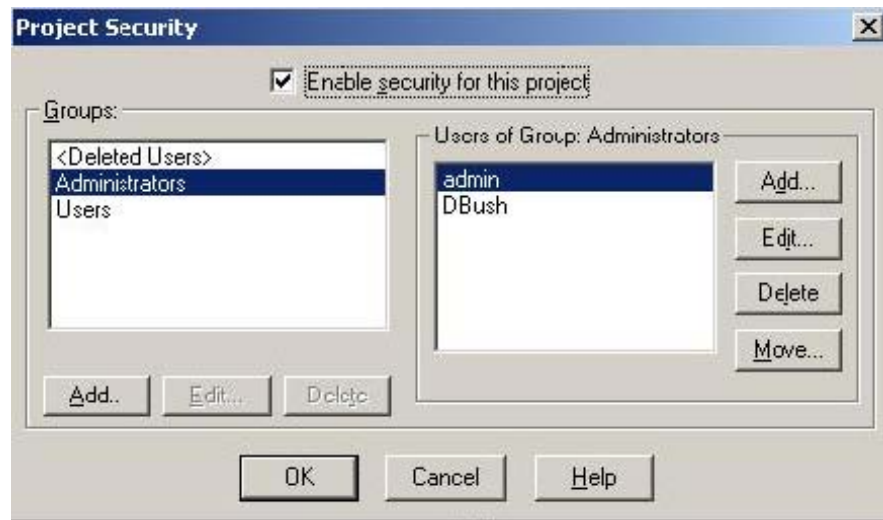
[5.3] Open File ~ Project Administration



