

IBM Rational Focal Point IT portfolio management template

User guide



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***IBM® Rational® Focal Point
IT Portfolio Management Template***

User Guide



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This edition applies to version 6.5.1 of Rational Focal Point and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this publication

Content

- This user guide explains how to use the IT portfolio management template to manage an IT portfolio.
- The IT portfolio management template is a pre-configured template that you can use in IBM® Rational® Focal Point.
- The examples and screen captures in this user guide demonstrate how the template can be used and are based on IT portfolio management in the financial sector, for example, a bank.

Objectives of the user guide

After reading this user guide you should be able to understand these concepts:

- The pre-defined roles and how they collaborate in the tool
- The process for projects
- The different information types, such as risks, business needs, portfolios.

Objectives of using the IT portfolio management template

With the template, you can complete these tasks:

- Align your project portfolio with your strategic objectives
- Analyze and monitor project portfolio health
- Make informed decisions about your portfolio
- Analyze the value of projects by using actual data and pairwise comparisons
- Create relationships between portfolios, projects, risks, business needs etc.
- Display data in analytical views: capacity analysis, risk assessment, application gap analysis
- Create project business cases and pre-plans
- Capture and edit projects, risk, business needs etc.
- Do high-level project resource planning, scheduling and scoping
- Monitor the progress of project implementation
- Transfer a project to Collaborative Lifecycle Management (CLM) and retrieve updates
- Bulk publish business needs as work items or requirements in a Collaborative Lifecycle Management (CLM) application.
- Do application value realization

Intended audience

This user guide is intended for the following audiences:

- Primary audience
 - Senior executives
 - Portfolio review board
 - Portfolio managers
 - Project management office
- IT analysts
 - Secondary audience
 - Application owners
 - Project managers
 - Project sponsors
 - Finance people

Prerequisites

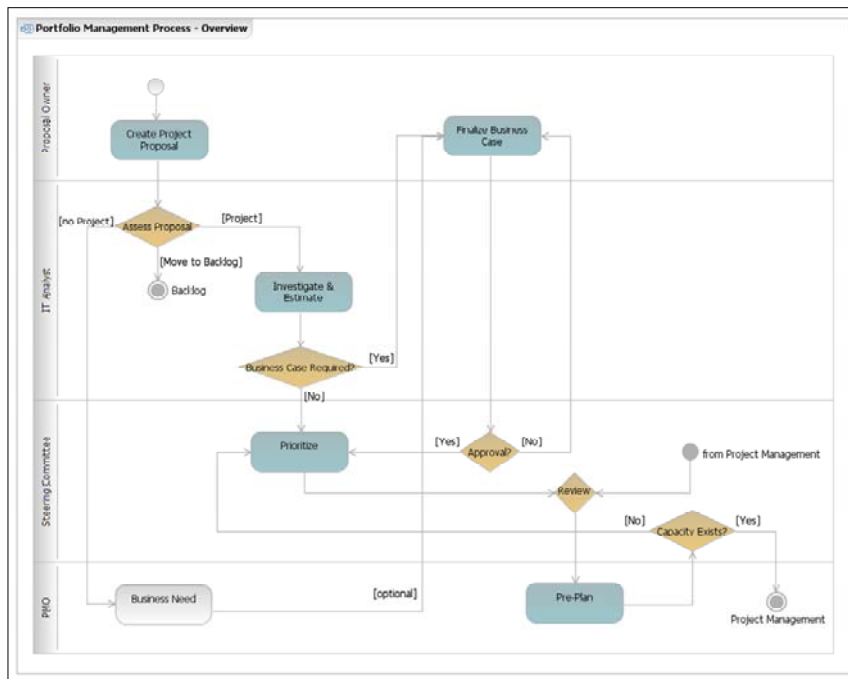
To follow this user guide, you must have basic knowledge of Rational Focal Point.

Section 1 – IT portfolio management process

This section explains the following concepts:

- The IT portfolio process in the template
- How users with different roles collaborate throughout the process

Section 1 – IT portfolio management process



Note: This process is implemented through the workflow engine in Rational Focal Point.

The process in the IT portfolio management template includes capturing project proposals; creating estimations and business cases; and conducting reviews, high level planning, and capacity analysis before exporting the project to CLM. The project proposal must be approved several times as it moves through the process.

All users can submit a project proposal. Later, the IT analyst can assign a submitter to be the proposal owner of the project proposal. As the proposal owner, the submitter is also responsible for creating the project business case. A project can also be added through integration with IBM® Rational® System Architect. For more information, see Section 11 – Integrating with Rational System Architect.

The IT analyst determines whether the submitted proposal is actually a project before he or she completes the initial investigation and estimations. If a proposal is not accepted as a project, it can be transformed into a business need, such as an enhancement request against an existing

application. A proposal that is not accepted can also be moved into a backlog; for example, if the proposal is really a defect in an existing application. The data in the backlog can be moved into other systems. Business needs can be included as scope items in the business case of the project.

After the IT analyst finishes the initial investigation of the proposal, which might include high-level estimations of cost, scope, duration, and time of delivery, he or she can determine whether the proposal needs a business case. A project that is expected to have a low cost and short duration might not require a business case. Such proposals are moved directly to the prioritization phase. However, the majority of projects need business cases. For a business case, the IT analyst selects a proposal owner. The proposal owner can be the same person as the project proposal submitter. The business case might include the financial plan for the project, a risk assessment, and an initial scope definition. The scope is refined during the pre-plan phase.

The steering committee decides whether to approve project proposals that have business cases. If a proposal is approved, it moves into the list of project proposals to be prioritized. If it is not approved, it can either be rejected or be returned to the proposal owner for further elaboration on the business case. Prioritization is done on regular basis; for example, quarterly. The steering committee gathers the proposals and votes on them to understand their alignment with the strategic objectives, their value to the business, their cost, risk, and so forth. The result of the prioritization is a ranked list of projects, in which the projects that score the highest considering all criteria are those that the business will focus on. Before the highest scoring proposals are approved, the proposals are reviewed against ongoing projects to balance the portfolio.

For projects that the steering committee has voted as top priority, the project management office (PMO) creates a pre-plan, or a high-level plan. In the pre-plan, the scope is defined in detail by associating business needs with the project, creating a financial plan, and determining the resource demand and the needed resources for the project. The proposal owner can also help to create the pre-plan.

Before it approves the projects for implementation, the steering committee reviews the pre-plan. If the pre-plan is approved, the PMO exports the project from Rational Focal Point to CLM. From that point, the project implementation is monitored from Rational Focal Point. The project is measured to see if the schedule targets are met, if the business needs are implemented on time, and if the cost is within plan.

When the project is complete in CLM, it is set as delivered in Rational Focal Point.

Section 2 – Adding and submitting project proposals

This section explains how to complete the following tasks:

- Add project proposals and link them to portfolios, applications, and strategic objectives
- Find your own draft project proposals
- Transfer the proposal from the Draft to the Proposed state

Section 2 – Adding and submitting project proposals

- Giulia, business stakeholder, adds a new project proposal by clicking **Add > Project Proposal**.
- She enters information in the fields, which are called attributes in Rational Focal Point, and clicks **OK** to save the information.

Rational Focal Point

Workspaces | Home | Preferences | Giulia | Help | Log

Add > Project Proposal

Enter information about the new Project, then click OK.

View to add project proposals.

Title: Enhancement of Fraud Detection Tool

Description: The project will do necessary upgrades to the fraud detection tool. We need real-time checks of risk factors. Automatic monitoring and alerts on suspect transactions is also important. Support for authentication of client data will be mandatory. In addition, the GUI needs a refresh and we also need to take a look at the access rights and user types.

Type: Strategic

Portfolio: Infrastructure

Submitter: Giulia - Lookup

Business Units: Investments

Comments: We've seen how our current system has flaws that need to be corrected in order to maintain high usability and value to our business.

Related Applications: Fraud Detection Tool

Related Projects: Online Shopping Security

Primary Strategic Objective: Adapt to new technologies

Project Objectives: Update the fraud detection system to the latest technologies available.

Business Value: New technologies have been developed over the years. We need to stay up to date in order to prevent frauds. That will in turn save cost for us.

OK Cancel Add Multiple Projects

All users can add project proposals. When you add a new project proposal, enter information in these fields:

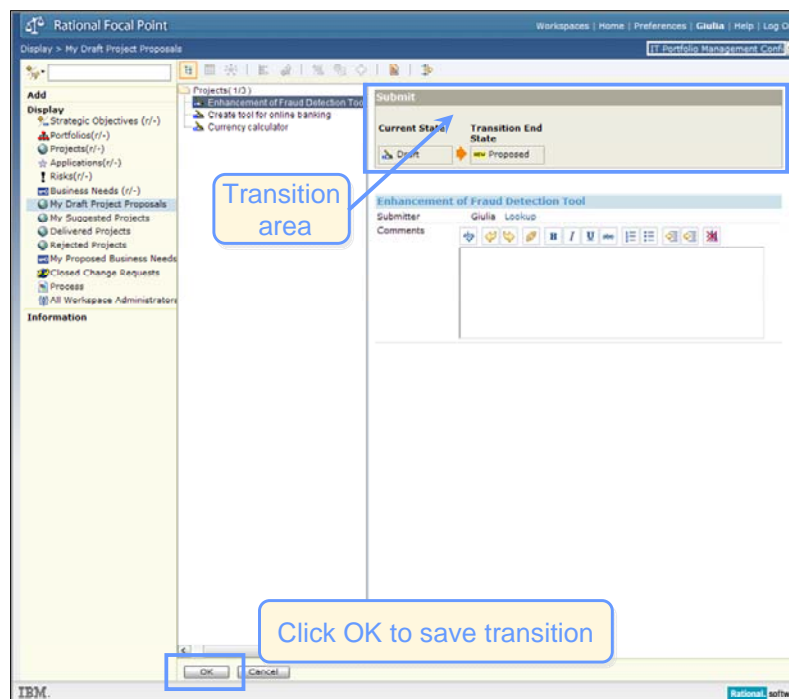
- **Title**
- **Description**
- **Type** – The type of project
- **Portfolio** – Which portfolio the project is related to

- **Submitter** – By default, this is the person who is logged in, but if the submitter is someone besides the person creating the proposal, this field can be changed.
- **Business Units** – The business units that the project affects
- **Comments**
- **Related Applications**
- **Related Projects**
- **Primary Strategic Objective** – The strategic objective that the project is mainly aligned with
- **Project Objectives**
- **Business Value** – The value the project will contribute to the business.
- **Parent Folder** – The program that the project should be added to

When you save the project proposal, it is in Draft state. To display all of your draft proposals, click **Display > My Draft Project Proposals**. When the submitter is satisfied with the proposal, he or she can submit the proposal.

Section 2 – Adding and submitting project proposals

- Giulia is ready to submit her draft project proposal. She clicks **Display > My Draft Project Proposals**.
- She selects the project. In the transition area, she clicks **Submit**.
- Giulia can now type additional comments if needed.
- She clicks **OK** to save.
- The project is now submitted.



The transition area is at the top of the list of attributes.

If the view does not have a transition area, you cannot change the state from that view. To transfer the project into the next state, select another view that has a transition area.

Section 3 – Assessing new proposals

This section explains how to complete these tasks:

- Accept or reject project proposals, ask for clarification, mark a proposal as duplicate, mark a proposal as business need, or move a proposal to backlog
- Assign an IT analyst to assess the project proposal
- Assess the project proposals and provide initial estimates for them

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Section 3 – Assessing New Proposals

- Emma, an IT analyst, clicks **Display > New Project Proposals** and looks at all new project proposals.
- She can only edit the IT Analyst and Comments information.
- Emma accepts a proposal and selects herself to be the IT analyst to do the investigation.

The screenshot shows the Rational Focal Point interface. On the left, a navigation pane lists various project management tasks. The main area displays a project proposal for 'Enhancement of Fraud Detection Tool'. The project is in the 'Proposed' state. The 'Current State' and 'Transitions' section shows buttons for 'Accept', 'Mark as business need', 'Move to backlog', 'Duplicate', 'Clarify', and 'Reject'. The 'General Information' section includes fields for ID (215), Title, Description, Type (Strategic), Portfolio (Infrastructure), Submitter (Giulia), IT Analyst (blank), Business Units (Operations, Investments), and Comments. The 'Links' section shows related applications and projects. The 'Value Statements' section includes Primary Strategic Objective, Project Objectives, and Business Value. The 'Element Information' section shows Version (1.0.1), Parent Folder (Projects), Creator (Giulia), Created Date (7/21/10), Last Changed By (Giulia), and Last Changed Date (7/21/10).

The IT analyst can complete these transitions for a project that is in the Proposed state:

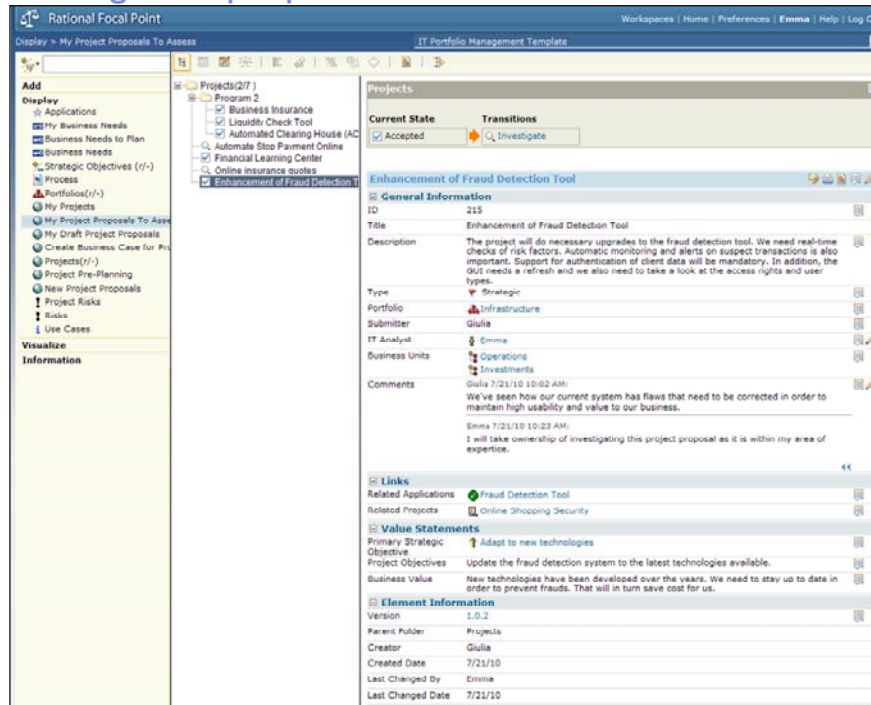
- **Accept** – The project proposal is valid and is accepted. During an investigation, the IT analyst estimates all accepted project proposals.
- **Mark as business need** – Proposals that are identified to be business needs against existing applications become business needs. The proposals that are to become business needs are displayed on the home page of the IT analyst, in the Create Business Need window. To create a business need, open a proposal, click **Add Business Need**, and complete the form for the business need (the Title and Description are copied from the

proposal). After you save the business need, a link to the original proposal is created automatically.

- **Move to backlog** – Proposals that are identified as something besides a project proposal or business need, such as a defect or a support case, belong in the backlog. Backlog items can be moved to other systems. IT analysts can click **Display > Non-Projects Backlog** to open a view in which they can manage proposals marked as backlog.
- **Mark as duplicate** – Proposals that are identical to other projects or project proposals are marked as duplicates. When you transfer a proposal to this state, a link to the original project is created.
- **Clarify** – Vague or incompletely described proposals are returned to the submitter for clarification.
- **Reject** – Proposals that do not make sense to the business are rejected; for example, invalid proposals. In the Comments attribute, provide a reason for the rejection.

Section 3 – Assessing new proposals

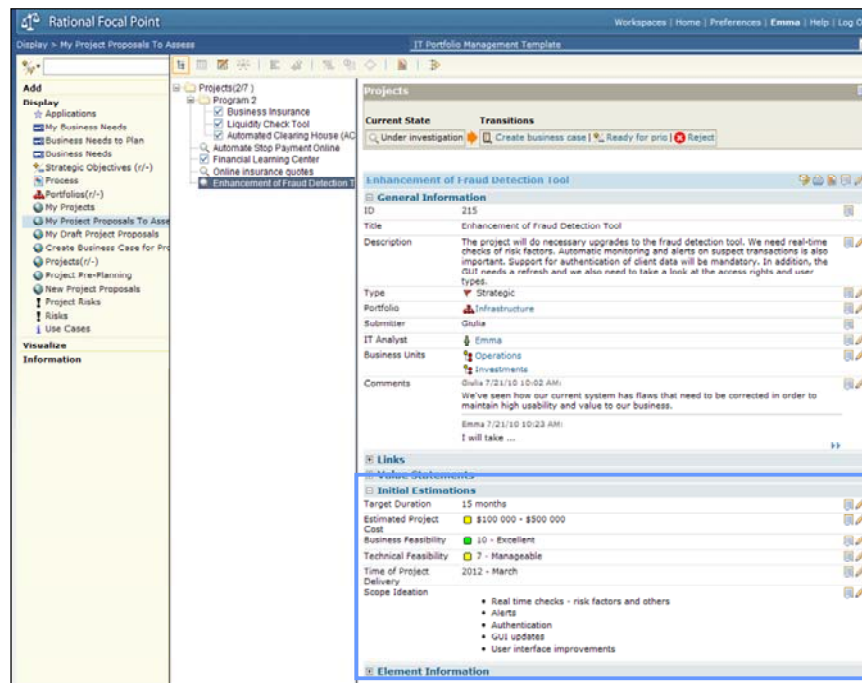
- Emma clicks **Display > My Project Proposals To Assess**
- The proposal is still read-only.
- In the transition area, Emma clicks **Investigate**.



On their home pages, IT analysts can also display the project proposals that they are assigned to assess. Click **Home**, and the proposal is displayed in the My Project Proposal To Assess window.

Section 3 – Assessing new proposals

- The project proposal is now under investigation by Emma.
- Emma can edit the project, and she updates the Initial Estimations attributes.
- When she is done, in the transition area, Emma clicks **Create business need** and selects Victor as the proposal owner.



During the assessment of the project proposal, the IT analyst can update the project proposal attributes that have been populated. For example, he or she can rename the project and elaborate on the description and project objectives. In addition, the IT analyst completes the initial estimation of the project by updating the following attributes:

- **Target Duration** – In months, how long duration the project is targeted to be
- **Estimated Project Cost** – The cost range that the project is in
- **Business Feasibility** – How feasible the project is from a business perspective
- **Technical Feasibility** – How feasible the project is from a technical perspective
- **Time of Project Delivery** – The year and month when the project is estimated to be delivered
- **Scope Ideation** – The approximate scope of the project

For a project in the Under investigation state, the IT analyst can do the following tasks:

- **Create a business case** – Project proposals that are estimated to have a high total cost or long duration must have business cases that explain the benefits and costs of the project. The steering committee reviews the business case of a project before it can approve the project for prioritization.

- **Transfer to Ready for prio** – Project proposals that are estimated to have a low total cost or short duration can be transferred directly to the Ready for prio state, without having a business case. This shortcut is for projects that do not need to be further investigated before the steering committee can prioritize them.
- **Reject the proposal** – If a project proposal does not have enough business value, will cost too much, or does not align with the strategy, the IT analyst can reject it.

Section 4 – Creating project business case

This section explains how to complete these tasks:

- Create the business case for the project:
- Update the problem and solution
- Assess risks
- Create the financial plan for the project
- Add business needs to the project as an initial definition of the scope
- Set the target start date.

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Section 4 – Creating project business cases

- Victor, the proposal owner, clicks **Display > Create Business Case for Projects**.
- Victor creates the business case:
 - ▶ He updates and edits the previously completed fields.
 - ▶ He describes the Problem and Solution.

Rational Focal Point

Workspaces | Home | Preferences | Victor | Help | Log Out

Display > Create Business Case for Projects

IT Portfolio Management Template

Projects

Current State Transitions

Finalize business case Ready for approval decision

Enhancement of Fraud Detection Tool

General Information

Links

Value Statements

Primary Strategic Objective Adapt to new technologies

Project Objectives Update the fraud detection system to the latest technologies available.

Business Value New technologies have been developed over the years. We need to stay up to date in order to protect frauds. That will in turn allow cost for us.

Problem

Solution

Risk Assessment

Average Risk Score 0

Risks -

Risk Details -

Financial Information

Mean NPV \$?

IRR 7 %

ROI 7 %

Payback Period 7 quarters

Financial Risk \$?

Financials

The proposal owner creates the business case for a project proposal. The proposal owner can edit the previously entered attributes, such as Title, Description, Portfolio, Type, Primary Strategic Objective, and Project Objectives. In addition, the proposal owner defines the problem and solution, assesses risks, and defines the financial plan and high-level scope.

Section 4 – Creating project business cases

- Victor adds risks and links them to the project.
- He clicks **Add > Project Risk**, enters the risk attributes, links them to the project, and clicks **OK**.

