RTC Administration for Configuration Managers

Module Two

Lifecycle Projects

It doesn't matter how many resources you have. If you don't know how to use them, they will never be enough.

Unknown

I like the saying: "Failure isn't an option. It's mandatory." That's how I think about complex systems at large scales. The individual components are going to fail in lots of different ways and the challenge is to think about how to build systems that can deal with that failure gracefully and transparently

Ryan Day

If you're doing it wrong, things break all the time and people see you fix them and think you're doing a great job. If you're doing it right, they think you don't do anything and you should be fired.

Anon Sysadmin

exgnosis

2.1 Project Areas

A project area is a region in the Jazz server repository where information about one or more software development projects is stored. A project area defines the project deliverables, team structure, process, and schedule. All project artifacts, such as plans, work items, requirements, test cases, and files are under source control within the context of a project area.

Each project area has a process, which governs how members work. For example, the project area process defines:

1. User roles

2. Permissions assigned to roles

3. Timelines and iterations

4. Operation preconditions and follow-up actions

5. Work item types and their state transition models

Each CLM application includes a predefined process templates, which can be used to create project area with a predefined configuration. Examples of predefined process templates include Scrum and Scaled Agile Framework (SAFe). However, custom process templates can be created either by modifying a predefined template or creating a temple from scratch.

Each CLM application (CCM. RM and QM) uses project areas to organize a teams' work. Project administrators are responsible for creating and managing project areas. A common administration task is to add users as members of a project area and to assign roles to those members. Because permissions are assigned to roles, a member's role assignments determine what operations that member can perform within the project area.

2.1.1 Linking artifacts across project areas

CLM lifecycle applications can link artifacts across application project areas. For example, a requirements collection defined in a RM project area can be linked with a release plan defined in a CC project area, and both of those artifacts can be linked to a test plan defined in a QM project area. This cross-application linking supports traceability throughout the application development lifecycle. Enabling artifact linking between project areas by configuring the associations between the project areas.

2.1.2 Lifecycle projects

The project are editor can be used to create and manage project areas in each application. However, a more efficient method is to use the Lifecycle Project Administration user interface to create a lifecycle project. When creating a lifecycle project, a template is selected that de-

fines the project areas to create, the process to use for each project area, and the associations to establish between those project areas.

For example, the following diagram shows a lifecycle project that contains three project areas, one from each CLM application. The associations are configured so that testers, working in the QM project area, can create defects and quality management tasks and store them in the CCM project area. Business analysts working in the RM project area, can create requirements change requests and implementation requests and store them in the change and configuration management project area. In addition, testers working in the quality management project area can create requirements that are stored in the requirements project area.
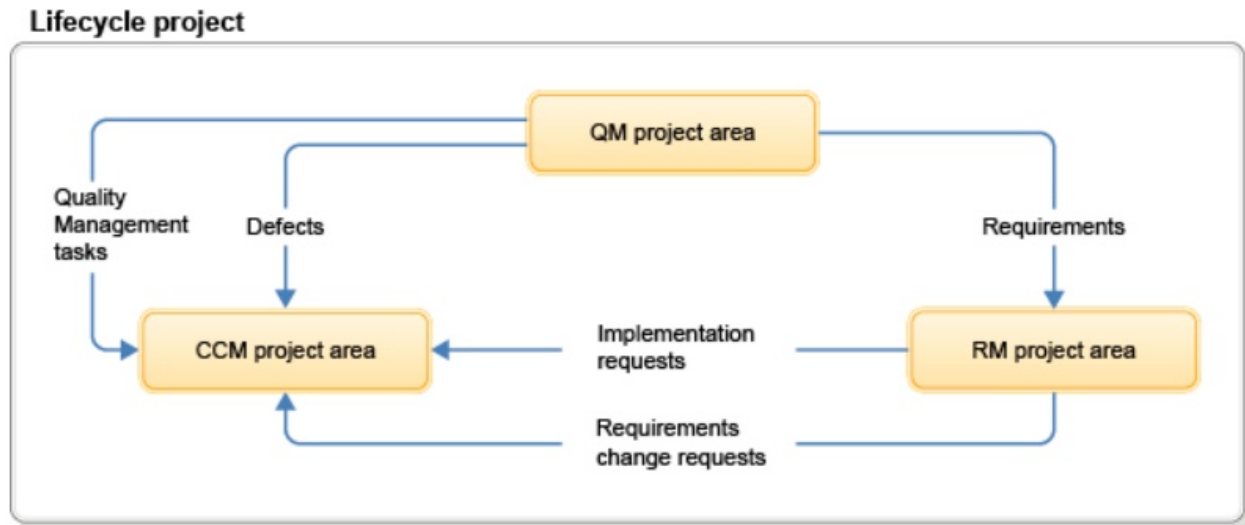
2.2 Administering Lifecycle Projects

The Lifecycle Project Administration (LPA) user interface is used to create and manage project areas across CCM, RM and QMapplications, and to establish associations between those project areas.

