

# **RaQuest Startup Manual**

by Sparx Systems Japan

# **RaQuest 5.1 English Version Startup Manual**



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# 1. Introduction

Welcome to the Sparx Systems Japan RaQuest Startup Manual. This manual introduces the operations of RaQuest from the start-up. The pictures used in this manual may be different from those of the latest version.

#### 2. First Run

#### 2.1. To Start RaQuest

You can start RaQuest from the icon created on your Windows desktop during installation. Doubleclick the icon to start RaQuest (fig. 1), or select **RaQuest** from **Windows Start** menu.



fig. 1

After starting RaQuest, the following window appears (fig. 2). In the next section, we will introduce how to create a new project for RaQuest.

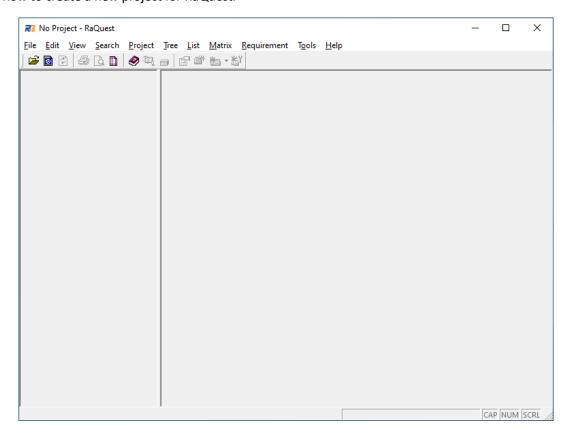


fig. 2

## 2.2. To Create New Project

Select the **File** | **New Project** (fig. 3). The dialog to specify a project file (QEAX file or EAPX file) appears. Specify a file name for a new project and click the **Save** button. As an example, we specify RaQuestStartup.qeax in this guide.

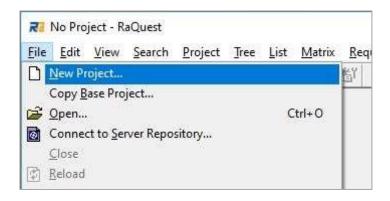


fig. 3

The project file is newly created (fig. 4).

The package, named "Requirements," in the Project tab on the left pane is the overall-standard package to manage requirements. It is called a root package.

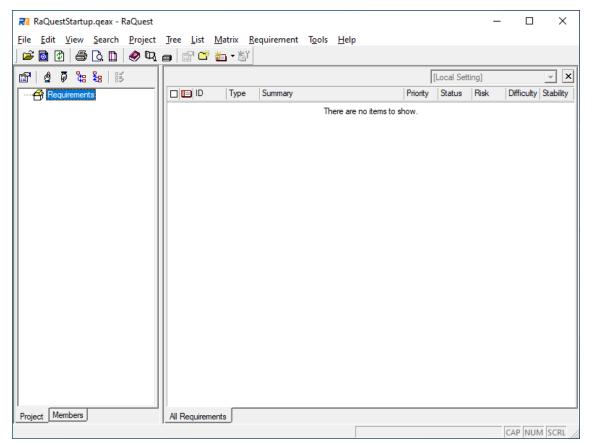


fig. 4

**Note**: Projects of RaQuest are in QEAX/EAPX files, the same data file with the UML Modeling Tool - Enterprise Architect. Repositories on Databases and Cloud Repositories can also be used as projects. (It is necessary to be able to open them with Enterprise Architect that works with RaQuest.)

In this manual, we describe how to create a new project on RaQuest, rather using a project file of Enterprise Architect as the project file of RaQuest. See the RaQuest Help, etc. to use a project of Enterprise Architect as the project of RaQuest.

# 3. Optional Setting in RaQuest

Before starting operations, this section provides the details about the optional settings in RaQuest.

#### 3.1. Setting for User Name

First, check the user name. With the project open, select the **Tools** | **Local Options**, then the following **Local Options** dialog appears (fig. 5). The field of **Current UserName** is shown on the first screen of this dialog. The Current UserName is applied to various fields like **Updated by**, which is used when creating requirements in RaQuest. If the **Current UserName** is blank or needed to be changed, enter the user name in the **Default UserName**. After setting the **Default UserName**, you have to reload the Project.

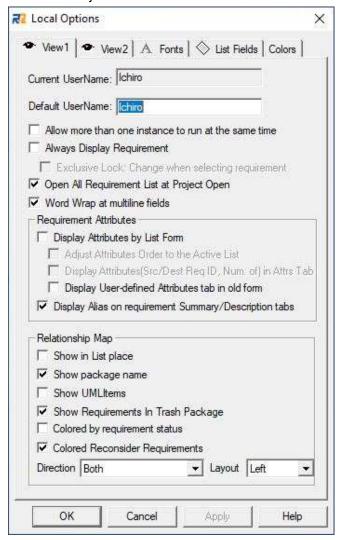


fig. 5

# 3.2. Requirement Status Flow in RaQuest

RaQuest assumes the following status flow in the process of requirements management (fig. 6).

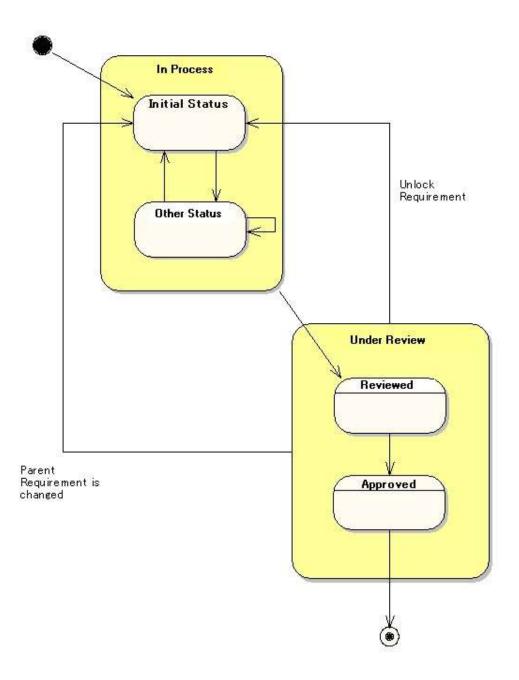


fig. 6

In the above status flow, there are three special statuses for RaQuest.

Initial status

The status for a requirement newly created. The requirement needs to be considered.

Reviewed status

The status for a requirement already considered. The content has been fixed.

Approved status

The status for a requirement finalized by the approval of a person in charge.

Each of these special statuses has its own status, which can be modified in the **Project Options**. It is possible to add/modify statuses in the **Project Options** as well.