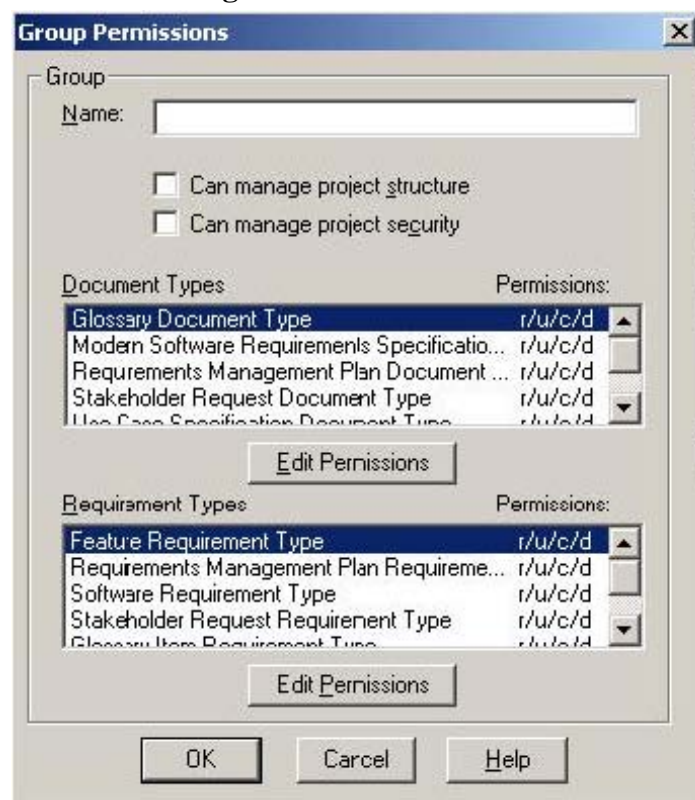
[5.4] Click open the Security setting



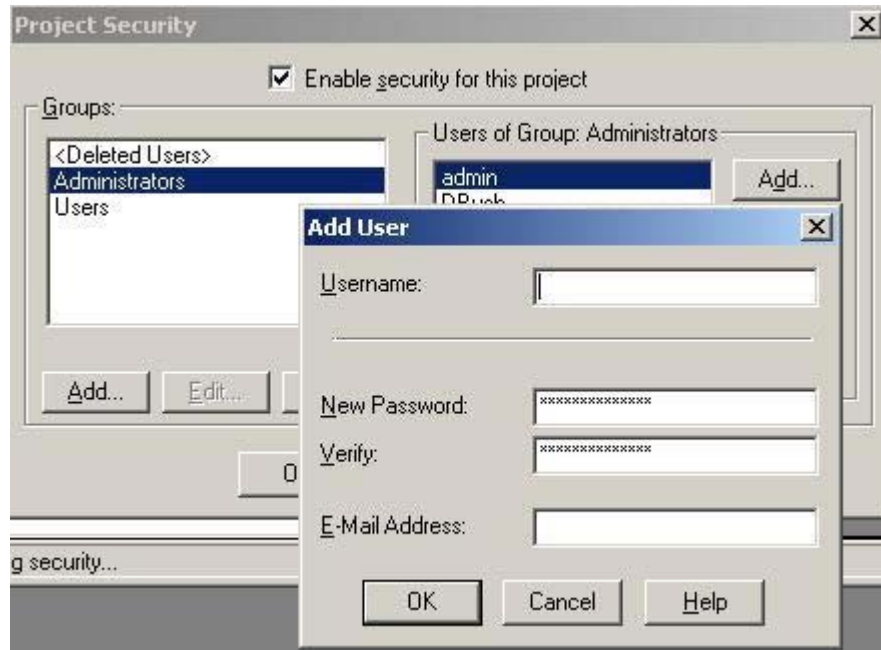
[5.5] Check “Enable Security for this Project”



[5.6] Set Group Permission setting



[5.7] Add Users



[5.8] Create a few accounts in Users Group



Exercise6: Working in Team Environment

[6.1] Login the project with any one User Account created in [2.8] and Create few sample Features



[6.2] Logout and Login again now with another User Account created in [3.8] and Create few sample Features

[6.3] Logout and Login with Admin. And observe “Author” Property of each Features created in step [4.1] and [4.2]



Requirements:	Author	Revision	Date
FEAT1: Feature Entered by...	TeamMem1	1.0000	1/20/2007 4:
FEAT2: Feature Entered By...	TeamMem2	1.0000	1/20/2007 4:
* <Click here to create a requirement>	admin	1.0000	1/20/2007 4:

Exercise 7: Team Communication

[7.1] Select the feature for Communication is required. Right Click and select Discussions. Click on Create Discussion.



Discussion Properties

General | Attributes | Participants | Requirements

Subject: Why Do you want FEAT1

Text: Why Do you want FEAT 1

OK Cancel Help

[7.2] Observe Red Colored Mark on the Feature and Hover the Mouse over feature for detail.