2.2.1 Creating Project Areas in a Lifecycle Project

The LPA implements a lifecycle project to manage the project areas by grouping the project areas that collaborate with each other. Rather than managing each project area separately, all of the project areas can be managed from this central lifecycle project.

After associations are established between project areas, their artifacts can be linked to establish traceability across the requirements, development, and testing phases of the application development lifecycle. For example, requirements can be linked to work items that describe the development work being done to implement the requirements. Work items can also be linked to test cases that verify whether the implementation is successful.

2.2.2 Using Templates to Create Lifecycle Projects

To create a lifecycle project a lifecycle project template is selected which specifies the project areas to create and which associations to establish between those project areas. The LPA user interface includes a set of predefined lifecycle project templates; however, customized templates can be imported and used as well.

2.2.3 Managing Users Across Project Areas

Project administrators can add users as members of their project areas. Likewise, team leaders can add users as members of their team areas. These members can be assigned different roles. Each role has a set of permissions that determine which actions the role can perform. In a cross-application environment, each project area has its own roles and permissions. For a user to work on linked artifacts in each project area, the user must have sufficient roles and permissions in each project area.

In the LPA user interface, you can view and modify the roles assigned to users across a set of project areas. You can also configure rules that specify which combination of process roles members should have across the project areas. The LPA user interface then flags users who do not have those process roles. In this way, the LPA user interface helps to avoid problems where members do not have the permissions needed to do their work.

For example, a lifecycle project might have a CCM project area and a QM project area. To associate CCM work items with QM test cases, a user might need the Team Member role in the CCM project area and the Test Team Member role in the QM project area. The administrator can configure a rule that specifies this requirement.
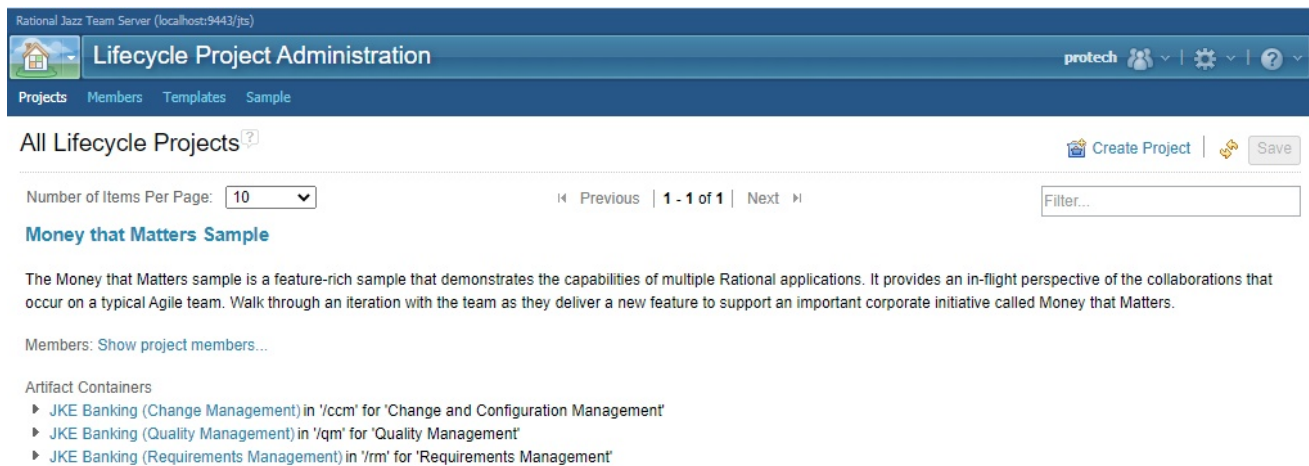
An existing user can be added to a lifecycle project which automatically adds them to each of the project areas that belong to the lifecycle project.