The following fig. 7 shows the flow of the statuses in the default setting.

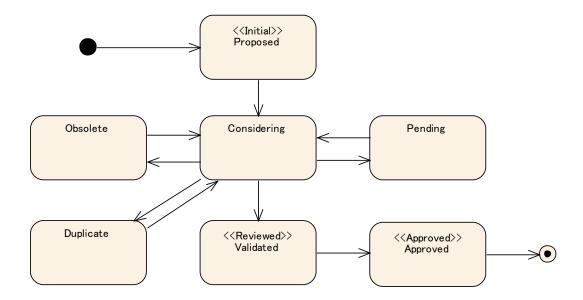


fig. 7

The default setting of RaQuest assumes the status flow of requirement to proceed from Initial (Proposed,) Considering, Reviewed (Validated), and Approved (Approved,) consecutively. Other than these, RaQuest has the statuses such as "Obsolete" for cases that requirements are excluded from consideration, and "Pending" for cases that consideration of requirements is pending.

The status corresponding to "Reviewed" or "Approved" means that the content of the requirement has been fixed, so the requirement has been automatically locked to protect it from modifications. If the lock is released (unlocked to make changes for some reason), the status will go back to the "Initial status" automatically. The statuses of related requirements will also be changed to "Review Required"

at the same time.

This enables you to have an accurate view of the requirements impacted by the change and prevents missing reviews.

#### 3.3. To Check the Status Definitions

Now, check the definitions of statuses explained in Section 3.2. From the main menu of RaQuest, select the **Tools | Project Options | Statuses** tab (fig. 8).

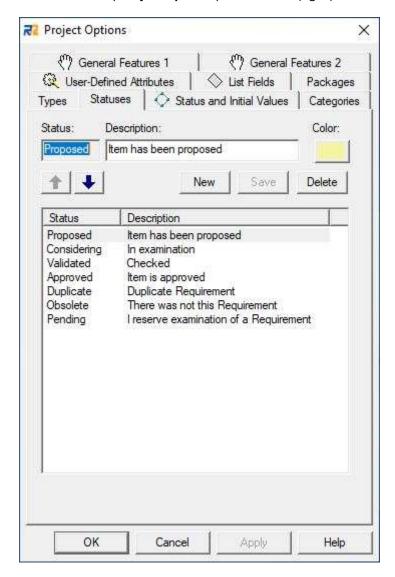


fig. 8

In this dialog, you can check and define statuses. Change the default definitions as necessary.

#### 3.4. To Check the Settings for Special Statuses

Before starting operations, you should check the settings of three special statuses ("Initial," "Reviewed," and "Approved," for details see Section 3.2). Display the **Project Options** | **Status and Initial Values** tab (fig. 9).

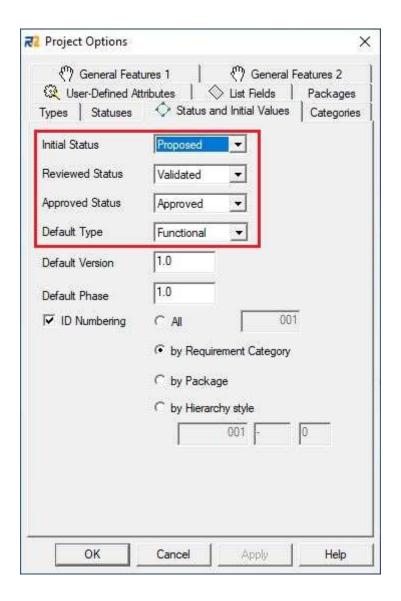


fig. 9

In the above dialog, statuses are assigned according to the status flow, as shown in fig. 6. You can change the settings for the three special statuses described in Section 3.2 in this dialog.

If you change the settings of the special statuses after creating a requirement, the status of the created requirement may be inconsistent. Therefore we recommend that you consider and assign the special statuses before creating a requirement and do not change them after starting the

operation if at all possible.

Please confirm the Default Type for a newly created requirement. The requirement types are explained in Section 3.5.

#### 3.5. To Check the Requirement Type Definitions

Check the definitions of requirement types. Select the Types tab of Project Options dialog (fig. 10).

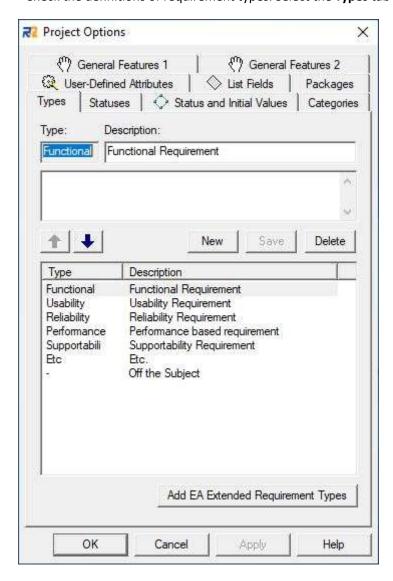


fig. 10

In the dialog, you can check and define requirement types for RaQuest. Requirements can be broadly classified into two types, "functional" and "non-functional." However, your team or division

may have an original rule for requirements' classification. You can freely add, modify, and delete requirement types in this dialog according to the rule in your team or division. For instance, "restriction," "performance," and so on may be defined as detailed requirement types for non-functional requirements.

The types in the classification model of FURPS+ are defined by default.

#### 3.6. Setting for Requirement Category

To set requirement category, display the Categories tab in the Project Options (fig. 11).

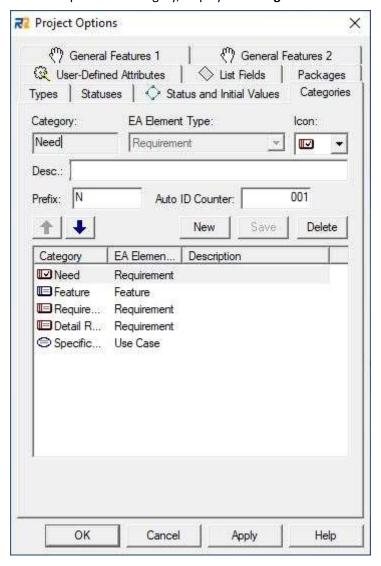


fig. 11

Requirement Category is not a type classification, but it is a classification of requirement abstraction level or granularity, and it is classified by Needs/Request/Specifications, or Needs/System requirements/Software requirements. In addition to the default settings, we added some categories

as the example above (fig. 11).