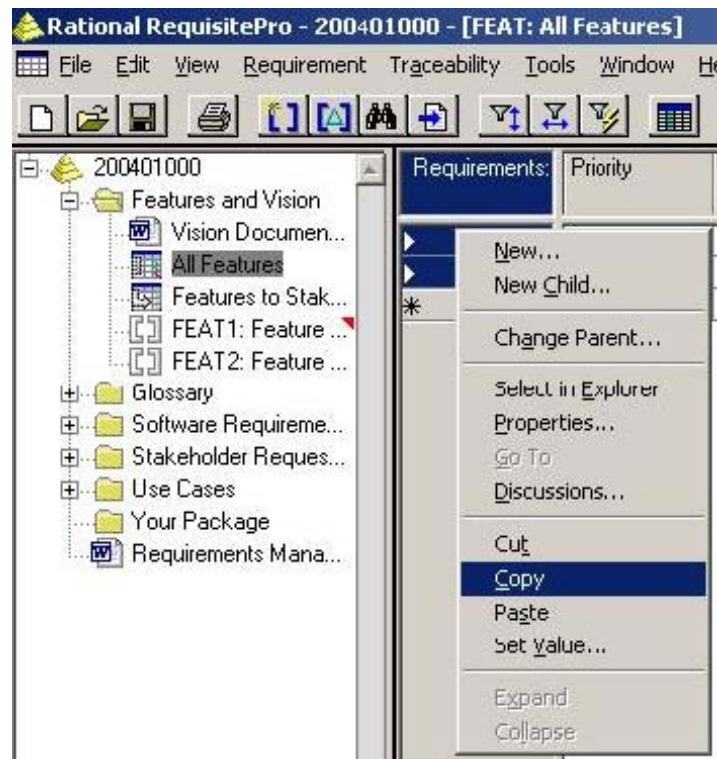


[7.3] Click to reply or manage discussion further

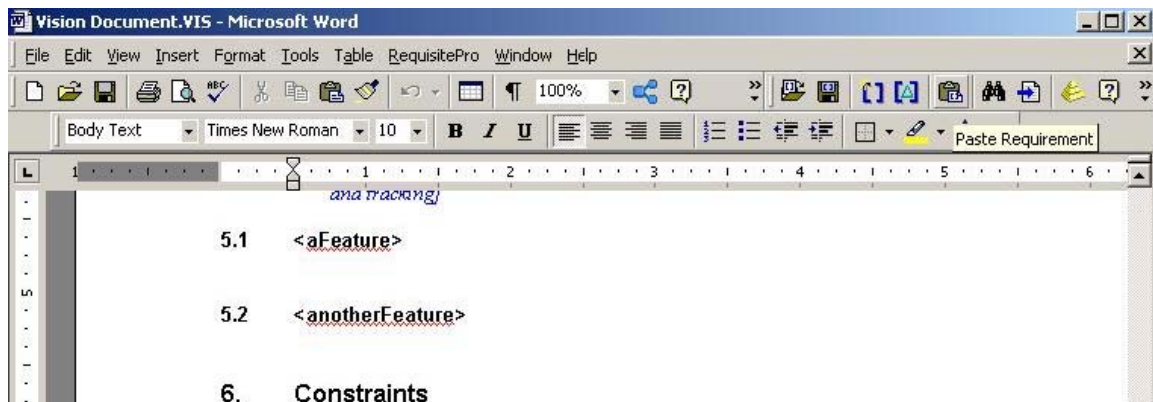


Exercise 8: Handling Requirement

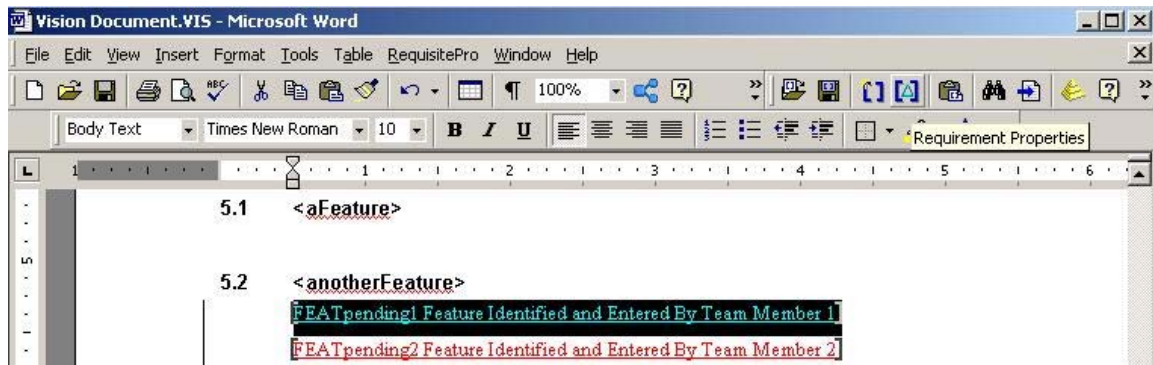
[8.1] Observe that all the Features created in Requisite pro is saved in Database. If it is to be moved to Vision Document, Select the desired ones and Right-Click~ Copy.



[8.2] Open the Vision document and put the cursor to the desired location where copied requirements are to be pasted. Then click on the “Paste Requirement”. Note: Ctrl V will produce undesired results.