To add a risk, enter values for the following attributes:

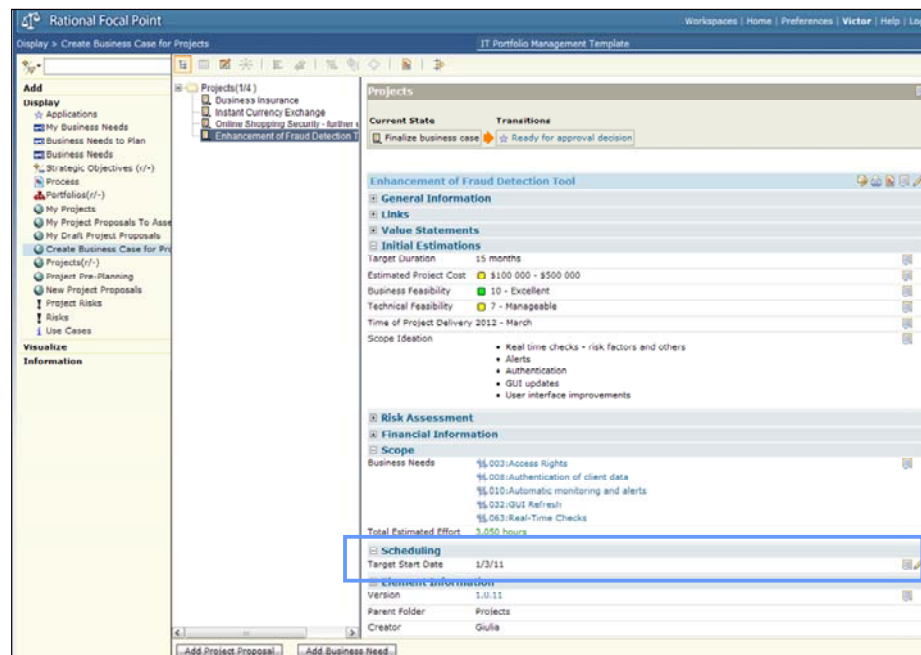
- **Title**
- **Description**
- **Projects** – The project the risk is related to
- **Attachments** – Any files that are related to the risk
- **Comments** – Additional comments about the risk, if necessary
- **Owner** – The owner of the risk. The owner mitigates the risk, if needed.
- **Related to Risks** – Any related risks, if dependencies exist
- **Classification** – The type of risk; for example, business, technical, organizational
- **Root Cause** – The cause of the risk
- **Trigger** – What might trigger the risk
- **Approach** – The approach to handle the risk: mitigate, watch, or accept
- **Probability** – The probability score for the risk
- **Consequence** – The consequence score for the risk
- **Mitigation Strategy** – The strategy to mitigate the risk.
- **Due Date** – The date by when the risk needs to be mitigated at the latest
- **Fallback Plan** – What should be done if the mitigation strategy fails

You can also relate existing risks to the project. You can relate a risk to more than one project if needed. To relate risks to the project:

1. Click **Display > Project Risks**.
2. Find the risks to add to the project.
3. In the Projects attribute for each risk, create a link to the project.

Section 4 – Creating project business cases

- Victor sets the Target Start Date for the project.



The Target Start Date attribute is also set to begin the interval for the Financials attribute. The end of the interval is set to 5 years after the Target Start Date.

Section 4 – Creating project business cases

- For the Financials attribute, Victor clicks **To Time Grid editor** and selects the **Likely** sheet.
- Victor adds the numbers for each quarter for both expenditures and benefits rows. The numbers are planned to be the likeliest numbers to get.

Cell A1

Input =A2*+A5

Menu

Last save

Enhancement of Fraud Detection Tool > Financials > Plan - Likely

		A	2011 Q1	B	2011 Q2	C	2011 Q3	D	2011 Q4	E	2012 Q1	F	2012 Q2	G	2012 Q3
Expenditures	1		901,000		1,004,000		1,019,000		1,009,000		738,000		0		0
Capital Expenditures	Σ 2		301,000		154,000		169,000		159,000		160,000		0		0
Development	3		151,000		120,000		117,000		90,000		95,000				
Investments	4		150,000		34,000		52,000		69,000		65,000				
Operational Expenditures	Σ 5		600,000		850,000		850,000		850,000		578,000		0		0
Resources	6		600,000		600,000		600,000		600,000		578,000				
Supplies	7														
R&D	8				250,000		250,000		250,000						
Benefits	Σ 9	0		0		1,000,000		2,403,800		2,431,100		0		0	
Cost Savings	10					1,000,000		1,137,600		1,153,200					
Cost Avoidance	11														
New Income	12							1,266,200		1,277,900					
Net Cash Flow	13		-901,000		-1,004,000		-19,000		1,394,800		1,693,100		0		0

Plan - Likely

Plan - High

Actual

Plan - Low

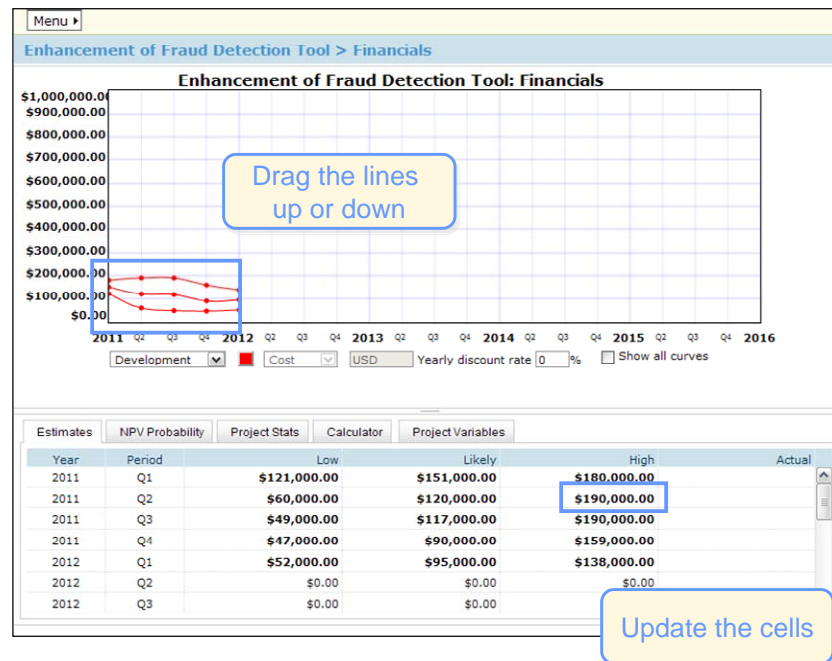
Plan - Likely Plan - High Actual Plan - Low

The Financial attribute contains four sheets: Plan - Likely, Plan - Low, Plan - High, and Actual. The planned numbers are entered in the Likely sheet. The proposal owner then opens the graphical editor and uses the NPV graph to estimate the low and high numbers. Because the project is approved and ongoing, the Actual sheet is updated continuously by the PMO.

You can also view the financial data on a yearly basis. In the top of the sheet, click the Menu and select **Time Interval > Year**. The quarter numbers are summed for each year.

Section 4 – Creating project business cases

- On the NPV graph, Victor can drag the lines to estimate the Low, High, and Likely values.
- The values on the **Estimates** tab are updated accordingly.

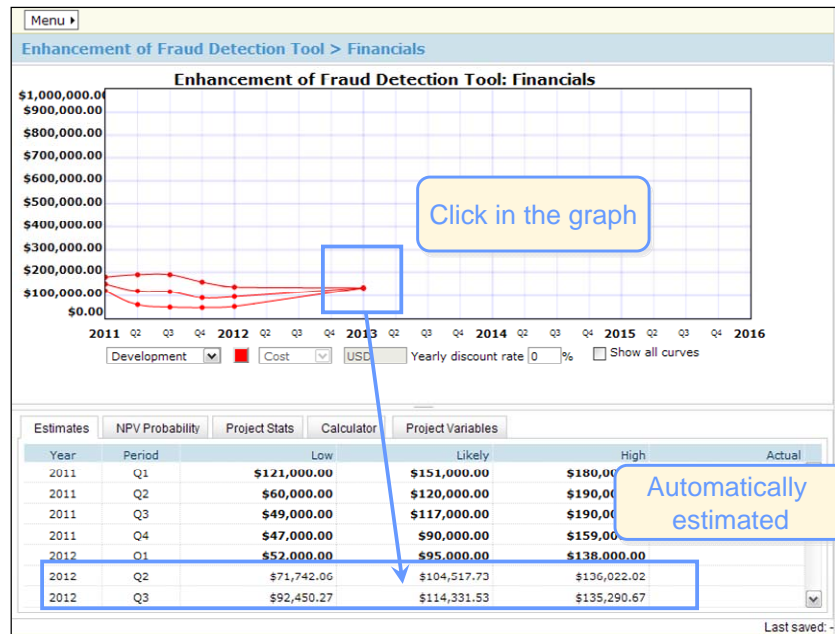


Click **Menu > Investment Analysis** to open for detailed financial analysis. In this image, the Development cost is plotted on the graph and on the **Estimates** tab. You can select both the costs and benefits from the drop-down lists. Select **Show all curves** to show all costs and benefits in the graph.

For each benefit and cost, update the Low and High estimates. You can also update the values by entering them directly in the cells on the **Estimates** tab. The graph is updated automatically. Be sure to save your changes.

Section 4 – Creating project business cases

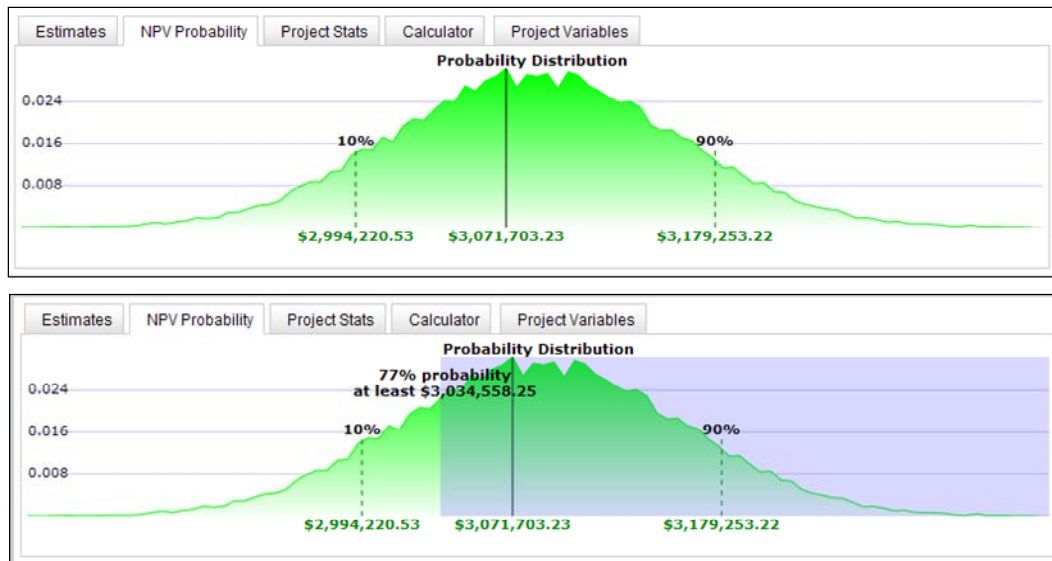
- Victor can click in the graph to estimate the trend.
- He clicks the graph for 2012 Q1. The estimated values between 2010 Q4 (his last entered value) and 2012 Q1 will be provided automatically.



Values that you entered manually are displayed in bold. Values that are estimated by the graphical editor are displayed in normal format.

Section 4 – Creating project business cases

- Click the **NPV Probability** tab.



The **NPV Probability** tab displays a probability distribution of the NPV, based on the numbers of the high, low, and likely costs and benefits.

In the top image, the NPV probability distribution indicates that there is a 10% risk that the NPV will be \$2,994,220.53 or less. The probability that the NPV will be \$3,179,253.22 or less is 90%. The mean NPV is about \$3 million.

The bottom image shows that when you move your mouse over the chart, you can see other percentages and NPV values.

Section 4 – Creating project business cases

- Victor can compare the sheets, for example the Plan – Likely to the Plan – High sheets.
- He clicks **Menu > Compare**
 - ▶ For Compare mode, he selects **Difference**
 - ▶ He selects Show both sheets.
 - ▶ For Compare to sheet, he selects the sheet to compare.

Cell

Input

Menu

Time Grid sheet compare settings

Enhancement of Fraud Detection Tool > Financials > Plan - Lik

Compare mode

Difference

Show both sheets

Current sheet: Plan - Likely
(Attribute: Financials, Element: Enhancement of Fraud Detection Tool)

Compare to sheet

Plan - High

(Attribute: Financials, Element: Enhancement of Fraud Detection Tool)

Change element

OK

		Plan - Likely 2011 Q1	Plan - High 2011 Q1	Dif	201
Expenditures	1	901,000	1,094,000	-193,000	
Capital Expenditures	Σ 2	301,000	387,000	-86,000	
Development	3	151,000	180,000	-29,000	
Investments	4	150,000	207,000	-57,000	
Operational Expenditures	Σ 5	600,000	707,000	-107,000	
Resources	6	600,000	707,000	-107,000	
Supplies	7	0	0	0	
R&D	8	0	0	0	250,000
Benefits	Σ 9	0	0	0	0
Cost Savings	10	0	0	0	0
Cost Avoidance	11	0	0	0	0
New Income	12	0	0	0	0
Net Cash Flow	13	-901,000	-1,094,000	193,000	-1,004,000
					-1,290,000
					286,000

Plan - Likely

Plan - High

Actual

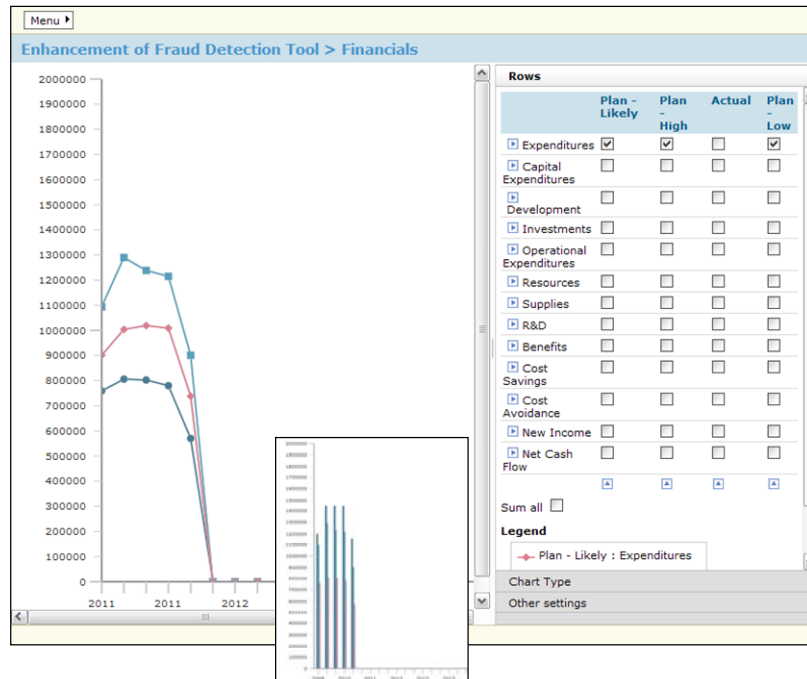
Plan - Low

Plan - Likely <=> Plan - High (Dif)

The comparison sheet shows the values from both sheets and the differences between the two for each quarter.

Section 4 – Creating project business cases

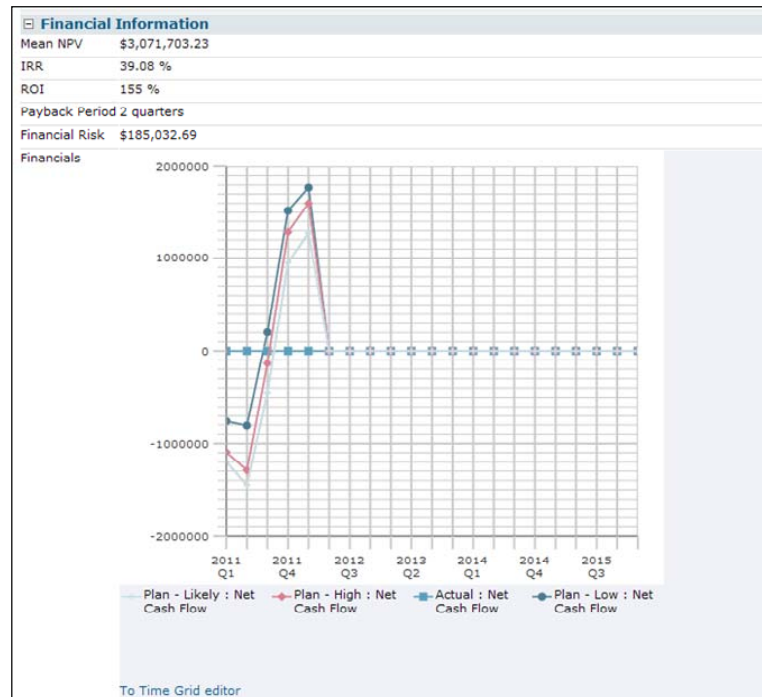
- Victor can also display the values in a line or bar chart.
- He clicks **Menu > View Chart**.
- He selects the values to plot in the chart, for example the expenditures for Plan – Likely, Plan – High, and Plan – Low.



The data in the Financials attribute can be displayed in various graphical ways. In the Menu, select the View Chart option.

Section 4 – Creating project business cases

- When Victor closes the Financials attribute, the Mean NPV, IRR, ROI, Payback Period, and Financial Risk are calculated.
- The Financials attribute displays a graph of the net cash flow over time for the Plan – High, Plan – Likely, and Plan – Low sheets.



- **Mean NPV** - The mean Net Present Value. This number represents the average value of the net present value of the project.
- **IRR** - Internal Rate of Return, based on the financial analysis
- **ROI** - Return of Investment, based on financial analysis
- **Payback Period** - Non-discounted payback period, based on financial analysis. Payback period is the period at which the benefits equal the costs. This period is relative to the start date of the Financials attribute. The payback period indicates the number of quarters after the start date. If the payback period is 0, it corresponds to the start date; if the period is 1, it corresponds to the second period; and so on.
- **Financial Risk** - The financial risk is the standard deviation of the net present value. It represents the risk in the NPV estimate. Assuming that NPV and related metrics are normally distributed, the probability that the actual value is within one standard deviation of the expected value is 68%. For example, if the product calculates an expected value of NPV = 1,000,000 with a standard deviation of 200,000, the probability that the actual NPV is between 800,000 and 1,200,000 is 68%.

Section 4 – Creating project business cases

- Victor also adds business needs and links them to the project.
- He clicks **Add > Business Need**, enters the business need attributes, links them to the project, and clicks **OK**.

The business needs are added to the business case so that approvers can understand the scope and the cost before they make decisions. Later during the pre-plan phase, the business needs are refined and described in more detail. Note the existing business needs. Find the business needs that are suitable for your project and associate them by linking them to the project. If your project is driven against a certain application, group the business needs by application so that you can easily find the business needs.

Section 4 – Creating project business cases

- The business case is complete.
- Victor changes the state to **Ready for approval decision**.



The completed business case includes:

- Problem and Solution
- Risk Assessment
 - Average Risk Score
 - Risks
 - Risk Details
- Financial Information
 - Mean NPV
 - IRR
 - ROI
 - Payback Period
 - Financial Risk
 - Financials
- Scope
 - Business Needs
 - Total Estimated Effort
- Scheduling
 - Target Start Date

Section 5 – Approving and prioritizing

This section explains how to do these tasks:

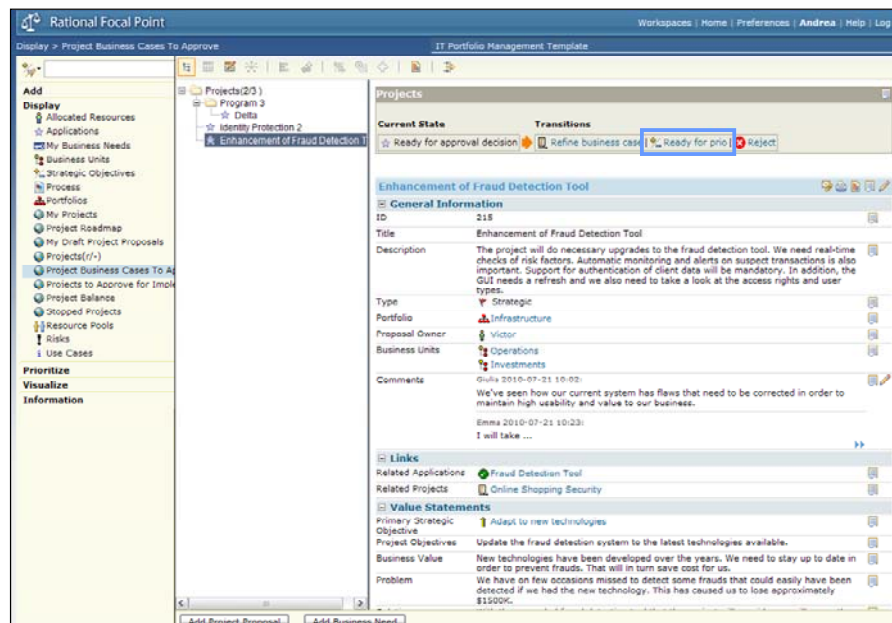
- Approve project proposal, whether they have business cases
- Weigh strategic objectives through pairwise comparisons
- Prioritize projects by completing pairwise comparisons
- Analyze the value of the project portfolio
- Balance the portfolio through a review of proposals and ongoing projects

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Section 5 – Approving and prioritizing

- Andrea, member of the steering committee, clicks **Display > Project Business Cases to Approve**
- To approve the project business case, she clicks **Ready for prio.**



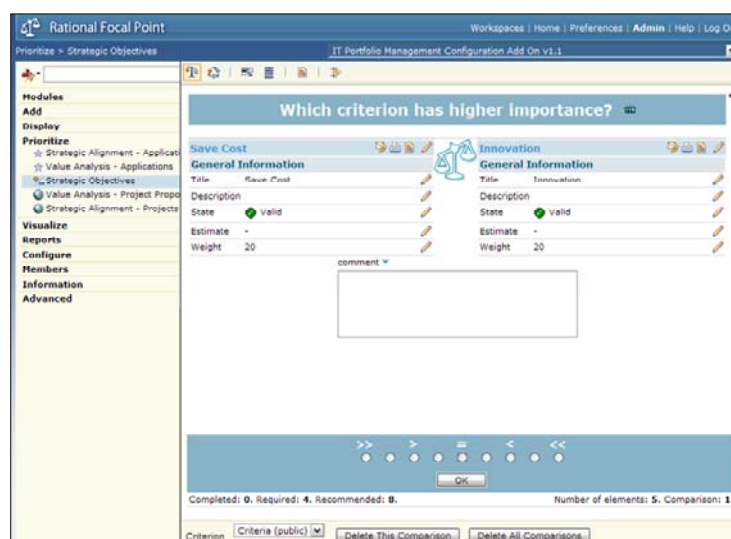
For projects that are in the Ready for approval decision state, the steering committee can complete these tasks:

- **Refine the business case** – If the steering committee is not satisfied with the information in the business case, they can ask the proposal owner to refine the business case before they make their decision.
- **Transfer to Ready for prio** – If the project proposal and its business case is satisfactory, it is moved to the Ready for prio state. By moving the business case into this state, the steering committee approves the business case.

- **Reject the business case**– If the business case and other attributes indicate that the project is not ready to move forward, the steering committee can reject it.

Section 5 – Approving and prioritizing

- Later, the steering committee meets for a prioritization session.
- First, they weigh the strategic objectives.
- Andrea clicks **Prioritize > Strategic Objectives**
- The committee compares the strategic objectives to each other in pairs.