In addition to using the LPA user interface to create project areas, existing project areas can be added to a lifecycle project so that they can be managed from that central location.

For example, an organization might have separate CCM and QM project areas (i.e. not part of a lifecycle project) that have associations established between them and, over time, users may be added to both project areas These project areas could be added to a lifecycle project to more easily manage those users.

2.2.4 Accessing the LPA

To access the LPA, you must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

Procedure

Access the Lifecycle Project Administration user interface by using one of the following options:

1. Go directly to the LPA page URL in the following form:

   ```
   https://localhost:9443/jts/lpa
   ```

2. Go to the *Lifecycle Project Administration* user interface page via the Jazz Team Server home page:

   ```
   https://localhost:9443/jts/admin
   ```

In the Manage Lifecycle Projects section, click either *Create Lifecycle Project* or *Manage Lifecycle Projects*.

3. From the Home menu in the upper left of any application web page, click *Lifecycle Project Administration* in the Administration section.

4. From the Active Project Areas page of any application administration page, you can click the *Create Lifecycle Project* link in the upper right part of the page.

2.3 Creating Lifecycle Projects from Templates

You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

The predefined lifecycle project templates define which application project areas to create and whether associations are established between those project areas. For example, the Analyst, Developer, Quality Professional template creates requirements management, change and configuration management, and quality management project areas. Associations are created between each of those project areas so that you can link artifacts across those project areas.

Procedure

1. In the Lifecycle Project Administration user interface, click Templates.

2. If the predefined templates are not visible, click Deploy Predefined Templates.

3. In the row for the template that you want to use, click icon for creating projects, the Create Lifecycle Project from this Template icon.

4. Enter a name for the lifecycle project.

5. Optionally, select a different locale.

6. Optionally, enter a brief description of the lifecycle project in the Description field.

7. The Artifact Containers for Template section shows the project areas to be created for each application. By default, each project area is named based on the name that you specify for the lifecycle project. You can specify a different name for each project area.

8. The Artifact Containers for Template section shows the process template (Change and Configuration Management and Quality Management) or project template (Requirements Management) or to be used for each project area. To choose a different template for a project area, select it from the drop-down list. For example, in the figure below, SAFe 4.0 Process (Portfolio) is the default template for the change and configuration management project area.

	Artifact Containers		
Artifact Containers for Template (3)			
Method	Artifact Containers	Process / Project Template	Actions
Create:	Sample (Requirements) project area in '/rm' for 'Requirements Management'	SAFe 4.0 Portfolio Component Templ ∨	Link to Existing...
	Provides 🖼 Requirements to **Sample (Quality Management)**		
Create:	Sample (Change Management) project area in '/ccm' for 'Change and Configuration Management'	SAFe 4.0 Process (Portfolio) ∨	Link to Existing...
	Provides 🖼 Implementation Requests to **Sample (Requirements)**		
	Provides 🖼 Defects to **Sample (Quality Management)**		
	Provides 🖼 Quality Management Tasks to **Sample (Quality Management)**		
	Provides 🖼 Requirements Change Requests to **Sample (Requirements)**		
Create:	Sample (Quality Management) project area in '/qm' for 'Quality Management'	Quality Management for SAFe ∨	Link to Existing...

9. For each project area listed in the Artifact Containers for Template section, you can choose to include an existing project area in the lifecycle project instead of creating a new project area. Click Link to Existing and select the project area that you want to include. This option allows you create a lifecycle project that includes new project areas and existing project areas.

10. To include additional existing project areas, click Add in the Additional Artifact Containers section. For project areas that you specify in the Additional Artifact Containers section, associations are not added. Any associations that exist in those project areas remain.

Tip: When you link to an existing project area while you create a lifecycle project from a template, associations are established between that project area and the other project area or areas in the lifecycle project as specified by the lifecycle project template.

11. Click Save to save your changes.

2.3.1 Lifecycle project templates

The LPA user interface includes the following predefined lifecycle project templates.

Quality Professional, Analyst, Developer

This template sets up associated project areas for QM, RM and CCM. The testers in QM and analysts in RM work with developers in CCM. Quality tasks and requirements change requests are tracked in the CCM project area. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template.

TheQM project area can be configured to use the Quality Management for SAFe or default process template. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template.