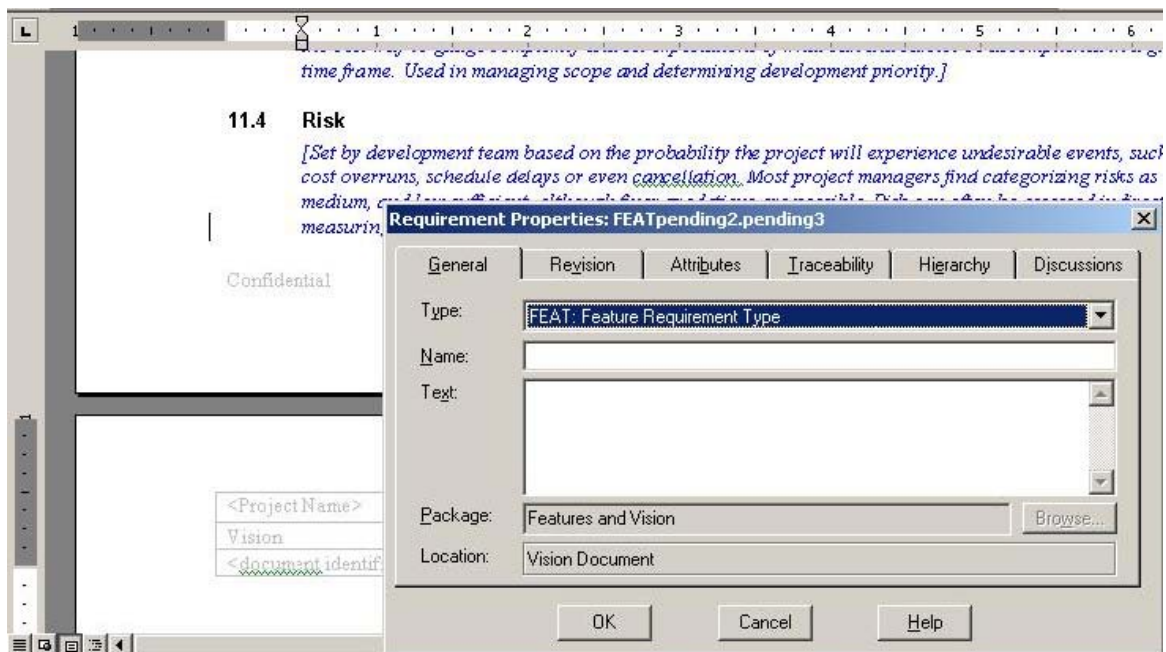


[8.3] In case requirements need to be updated, it can be done by selecting the desired requirement and clicking on “Requirement Properties” in Requisite Toolbar.



Exercise 9: Requirement Types

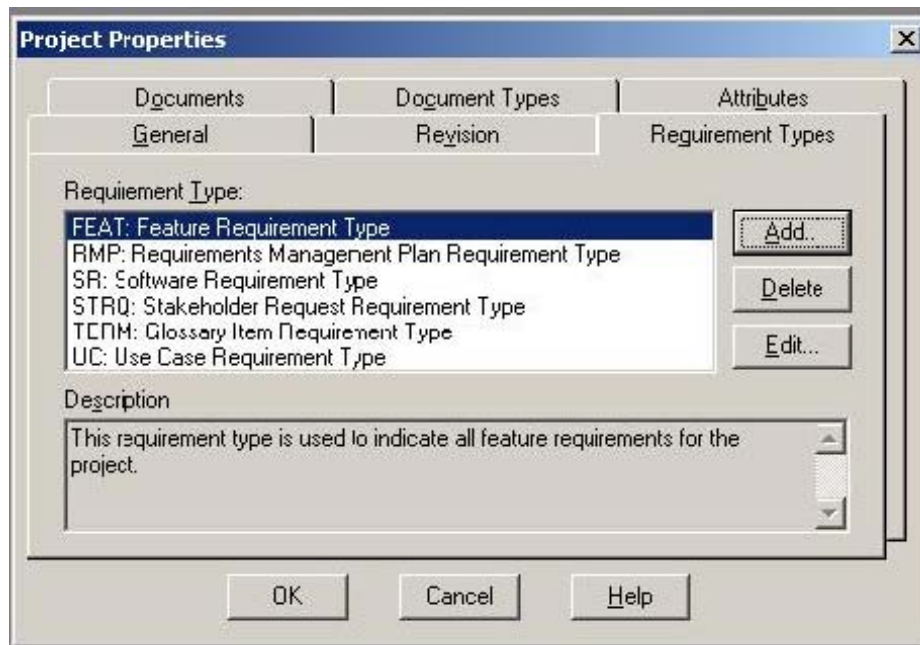
[9.1] The vision document contains Items like Risk for which Requirement Type is not available by default.