#### 3.7. Setting for Division and Member

To configure divisions and members, click the **Members** tab in the left pane of the main window in RaQuest (fig. 12). The **Members** tree appears and you can set divisions and members in the **Members** tree.

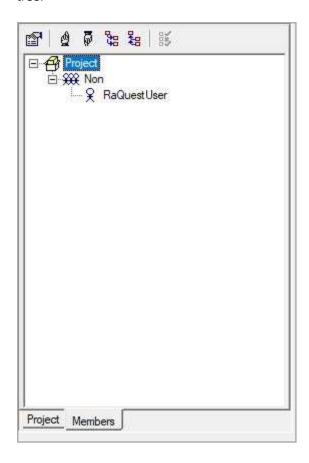


fig. 12

To create new divisions or members, move your mouse to where you would like to create and right-click to show the context menu. Select **Add Division** or **Add Member** to create them (fig. 13). You can put members under divisions.

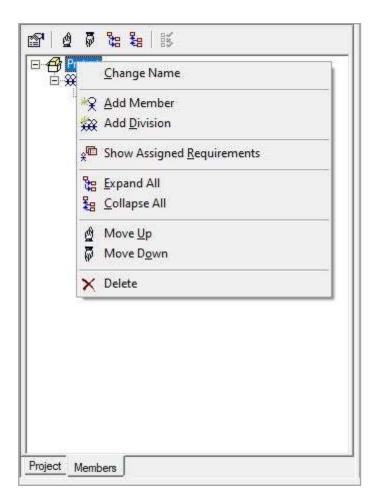


fig. 13

In this example, we set divisions and members, as shown in fig. 14. We recommend that you add UserName described in Section 3.1 "Setting for User Name" to the Members Tree for your convenience.



fig. 14

## 3.8. Setting for User-Defined Attributes

Next, this section describes the setting of User-Defined Attributes. In RaQuest, you can define attributes that are not in the existing attributes. We recommend that you create the required attributes before starting the project.

User-Defined Attributes can be defined in the Project Options' User-Defined Attributes tab (fig. 15).

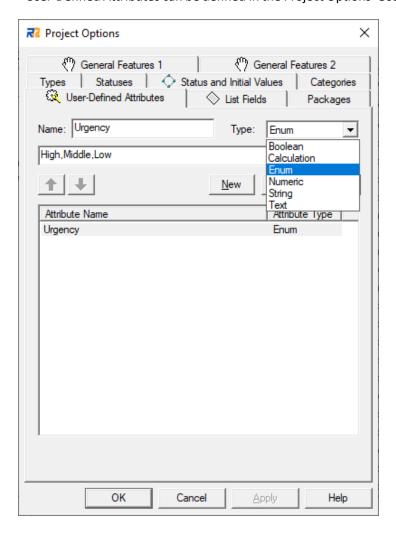


fig. 15

To define User-Defined Attributes, set Attribute Name and Type and click the **Save** button. The User-Defined Attributes are available in the **User-Defined Attributes** tab of **Requirements Properties** dialog (fig. 16).

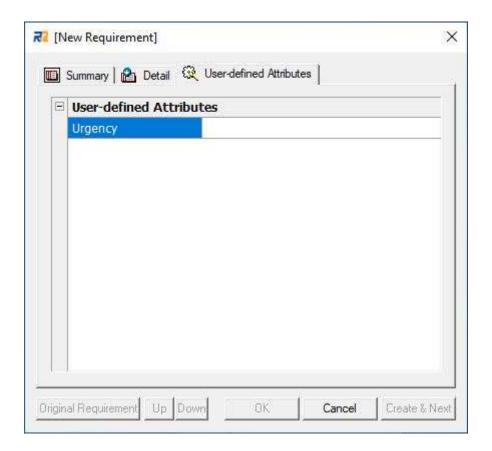


fig. 16

Now, all the settings of the project are completed.

# 4. Creation and Management of Requirement Items

The remaining part of this guide describes the actual operations for creating and managing requirement items.

#### 4.1. To Enter Purpose, Range, and Abstract of System

Before creating requirement items, first, enter "Name," "Purpose of System," "Scope of System," and "Summary" into the properties of the root package. These are the bases of requirements managed in this project. Right-click the root package in the tree (the root package is located at the top of the tree) and select **Properties** (fig. 17).



fig. 17

The Root Package Properties dialog appears. Enter the necessary information into the dialog. In this example, we enter them, as shown in fig. 18.

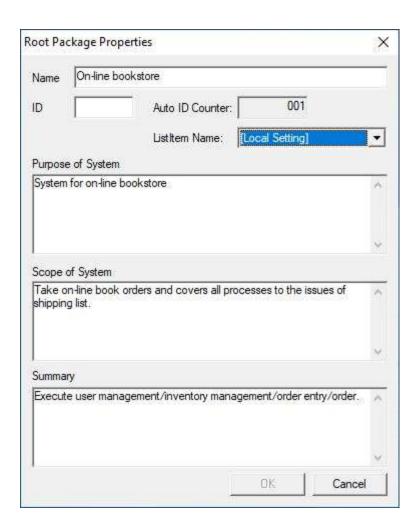


fig. 18

## 4.2. To Create Package and Requirement

RaQuest can create the following three items:

- Package
  - A container for managing multiple requirements together.
- Requirement
  - An individual requirement.
- Change

A special requirement for an existing requirement that requires to be changed. For instance, when a requirement of a product requires to be updated from version 1.0 to version 1.1, modifying the existing requirement will make its history hard to see. To avoid this, the "Change" requirement is useful. Defining the "Change" to the existing requirement allows you to see the changes made to the requirement.

Before creating a requirement item, create a new package. To create a package, right-click a package where you would like to create the new package (the root package is used here) and select **New Package** (fig. 19). The **Package Properties** dialog appears. Enter the Name, Summary, and so on into the dialog. In this example, we enter them, as shown in fig. 20.

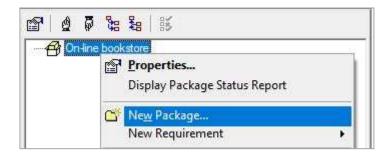


fig. 19

ackage Properti	es		>
Name: Needs			
ID	☐ ☐ Auto ID Cod	inter: 00	1
	ListItem Name:	[Inheritance]	•
Summary	Category:	Need	•
Requirements on	business side		^
		- 20 E	. Y
		ok	Cancel

fig. 20

Next, in this example, we create some more packages, as shown in fig. 21.



fig. 21

Then, create a new requirement. Right-click a package (where you would like to create a new requirement) and select **New Need** (fig. 22). The **New Requirement** dialog appears. Enter the necessary information into the dialog. In this manual, we enter them, as shown in fig. 23.