The diagram shows three project areas within the lifecycle project. The CCM project area stores quality management tasks and defects for QM project area testers. The CCM project area stores implementation requests and requirements change requests for RM project area analysts. The RM project area stores requirements for QM project area testers.

Quality Professional, Analyst, Developer – with Design Management

This template sets up associated project areas for QM, RM, and CCM, and architecture management or design management. The testers in QM, analysts RM and architects (in architecture management or design management) work integrated with development CCM. Quality management tasks, requirements change requests, and architecture change requests are tracked in the CCM project area. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Fo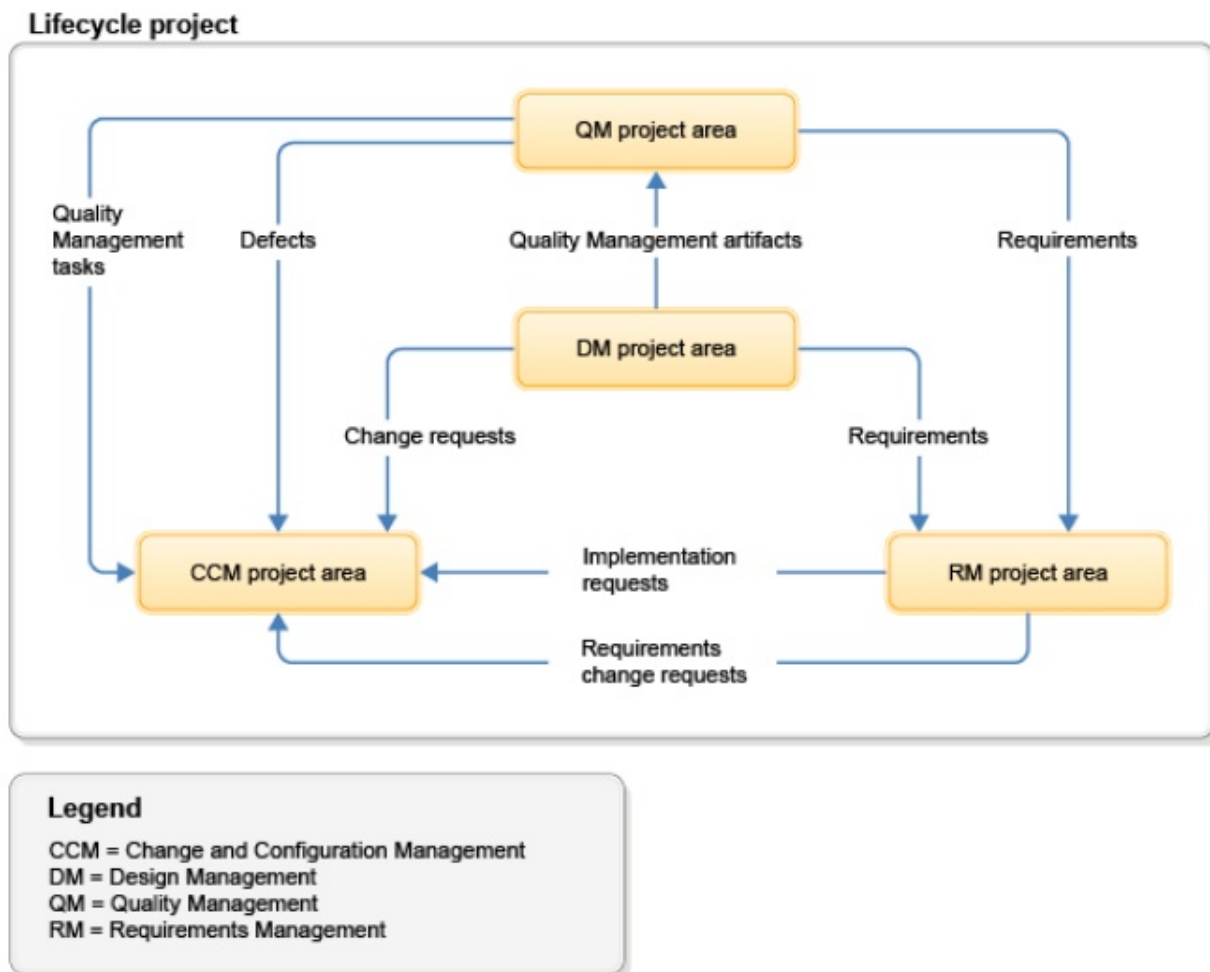rmal Project Management process template. The QM project area can be configured to use the Quality Management for SAFe or default process template. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template. The design management project area can be configured to use the Basic or Blank template. The architecture management project area uses the Architecture Management Default Process.