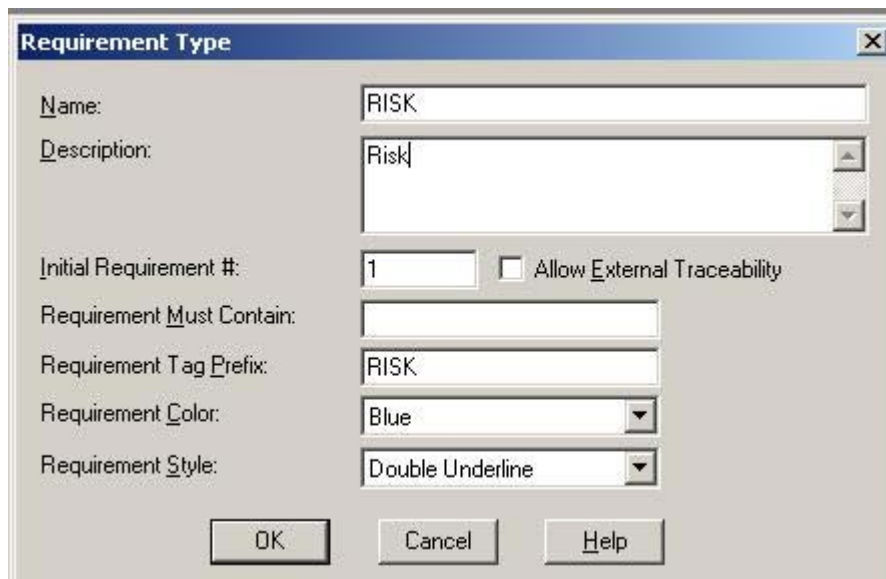
[9.2] For adding custom Requirement Type, Login with admin Account .



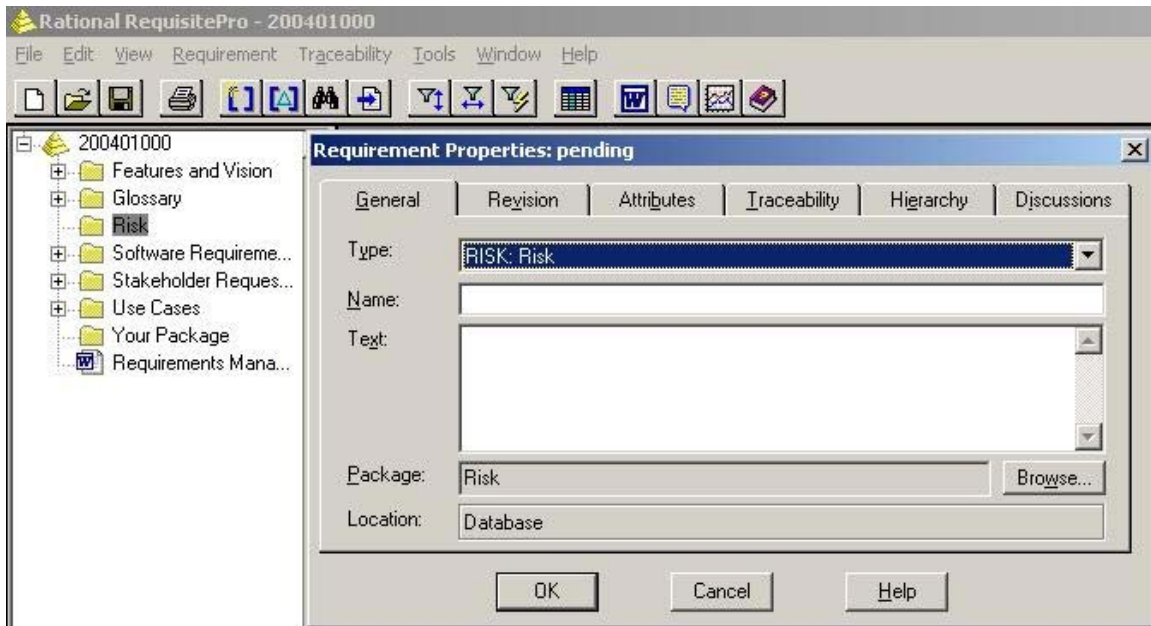
[9.3] View available Requirement Types and Click on Add to add new.