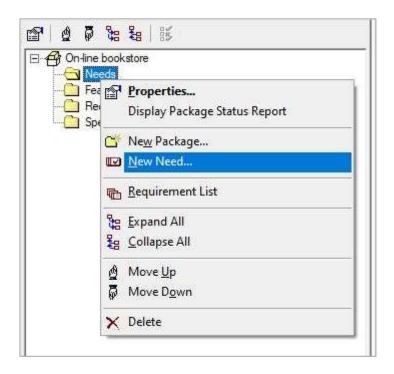


fig. 22

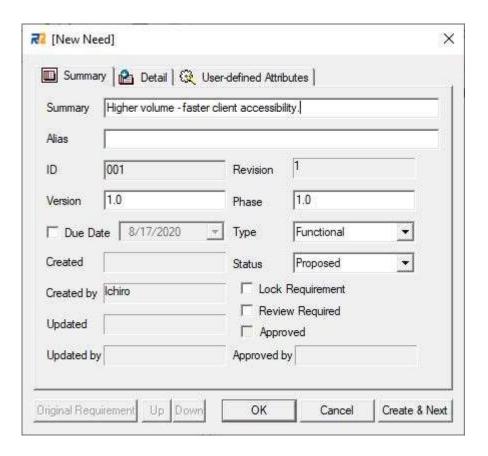


fig. 23

You can create other requirements in the same way. In this manual, we create requirements as shown in fig. 24.

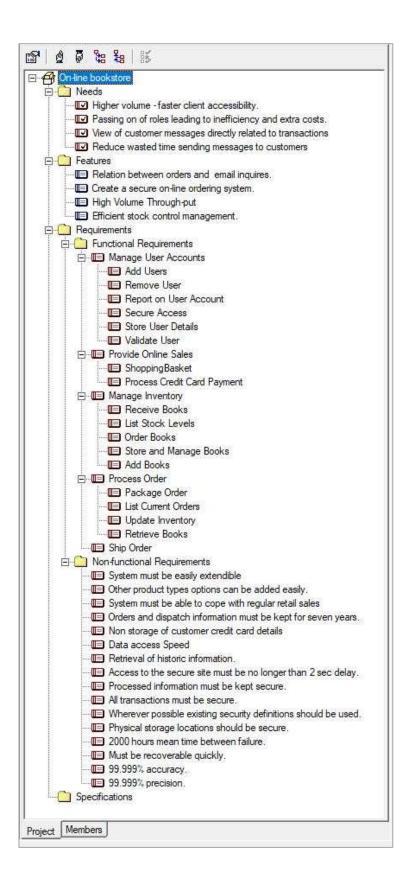


fig. 24

Once you create a requirement, you can assign a person in charge and add information about related files, URLs, and UML elements and write comments. For details, see the RaQuest Help.

It is also possible to place packages under a requirement. Such packages work as an index to classify the child requirements, and they play a different role from the packages with the standard hierarchical structure. For this reason, this kind of packages cannot be moved.

#### 4.3. Requirements List

You can display a list of created requirements in the right pane of the main window. Select the root package (or a package that has requirements to display) and select the **List** | **Requirements List** (fig. 25). The created requirements are listed (fig. 26).

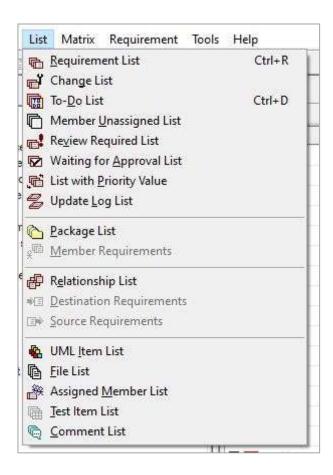


fig. 25

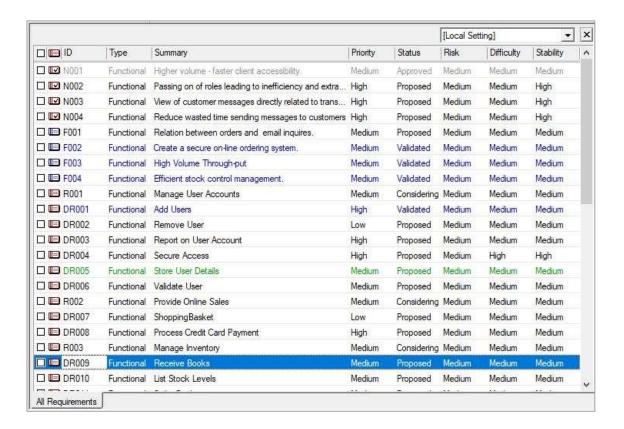


fig. 26

Click the header of each column to sort the requirements by the header item.

You can use the filter feature to narrow down the requirements to be listed. Select the **Search** | **Filter List**. The **Filter List** dialog appears and then check the items and enter the filtering keywords into the fields. You can display requirements containing or not containing the filtering keywords (fig. 27, fig. 28).

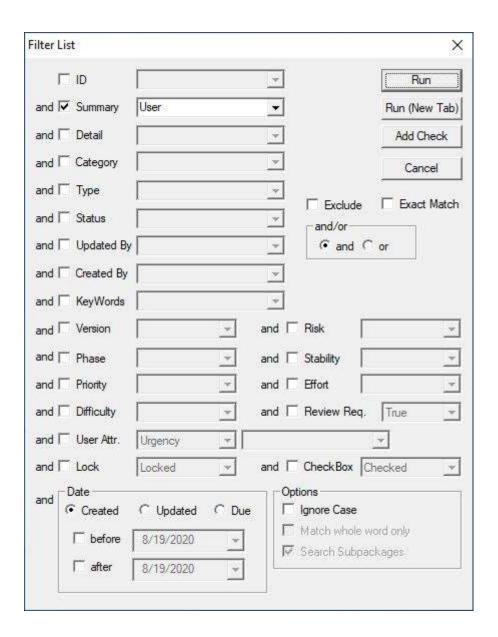


fig. 27

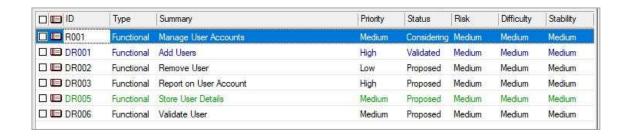


fig. 28

By using these features, you can easily check a lot of requirements. Furthermore, "Reviewed" or "Approved" requirements and expired requirements are displayed in different colors so that it helps the effective management (fig. 29).