Lifecycle project

QM project area

Quality Management tasks | Defects | Quality Management artifacts | Requirements

DM project area

Change requests | Requirements

CCM project area | Implementation requests | RM project area

Requirements change requests

Legend

CCM = Change and Configuration Management
DM = Design Management
QM = Quality Management
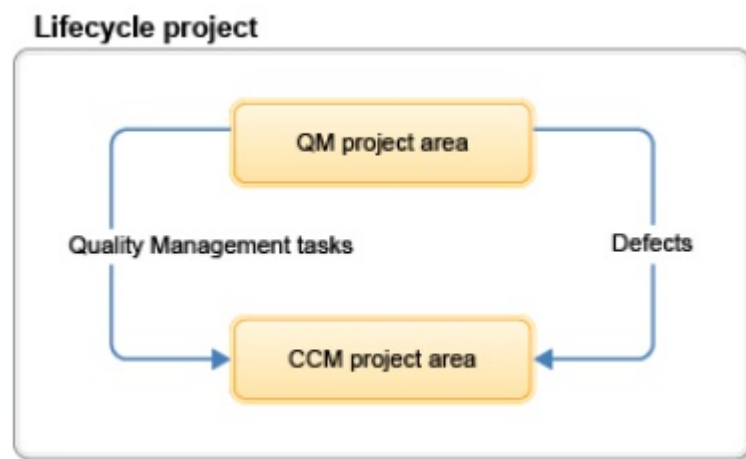RM = Requirements Management

The diagram shows four project areas in the lifecycle project. The CCM project area stores Quality Management tasks, defects, and change requests for QM users; implementation requests and Requirements change requests for RM users; and change requests for DM users. The QM project area stores Quality Management artifacts for DM users. The RM project area stores requirements for QM users and DM users.

Product Engineer, Developer

This template sets up associated project areas for CCM and product line engineering.

Quality Professional, Developer – without Requirements

This template sets up associated project areas for CCM and QM. The testers in QM work with developers in CCM. Quality management tasks are tracked in the CCM project area. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template. The QM project area can be configured to use the Quality Management for SAFe or default process template. Capabilities for requirements are not set up, assuming that other tools and integrations will be used for this capability.

The diagram shows two project areas in the lifecycle project. The CCM project area stores quality management tasks and defects for QM project area testers.

Quality Professional, Analyst

This template sets up associated project areas for QM and EM. Quality management tasks and requirements change requests are tracked in a separate CCM project area. The QM project area can be configured to use the Quality Management for SAFe or default process template. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Require-

ments project template. Capabilities for Defects are not set up, assuming that other tools and integrations will be used for this capability.