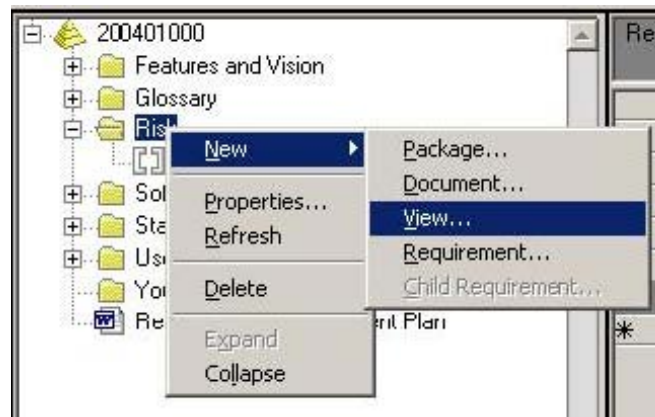
[9.4] Supply details of new Requirement Type



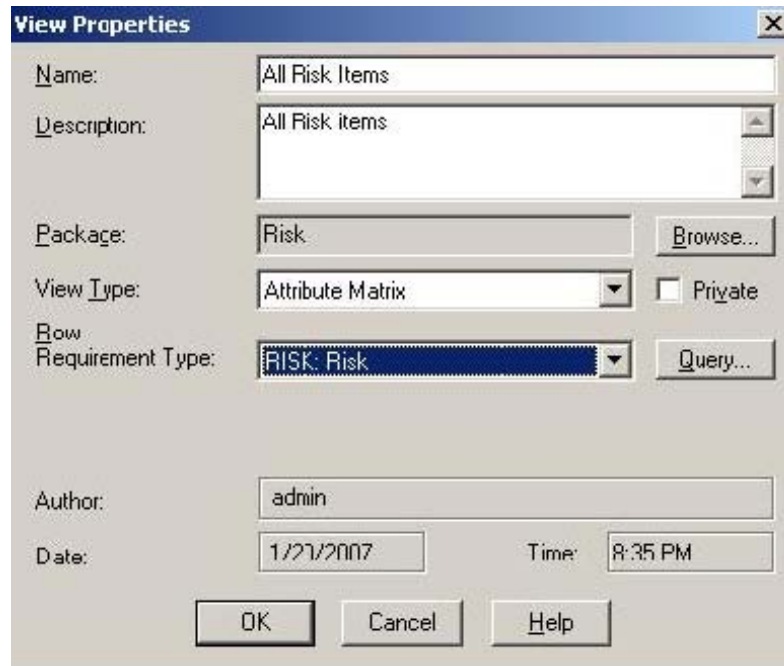
[9.5] Once new requirement type is added by administrator as indicated in [9.4], the users of the project will be able to add requirements of the newly added type.



[9.6] To see all newly created requirements, click on New~ View.



[9.7] Supply details for new view.



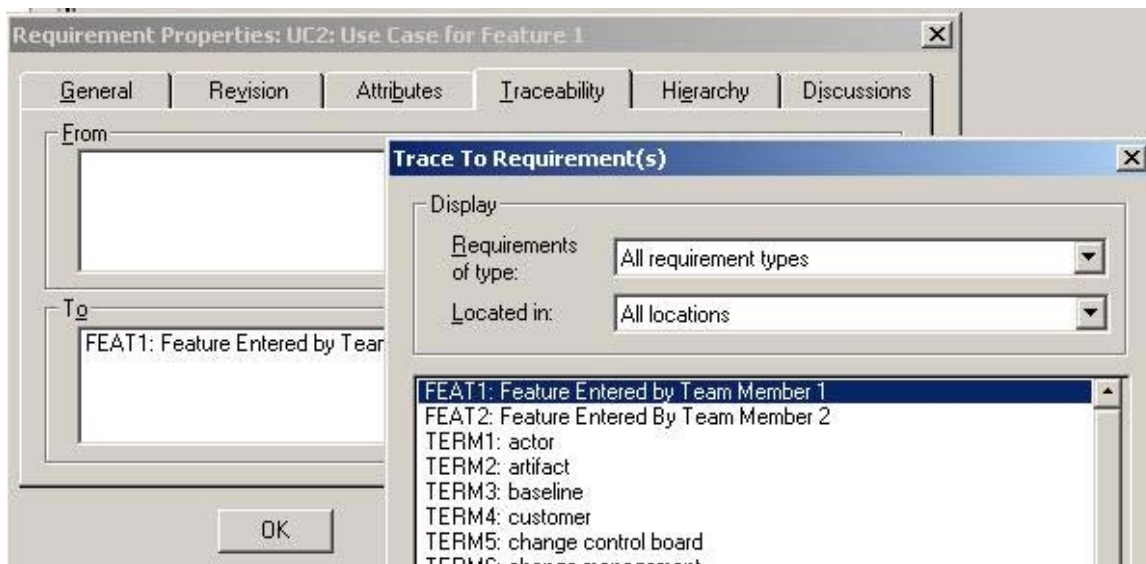
The 'View Properties' dialog box is shown with the following fields and values:

- Name:** All Risk Items
- Description:** All Risk items
- Package:** Risk (with a 'Browse...' button)
- View Type:** Attribute Matrix (with a 'Private' checkbox that is unchecked)
- Row Requirement Type:** RISK: Risk (with a 'Query...' button)
- Author:** admin
- Date:** 1/27/2007
- Time:** 8:35 PM

Buttons at the bottom: OK, Cancel, Help.

Exercise 10: Traceability

[10.1] Open the property of the requirement to set Traceability Details.

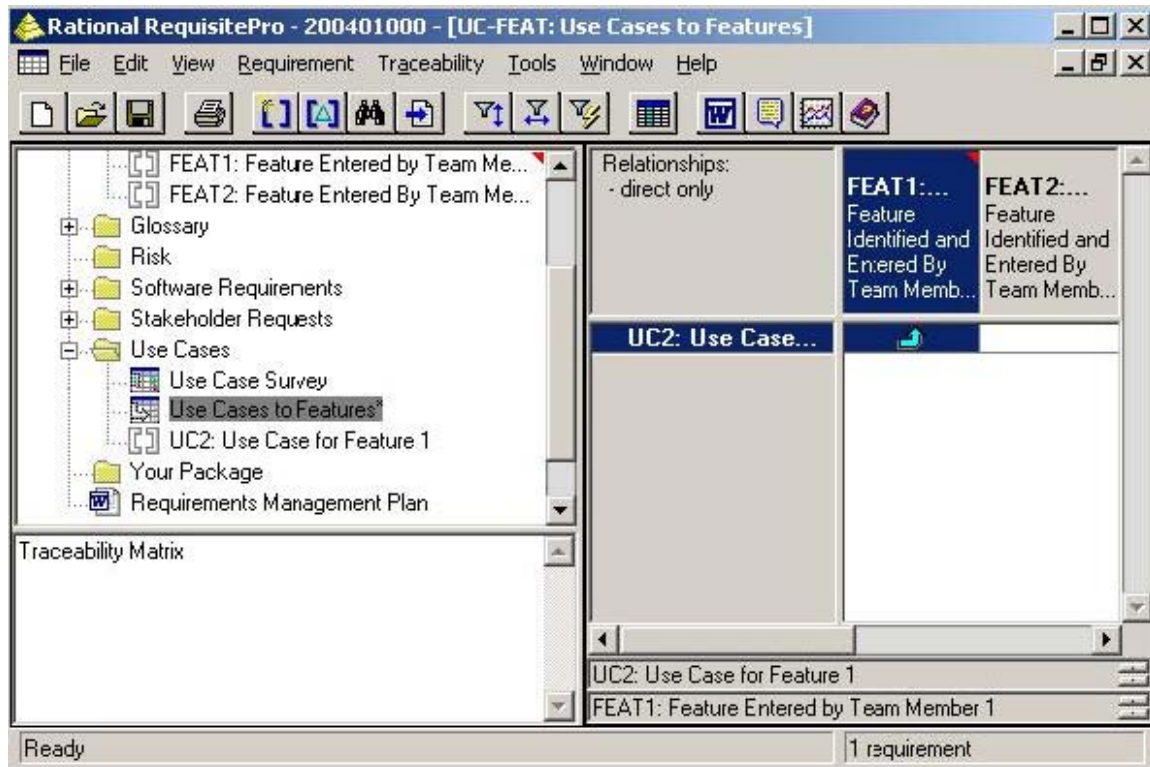


The 'Requirement Properties: UC2: Use Case for Feature 1' dialog box is shown with the 'Traceability' tab selected. The 'From' field is empty, and the 'To' field contains 'FEAT1: Feature Entered by Team Member 1'. The 'Trace To Requirement(s)' sub-dialog is open, showing the following details:

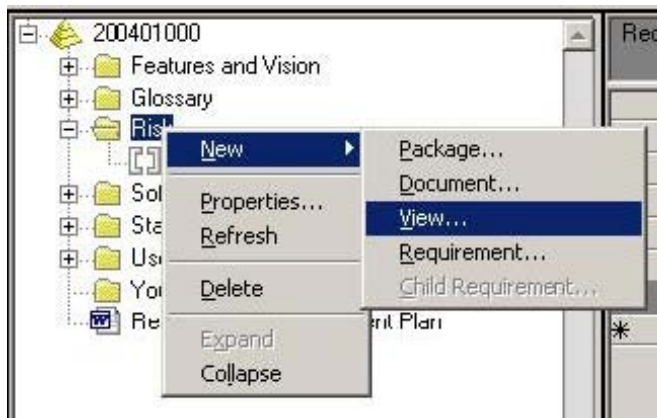
- Display:**
 - Requirements of type:** All requirement types
 - Located in:** All locations
- Trace To Requirement(s) list:**
 - FEAT1: Feature Entered by Team Member 1
 - FEAT2: Feature Entered By Team Member 2
 - TERM1: actor
 - TERM2: artifact
 - TERM3: baseline
 - TERM4: customer
 - TERM5: change control board
 - TERM6: change management

Buttons at the bottom: OK.

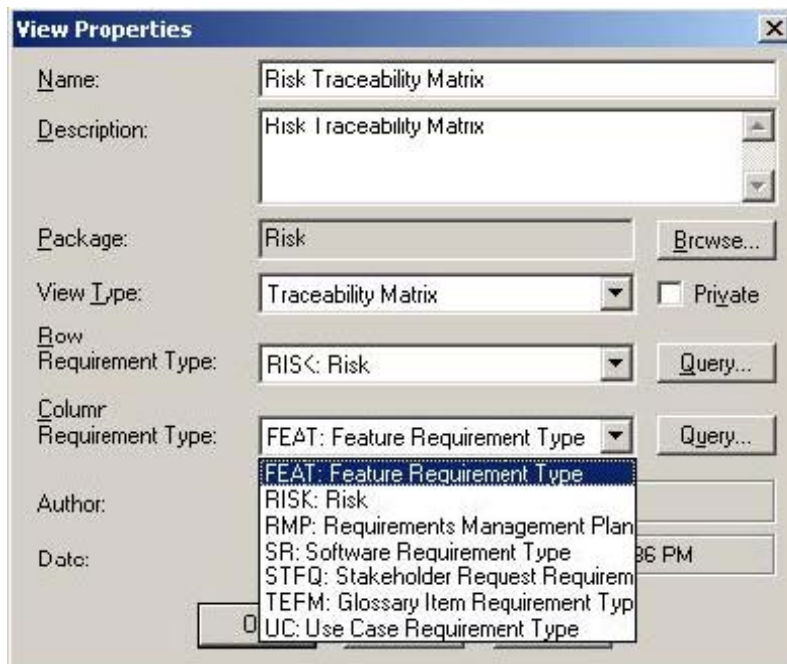
[10.2] Observe the Traceability arrow in Traceability Matrix



[10.3] Create New Traceability Matrix for newly added requirement type by clicking on New~ View



[10.4] Select Traceability Matrix in View Type:



[10.5] Observe resulting Traceability Matrix created in step [7.4]



Appendix

A1 Exercise A1: Explore Rational Requisite Pro Sample Projects




C:\Program Files\Rational\RequisitePro\samples




A2 RUP Links




[a] Tool Mentors:




 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Setting Up Rational RequisitePro for a Project



 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Detailing a Use Case Using Rational RequisitePro



 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Eliciting Stakeholder Requests Using Rational RequisitePro




 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Developing a Vision Using Rational RequisitePro



 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Eliciting Stakeholder Requests Using Rational RequisitePro




 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Capturing a Common Vocabulary Using Rational RequisitePro



 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Detailing a Business Use Case Using Rational RequisitePro



 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Managing Dependencies Using Rational RequisitePro

 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Reviewing Requirements Using Rational RequisitePro

 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Baselining a Rational RequisitePro Project

 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Viewing Requirement History Using Rational RequisitePro

 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Adding Templates to Your Rational RequisitePro Project

 [Tool Mentors](#) >  [Rational RequisitePro Tool Mentors](#) >  Archiving Requirements Using Rational RequisitePro