The strategic objectives to compare are displayed in pairs. As shown in the screen capture, you select which strategic objective has the highest importance. To save the score, click **OK**. A new pair of strategic objectives is displayed. Continue comparing until the number of Completed comparisons is equal to or higher than the Recommended number. The pairwise comparison creates a result that you can trust without having to compare all the strategic objectives.

How prioritization works

Rational Focal Point uses a statistical prioritization engine that improves the Analytical Hierarchy Process (AHP) by reducing the number of pairwise comparisons needed. While many criteria might be important to rank information, with Rational Focal Point, you can compare fewer criteria. The consistency checker and the input of multiple evaluators decrease subjectivity.

The Prioritize frame displays one comparison. When a comparison is completed, a new one is produced. The algorithm consists of two phases:

In the first phase, comparisons are selected so that all projects are connected. If more than one comparison connects unconnected projects, one of the comparisons is selected randomly. As a consequence, different comparisons might be displayed when the same view is compared for two criteria. For example, if a view contains ten projects, nine comparisons are needed to connect the elements. When these nine comparisons are complete, priorities can be calculated.

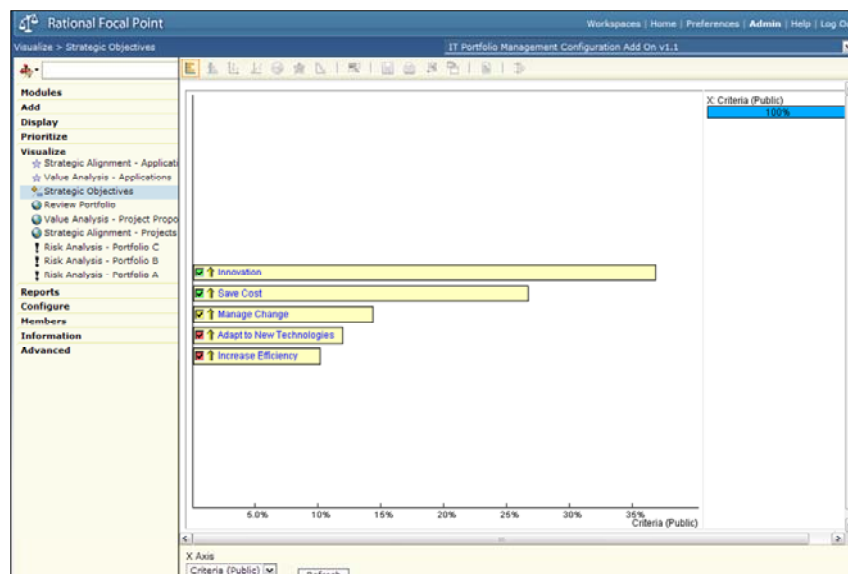
In the second phase, the algorithm searches for the comparison that contributes the most information. This search is completed as follows:

- Find at least two projects that are part of as few comparisons as possible.
- If only two projects are found, they are used for the comparison.
- If more than two projects are found (for example, five projects are part of two comparisons each), select the two projects with the highest priorities for the comparison.

Section 5 – Approving and prioritizing

- Andrea clicks **Visualize > Strategic Objectives**.

- The committee views the result of the prioritization by using a bar chart.



- The strategic objective at the top is most important.
- The length of the bars represents the weight of the strategic objectives.

Section 5 – Approving and prioritizing

- Next, the committee stores the weight for strategic objectives:
 1. Right-click the Visualize chart.
 2. Click **Rank the Elements**. A window opens.
 3. Select the **Weight** attribute.
 4. Select a ranking scheme, which is either the third or fourth option.
 5. Click **OK**.
- The rank value is stored in the Weight attribute for each strategic objective.
- The weight of the strategic objectives affects the result of prioritization of strategic alignment for both projects and applications.

By specifying 100% equals 100 as the ranking scheme, the strategic objectives are weighed as follows:

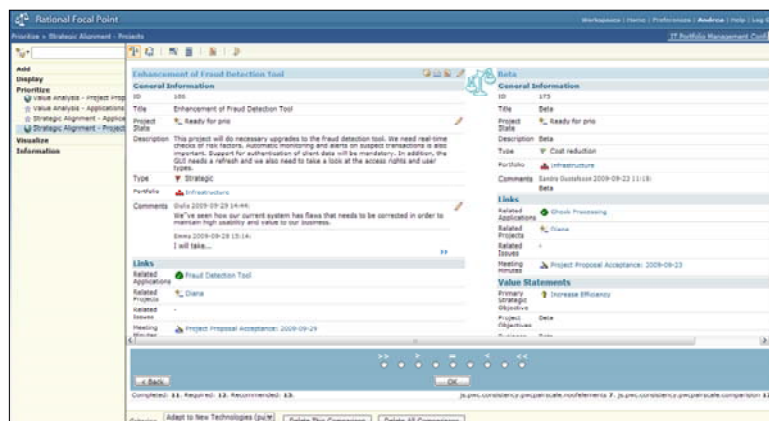
- Innovation: 37
- Save Cost: 27
- Manage Change: 14
- Adapt to New Technologies: 12
- Increase Efficiency: 10

Note: If the strategic objectives are prioritized again, you can update the weight by saving the new ranking in the Weight attribute.

Section 5 – Approving and prioritizing


- The steering committee compares all projects in the Ready for prio state.
- First comparison – Strategic Alignment
 - ▶ The committee compares the projects against each strategic objective
 - ▶ Andrea clicks **Prioritize > Strategic Alignment - Projects**

- Second comparison – Value Analysis
 - ▶ The committee compares projects against business value
 - ▶ Andrea clicks **Prioritize > Value Analysis – Project Proposals**

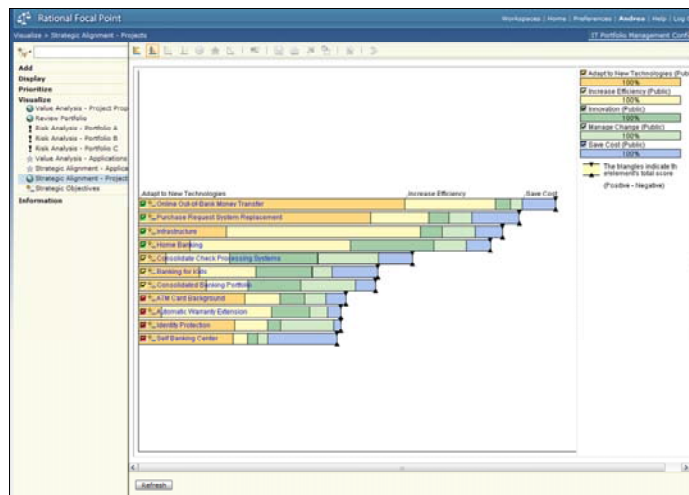


The displayed pairs are now projects instead of strategic objectives. In the screen capture, projects are compared to determine which is most aligned with the Adapt to New Technologies strategy. The prioritization also indicates how much more one project is aligned with that strategy than another project is. To save the score of a prioritization, click **OK**. A new pair of projects is displayed. Continue until the number of Completed comparisons is equal to or higher than the Recommended number. When you have your result, change the criterion to another strategic objective and compare the projects based on that criterion. Repeat these steps for all criteria in your list.

Section 5 – Approving and prioritizing

- Andrea clicks **Visualize > Strategic Alignment – Projects**.
- The committee views the total strategic alignment by using a stacked bar chart 

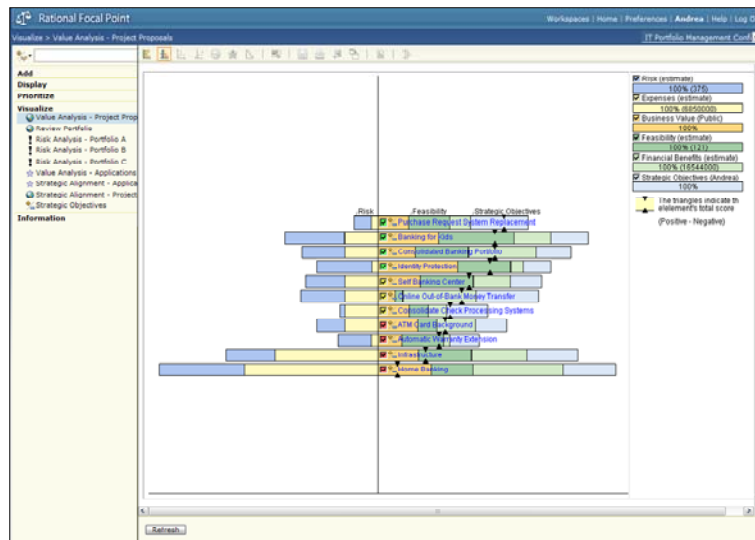
- The projects at the top are most aligned with all strategic objectives.



The bar chart displays the alignment against one strategic objective at a time. To view data in a bar chart, in the toolbar, click the icon to the left of the **Stacked bar chart** icon. To toggle between strategic objectives, use the Criteria drop-down list.

Section 5 – Approving and prioritizing

- Andrea clicks **Visualize > Value Analysis – Project Proposals**.
- The committee views more than the strategic alignment aspect by using the stacked bar chart
- The projects at the top will provide most value and the least cost and risk.



In this chart, the following factors are considered apart from the alignment with the strategic objectives. Rational Focal Point retrieves these values from the project. Because they are numbers, you do not need to do pairwise comparisons for these criteria.

- **Risk** – The Total Risk Score for the project
- **Expenses** – The Estimated Project Cost for projects without business cases, or for projects with business cases, the sum of the Expenditures in the Plan - Likely sheet
- **Business Value** – The result of the prioritization against business value
- **Feasibility** – The result of the score for Business Feasibility multiplied by Technical Feasibility
- **Financial Benefits** – The sum of the planned likely benefits for projects with business cases

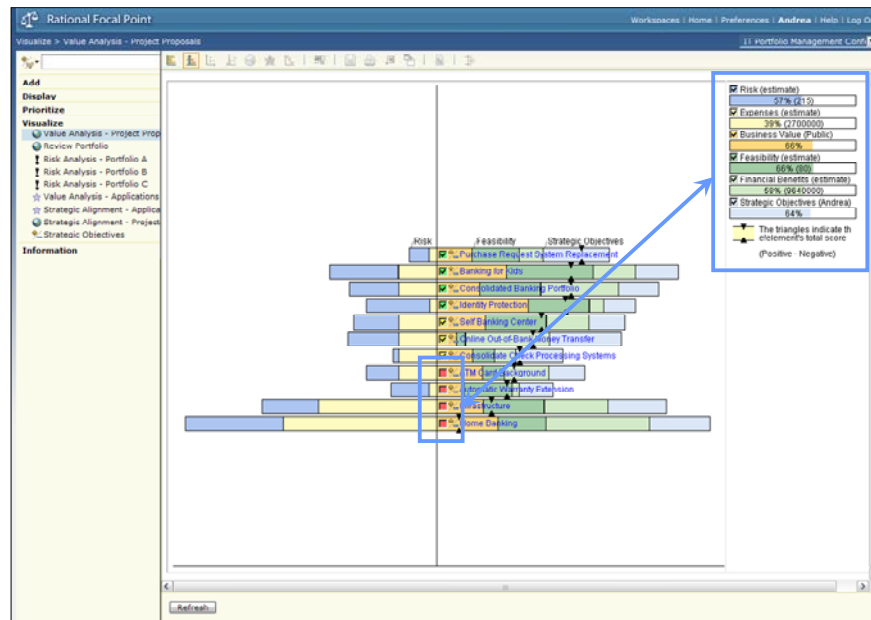
Value Analysis

Projects are divided into thirds:

- The top third has green check boxes and scored the highest against all criteria.
- The bottom third has red check boxes and scored the lowest against the criteria.
- The middle third has yellow check boxes and scored in the middle against the criteria.

Section 5 – Approving and prioritizing

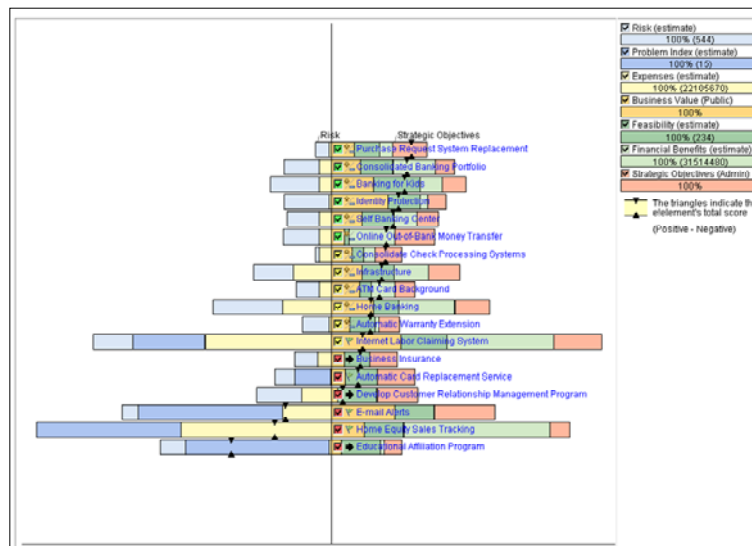
- Andrea removes the the bottom third of project proposals by clearing the red check boxes.
- Removing those projects creates these results:
 - ▶ Risk reduced to 57%
 - ▶ Expenses reduced to 39% (\$2.700k)
 - ▶ Business Value maintained at 66%
 - ▶ Feasibility maintained at 66%
 - ▶ Financial Benefits maintained at 58% (9.640k)
 - ▶ Alignment with strategic objectives maintained at 64%



You might not want to accept the bottom third of the project proposals. You can clear and select the check boxes of projects to explore which projects to approve for implementation.

Section 5 – Approving and prioritizing

- Before requesting pre-plans for top priority project proposals, Andrea and the steering committee balance the project portfolio by considering ongoing and on-hold projects.
- Andrea clicks **Visualize > Review Portfolio**.
- The Problem Index score indicates the projects that might have problems.



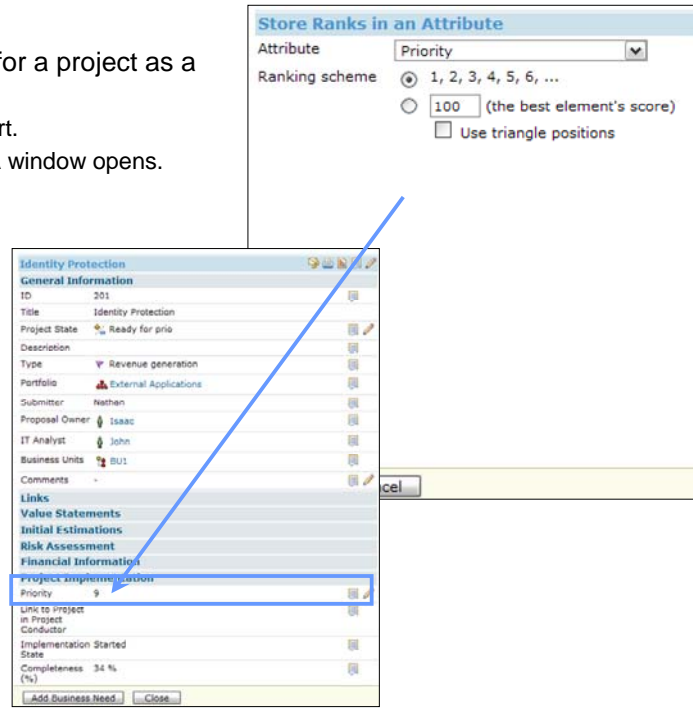
If a project has a high problem index, check its progress. If the project does not provide the value that it was supposed to, consider stopping the project and using its resources elsewhere.

The icons in front of the project name represent the state of the project:

- The +/- icon represents projects that are ready for prio
- The green flag icon represents projects that are being implemented
- The black arrow icon represents projects that are on hold

Section 5 – Approving and prioritizing

- Andrea stores the ranking for a project as a number:
 1. Right-click the Visualize chart.
 2. Click **Rank the Elements**. A window opens.
 3. Select the **Priority** attribute.
 4. Select a ranking scheme.
 5. Click **OK**.
- The rank value is stored in the Priority attribute for each project.

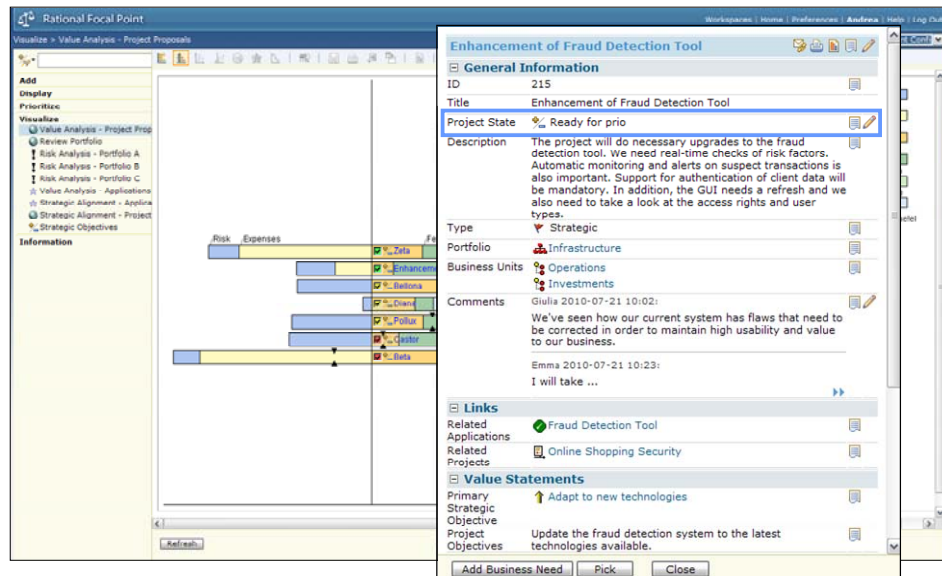


Note: If the same project is ranked again, the Priority value is overwritten.

Section 5 – Approving and prioritizing

- Andrea and the committee open the project proposal and edit the Project State to Pre-plan project:

- ▶ Select the projects to move forward with.
- ▶ Right-click the chart.
- ▶ Click **Edit** all checked elements.
- ▶ Change the project state.
- ▶ Click **OK**.



To open a project from a chart, click the title of the project. A window opens. To edit the Project State, double-click the attribute name or click the **Edit** icon.

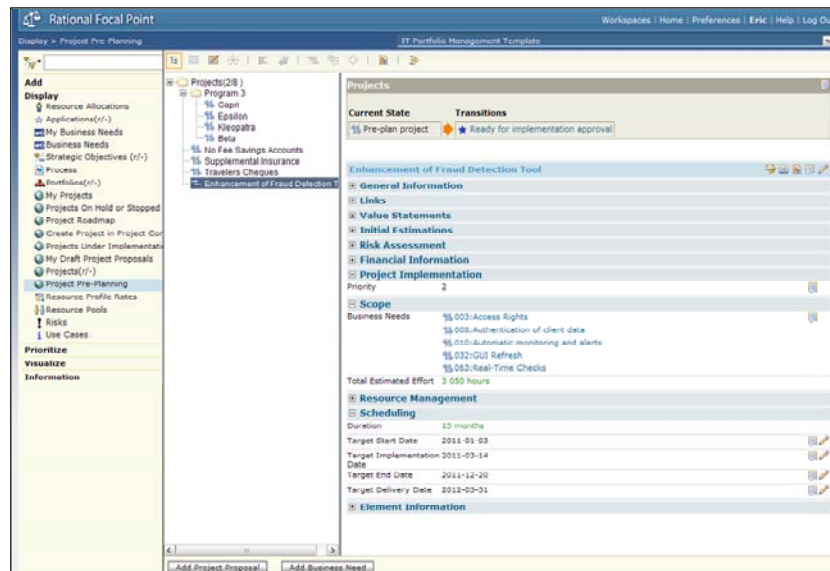
Section 6 – Pre-planning projects

This section explains how to do these tasks:

- Update the planned financials for the project and compare them to the budget.
- Define the detailed scope of the project in the form of business needs.
- Define the high-level resource demand.
- Set (and update) the target dates for the project.

Section 6 – Pre-planning projects

- The project management office (PMO) completes pre-planning. Eric is a member of the PMO.
- Eric clicks **Display > Project Pre-Planning**.
- To create the pre-plan:
 - ▶ Refine the business needs.
 - ▶ Define the resource demand.
 - ▶ Set and update target dates

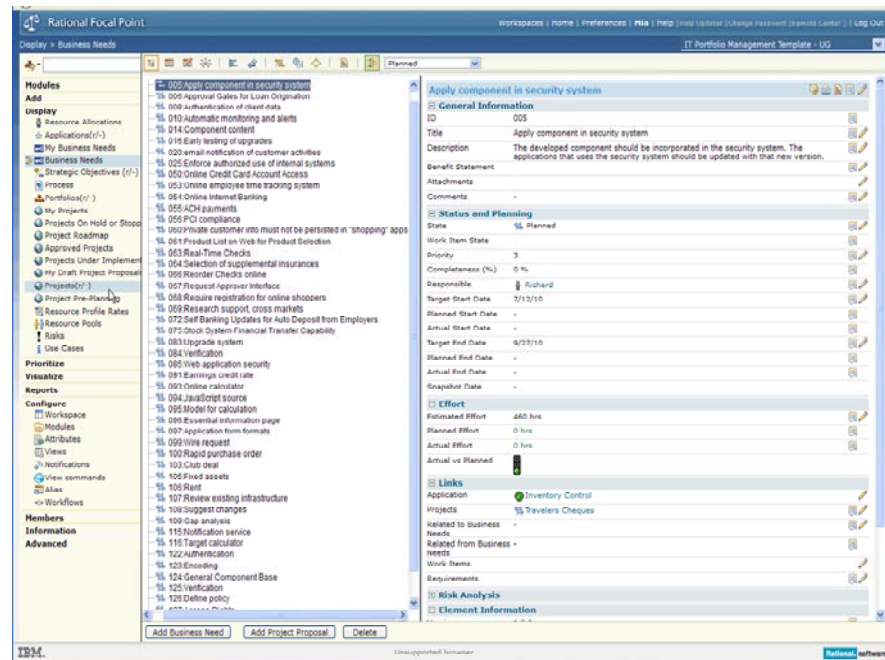


The proposal owner can also click **Display > Project Pre-Planning**. The PMO and the proposal owner can work together to create the pre-plan for a project.