Lifecycle project
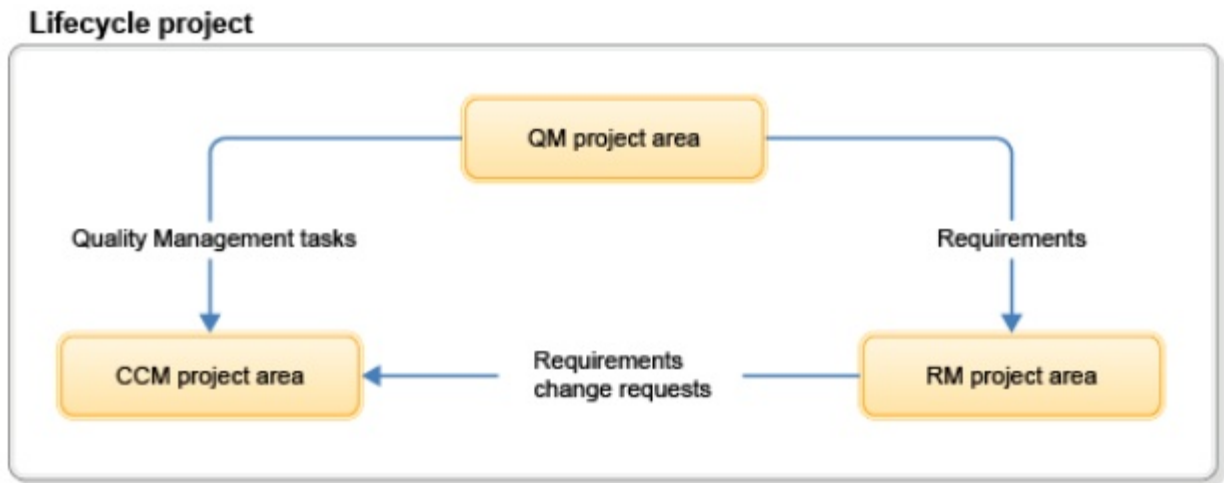

The diagram shows three project areas in the lifecycle project. The CCM project area stores quality management tasks for QM project area testers, and requirements change requests for RM project area analysts. The RM project area stores requirements for QM project area testers.

Analyst, Developer

This template sets up associated project areas for RM and CCM. The analysts in RM work with developers in CCM. Requirements change requests are tracked in the CCM project area. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template.
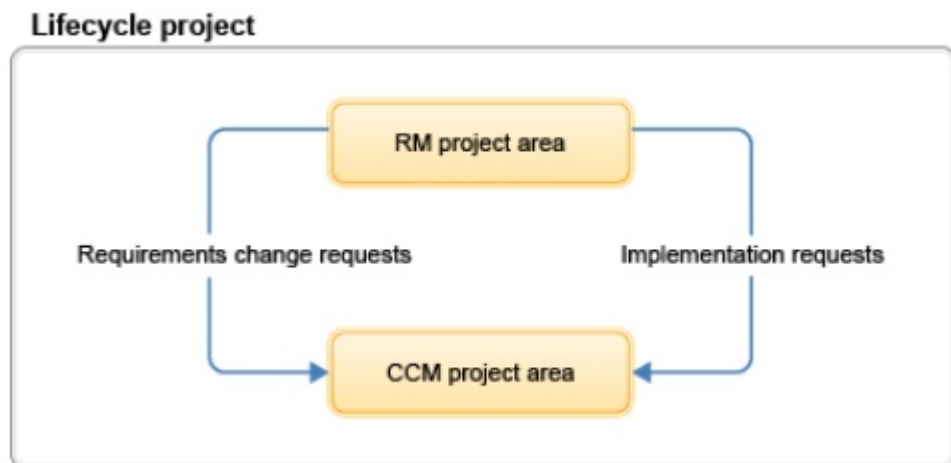
Lifecycle project

The diagram shows two project areas in the lifecycle project. The CCM project area stores requirements change requests and implementation change requests for RM project area analysts.

Analyst

This template sets up a project area for rRM. Requirements change requests are tracked in a separate CCM project area. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template.
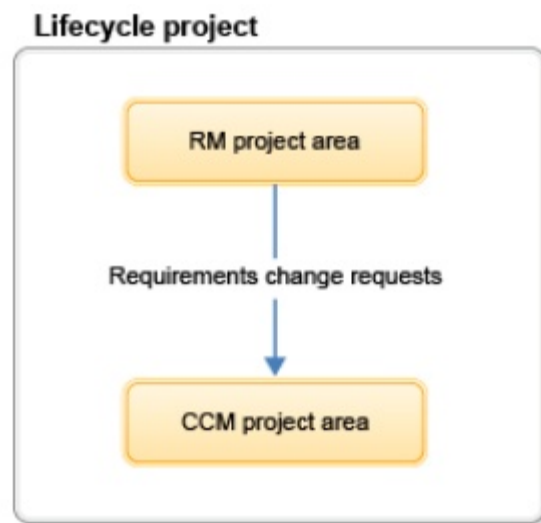
The diagram shows two project areas in the lifecycle project. The CCM project area stores requirements change requests for RM project area analysts.

Analyst – without Requirements Change Requests

This template sets up a project area for RM. The project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template.

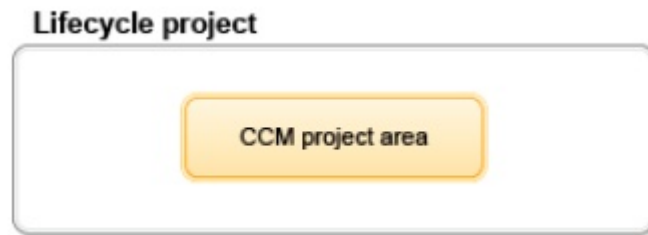## Quality Professional – without Defects and Requirements

This template sets up a project area for QM. Quality management tasks are tracked in a separate CCM project area. The QM project area can be configured to use the Quality Management for SAFe or default process template. Capabilities for defects and requirements are not set up, assuming that other tools and integrations will be used for these capabilities.