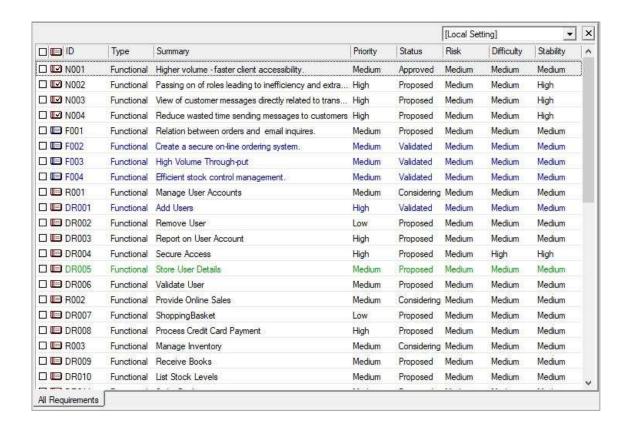


fig. 29

# 5. To Import the Existing Requirements Information

In this section, we will explain the following two methods to import the information of existing requirements managed by external tools like spreadsheet programs and others.

- CSV importing function
- Word Add-in

#### 5.1. CSV Import

To import requirement information from external tools like spreadsheet programs and others, the data has to be converted to CSV files. Export the data to a CSV file with each tool and then import it to RaQuest by the following steps.

First, select a package in the tree to store the imported requirements. And then, select the **File** | **Import** | **CSV** (fig. 30).

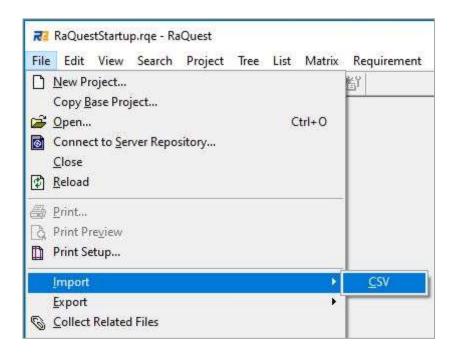


fig. 30

On the **List Import/Export** dialog, press the **Edit/New** button (fig. 31).

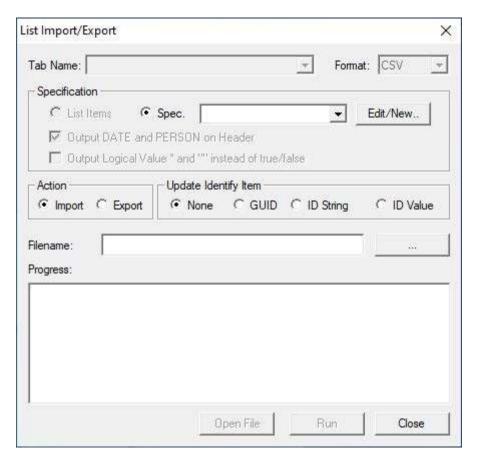


fig. 31

Then, on the CSV/Excel Import/Export File Specification dialog, use the Add Field and Up/Down buttons to define a file format to import the CSV file. In this manual, we use the following CSV file format for the setting (fig. 32).

(ID), (Summary), (Status)

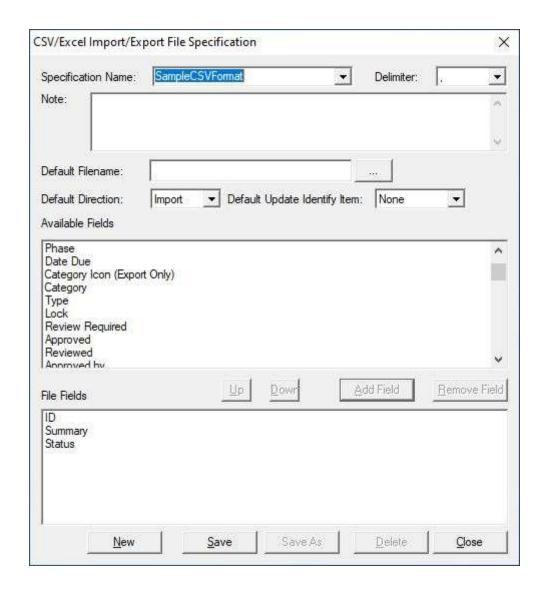


fig. 32

Name and save the setting. (In this manual, we name it SampleCSVFormat.)

On the **List Import/Export** dialog, select the created CSV format from the combo box of setting. Specify the CSV file, and then press the **Run** button. The data in the CSV file is imported as requirements into the specified package.

If the ID or GUID of requirement in the CSV file already exists in the project, it can be overwritten by changing the setting of **Update Identify Item** on the **List Import/Export** dialog. Also, you can synchronize the data even if the CSV file is edited outside of RaQuest. In order to synchronize the data, you need to include ID or GUID information in the CSV file when exporting; CSV/Excel Export will be explained in section 9.2.

#### 5.2. Word Add-in

When Word Add-in is registered at the installation, right-click menu of the high-lighted texts has **Register to RaQuest**. If both Microsoft Word and RaQuest are running, this menu registers the high-lighted texts as a requirement of the project currently opens in RaQuest.

For details, please see the RaQuest Help.

# 6. To Assign Member and Make Relationship to Requirement

#### 6.1. To Assign Member to Requirement

You can assign members to requirements. The member assigned here can be a person who reviews the requirement or a person who is in charge of the requirement until it is approved.

The following is the simplest way to assign members to requirements. First, display the **Requirements** list explained in Section 4.3 and select the **Members** tab at the left pane of the main window to display the **Members** tree. Drag and drop a requirement to a member in the **Members** tree (fig. 33).

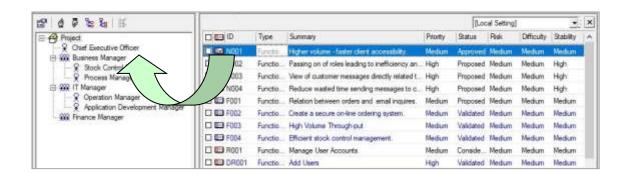


fig. 33

The member has been assigned successfully when the message is displayed on the status bar, as shown in fig. 34.

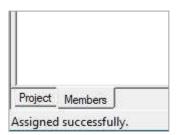


fig. 34

Drag and drop a member to a requirement works as well. Use whichever you like depending on the situation.

You can check the assigned members of the requirements from the **Properties** dialog of each requirement. Select the **Members** tab to check it (fig. 35).