During the pre-plan phase, you might need to update the financial plan. For the Financials attribute, note how changes to the Target Start Date might impact the intervals. The data that you enter is moved accordingly.

Section 6 – Pre-planning projects

- The scope is defined by one or more business needs that are associated with the project.
- The business needs of the project are refined during the pre-plan phase.



The business needs are added to the project when the business case is created. During the pre-plan phase, the business needs are refined and further elaborated.

1. Click **Display > Business Needs**.
2. From the Filter drop-down list, select **Planned**.
3. In the list of business needs, right-click and select **Group By Attribute > Link > Application**. The business needs are sorted by the application that they are related to.
4. Select the business need that is planned to your project and refine it. For example, you might provide more details in the description and benefit statement, set the state to Planned, select someone to be responsible for the business need, set the target start and end dates, make a more accurate estimation of the effort to implement the business need, relate the business need to applications, or analyze risks.

To create more business needs:

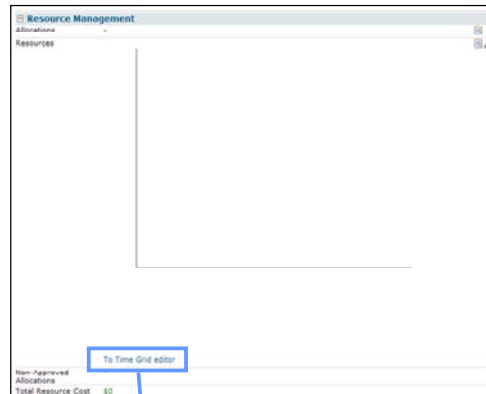
1. Click **Add > Business Needs**.
2. Complete the form. Enter a title, description, benefit statement, attachments, and comments.
3. Link the business needs with the project. You can also link the business need to applications, projects, and other business needs.
4. Save the business need.

If you use CLM for project management, you can send the business needs with the project to that tool.

Section 6 – Pre-planning projects

Eric and the PMO define the resource demand:

1. Click **Display > Project Pre-Planning** and select the project.
2. For the Resources attribute, click **To Time Grid editor**.
3. Enter the hours demanded for each resource profile and month.
4. Save and close the Resources attribute.



Cell Input Menu ▾ Last saved: -

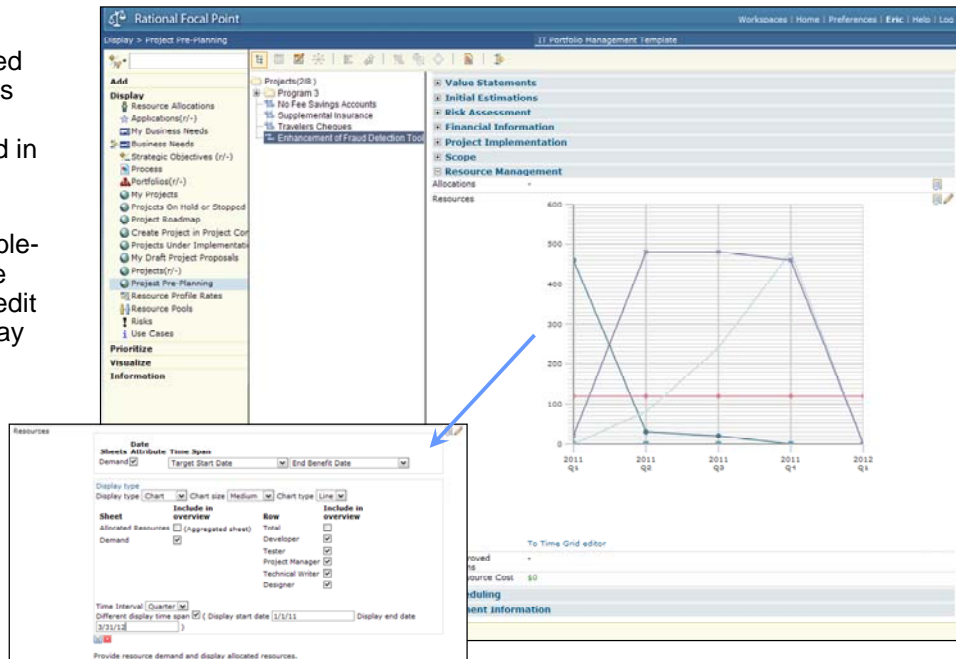
Enhancement of Fraud Detection Tool > Resources > Demand

		A	jan 11	B	feb 11	C	mar 11	D	apr 11	E	maj 11	F	jun 11
Σ	1	200		200		200		210		210		290	
Developer	2					20		160		160		160	
Tester	3											80	
Project Manager	4	40		40		40		40		40		40	
Technical Writer	5												
Designer	6	160		160		140		10		10		10	

The start of the interval for the Resources sheets is the target start date. The end is set to be 5 years after the target start date.

Section 6 – Pre-planning projects

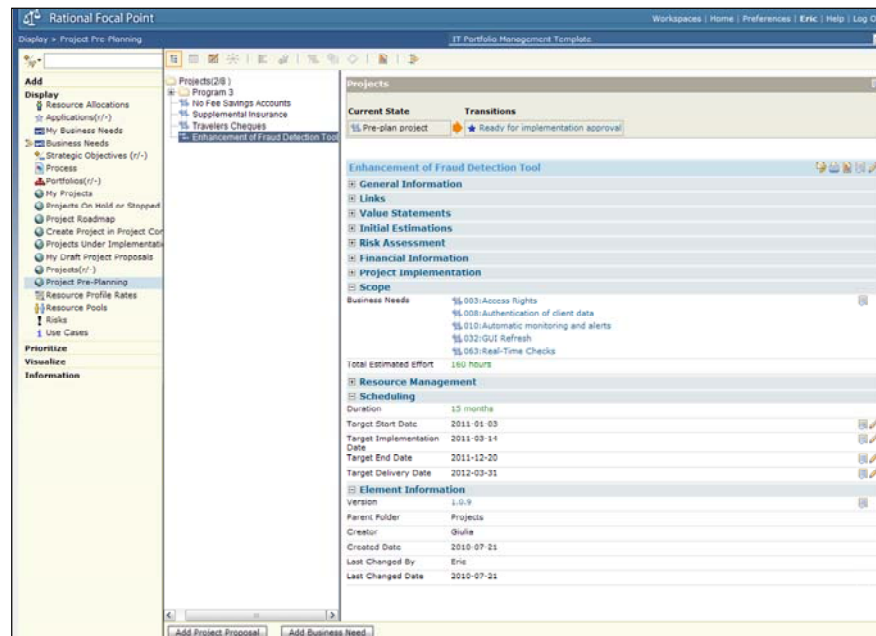
- The demanded resources can be displayed in a graph.
- Eric double-clicks the chart to edit the display type.



The Resources attribute is of the type Time Grid. All Time Grid attributes can be displayed in various ways when looking at them in the attribute list. Each project can have its own display type.

Section 6 – Pre-planning projects

- The final step of pre-planning is completing target schedule.
- Eric enters or updates the target dates:
 - ▶ Start Date
 - ▶ Implementation Date
 - ▶ End Date
 - ▶ Delivery Date
- He transfers the project to Ready for implementation approval.



The target start date and the target delivery date are used to calculate the Duration of the project, in months. After the project is approved for implementation, the planned and actual dates are populated as the project progresses.

- **Target Start Date** – The date when project is targeted to start
- **Target Implementation Date** – The date when the implementation of the project scope is targeted to end
- **Target End Date** – The date when the tests of the implementation of the project scope is targeted to end
- **Target Delivery Date** – The date when the project is targeted to be delivered. The delivery date is separate from the end date because enablement and delivery activities will likely occur after the project implementation and tests end.

Section 7 – Approving projects for implementation

This section explains how to do these tasks:

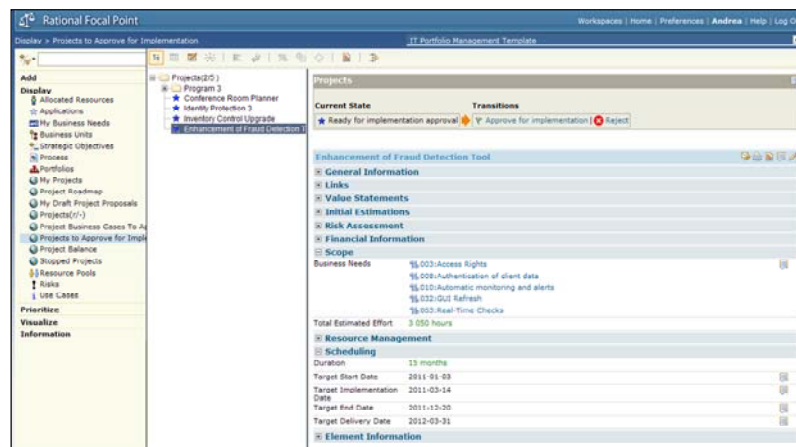
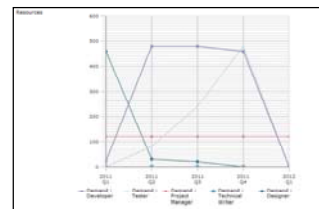
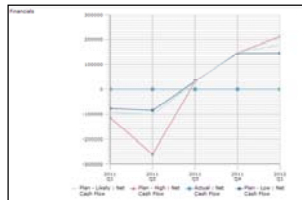
- View the balance of projects
- Complete the capacity analysis of projects
- Understand how to use road maps
- Approve projects for implementation

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Section 7 – Approving projects for implementation

- Andrea, a steering committee member, clicks **Display > Projects to Approve for Implementation**.
- She reviews the pre-plan:
 - Financials
 - Scope
 - Resources
 - Scheduling



Before making a decision, the steering committee does the following tasks:

- Views the balance of projects
- Completes a capacity analysis
- Studies the road map

Section 7 – Approving projects for implementation

- Click **Display > Project Balance**
- Select a row and cell.

The screenshots illustrate the 'Display > Project Balance' view in Rational Focal Point, showing three different analytical views:

- Portfolio & Mean NPV:** A table showing the quantity of projects and their mean NPV for different portfolios.

Portfolio	Quantity	Sum: Mean NPV	Share
Business Operation	1	4 129 500,0	11,7%
External Applications	4	18 291 200,0	51,7%
Infrastructure	2	12 972 900,0	36,7%
Sum: 7		Sum: 35 393 600,0	
- Primary Strategic Objective & Mean NPV:** A table showing the quantity of projects and their mean NPV for different primary strategic objectives.

Primary Strategic Objective	Quantity	Sum: Mean NPV	Share
Adapt to new technologies	1	3 127 900,0	8,8%
Increase efficiency	2	6 720 000,0	19,0%
Innovation	1	9 849 000,0	27,8%
Manage change	1	4 276 400,0	12,1%
Save cost	2	11 423 300,0	32,3%
Sum: 7		Sum: 35 393 600,0	
- Type & Total Resource Cost:** A table showing the quantity of projects and their total resource cost for different types.

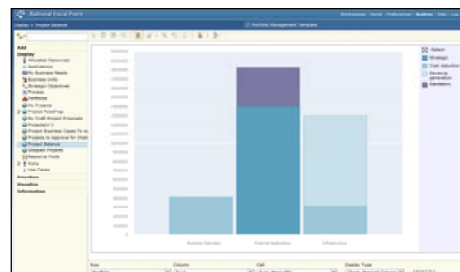
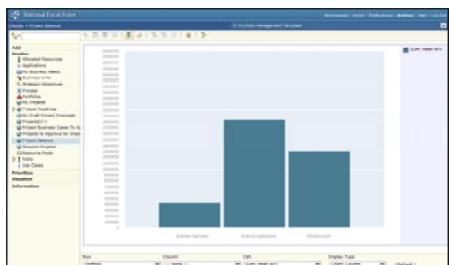
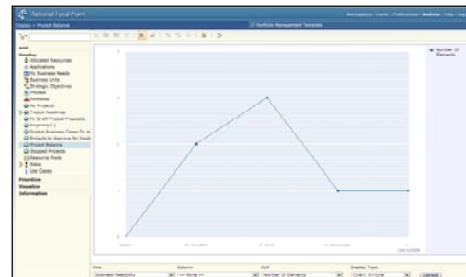
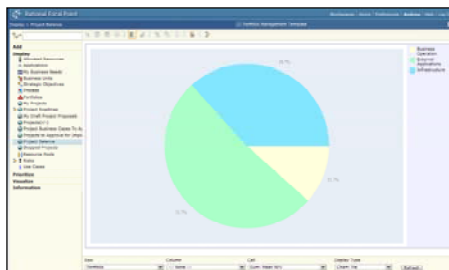
Type	Quantity	Sum: Total Resource Cost	Share
-Select-	0	0	0,0%
Strategic	2	1 245 500	29,7%
Cost reduction	3	489 500	10,6%
Revenue generation	1	918 500	20,2%
Mandatory	1	483 500	10,4%
Sum: 7		Sum: 3 135 000	

Before the steering committee makes a decision, they can analyze the projects that are to be approved. By selecting the Project Balance view and toggling the values for Row, Column, and Cell, the committee can display several analytical views. The screen captures show the following information:

- Portfolio & Mean NPV** – The quantity of projects that are ready for implementation approval in each portfolio, and the total mean NPV that they will provide to each portfolio
- Primary Strategic Objective & Mean NPV** – The quantity of projects that are ready for implementation approval that support a certain strategic objective, and the total mean NPV that the projects will provide to each objective
- Type & Total Resource Cost** – The quantity of projects that are ready for implementation approval of a certain type, and the total resource cost for implementing the projects for each type

Section 7 – Approving projects for implementation

- The project balance can also be displayed in various graphs, which can be selected from the **Display Type** list.



You can, for example, display the following charts:

- Pie chart:
 - Row – Portfolio
 - Column – None
 - Cell – Mean NPV
 - Display Type – Chart: Pie
- Line chart:
 - Row – Business Feasibility
 - Column – None
 - Cell – Number of elements
 - Display Type – XY-Line
- Column chart:
 - Row – Portfolio
 - Column – None
 - Cell – Mean NPV
 - Display Type – Chart: Column
- Stacked column chart:
 - Row – Portfolio
 - Column – Type

- Cell – Mean NPV
- Display Type – Stacked Column

Section 7 – Approving projects for implementation

1. Click **Display > Projects to Approve for Implementation**
2. Select the project.
3. For the Resources attribute, click **To Time Grid editor**. The demand for the project is displayed
4. Select **Sum all**. The demand for *all projects to approve* is displayed.

Cell Input Last saved:

Resources > Allocated Resources (Sum of all elements)

		A	Jan 10	B	Feb 10	C	Mar 10	D	Apr 10	E	Ma
<input type="checkbox"/> Total	Σ	1	1,325		1,160	950		1,030		1,110	
Developer	#	2	810		800	500		500		500	
Tester	#	3	50		0	0		100		200	
Project Manager	#	4	160		100	100		100		80	
Technical Writer	#	5	105		60	150		150		150	
Designer	#	6	200		200	200		180		180	

The steering committee can display the total demand for all projects they wish to approve.

Section 7 – Approving projects for implementation

- Click **Home**
 - **Total Supply** contains the supply and allocations for all resource pools.

Total Supply																					
Allocated Resources (Aggregated sheet)																					
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	
Developer	3,800	4,200	4,500	5,100	4,300	8,600	6,600	2,450	1,200	2,670	2,790	3,120	1,400	345	0	0	0	0	0	0	
Tester	1,500	1,500	1,500	1,500	2,035	2,180	1,750	2,400	890	1,460	1,790	1,890	1,920	1,290	900	0	0	0	0	0	
Project Manager	900	900	900	900	3,420	1,640	1,670	1,240	870	670	100	100	120	200	130	0	0	0	0	0	
Technical Writer	650	650	700	700	2,630	610	890	1,050	470	550	100	100	180	200	200	0	0	0	0	0	
Designer	1,200	1,200	1,200	1,200	2,940	2,520	2,730	1,400	1,200	570	800	1,870	600	100	30	0	0	0	0	0	
Supply																					
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	
Developer	4,000	5,000	5,000	6,000	6,000	9,000	9,000	5,000	5,000	5,000	5,000	5,000	4,000	4,000	4,000	4,000	5,000	5,500	5,500	6,000	
Tester	1,500	2,000	2,000	2,000	2,500	2,500	2,000	2,500	2,000	2,000	2,000	2,500	2,500	2,000	2,200	2,200	2,200	2,400	2,400	2,400	
Project Manager	1,000	1,000	2,000	3,500	3,000	2,000	2,000	2,000	1,500	1,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,200	
Technical Writer	650	650	700	750	3,000	1,200	1,200	1,200	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,500	1,500	1,500	1,500	
Designer	1,200	1,200	1,300	1,300	3,000	2,600	2,800	2,500	2,500	2,500	3,000	3,000	3,000	3,300	3,300	3,300	3,300	3,000	3,000	2,900	

Compare the total supply for all resources pools with the total allocations for all projects, both existing and pipeline projects, to ensure that the supply covers the allocations.

Section 7 – Approving projects for implementation

- Click Home

- **Total Demand Pipeline Projects** contains the demand and allocations for all projects in the pipeline.
 - **Total Demand Existing Projects** contains the demand and allocations for all ongoing and delivered projects.

delivered projects.

Total Demand Pipeline Projects																											
Allocated Resources (Aggregated sheet)																											
	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4											
Developer	2,000	5,600	3,500	2,450	1,200	2,670	2,790	3,120	1,400	345	0	0	0	0	0	0											
Tester	1,235	1,230	780	2,400	890	1,460	1,790	1,890	1,920	1,290	900	0	0	0	0	0											
Project Manager	2,860	1,080	1,000	1,240	870	670	100	100	120	200	130	0	0	0	0	0											
Technical Writer	2,340	300	560	1,050	470	550	100	100	180	200	200	0	0	0	0	0											
Designer	2,000	1,800	1,800	1,400	1,200	870	800	1,870	600	100	30	0	0	0	0	0											

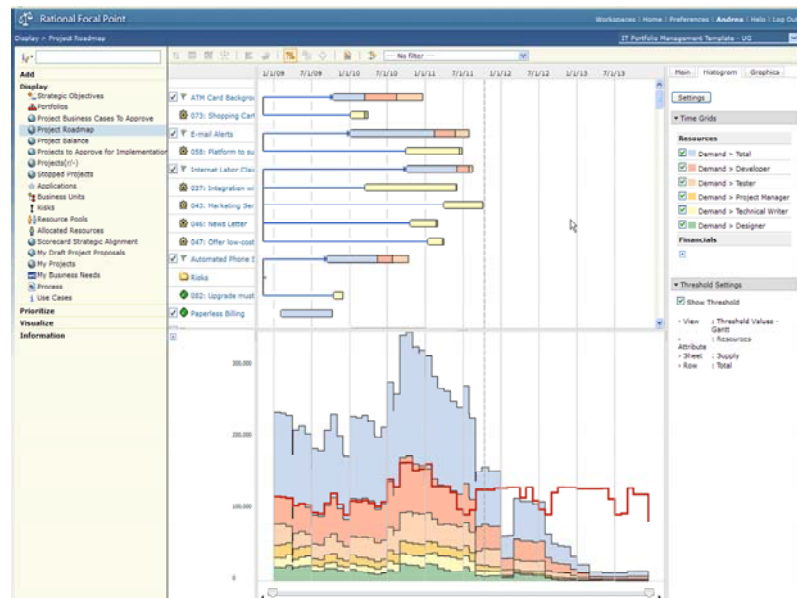
Demand																												
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
Developer	0	0	0	0	4,100	9,400	9,270	6,850	3,650	8,000	4,500	3,640	3,900	1,200	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tester	0	0	0	0	13,000	4,500	2,100	3,300	2,400	2,000	3,000	3,000	2,700	2,700	1,200	0	0	0	0	0	0	0	0	0	0	0	0	
Project Manager	0	0	0	0	6,800	1,200	1,500	1,500	1,050	1,500	150	160	180	200	140	0	0	0	0	0	0	0	0	0	0	0	0	
Technical Writer	0	0	0	0	4,100	600	2,400	2,040	900	1,050	180	180	180	220	240	0	0	0	0	0	0	0	0	0	0	0	0	
Designer	0	0	0	0	2,170	1,940	3,300	2,310	1,800	1,600	1,980	1,600	2,000	810	120	60	0	0	0	0	0	0	0	0	0	0	0	

Demand																												
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
Developer	4,230	4,700	5,300	5,400	2,340	3,120	3,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tester	1,700	1,650	1,650	1,700	800	990	970	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Manager	1,000	1,000	1,000	1,000	560	560	670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Technical Writer	650	650	700	700	290	310	330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Designer	1,200	1,200	1,200	1,200	940	1,020	1,220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

- Total Demand Pipeline Projects show the details of the total demand and how much has been allocated for all projects in state Pre-plan or Ready for implementation approval.
- Total Demand Existing Projects show the details of the total demand and how much has been allocated for all projects in state Approved for implementation or Delivered.

Section 7 – Approving projects for implementation

- Click **Display > Project Roadmap**.
- The project road map shows the projects over time.
- The target dates define the length and sections of the bars.
- The histogram shows the demand over time, per resource profile.
- The red threshold line shows the total supply over time.



The project road map contains both the delivered and ongoing projects as well as the projects to be approved for implementation. To display only ongoing projects or only projects to be approved, use the filters.

The Gantt chart has four areas:

- **The Gantt area**— Displays the elements in the view, the date attributes, and the relationships between elements. In the screen capture, this area shows the projects to be approved for implementation.
- **The Stacked value area**— Beneath the Gantt area, the Stacked value area displays the sum of values over time in a histogram as well as a red threshold line. For example, it can display the sum of development cost and production cost for all projects displayed in the Gantt area. In the screen capture, the histogram shows the total demand, each colour representing a resource profile. The red threshold line shows the total supply of resources. To change what the histogram displays, change to another value in the Values section of the Selections area.
- **The Time line area**— Shows the position of the elements over time. This area is at the top of the chart.
- **The Settings area**— Contains three tabs, **Main** that shows the dates and links that you can display in the Gantt area, **Histogram** that shows the attributes that you can

display in the histogram, and **Graphics** for the graphic settings available. This area is on the right of the chart.