The diagram shows two project areas in the lifecycle project. The CCM project area stores quality management tasks for QM project area testers.

Developer

This template sets up a project area for CCM. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template.

The diagram shows one CCM project area.

Quality Professional, Analyst, Developer – with separate Quality Management Tasks and Requirements Change Requests

This template sets up project areas for QM, RM and CCM. The testers in QM and analysts in RM work independently from the developers in CCM.

Quality tasks and requirements change requests are tracked in separate CCM project areas. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template. The QM project area can be configured to use the Quality Management for SAFe or default process template. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template.
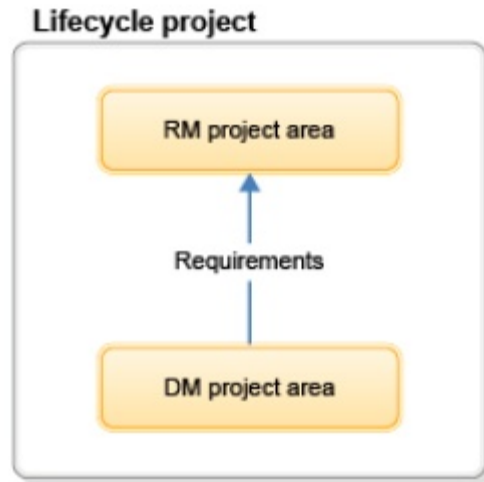
Lifecycle project
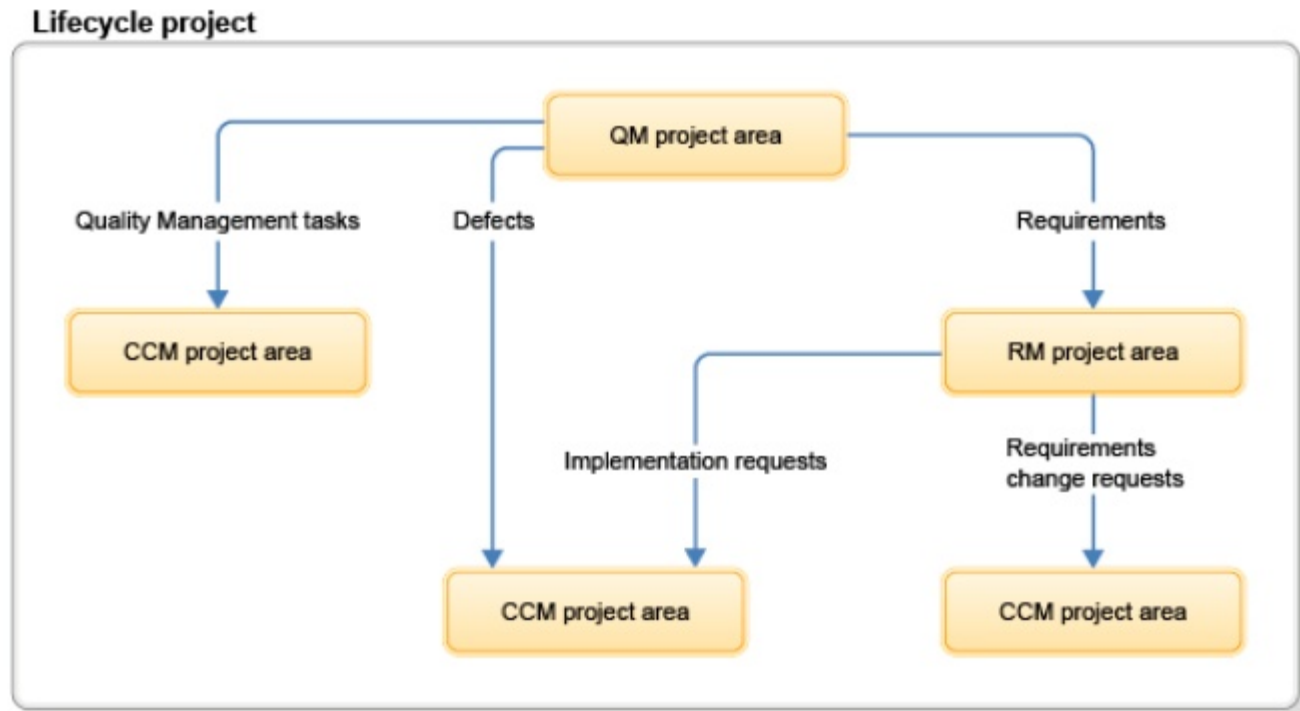
The diagram shows three CCM project areas, a QM project area, and an RM project area. One CCM project area stores quality management tasks for QM project area testers. The second CCM project area stores requirements change requests for RM project area analysts. The third CCM project area stores defects for QM project area testers, and implementation requests for RM project area analysts. The RM project area stores requirements for QM project area testers.