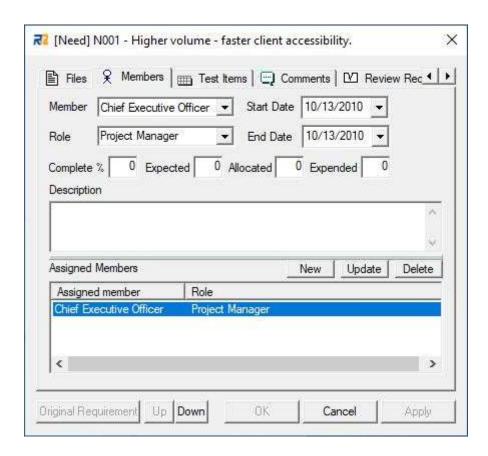


fig. 35

You can assign members also in this dialog. Use this dialog when you would like to modify or delete the assigned members. To customize the roles, run Enterprise Architect from Tools | run Enterprise Architect. Then, in Enterprise Architect, select the Configure Ribbon | Reference Data | Model Types | People. The People dialog shows up. You can customize the roles in the Project Roles tab. Change them as you need.

You can list the requirements on an individual assigned member basis. Select a member in the **Members** tree at the left pane of the main window, and select the **List | Member Requirements**. You can view all requirements of the member in a list at the right pane of the main window (fig. 36, fig. 37).

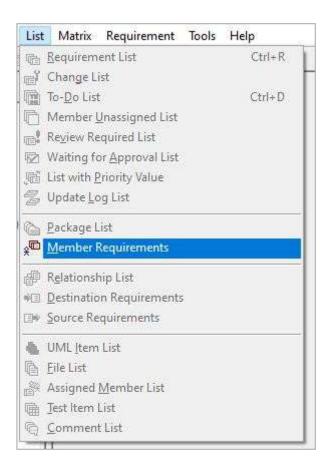


fig. 36



fig. 37

# **6.2.** To Make a Relationship between Requirements

Relationships between the requirements can be defined when needed. "Relationship" here means that the contents of requirements A and B are closely-related so that any changes made to requirement A likely influence requirement B. Many of the relationships are created between requirements contained in different packages immediately below the root package (fig. 21). With RaQuest, you can manage such relationships.

With drag-and-drop, you can easily make a relationship between requirements. Within the Requirement list of the right pane, you can drag a requirement and drop it to another requirement. Also, you can drag a requirement from the **Project** tree and drop it to another requirement in the **Requirement** list. Note that you have to drag a requirement (destination requirement, B in the above example), which will be influenced, and drop it to an influential requirement (source requirement, A in the above example). The result will be displayed on the status bar (fig. 38).

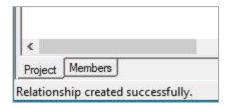


fig. 38

There are three ways to check the relationships between requirements; Relationship Map, Relationship List, and Matrix.

Right-click a requirement and select the **Show Relationship Map**, which shows the relationships between the selected requirement and its related requirements (fig. 39).

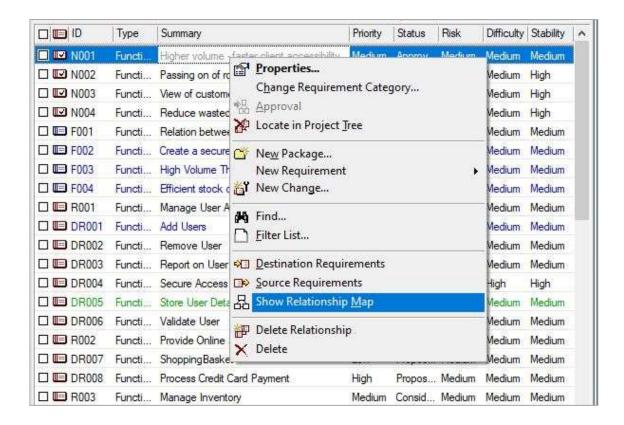


fig. 39

The diagram appears, as shown in fig. 40. The requirement you selected is shown in red.

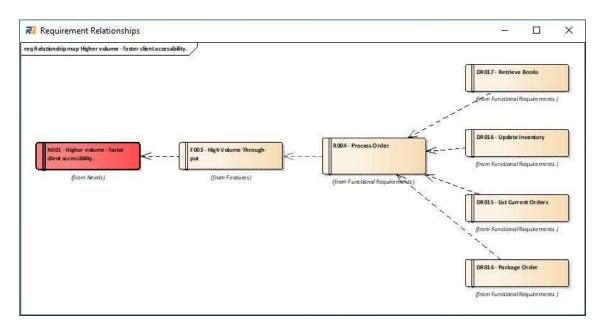


fig. 40

Each individual arrow on the diagram indicates the direction of dependency. In fig. 40, the left requirement is dependent on the right requirement. Note that the direction of dependency is in the reverse direction from the direction of effect.

Right-click the requirement and select **Destination Requirements** or **Source Requirements** to list the relationships. "**Destination Requirements**" means requirements that are affected by the currently selected requirement. For the previous example, selecting requirement A and showing the Destination Requirements list, it includes requirement B (fig. 41). On the other hand, "**Source Requirements**" means requirements that affect the currently selected requirement.

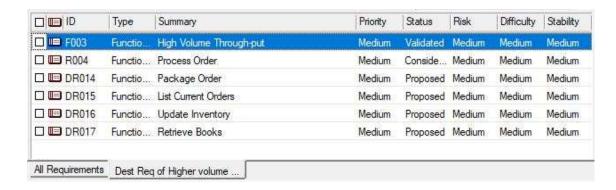


fig. 41

When you delete the relationship, right-click the requirement and select **Delete Relationship** from the context menu (fig. 42).

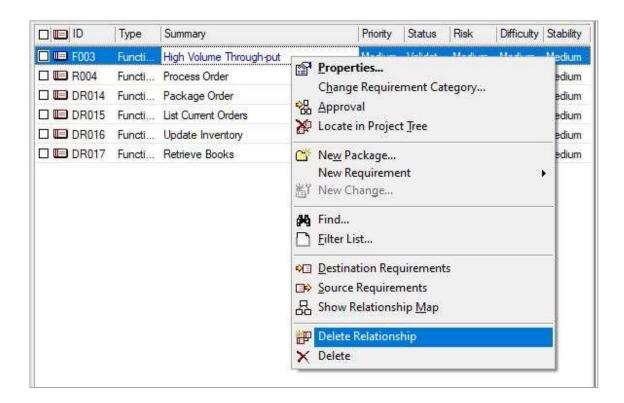


fig. 42

To display matrix, select the **Matrix** | **Requirement Matrix**. At first, the relationships between all requirements are displayed (fig. 43). You can narrow down the target packages by specifying the packages as necessary. Setting and editing the relationships are possible by left double-clicking the matrix or from the context menu displayed by right-clicking the matrix. Not only relationships between requirements, but also you can display requirements and members, requirements and Use Cases, and requirements and UML items in Matrix. To check "missing items," it is effective to use the "color unrelated" option.