In the example in the screen capture, the total demand is higher than the capacity where the stacked demand crosses the red threshold line. You can change the road map to align the demand with the supply. To change the project road map:

1. In the **Main** tab, click the **Edit Dates** button.
2. Drag the project bars backward or forward, depending on the change you want to make.
3. Click **Save** to update the dates of the projects. The demanded resources will move in time accordingly.

By using this method, you can create the best scenario for starting and ending the projects to approve for implementation, given the resources that already has been or is being used by the already delivered and ongoing projects. The histogram updates automatically when you change the dates. When you save the new road map, the project target dates are updated.

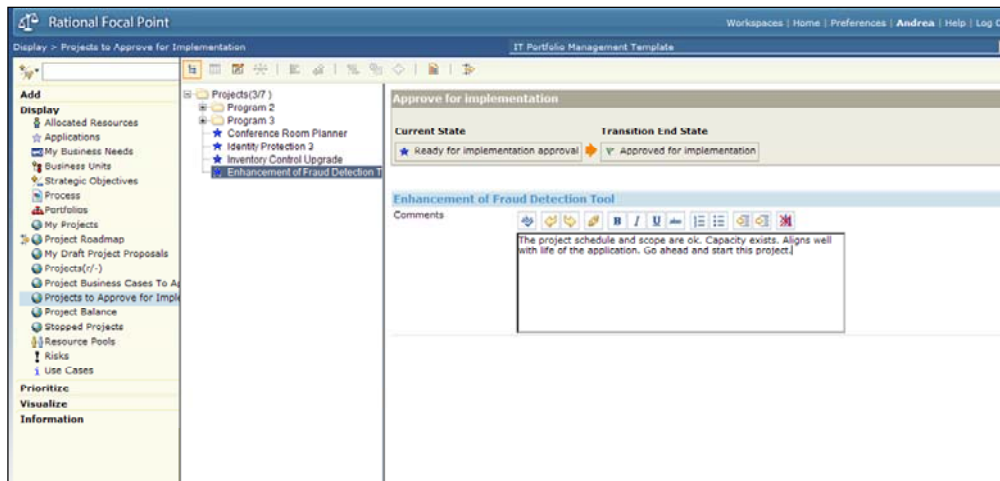
To display the histogram as in the screen capture:

1. Adjust the relative size between the chart and the histogram by dragging the bar between the chart area and the stacked value area.
2. In the **Histogram** tab, click **Settings**.
3. In the **Value Type** list, select **Time Grids**.
4. Expand **Resources**. Clear all check boxes in the **Allocated Resources** column, and select all check boxes in the **Demand** column, that is Developer, Tester, Project Manager, Technical Writer, and Designer.
5. For the **Threshold Settings**, specify these settings:
 - **View:** Select **Threshold Values – Gantt**
 - **Attribute:** Select **Resources**
 - **Time Grid Sheet:** Select **Supply**
 - **Time Grid Row:** Select **Total**
6. Click **OK**.
7. In the **Histogram** tab, select the check box **Show Threshold**.

A threshold line for the total supply resources is displayed with a histogram of the total demand resources. The threshold line indicates whether the projects must be rescheduled because of the availability of resources.

Section 7 – Approving projects for implementation

- After the committee views the project balance, completes the capacity analysis, and studies the road map, it selects which projects to approve for implementation.
- Click **Display > Projects to Approve for Implementation**.



Section 8 – Allocate resources

This section explains how to do these tasks:

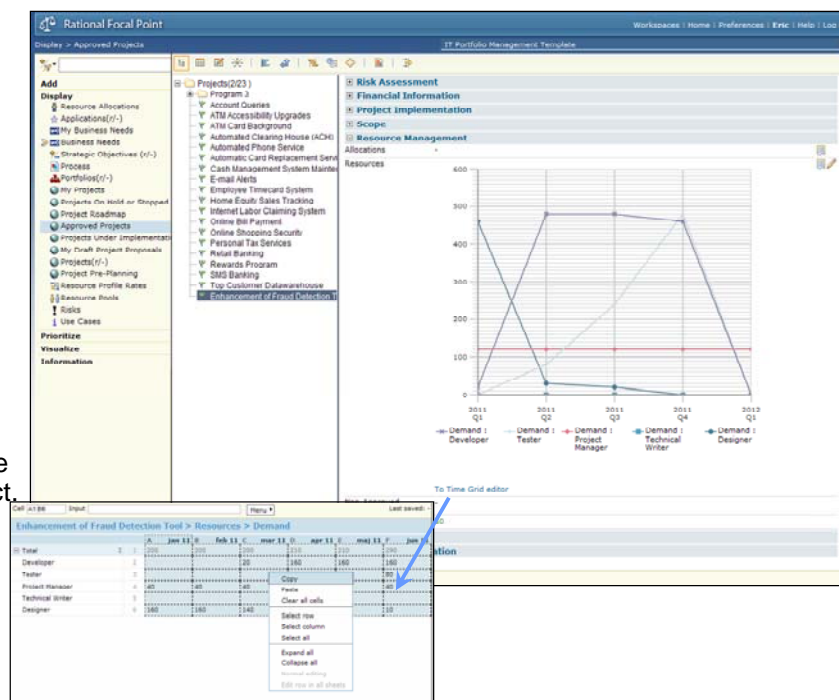
- Allocate resources to an approved project.
- Approve allocated resources

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Section 8 – Allocate resources

- For each approved project, the PMO must allocate resources to cover its demand.
- Eric, a member of the PMO, clicks **Display > Approved Projects** to display the approved projects.
- For the Resources attribute, he clicks **To Time Grid editor** to see the demand for a project.
- He selects all cells and copies them.



The PMO displays the demand for a project that has been approved for pre-planning.

Section 8 – Allocate resources

Eric adds a resource allocation:

1. Click **Add > Resource Allocation**.
 1. Select the project to allocate to.
 2. Select the resource pool allocate the resources from.
 3. Select an approver.
2. Click **OK**.
3. Repeat steps 1-2 for each resource pool you want to allocate from.

Rational Focal Point
Add > Resource Allocation

Enter information about the new Allocation, then click OK.
Add view used to allocate resources from the resource pool to the projects.

General Information
(Default value is an expression)

Title

Description

Allocation from the New York lab to the Enhancement of Fraud Detection Tool project.

Project* Enhancement of Fraud Detection Tool

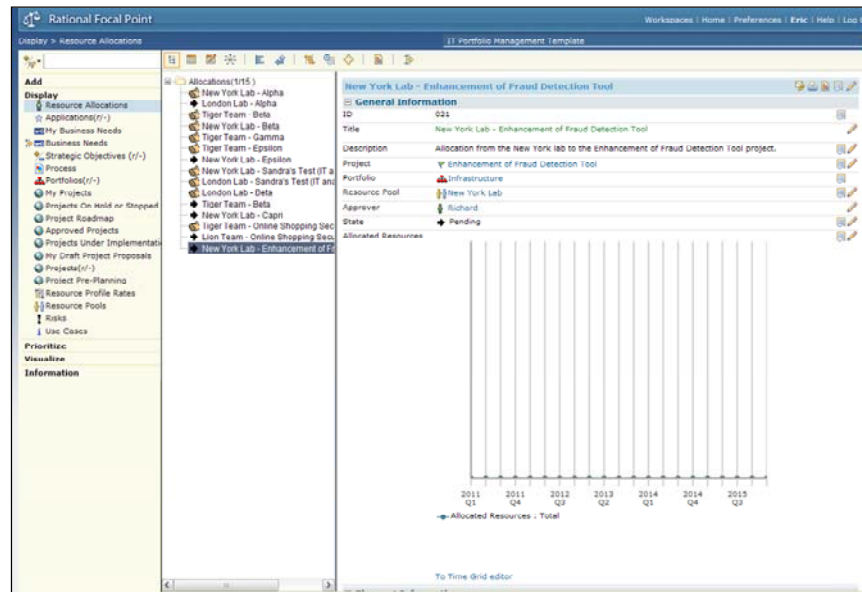
Resource Pool* New York Lab

Approver* Richard

The approver is selected from the PMO, and is usually a person with a resource manager role. In this example, Richard is the approver because he is the resource manager for the New York lab.

Section 8 – Allocate resources

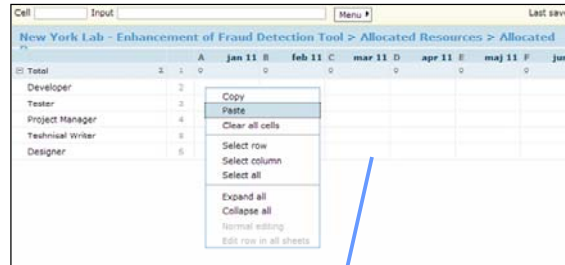
- Eric clicks **Display > Resource Allocations**.
- He selects the allocation he created.
- For the **Allocated Resources** attribute, he clicks **To Time Grid editor**.



The PMO opens the Allocated Resources attribute to enter the allocations for the project.

Section 8 – Allocate resources

- Eric pastes the cells into the Allocated Resources sheet.
 - ▶ If the allocation is the same as the demand, saves and closes the sheet.
 - ▶ If the allocation is different than the demand, he makes updates and then saves and closes the sheet.

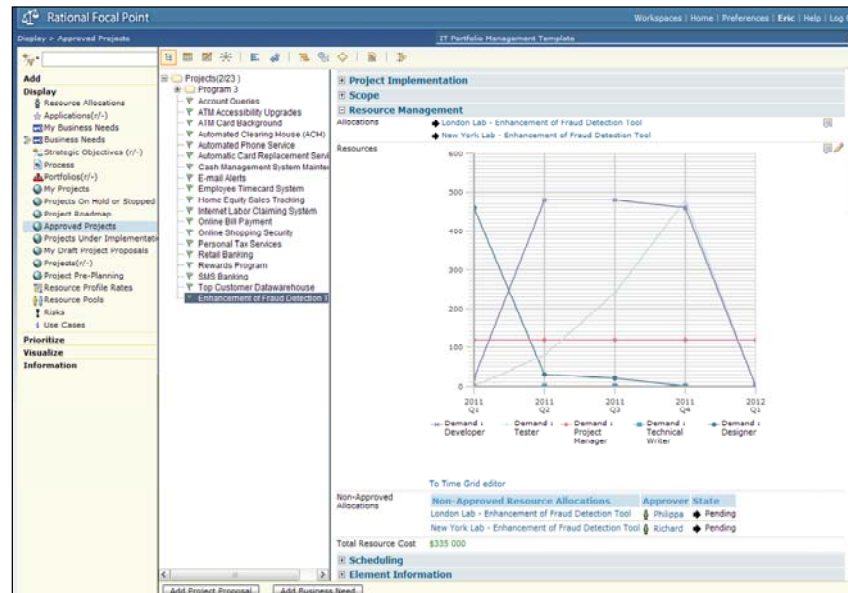


		A	jan 11	B	feb 11	C	mar 11	D	apr 11	E	may 11	F	jun 11
Total		1	0		0								
Developer	2												
Tester	3												
Project Manager	4												
Technical Writer	5												
Designer	6												

In this example, the developers and testers are allocated from the New York lab resource pool and the project managers and designers are allocated from the London lab resource pool. Therefore, the copied demand data is saved in the Developer and Tester rows only for the New York lab allocation and the copied demand data is saved in the Project Manager and Designer rows only for the London lab allocation.

Section 8 – Allocate resources

- Click **Display > Approved Projects**.
- The allocations are now associated with the project.



These attributes are in the Resource Management section:

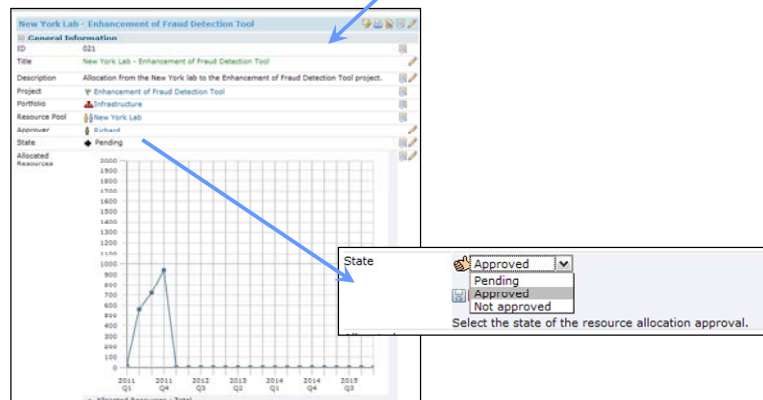
- Allocations** – A list of allocations that are associated to the project
- Resources** – A graph of the resources that are demanded by the project
- Non-Approved Allocations** – The allocations that have not been approved
- Total Resource Cost** – Depends on the rates of the resource profiles that are allocated

Section 8 – Allocate resources

- Richard, who is the approver of one of the allocations, sees the allocations he needs to approve on his Home page.

Welcome to IT Portfolio Management in Rational Focal Point												My Project Proposals to Clarify																																								
IBM IBMers value... <ul style="list-style-type: none">- Dedication to every client's success.- Innovation that matters for our company and for the world.- Trust and personal responsibility in all relationships.												Title Project state																																								
Total Supply												My Owned Open Risks																																								
Allocated Resources (Aggregated sheet)												Title Approach Probability Consequence Priority Due Date																																								
<table><tr><th></th><th>2010 Q1</th><th>2010 Q2</th><th>2010 Q3</th><th>2010 Q4</th><th>2011 Q1</th><th>2011 Q2</th><th>2011 Q3</th><th>2011 Q4</th><th>2012 Q1</th><th>2012 Q2</th><th>2012 Q3</th></tr><tr><td>Developer</td><td>2 110</td><td>1 950</td><td>1 760</td><td>1 790</td><td>1 300</td><td>1 760</td><td>1 010</td><td>830</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Tester</td><td>50</td><td>500</td><td>660</td><td>1 005</td><td>660</td><td>540</td><td>590</td><td>780</td><td>0</td><td>0</td><td>0</td></tr></table>													2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	Developer	2 110	1 950	1 760	1 790	1 300	1 760	1 010	830	0	0	0	Tester	50	500	660	1 005	660	540	590	780	0	0	0	Allocations to Approve				
	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3																																									
Developer	2 110	1 950	1 760	1 790	1 300	1 760	1 010	830	0	0	0																																									
Tester	50	500	660	1 005	660	540	590	780	0	0	0																																									
												Title Project Resource Pool Approver State																																								
												New York Lab - Enhancement of Fraud Detection Tool Enhancement of Fraud Detection Tool New York Lab Richard Pending																																								

- After reviewing the allocation, he clicks the allocation to open and approve it.



When all allocations are approved, the PMO can export the project to CLM to start the implementation.

Section 9 – Integration with CLM

This section explains how to do these tasks:

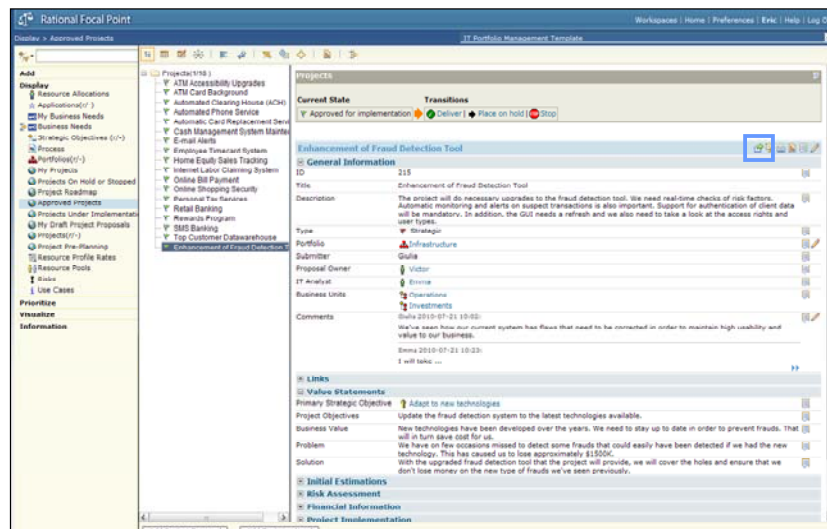
- How to export a project to CLM
- Understand which attributes in Rational Focal Point are moved to CLM
- Understand which attributes in Rational Focal Point are updated with data from CLM
- How to publish business needs to an existing project area in a CLM system.

Section 9 – Integration with CLM

- Eric, a member of the PMO, displays the projects that are approved for implementation.

- To export a project:

1. Click **Display > Approved Projects**.
2. Click the **Create project** icon.
3. Select the CLM server and click **Log In**.
4. Specify the process template, work item type, and owner and click **Create**.



The IT portfolio template in Rational Focal Point can integrate with CLM. When you integrate the tools, after the steering committee approves a project for implementation, the PMO can export the project to the Change and Configuration Management application in the CLM system.

To export a project to a CCM application in a CLM system:

1. Click **Display > Approved Projects**.
2. Select the project to export to the CCM application in the CLM system
3. Click the **Create project in Jazz** icon.
4. Select the CCM application server to export the project to.
5. Click **Log In**. If you are already logged in, you will not be prompted with the Login page.
6. Select the process template, work item type and owner. In this example, the business needs are created as Plan Items in the CCM application in the CLM system. The Process Template defines which work item types can be selected. The owner must be the project manager in the CLM system.
7. Click **Create**. Wait until the project is created; it might take some time to create the project. The CLM system receives the project and its related business needs. The project is no longer visible in the Approved Projects view. Instead, you can find it by clicking **Display > Projects Under Implementation**.

If you do not use the CLM integration, the PMO members can update Rational Focal Point with the details of the project plan and the actuals either manually or by using the Rational Focal Point Web services API.

Section 9 – Integration with CLM

- When a project is exported, these attributes are moved from Rational Focal Point to CLM:

Module	Rational Focal Point	CLM
Projects	Title	Project Area Name
Projects	Target Start Date	Start Date
Projects	Target End Date	Finish Date
Projects	Business Needs	Any work item type, for example, a Plan item, Story, or Defect. The work item type is defined by process template in CLM.
Business Needs	Title	Work Item Summary
Business Needs	Description	Work Item Description
Business Needs	Work Items	-

Note: The names of the fields in CLM are defined as in the formal project management template. Comments

- Target Start Date and Target End Date** - The Start Date and End Date for the project in CLM are actually the start and end dates of the iteration. To see the dates, click Project > Administration > Time-line editor.
- Link to Implementation Project** - The link to the project in CLM is set when the project is exported. When you click the link, you are directed to the project in CLM.
- Implementation Project URI** – This link is a hidden link that is set during project export. This link is a technical requirement to make the integration work.
- Work Items** – When the project is exported, the work item for a business need in Rational Focal Point is populated with a link to the work item in CLM.

Section 9 – Integration with CLM

- Click **Display > Projects Under Implementation**. A link to the project in the CLM system will be displayed when the project has been transferred.
- After exporting the project to CLM, the business needs associated with the project also contain the work item in CLM.

Project Implementation	
Priority	2
Link to Implementation	https://9.184.147.170:8443/rnc/projects/Enhancement+of+Fraud+Detection+Tool+addon+com.ibm.team.apl.viewPlan&page=viewModel&id=_h06e2726d-AbrCu907fw
Project Implementation	
State	
Completion (%)	0 %
Expenses Overview	
Used Budget vs. Completion %	
Project Plan	
Schedule	
Project Progress on Target	
Project Scope	
Details	

Work Items

83: Access Rights

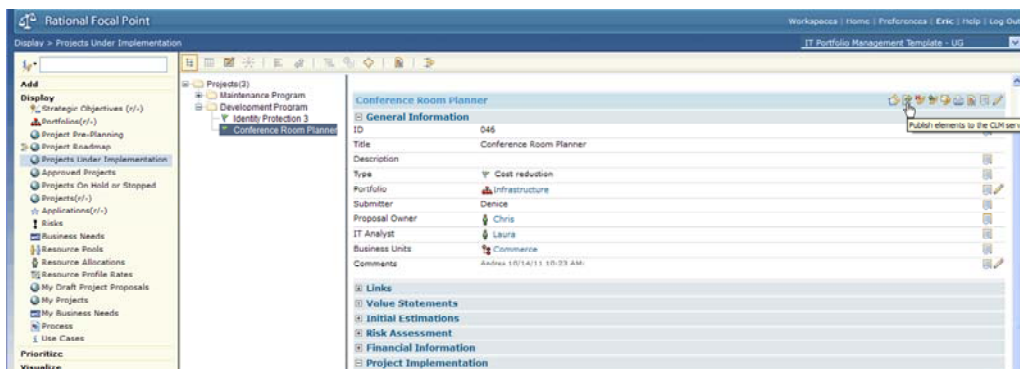
Hover the cursor over the work item

The screenshot shows a detailed view of the '83: Access Rights' work item. It includes sections for 'General Information', 'Status and Planning', 'Details', and 'Access Rights'. The 'Access Rights' section lists various permissions and their states.

When you hover your cursor over a work item in Rational Focal Point, a window with details about the work item opens.

Section 9 – Integration with CLM

- Eric identifies additional business needs for the project, and publishes them as work items in the existing project area.
- By publishing the linked business needs from a project, you can create additional work items or requirements in an existing project area for each business needs linked to the project.
- Bulk publishing can be configured for both CCM applications and Requirement Management (RM) applications in a CLM system.



Publish three new business needs as work items for the exported project:

1. Click **Display > Business Needs**.
2. Select the business need to include.
3. In the Projects attribute, set a link to the project.
4. Repeat steps 1-3 twice to add two more business needs.
5. Click **Display > Projects under Implementation**. Select the project.
6. Click the **Publish elements to the CLM server** icon. The **Select elements to publish** window is displayed:
 - In **Attribute where the CLM servers were configured**, select **Work Items**.
 - In **Allowed CLM servers**, select the CCM application that the project was exported to.
 - In **Allowed project areas**, select the project area corresponding to the exported project.
 - Select **Hide elements that link to artifacts on the CLM server** to ensure that you only create work items for the new business needs.
 - Click **Add All**.
7. Click **Next**.
8. In **New Defect**, select settings corresponding to the exported project. Click **OK**.

The **Bulk Publishing Result** is displayed. Click **Close**.

In this example, you publish work items to the project area of the exported project in a CCM application. If an integration with a Requirement Management application is configured, you can also publish business needs as requirements to a project area in a Requirements Management application by selecting **Requirements** in **Attribute where the CLM servers were configured**.

You can also add a single business needs to the project in the CCM application from the business need:

1. Click **Display > Business Needs**.
2. Select the business need to include.
3. In the Projects attribute, set a link to the project.
4. Edit the Work Items attribute and click **Create New**.
5. Enter details about the new business need; for example, who it is filed against, who it is owned by, the priority, and the planned for dates.
6. Click **OK** to save the work item in the CLM system.
7. Click the **Save** icon to save the work item in Rational Focal Point.

You can also link a business need to work items in the CLM system. In step 4 of the previous procedure, instead of creating a work item, click the **Select** button.

Section 9 – Integration with CLM

- The following work items are related to the created project in the CLM system.
- The project manager has started dividing the plan items, called *business needs* in Rational Focal Point, into tasks and assigning them.



Type	Id	Summary	Owned By	Status	Priority	Severity	Modified Date	Actions
	76	GUI Refresh	SANDRA	Committed			23 Jul 2010 12:08:32	
	77	Real-Time Checks	RAJESH	Proposed			23 Jul 2010 12:03:55	
	85	Implement access rules	RAJESH	New			23 Jul 2010 12:01:59	
	84	Update security framework	RAJESH	New			23 Jul 2010 12:00:41	
	83	Review roles	RAJESH	New			23 Jul 2010 11:59:08	
	81	Access Rights	RAJESH	New			23 Jul 2010 11:49:14	
	75	Automatic monitoring and alerts	Unassigned	New			23 Jul 2010 10:51:49	
	74	Authentication of client data	Unassigned	New			23 Jul 2010 10:51:48	
	73	Access Rights	Unassigned	New			23 Jul 2010 10:51:49	

This user guide does not describe the implementation of the project in the CLM system or in any other project management tool.

Section 10 – Monitoring project implementation

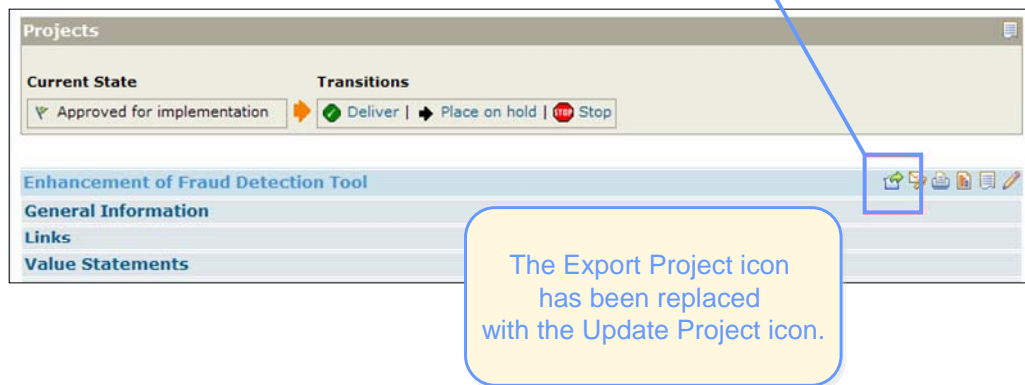
This section explains how to do these tasks:

- Update a project in Rational Focal Point with data from CLM.
- Understand which attributes in Rational Focal Point are updated from CLM.
- Monitor the implementation of projects.
- Monitor the project portfolio.

Section 10 – Monitoring project implementation

To update Rational Focal Point with data from the CLM system:

1. Click **Display > Projects Under Implementation**.
2. Click the **Update Project** icon to update the project.
3. Log in to the CLM server.
4. Update the project.



Before you update the project in Rational Focal Point with information from the CLM system, you must take a snapshot in CLM. You must take a snapshot each time you update the project in Rational Focal Point.

Note: When you integrate Rational Focal Point with a CLM system, you must update the projects individually. Multi-updates and automatic scheduled updates are not supported.

Section 10 – Monitoring project implementation

- Project attributes updated from the CLM system:

Project Implementation	
Priority	2
Link to Implementation Project	https://9.184.147.170:9443/rtc/web/projects/enhancement+of+fraud+detection+tool#action=com.ibm.team.appt.viewPlans&page=viewModel&id=_h10boZY3td-A8rCoF9Q7Rw
Implementation State	Ongoing
Completeness (%)	89 %

Scope	
Business Needs	<ul style="list-style-type: none"> 003:Access Rights 008:Authentication of client data 010:Automatic monitoring and alerts 032:GUI Refresh 063:Real-Time Checks
Total Estimated Effort	3,050 hours
Total Planned Effort	3,225 hours
Total Actual Effort	3,189 hours
Days Delay	0 days

Scheduling	
Duration	15 months
Target Start Date	1/3/11
Planned Start Date	1/10/11
Actual Start Date	1/10/11
Target Implementation Date	3/14/11
Planned Implementation Date	3/16/11
Actual Implementation Date	3/15/11
Target End Date	12/20/11
Planned End Date	12/23/11
Actual End Date	12/22/11
Target Delivery Date	3/31/12
Planned Delivery Date	3/12/12
Actual Delivery Date	-
Snapshot Date	12/23/11

The Total Planned Effort and Total Actual Effort attributes automatically calculate the sum of the planned effort and actual effort for the related business needs to the project level. If you integrate with the CLM system, it overwrites those calculations with the values for the planned effort and actual effort of the project.

If you do not integrate with CLM, the PMO must update the planned and actual hours for business needs manually.

Comments:

- Total Planned Effort** and **Total Actual Effort** - The Planned Effort and Actual Effort values in the CLM system are shown as a progress bar in the iteration plan view (Eclipse client) and in the iteration plan list view (Web client).
- Last Snapshot Date** - The Last Snapshot Date for the business needs related to the project will be the same as the Last Snapshot Date for the project.
- Completeness (%)** – The Percent Complete in the CLM system, e.g. 34% or 78%. The progress of all the business needs are rolled up and displayed as the project completeness.

Section 10 – Monitoring project implementation

- Business Needs attributes updated from the CLM system:

Status and Planning	
State	Completed
Work Item State	Verified
Priority	12
Completeness (%)	100 %
Responsible	Indra
Target Start Date	5/2/11
Planned Start Date	5/4/11
Actual Start Date	5/5/11
Target End Date	10/18/11
Planned End Date	10/20/11
Actual End Date	10/21/11
Snapshot Date	12/23/11

Effort	
Estimated Effort	160 hrs
Planned Effort	100 hrs
Actual Effort	68 hrs
Actual vs Planned	
Links	
Application	Fraud Detection Tool
Projects	Enhancement of Fraud Detection Tool
Related to Business Needs	-
Related from Business Needs	-
Work Items	83: Plan Item 83: Access Rights



Note: The snapshot date for a business need is the same as the snapshot date of the project that the business need is related to.

Comments:

- Planned Effort** – The correction value will override the Estimate value in the Estimate / Correction fields in the CLM tool.
- Planned Start Date** – Planned start dates are not displayed for work items in the CLM system. This date is visible only in the timeline of a work item in the Gantt view.
- Actual Start Date** – Actual start dates are not displayed for work items in the CLM system. This date is visible only in the timeline of a work item in the Gantt view.
- Planned End Date** – Planned end dates are not displayed for work items in the CLM system. This date is visible only in the timeline of a work item in the Gantt view.
- Actual End Date** – Actual end dates are not displayed for work items in the CLM system. This date is visible only in the timeline of a work item in the Gantt view.
- Completeness (%)** - The Percent Complete in the CLM system, e.g. 34% or 78%. The progress of all the children work items is rolled up and is displayed as percentage completeness.

Section 10 – Monitoring project mplementation

- Monitor all ongoing projects
 - ▶ Click **Display > Projects(r/-)**
 - ▶ In the Filter list, select **Business Overview Ongoing Projects**

Title	Time	Portfolio	Business Units	Related Applications	Primary Strategic Objectives	Average Risk Score	Mean NPV	Implementation Status	Completeness (%)	Business Needs	Duration
033 Account Queries	Strategic	External Applications	Operations	Mail System	Increase efficiency	18	\$2 991 000	Started	12 %	<ul style="list-style-type: none"> 033-Client history 033-Compare CD Rates with other Banking Providers and Online Providers 034-Component content 	9 months
034 ATM Accessibility Upgrades	Cost reduction	Infrastructure	Commerce	Core Banking Payments	Adapt to new technologies	41	\$1 992 000	Started	24 %	<ul style="list-style-type: none"> 037-ATM software needs to support visually impaired 037-General Component Base 038-Upgrade for portfolio 038-Old Refresh 038-Inventory log for ATM traffic 038-Idemity Production 038-Inventory analysis 038-Inventory messaging 038-Data quality 038-Kids Banking Application Capability 038-Life Insurance quotes online 038-Multiple language support 038-Provide upgrade verification tests 038-Upgrade must be fast 	12 months
035 ATM Card Background	Revenue generation	Business Operation	Infrastructure	Core Banking Payments	Innovation	28	\$4 498 000	Started	76 %	<ul style="list-style-type: none"> 037-Statements 	14 months
037 Automated Clearing House (ACH)	Strategic	Infrastructure	Commerce	Inventory Control	Manage change	22	\$993 000	To be tested	79 %	<ul style="list-style-type: none"> 033-Encoding 038-Provide time sheet entry 038-Data quality 038-Online Employee Flexible work schedule application 	17 months
038 Automated Phone Service	Cost reduction	Business Operation	Investments	Call Center Application	Save cost	17	\$3 654 000	Completed	89 %	<ul style="list-style-type: none"> 038-Access Rates 038-Electronic Data Interchange (EDI) - Invoicing 038-Email Alerts 038-Flexible time sheet entry 038-Data quality 	13 months
040 Automatic Card Replacement Service	Mandatory	Infrastructure	Commerce	Call Center Application	Adapt to new technologies	20	\$1 970 000	Started	43 %	<ul style="list-style-type: none"> 033-Client history 041-Offer low-cost no-fee alternatives 044-Online Internet Banking 044-Platform to support web-based solution 044-Reduce costs associated with lost cards 044-Upgrade system 	13 months
043 Cash Management System	Revenue generation	Infrastructure	Commerce	Check Processing	Adapt to new technologies	22	\$2 310 000	To be tested	93 %	<ul style="list-style-type: none"> 038-Automated process for Home Banking Analysis 038-System Interface for Cash Management 	14 months

This view shows all of the ongoing projects in a table. The PMO, steering committee, and executive stakeholders can access this view and these filters. In this view, you can for example see the following information about projects:

- Types
- Portfolios to which they belong
- Primary strategic objectives
- Average risk scores
- Mean NPVs
- Percentage of completeness

Section 10 – Monitoring project implementation

- The Projects(r/-) view has other filters, such as Financial Overview Ongoing Projects, Health Ongoing Projects and Schedule Overview Ongoing Projects.

Expenses Overrun	
Used Budget vs Completeness %	
Project On Schedule	
Project Progress on Target	
Project Scope Delay	

These filters provide overviews of the current status of the ongoing projects. The traffic light icons indicate the health of the project.

- Expenses Overrun** – If the actual expenses for the project have exceeded the likely expenses by more than 20%, the traffic light is red. If expenses have exceeded by between 10-20%, the light is yellow. If expenses have exceeded by less than 10%, the light is green.
- Used Budget vs Completeness %** - TrafficLight used as indicator if project completeness is low and money used (the total actual expenditures) is high compared to money planned (the total planned likely expenditures). The TrafficLight will show red if the difference between percent complete for the project and the percent money used is higher than 30%, yellow if between 20 and 30% and green if less than 20%.
- Project On Schedule** – If both the actual start date and actual end date are more than 30 days from planned start date or planned end date, the traffic light is red. If either the actual start date or actual end date are more than 30 days from the planned start date or planned end date, the light is yellow. If neither the actual start date nor the actual end date are more than 30 days from the planned start date or planned end date, the light is green..
- Project Progress on Target** – If the difference between the percent complete for business needs and percent complete for the project schedule (based on the planned start date, the current date, and the planned end date) is higher than 30%, the traffic light is red. If the

difference is between 20 and 30%, the light is yellow. If the difference is less than 20%, the light is green.

- **Project Scope Delay** – Compares the total number of days to implement business needs with the number of days from the planned start to planned end. If the number of days to implement business needs exceeds the planned project days by more than 30%, the traffic light is red. If the number exceeds by between 20 and 30%, the light is yellow. If the number exceeds by less than 20%, the light is green.

Section 10 – Monitoring project implementation

- The steering committee and executive stakeholders can monitor the portfolio on their Home pages.
- Click **Home** to view the following information:
 - ▶ Portfolio Health
 - ▶ Projects With Overrun Planned Expenses

Portfolio Health							
Title	Project Expenses Overrun	Red Lights in Ongoing Projects	Portfolio Level Risk Score	Project Level Risk Score	Net Cash Flow for Delivered Projects	Accumulated Investments	Total Mean NPV - Ongoing Projects
Infrastructure					\$-1 434 677	\$3 885 272	\$7 163 500
External Applications					\$12 440 000	\$47 870 000	\$6 012 000
Business Operation					\$6 094 000	\$8 997 000	\$10 294 000

Projects with Overrun Planned Expenses				
Title	Project State	Portfolio	Implementation State	Expenses Overrun
Home Equity Sales Tracking	Approved for implementation	External Applications	Started	

The Portfolio Health area contains the following information:

- **Project Expenses Overrun:** If at least one ongoing project is exceeding its planned likely expenses by more than 20%, the traffic light is red. The projects that have overrun the planned expenses are listed in the Projects with Overrun Planned Expenses window, which is also displayed on the home page.
- **Red Lights in Ongoing Projects:** If the number of red lights in ongoing projects is more than 20, the light is red. If the number is between 10 and 20, the light is yellow, and if the number is less than 10, the light is green.
- **Portfolio Level Risk Score:** If the average portfolio risk score is more than 50, the light is red. If the number is between 30 and 50, the light is yellow. If the number is less than 30, the light is green.

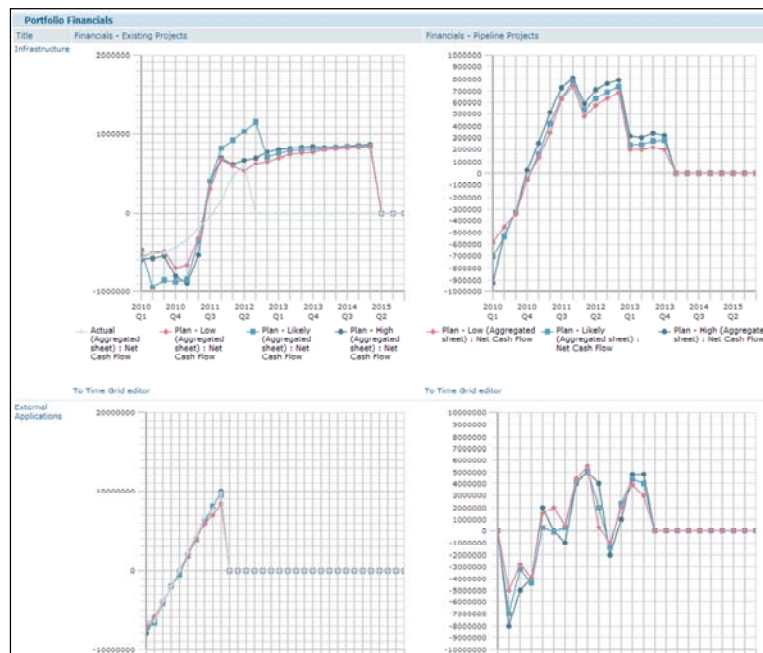
- **Project Level Risk Score:** If the average project level risk score is more than 20, the light is red. If the number is between 10 and 20, the light is yellow. If the number is less than 10, the light is green.
- **Net Cash Flow for Delivered Projects:** The total net cash flow for all delivered projects in the portfolio
- **Accumulated Investments:** The total cost for all projects in the portfolio until now
- **Total Mean NPV – Ongoing Projects:** The sum of the mean NPV for the ongoing projects in the portfolio

The Projects with Overrun Planned Expenses area contains a list of the projects that have overrun their planned likely expenses by more than 20%. You can also see which implementation state the projects are in and which portfolio they belong to. To see details, click the links.

Section 10 – Monitoring project implementation

- On the Home page, you can also see this information:

- ▶ Financials – Existing Projects
- ▶ Financials – Pipeline Projects
- ▶ Project distribution: State (see image on next page)
- ▶ Open High Priority Portfolio Risks (see image on next page)



The Portfolio Financials area contains the following information:

- **Financials – Existing Projects** - Financial data from all projects in the portfolio that are in the Approved for Implementation or Delivered states. The graphs show the Net Cash Flow for the Planned – Low, Planned – Likely, Planned - High, and Actual sheets.
- **Financials – Pipeline Projects** - Financial data from all projects in the portfolio that are in these states: Ready for approval decision, Ready for prio, Pre-plan project, or Ready for

implementation approval. The graphs show the Net Cash Flow for the Planned – Low, Planned – Likely, and Planned – High sheets.

Section 10 – Monitoring project implementation

- The project state distribution and risk information, as shown on the Home page.

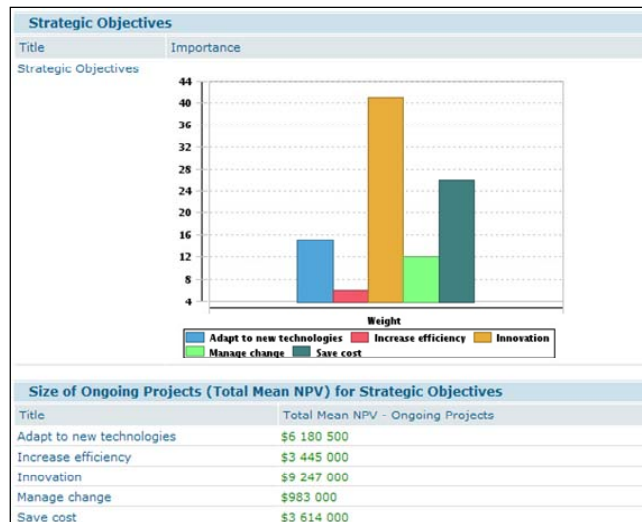
Open High Priority Portfolio Risks				
Title	Portfolios	Approach	Probability	Consequence
Budget overrun	Infrastructure	Mitigate	10 - Very High	7 - High
Poor project management	Infrastructure	Accept	1 - Low	4 - Medium
Low quality project deliverables	External Applications	Watch	4 - Medium	1 - Low
Possibility to impair benefits	External Applications	Mitigate	7 - High	4 - Medium
Budget cuts	Business Operation	Watch	1 - Low	4 - Medium
Overambitious plans	Business Operation	Accept	1 - Low	1 - Low
Unacceptable NPV	Business Operation	Mitigate	10 - Very High	10 - Very High
Lacking resource availability	Business Operation	Mitigate	10 - Very High	7 - High
Poor application of best practice	External Applications	Mitigate	4 - Medium	7 - High
Failing execution of strategy	Infrastructure	Watch	4 - Medium	1 - Low
Changed strategy	External Applications	Accept	4 - Medium	1 - Low
High expectancy - Low result	Business Operation	Watch	1 - Low	4 - Medium

Project Distribution: State		
Project State	Quantity	Share
Draft	35	17,2%
Proposed	60	29,6%
Accepted	19	9,4%
Under investigation	8	3,9%
Finalize business case	15	7,4%
Ready for approval decision	2	1,0%
Ready for prio	10	4,9%
Pre-plan project	7	3,4%
Ready for implementation approval	7	3,4%
Approved for implementation	18	8,9%
Delivered	10	4,9%
Business Need	1	0,5%
Backlog	2	1,0%
Duplicate	1	0,5%
To be clarified	1	0,5%
On hold	2	1,0%
Stopped	2	1,0%
Rejected	3	1,5%
Delete	0	0,0%
Sum: 203		

- Project distribution: State** – Shows all projects according to their state. To open a list of all projects in a certain state, click the number in the Quantity column or the bar in the Share column.
- Open High Priority Portfolio Risks** – Shows a list of all portfolio risks that are open and where priority is high. To see details, click the links.

Section 10 – Monitoring project implementation

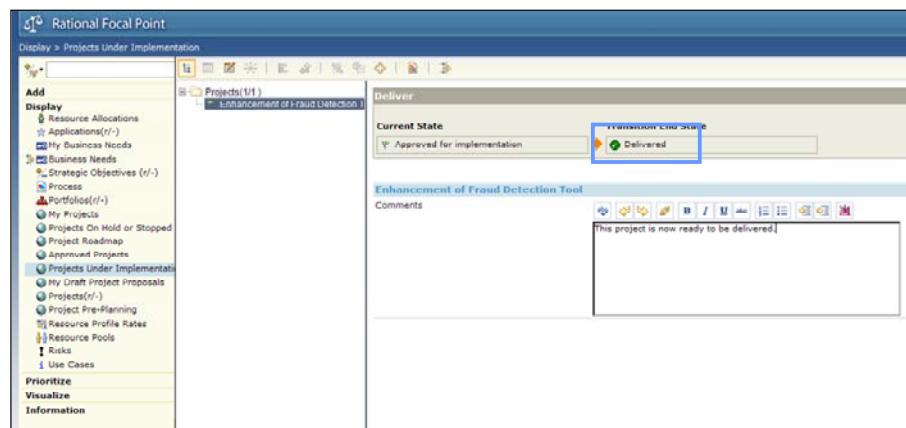
- The Strategic Objectives chart shows the sizes of the ongoing projects, which are based on Total Mean NPV, distributed according to the strategic objectives.



- Strategic Objectives:** This chart shows how the strategic objectives are weighed. In the screen capture, the Innovation objective is ranked as the most important with about 36% weight. The Save Cost objective is the second most important with 28% weight.
- Size of Ongoing Projects (Total Mean NPV) for Strategic Objectives –** This area shows the distribution of the mean NPV for ongoing projects against the strategic objectives. In the screen capture, around 6.2 million dollars are invested in the Adapt to new technologies objective. When compared with the importance of that strategic objective, it is a poor investment. Instead, more money should have been invested in the Save cost objective, which is the second most important objective.

Section 10 – Monitoring project implementation

- Eric, a member of the PMO, clicks **Display > Projects Under Implementation**
- He changes the state to Delivered



Once the project has been completed, the PMO changes its state to Delivered.

Section 11 – Integrating with Rational System Architect

This section explains these concepts:

- The value that the integration between IBM® Rational® System Architect and Rational Focal Point can provide to your business.
- The tasks you can complete by integrating Rational System Architect with Rational Focal Point.