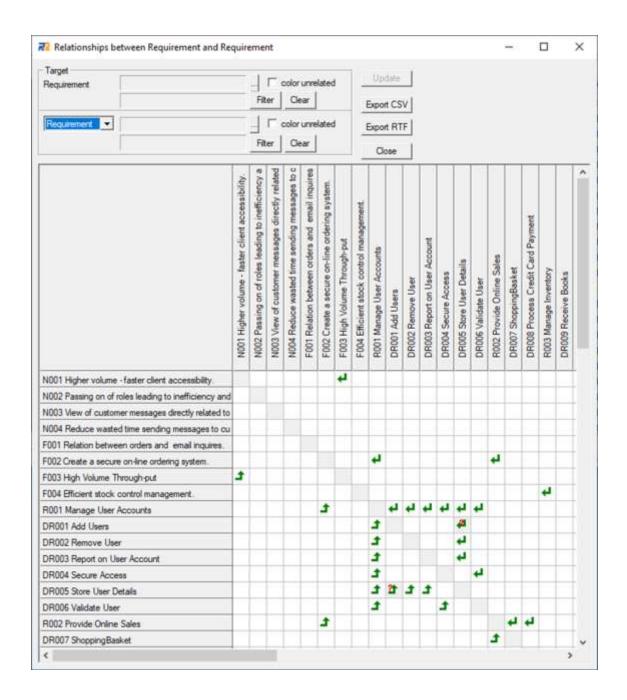


fig. 43

As described so far, you can define relationships between requirements and check them in diagrams, lists, and matrix diagrams. These relationship definitions are also used for checking the impact of a status change as described in Section 7.4.

## 7. Requirement Status Management

This section describes how to manage requirement status.

#### 7.1. To Change Requirement Status

As described before, each requirement has its own status. You can manage requirements by the status transition. To change the status, the **Properties** dialog of the requirement is used.

Double-click a requirement in the **Requirements** list or **Project** tree, or right-click the requirement and select **Properties**. The **Properties** dialog appears, as shown in fig. 44. You can change the status in this dialog.

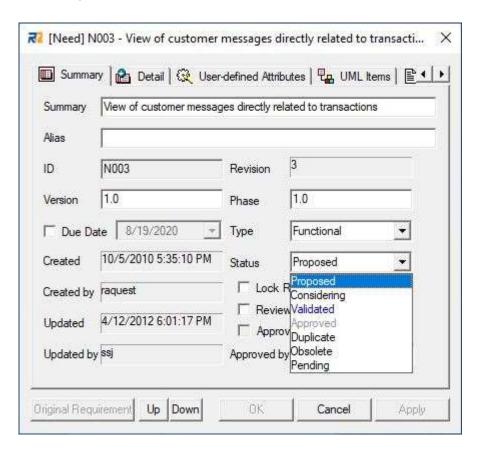


fig. 44

After changing the status, click the  ${\bf OK}$  button to save and reflect the value.

### 7.2. Status Change to "Reviewed"

"Reviewed" and "Approved" status are special status for RaQuest, so they need special steps when you change the requirement status to "Reviewed" or "Approved."

First, let's look at "Reviewed" status. You can change the requirement status to "Reviewed" according to the procedure described in Section 7.1. After you click the **OK** button, the following message appears (fig. 45).

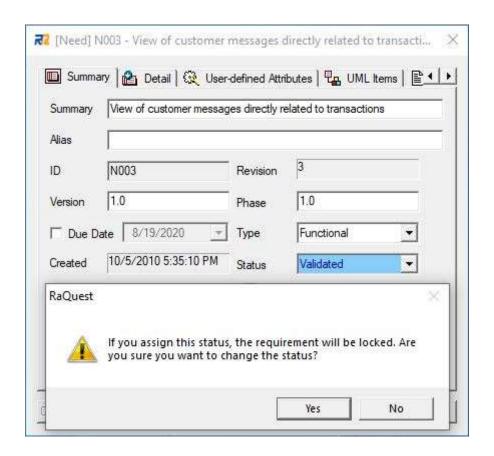


fig. 45

If you click the **Yes** button, the requirement is locked and you cannot modify it. When you need to modify the locked requirement, uncheck the **Lock Requirement** checkbox in the **Properties** dialog. When you uncheck the checkbox, the following confirmation message appears, as shown in fig. 46.

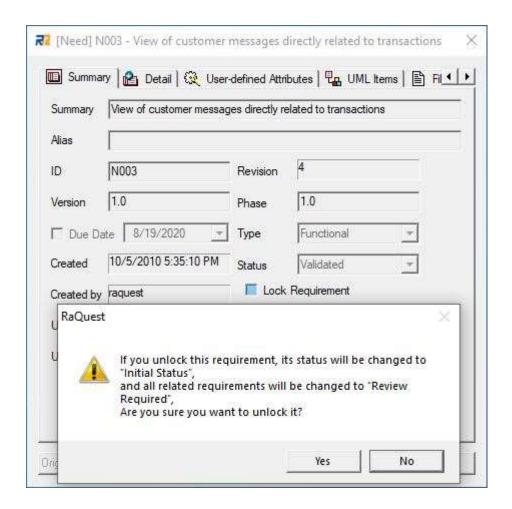


fig. 46

If you click the **Yes** button here, the requirement status is changed to the "Initial" status automatically. In this example, status "Proposed" is defined as the initial status, so the requirement status gets back to "Proposed." At the same time, the statuses of all related requirements are also changed automatically (the details are described in Section 7.4).

#### 7.3. Status Change to "Approved"

Changing the status to "Approved," the final stage of status transition, needs to follow the different steps. You have to use the approval function to change the status to "Approved."

To approve, select a requirement, and then select the **Requirement** | **Approval** (fig. 47).

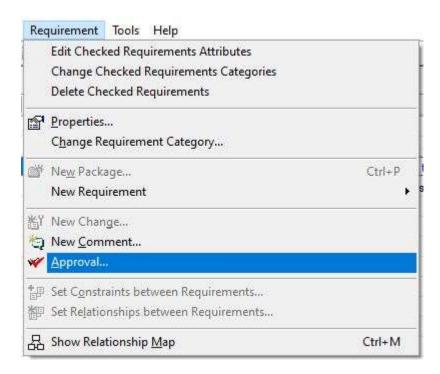


fig. 47

The following dialog appears, as shown in fig. 48. In this dialog, the summary and details of the requirement are described. You can decide whether to approve it based on the information (fig. 48).