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Section 11 – Integrating with Rational System Architect

- Aligning your IT portfolio and processes with business strategy is important, especially during organizational changes, such as mergers and acquisitions.
- You can use Rational System Architect to model your present and future enterprise architecture, your organization, processes, applications, servers, use cases, and user groups and understand how they are related to each other. You can gain a clear and simple view of your enterprise and connect business and IT.
- You can integrate Rational Focal Point with Rational System Architect to determine which projects to run to reach your future enterprise architecture in the best way. The value analysis of projects and applications in Rational Focal Point supports this work.
- With this integration, you can complete the following tasks:
 - ▶ Import identified projects, applications, and strategic objectives from Rational System Architect to Rational Focal Point.
 - ▶ Analyze costs and benefits, trade offs, and gaps by completing pairwise comparisons and scorecards in Rational Focal Point.
 - ▶ Plan the projects with the most value in a road map in Rational Focal Point.
 - ▶ Act on the analysis results and plans in Rational System Architect.



Section 12 – Analyzing applications

This section explains how to complete these tasks:

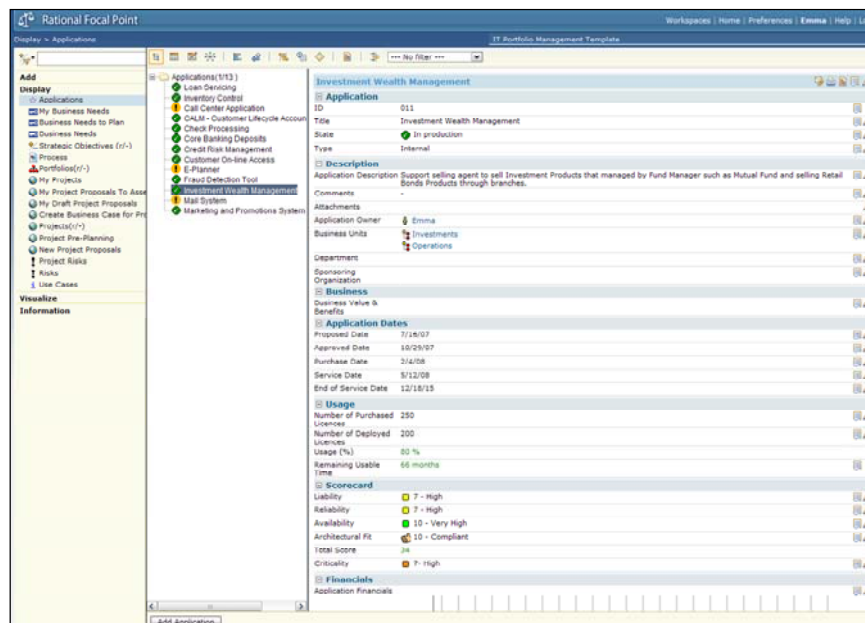
- Add and display applications.
- Display a table of application scorecards.
- Analyze gaps in applications.
- Analyze the value of applications.
- Complete a value realization of applications.

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Section 12 – Analyzing applications

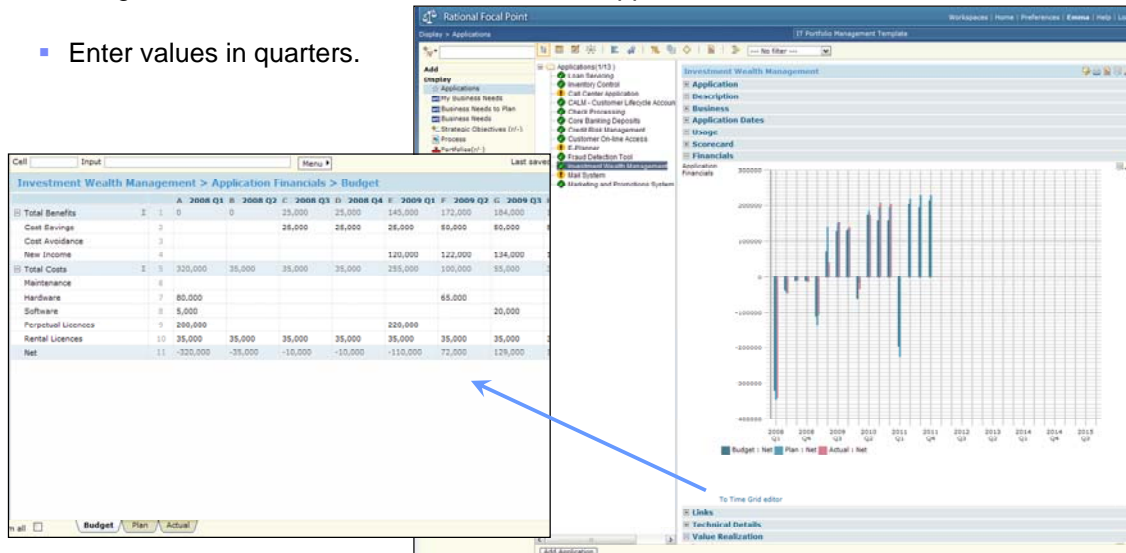
- To add applications to Rational Focal Point:
 - ▶ Click **Add > Application**.
 - ▶ Integration with Rational System Architect.
- To see all applications, click **Display > Applications**.



In the IT portfolio management template, IT analysts can add and manage applications.

Section 12 – Analyzing Applications

- Display > Applications > Application Financials
- Budget, Planned and Actual sheets for each application.
- Enter values in quarters.



To update the financial information about an application, the IT analyst can click **Display > Applications > Application Financials > To Time Grid editor**. The analyst can view three sheets: Budget, Planned, and Actual. The Budget sheet contains the budgeted benefits and costs. The Planned sheet contains the expected benefits and costs. Update the Actual sheet with the actual numbers as they are provided. A graph of the net value over time is displayed in the attribute list for the application.

A person with the Finance role can also update the application financials.

Section 12 – Analyzing applications

Display application scorecards:

- Click **Display > Applications**.
- From the Filter list, select Scorecard
- Switch to Table mode. This report shows a list of the applications that are in production in a scorecard view.

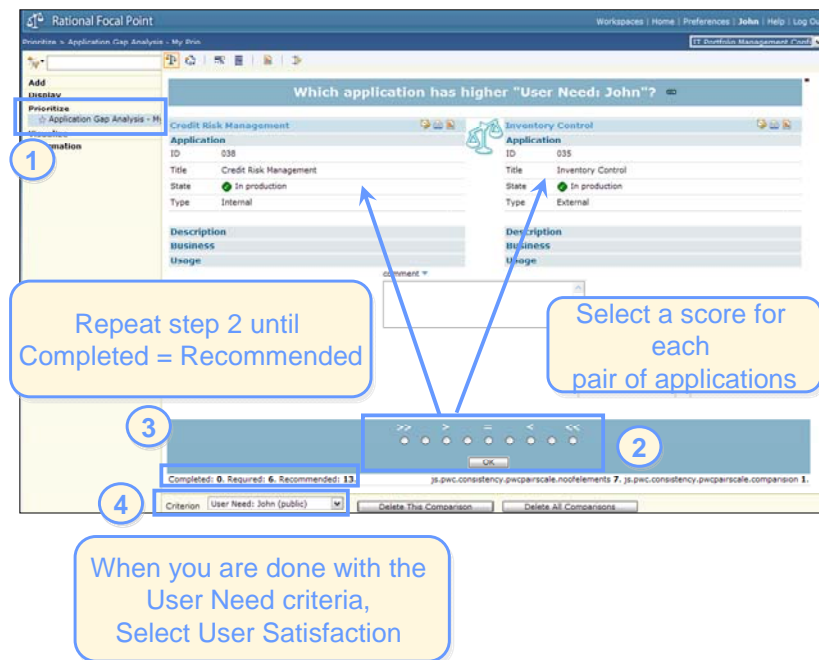
ID	Title	Liability	Reliability	Availability	Architectural Fit	Total Score	Criticality
001	Loan Servicing	1 - Low	10 - Very High	4 - Medium	10 - Compliant	25	7 - High
002	Inventory Control	7 - High	10 - Very High	10 - Very High	10 - Compliant	37	1 - Low
003	Call Center Application	7 - High	7 - High	7 - High	10 - Compliant	31	4 - Medium
004	CALM - Customer Lifecycle Account Management	4 - Medium	10 - Very High	10 - Very High	10 - Compliant	34	10 - Mission critical
005	Check Processing	7 - High	7 - High	10 - Very High	10 - Compliant	31	4 - Medium
006	Core Banking Deposits	4 - Medium	1 - Low	7 - High	1 - Non-compliant	13	4 - Medium
007	Credit Risk Management	4 - Medium	4 - Medium	7 - High	1 - Non-compliant	16	4 - Medium
008	Customer On-line Access	10 - Very High	10 - Very High	10 - Very High	10 - Compliant	40	7 - High
009	E-Planner	7 - High	4 - Medium	10 - Very High	10 - Compliant	31	10 - Mission critical
010	Fraud Detection Tool	10 - Very High	1 - Low	7 - High	1 - Non-compliant	19	10 - Mission critical
011	Investment Wealth Management	7 - High	7 - High	10 - Very High	10 - Compliant	34	7 - High
012	Mail System	4 - Medium	7 - High	10 - Very High	10 - Compliant	31	7 - High
013	Marketing and Promotions System	4 - Medium	7 - High	7 - High	10 - Compliant	28	7 - High

In the example in the screen capture, an application in an important production has scored low on reliability. To resolve this situation, you might propose a project that is related to this application that can address the reliability issue. You might also search for business needs that are raised against this application that will improve reliability and that can be included as part of the scope.

Section 12 – Analyzing applications

- Analyze gaps:

1. Click **Prioritize** > **Application Gap Analysis – My Prio**
2. For the Criterion, select **User Need** for a certain user, such as John
3. Compare user needs until the Completed and Recommended values are the same.

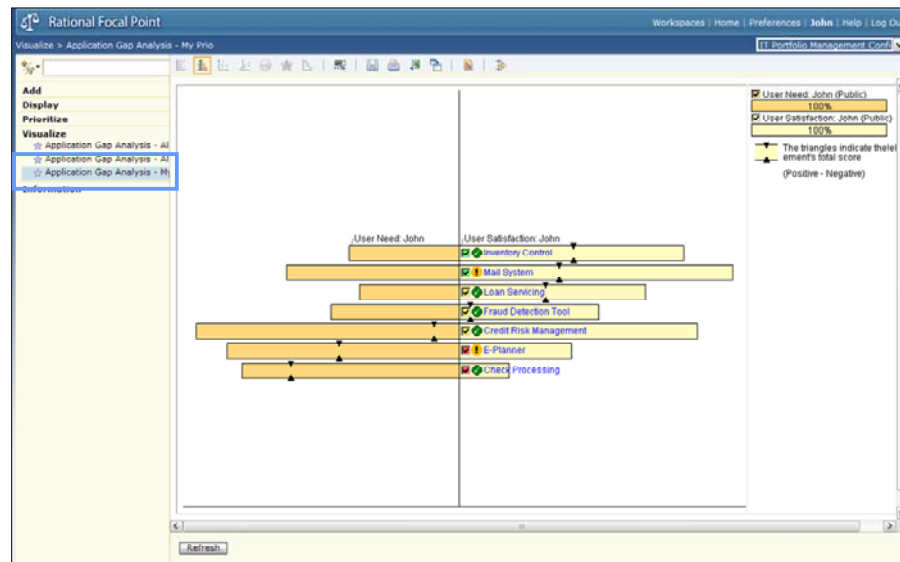


In the example in the screen capture, a user named John is selected as the application gap analyst. John must vote for how much he needs certain applications compared to how satisfied he is with the applications. John does pairwise comparisons according to User Need and then compares according to User Satisfaction.

Note: To access the Application Gap Analysis – My Prio view, you must have the Application Gap Analyst secondary role.

Section 12 – Analyzing applications

- To see the results of the prioritization, click **Visualize > Application Gap Analysis – My Prio**

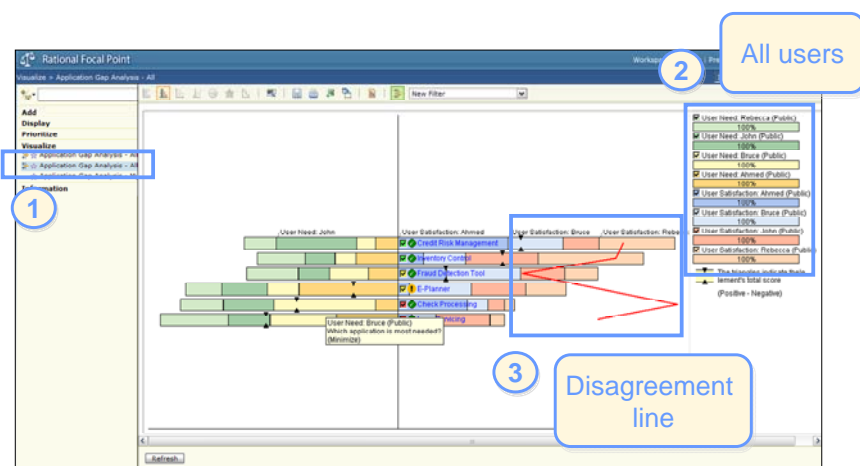


The Application Gap Analysis – My Prio view shows the result of the prioritization. The black arrows in the chart represent the difference between positive and negative. When the arrows are close to the middle, the gap is small. When the arrows are far from the middle, the gap between need and satisfaction is large. For example, this user often needs the Check Processing application, but is not satisfied with it. However, he has no issues with the Fraud Detection Tool.

Note: To access this view, you must have the Application Gap Analyst secondary role.

Section 12 – Analyzing applications

- To view the results of all gap analysts' votes, click **Visualize > Application Gap Analysis – All**
- The red line shows disagreement. If the line is far to the right, disagreement is strong.



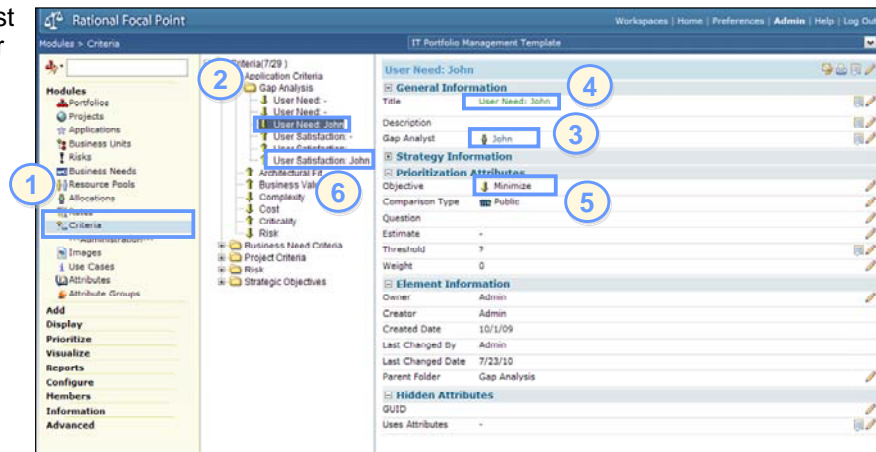
In the example in the screen capture, the Loan Servicing and Credit Risk Management application has the biggest gap between satisfaction and need. The disagreement about the Check Processing application is strong.

Note: This view is accessible only to IT analysts and users with the Application Gap Analyst secondary role.

Section 12 – Analyzing applications

To set up a gap analysis:

- The user who votes must have the Application Gap Analyst secondary role. An administrator can grant this role.
- An administrator must create two criteria for each application gap analyst.



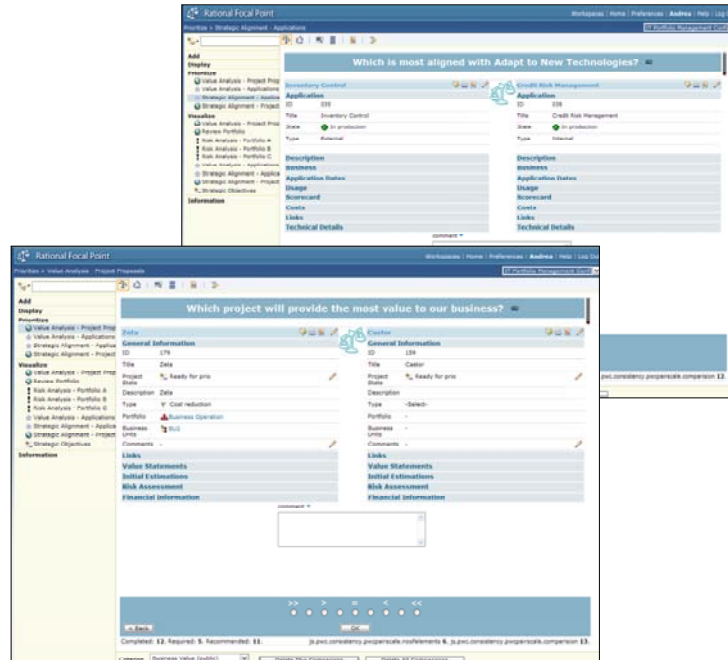
To set up a gap analysis:

1. Log in as an administrator and click **Modules > Criteria**.
2. Add a criterion named User Need.
3. Select the Gap Analyst.
4. Edit the title and enter the following expression: `"User Need: " + 'Gap Analyst'`
5. For the Objective, select **Minimize**.
6. Add a criterion named User Satisfaction.
7. Enter this expression for the title: `"User Satisfaction: " + 'Gap Analyst'`
8. For the Objective, select **Maximize**.

Section 12 – Analyzing applications

Analyzing application value

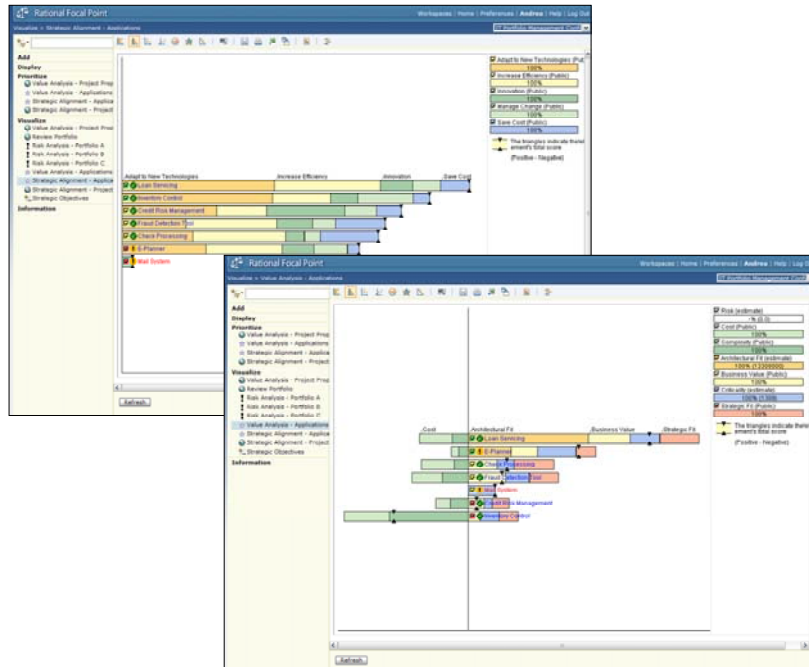
- To prioritize applications against strategic objectives, click **Prioritize > Strategic Alignment – Applications**.
- To prioritize applications against Complexity, Cost, and Business Value, click **Prioritize > Value Analysis – Applications**



The steering committee can analyze the value of applications by prioritizing them against the strategic objectives. After the strategic fit is determined through that analysis, the committee can continue analyzing value against cost, complexity, and business value.

Section 12 – Analyzing applications

- To see the alignment to the strategic objectives, click **Visualize > Strategic Alignment – Applications**.
- To see the result of the prioritization against complexity, cost, and business value, click **Visualize > Value Analysis – Applications**.
- The chart also contains the result of the strategic alignment prioritization in the strategic objectives criteria as well as risk, architectural fit, and criticality.



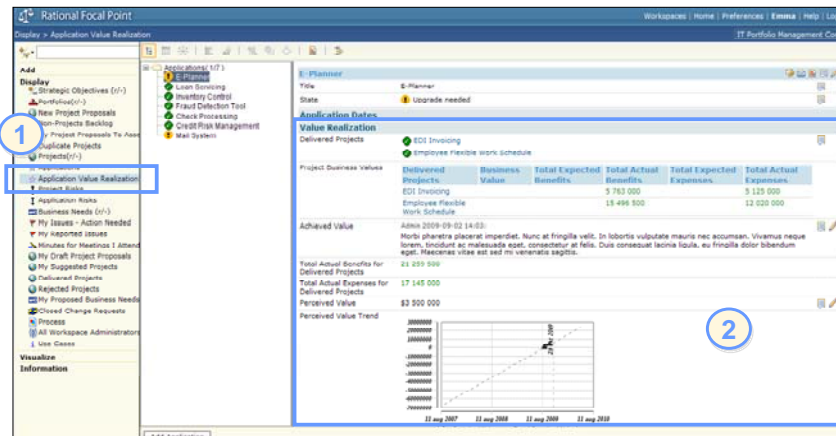
To understand the value that each application provides to the business, study the results of the application value analysis. For example, if you find that an application high cost but low value, you might consider replacing or retiring the application.

Note: The weight of the strategic objectives that is determined through the prioritization of strategic objectives affects the result of the strategic alignment of the applications. If the weight changes, the strategic alignment chart is updated.

Section 12 – Analyzing applications

Analyzing the value realization of applications

- IT analysts analyze the application value realization.
- Click **Display > Applications**.
- Value realization applies only to delivered projects.



- Delivered Projects** – Displays the list of delivered projects that were run against the application
- Project Business Value** – Displays details about each delivered project; for example, their business value, total expected benefits and expenses, and total actual benefits and expenses
- Achieved Value** – A description of the value that the application has provided to the business
- Total Actual Benefits for Delivered Projects** – The sum of the actual benefits for the delivered projects run against the application
- Total Actual Expenses for Delivered Projects** – The sum of the actual expenses for the delivered projects run against the application
- Perceived Value** – The perceived value that the application has to the business. This field is updated over time.
- Perceived Value Trend** – A graphical representation of the changes in Perceived Value for the application over time, including a trend line

Section 13 – Analyzing risks

This section explains how to complete these tasks:

- Analyze risk on the portfolio level in XY charts and pie charts
- Display application, portfolio, or project risk scorecards

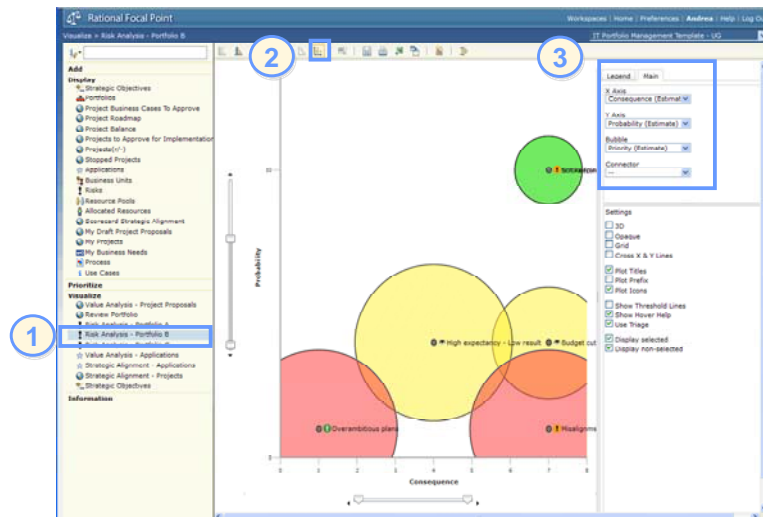
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Section 13 – Analyzing risks

Portfolio risk analysis

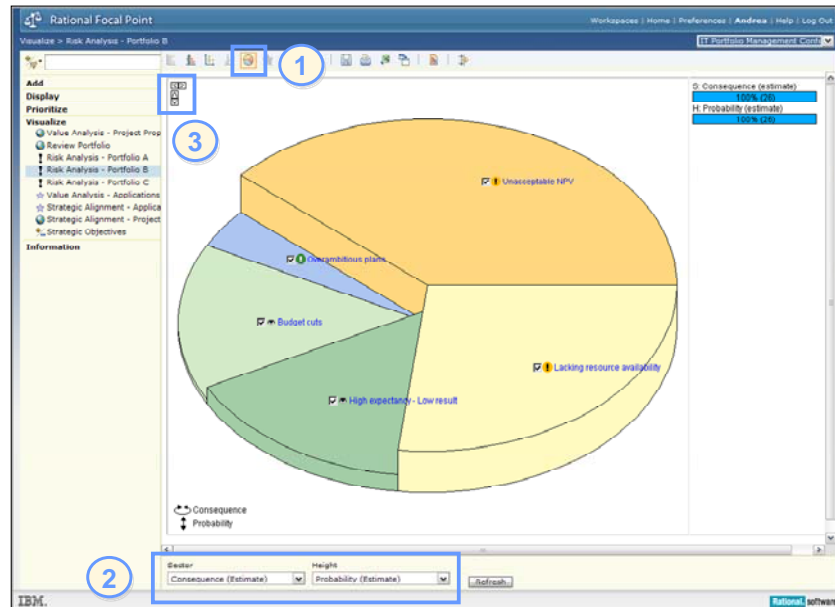
- A steering committee member can click **Visualize > Risk Analysis – [Portfolio B]**



This XY chart shows the risks that are associated with a certain portfolio. The X axis contains the Consequence score, the Y axis contains the Probability score, and the bubble represents the Priority score. The icon preceding the risk name in the chart represents the approach that the business uses for each risk: Accept, Watch, or Mitigate.

Section 13 – Analyzing risks

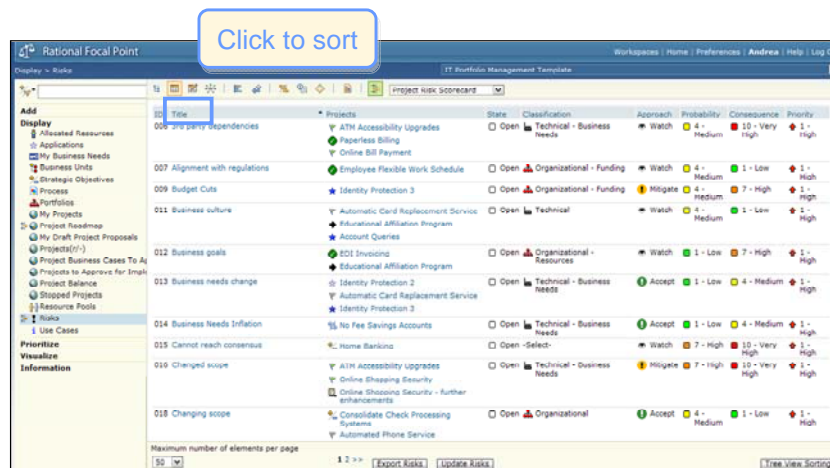
The steering committee views the data in Pie Chart mode



The pie chart mode shows the same risks for the same portfolio in a pie chart. The sector is the Consequence score and the height is the Probability score. To turn the pie chart, use the arrows, as step 3 in the screen capture indicates.

Section 13 – Analyzing risks

- The steering committee can also look at all risks in a scorecard table.
- Click **Display > Risks**. From the Filter list, select Application risk scorecard, Portfolio risk scorecard or Project risk scorecard.
- Select the Table view.



The risk scorecard shows a quick overview of the application, portfolio, or project risks. You can create filters to display only certain risks, such as open risks, risks of a certain portfolio, or high priority risks.

The risks in the screen capture are sorted by Title. To sort, click the column name to sort by.

Section 14 – Managing business needs

This section explains how to complete these tasks:

- Submit business needs.
- Prioritize business needs.
- Plan business needs for a project.
- Monitor the progress of the implementation of business needs.

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Section 14 – Managing business needs

- To submit a new business need, click **Add > Business Need**.
- After you add the business need, you can edit and track its progress in the My Proposed Business Needs view. To open this view, click **Display > My Proposed Business Needs**.

Rational Focal Point

Workspaces | Home | Preferences | Andrea | Help | Log Out

Add > Business Need

IT Portfolio Management Template

Enter information about the new Business Needs, then click OK.

View to add business needs.

Title* Approval Gates for Loan Origination

Description* Implement gates in the tool in order to better control approvals.

Benefit Statement Increased security and reduced number of approved loan applications that should have been declined.

Attachments Size limit 10 MB
The total size of all files in a file attribute can not exceed 10 MB
Choose File No file chosen

Comments

OK Cancel Add Multiple Business Needs

All users can add business needs. If you add a business need, you can update its state, responsible person (PMO members), target start and end dates, estimated man hours, risk analysis, and other information. If several business needs are added at the same time (for example, if you receive business needs from customers and do not have the chance to review them all), you can use the Accepted state. For the business needs that you have reviewed, set the state to Accepted. When a business need is properly completed and the analysis is finished, change the state to Ready to be planned. When the PMO plans projects to run against a certain application, the PMO can choose from the list of business needs in the Ready to be planned state.

To add a business need, enter the following information:

- **Title**
- **Description**
- **Benefit Statement** – Describe the benefits that the business need would create if it is implemented
- **Attachments** – Attach any files, illustrations, or documents that are related to the business need
- **Comments** – Enter any additional comments to describe the business need
- **Application** – Select any application against which the business need is raised
- **Projects** – Select any projects that the business need is related to
- **Related to Business Needs** – Select any other existing business needs that are related to the business need

Section 14 – Managing business needs

- To see your business needs, click **Display > My Business Needs**.
- Before you can prioritize the business needs, you must provide the following information:
 - ▶ Responsible
 - ▶ Estimated Effort
 - ▶ Technology Risk
 - ▶ Quality Risk
 - ▶ Cost Risk
 - ▶ Schedule Risk
 - ▶ The State of the business needs need to be Ready to be planned.

The screenshot shows the Rational Focal Point web application. The left sidebar has a navigation menu with 'My Business Needs' selected. The main content area displays a table of business needs. The selected entry, 'Approval Gates for Loan Origination', is shown in detail on the right. The details include:

- General Information:** ID: 009, Title: Approval Gates for Loan Origination, Description: Implement gates in the tool in order to better control approvals, Benefit Statement: Increased security and reduced number of approved loan applications that should have been declined, Attachments: dependency.gif, Comments: -
- Status and Planning:** State: Ready to be planned, Work Item State: -, Priority: 0, Completeness (%): 0 %, Responsible: Bruce, Target Start Date: -, Planned Start Date: -, Actual Start Date: -, Target End Date: -, Planned End Date: -, Actual End Date: -, Snapshot Date: -
- Effort:** Estimated Effort: 150 hrs, Planned Effort: 0 hrs, Actual Effort: 0 hrs, Actual vs Planned: 0
- Links:** Application: Loan Servicing, Projects: -, Related to Business Needs: -, Related from Business Needs: -, Work Items: -
- Risk Analysis:** Technology Risk: 1, Quality Risk: 2, Cost Risk: 1, Schedule Risk: 3, Risk Index: 7

All users can access the Display > My Business Needs view.

Section 14 – Managing business needs

- To prioritize business needs, click **Prioritize > Business Needs**.

The screenshot shows the Rational Focal Point interface with a comparison window titled "Which business need is most important?". The window compares two business needs: "Approval Gates for Loan Origination" (ID: 009) and "Change fund" (ID: 011).

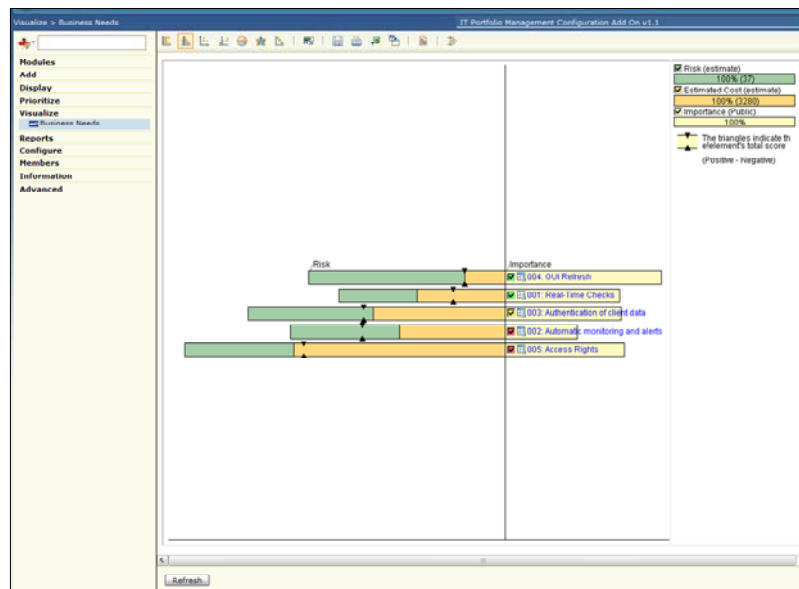
Approval Gates for Loan Origination (ID: 009)	Change fund (ID: 011)
General Information	General Information
Title: Approval Gates for Loan Origination	Title: Change fund
Description: Implement gates in the tool in order to better control approvals.	Description: Description
Benefit Statement: Increased security and reduced number of approved loan applications that should have been declined.	Benefit Statement: Description
Attachments: dependency.gif	Attachments: Description
Comments: +	Comments: +
Status and Planning	Status and Planning
State: Ready to be planned	State: Ready to be planned
Work Item: State	Work Item: State
Priority: 0	Priority: 0
Responsible: Bruce	Responsible: +
Target Start Date: +	Target Start Date: +
Planned Start Date: +	Planned Start Date: +
Target End Date: +	Target End Date: +
Planned End Date: +	Planned End Date: +
Snapshot Date: +	Snapshot Date: +
Effort	Effort
Estimated Effort: 350 hrs	Estimated Effort: 0 hrs
Planned Effort: 0 hrs	Planned Effort: 0 hrs
Links	Links
Application: Loan Servicing	Application: Call Center Application
Projects: +	Projects: +
Related to Business Needs: +	Related to Business Needs: +
Related from: +	Related from: +

At the bottom of the comparison window, it shows: Completed: 0, Required: 11, Recommended: 24. Number of elements: 13, Comparison: 1.

Only the PMO can prioritize business needs. The business needs must be in the Ready to be planned state before they can be prioritized. The business needs are prioritized against the Importance criterion, but you can add more criteria for the comparison.

Section 14 – Managing business needs

- To see the result of the prioritization of the business needs, click **Visualize > Business Needs**.
- The PMO uses this information as they plan the scope of the project.



The Risk Index (Risk) and the Estimated Man Hours (Estimated Cost) are included in the result chart so that you can record those aspects of the business needs.

To save the priority of the business needs:

- Right-click in the chart and select **Rank The Elements**.
- From the Attribute drop-down list, select **Priority**.
- Select the ranking scheme.

Section 14 – Managing business needs

- PMO members can find business needs for a project by clicking **Display > Business Needs** and select the 'Ready to be planned' filter.

The screenshot shows the Rational Focal Point interface. The left sidebar has a tree view with 'Business Needs' selected. The main area displays a list of business needs, with one selected and its details shown on the right. Annotations include:

- 1. A blue circle with the number '1' pointing to a right-click action on a business need.
- 2. A blue circle with the number '2' pointing to the 'Group By' dropdown menu. A callout box says "Click Group By > Link > Application".
- A callout box says "Right-click here".

When you view the Display > Business Needs view with the Ready to be planned filter, you can see the business needs that can become part of the scope of a project. If you group the business needs by application (see step 1-2), you can see all business needs that have been raised so far against a certain application. Then, you can find business needs to add to a project that, for example, make improvements to a certain application.

To plan a business need to a project, in the Projects attribute of the business need, create a link to the project and change the state to Planned. Then update the target start and end dates.

Section 15 – Viewing use cases

This section explains how to complete these tasks:

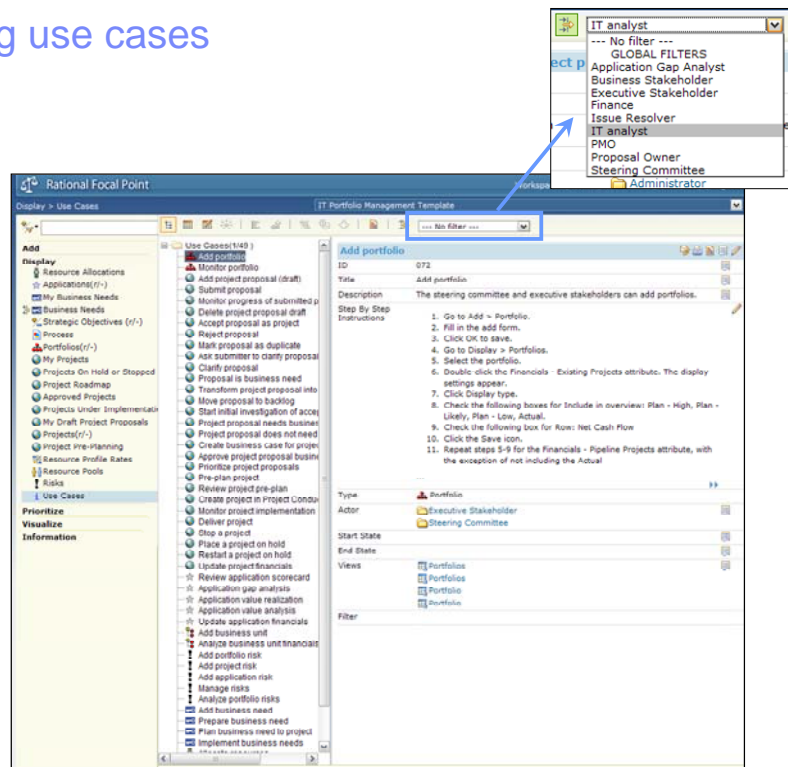
- View the use cases that can be performed in the template
- View the use cases per role

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Section 15 – Viewing use cases

- All users can view use cases by clicking **Display > Use Cases**.
- This view shows which views to use for which use cases.
- To see use cases for a particular role, use a filter.



Use cases are grouped by type; for example, Project, Portfolio, or Risk. For each use case, you can see a brief description, instructions to complete the use case, the actors that are involved, the start and end states (if any), and the views that are used to complete the use case. Use this view to find out which view to use for a use case.

Section 16 – Integration with estimation tools

This section explains the following concept:

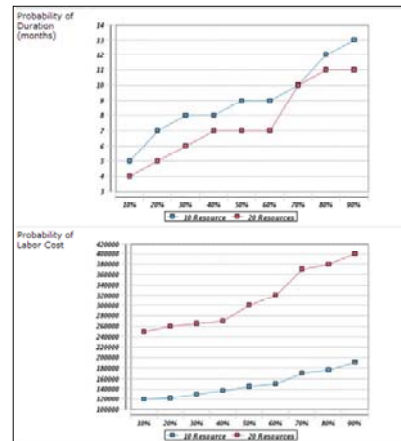
- What value estimation tools can provide to the process of estimating projects

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Section 16 – Integration with estimation tools

- You can integrate Rational Focal Point with estimation vendor tools to do high quality estimations for a project.
- To complete estimations, you can use the following set of hidden attributes on the project level in the IT portfolio management template:
 - ▶ Probability of Duration (months) – a matrix in graphical form
 - ▶ Probability of Labor Cost – a matrix in graphical form
 - ▶ Probability of Peak Staffing – a matrix in graphical form
 - ▶ Estimate Detail – a link to an external estimation vendor tool
 - ▶ Needed Certainty – the percentage of the level of certainty needed for the estimations



For a list of vendors that integrate with Rational Focal Point, see <http://www.ibm.com/developerworks/rational/downloads/ready.html>

To assess whether to execute a project, you must understand the time and effort required to complete the project, assuming that the effort hours of a team is the major factor in the cost of the project. You can use the estimation tools to consider these factors. The estimation tools provide more than a number; they provide a probability distribution. For example: There is a 20% chance that the project will take 14 months or less, and a 90% chance that it will be done within 32 months.

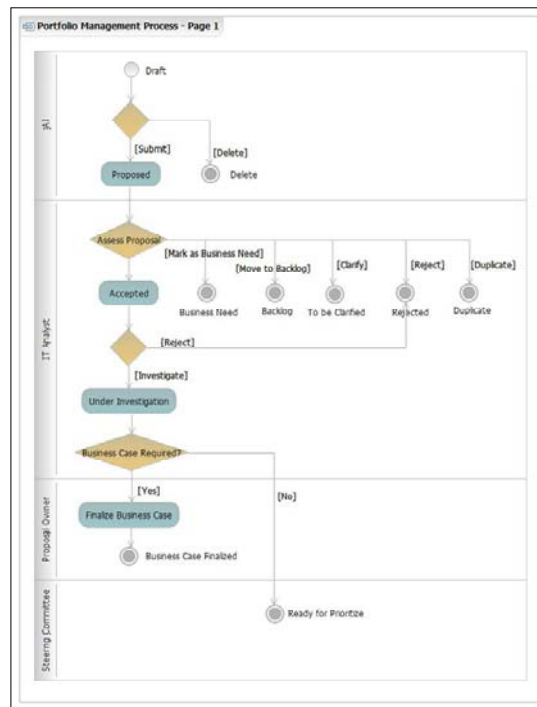
The estimation tools can also provide multiple estimates based on the peak team size. For example, if X many people work on the project, how long it will take to complete? If Y more people are added, how will the schedule change?

By using the estimation tools, the steering committee can better understand the cost of the project and the uncertainty associated with the cost. The relationship between team size and duration is not simple; doubling the team size does not halve the duration.

You can use the estimation tools to make multiple estimates that are difficult to compute manually. The estimation tools transfer multiple estimates for a given project into the Probability matrices in the workspace, with each estimate being a probability distribution of duration, labor cost, and peak staffing.

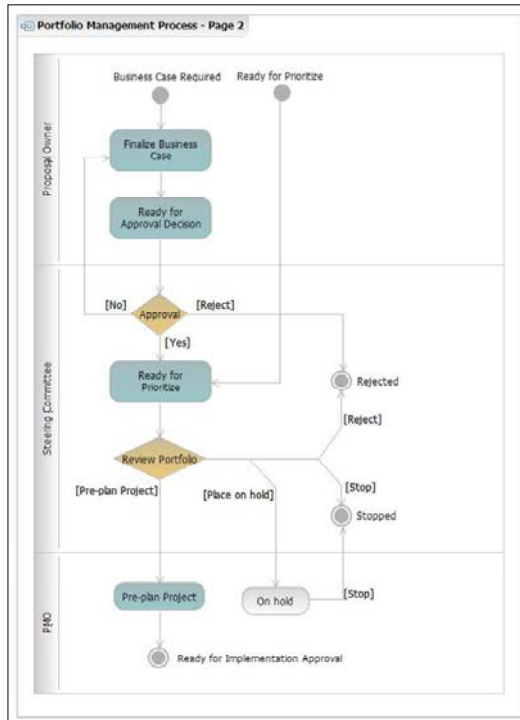
Appendix

Appendix - Project process



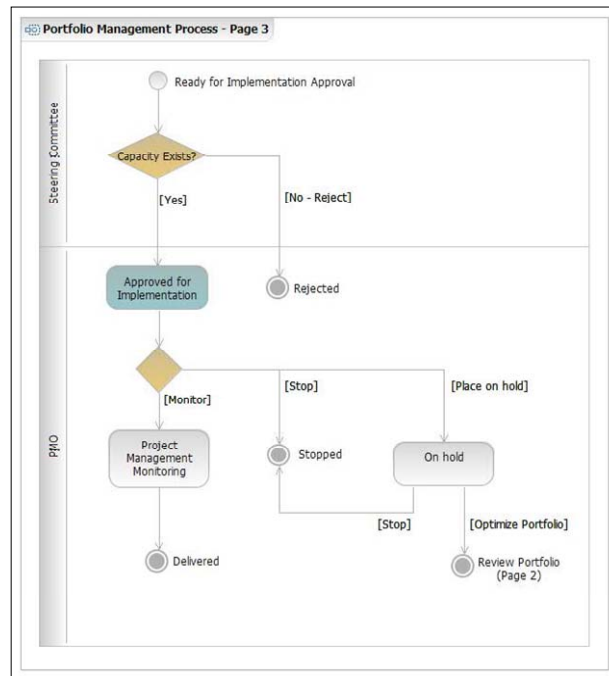
The project process in detail, from Draft to Business Case Finalized or Ready for Prioritize.

Appendix - Project process



The project process in detail, from Business Case Finalized to Ready for Implementation Approval.

Appendix - Project process



The project process in detail, from Ready for Implementation Approval to Delivered.

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