ID	F002			
Summary	Create a	secure on-line order	ing system.	
Detail	The ordering system must be secure 🔥			
	against t	fraudulent transactio	ins.	V
Approve t			ns.	~
Approve to	his Requi		ns. Next	_

fig. 48

The approved requirement remains to be locked. When you try to modify the locked requirement, the confirmation message, the same one which appears when unlocking the "Reviewed" requirement,

appears.

### 7.4. Effect of Status Change

When you unlock a requirement with "Reviewed" or "Approved" status, RaQuest considers its fixed contents need to be changed. In this situation, the related requirements will be changed as follows:

- unlocked.
- the status "Reviewed" or "Approved" will go back to "Initial."
- "Review Required" will be checked.

"Review Required" status can be modified in the Properties dialog of the requirement (fig. 49).

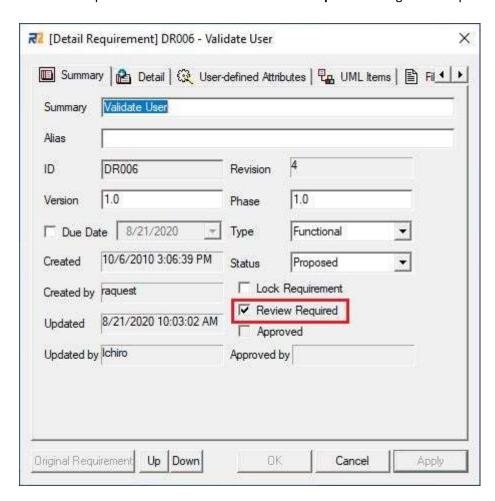


fig. 49

When Review Required is checked, it means that the requirement was affected by the changes in

the other requirements. Unchecking the Review Required means the review is finished. However, we do not recommend unchecking it right after the modification of the source requirement because Review Required means the dependent requirement has been changed. You can check which dependent requirements have been changed on the **Review Requirements** tab. Check the impact of each dependent(source) requirement on the **Review Requirements** tab. Change the contents if needed and click **Reviewed** to empty the **Source Requirement List for Review**, and then uncheck the **Review Required** checkbox.

The requirements with "Review Required" status are displayed in green in the **Requirements** list. They are also in green in the diagram displayed by the **Show Relationship Map** feature, as shown in fig. 50.

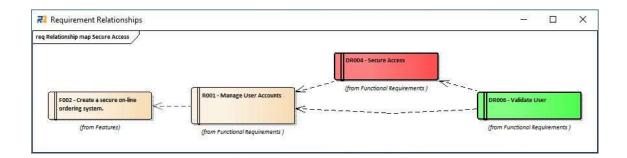


fig. 50

When you modify a locked requirement, it is a difficult task to review all the destination requirements without missing out. The "Review Required" status is useful to check requirements affected by the change without missing out. In this way, even if you change requirements, RaQuest can support you in not forgetting to review all affected requirements.

# 8. Variation of Requirements Display

Not only the tree and the list as described in section 4, but also RaQuest can display requirements in various forms by the following features:

- 1. Custom tree
- 2. Customizable list fields
- 3. Matrix
- 4. Always Display Requirement option
- 5. Display Attributes by List Form option

For the details of these features, see the RaQuest Feature Guide or the RaQuest Help. The following fig. 51 is a sample window of when the **Always Display Requirement** option is checked and fig. 52 is a sample window of when the **Display Attributes by List Form** option is checked.

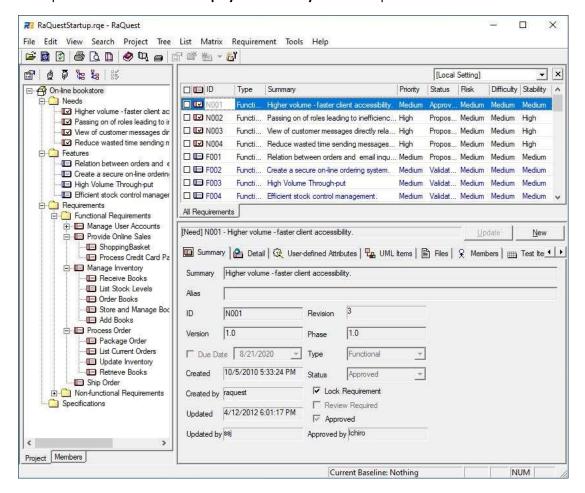


fig. 51

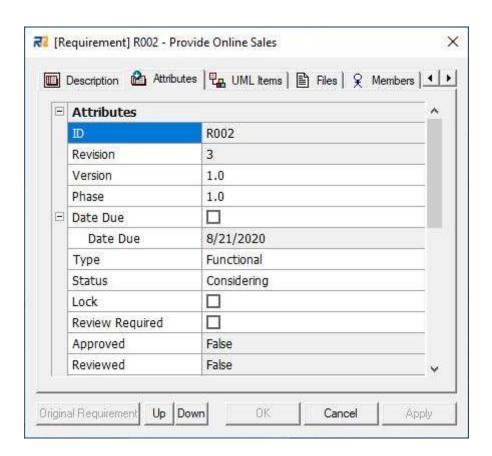


fig. 52

# 9. Output of Requirements

This last section describes how to output requirements. Basically, generated requirements can be managed in RaQuest, but you may be required to output the requirements for consideration or documentation.

RaQuest can output requirements by the following two ways.

### 9.1. Print Requirements

All lists in the right pane of the main window can be printed out. Not only the **Requirement** list but also any lists such as the **Member Requirements list** or the **To-Do** list are able to be printed out.

To print out a **Requirements** list, select the tab to display the list and then select the **File | Print** (fig. 53).

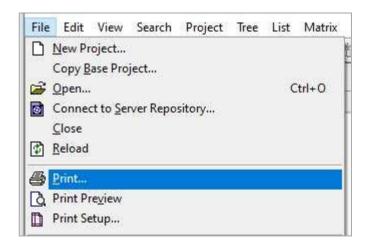


fig. 53

# 9.2. Export Documents

RaQuest can export requirements in the following file formats.

- -HTML
- -RTF
- -CSV
- -Microsoft Excel

For details, see the RaQuest Help.

These output features expand the effective utilization of requirements.