Architect, Analyst

This template sets up associated project areas for design management or architecture management and RM. The architects in design management or architecture management work integrated with analysts in RM. Artifacts in the design management or architecture management project elaborate requirements in the requirements project. The RM project area can be configured to use the SAFe 4.0 Portfolio Component, Requirements Template for Testers, Use Case, Agile Requirements, or Traditional Requirements project template. The design management project area can be configured to use the Basic or Blank template. The architecture management project area uses the Architecture Management Default Process.

The diagram shows two project areas in the lifecycle project. The RM project area stores requirements for DM users.
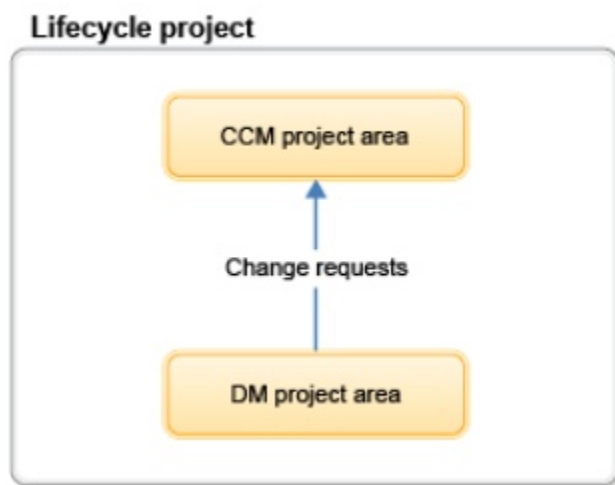
Architect, Developer

This template sets up associated project areas for design management or architecture management and CCM. The architects in design management or architecture management work integrated with development in CCM. Architecture change requests are tracked in the CCM project area. The CCM project area can be configured to use the Scaled Agile Framework (SAFe) 4.0 Program, SAFe 4.0 Portfolio, Scrum, or Formal Project Management process template. The design management project area can be configured to use the Basic or Blank template. The architecture management project area uses the Architecture Management Default Process.

The diagram shows two project areas. The CCM project area stores change requests for DM users.

Architect, Developer, Product Engineer

This template sets up associated project areas for design management or architecture management, CCM, and product line engineering.

Architect, Product Engineer

This template sets up associated project areas for design management or architecture management and product line engineering.

Architect

This template sets up a project area for design management or architecture management. The design management project area can be configured to use the Basic or Blank template. The architecture management project area uses the Architecture Management Default Process.

Product Engineer

This template sets up a project area for product line engineering.

2.4 Creating a Project from Existing Project areas

In the LPA user interface, a new lifecycle project can be created without creating new project areas. This option allows the addition of existing project areas to a lifecycle project so that they can be managed from a central location.

You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

When adding existing project areas to a lifecycle project, those project areas retain their members and the roles assigned to those members. New members can then be added to all of those project areas and be assigned roles. Likewise, existing role assignments can be altered and members removed.

Procedure

1. On the Projects page of the user interface, click the Create Project icon, icon for the create project action.

2. Enter a name for the lifecycle project.

3. n the Template field, select Empty Lifecycle Project.

   Note: When you create a lifecycle project and specify Empty Lifecycle Project, the LPA user interface does not establish associations between the existing project areas that you include in the lifecycle project. If the existing project areas already have associations, those associations remain in place.

4. In the Additional Artifact Containers section, click Add. The Select Artifact Container window displays the available project areas for each installed application.

5. Select an application that contains a project area that you want to add to the lifecycle project.

6. In the Artifact Container section, select the project area. Click Add.

7. Select additional project areas from the available applications. When you have selected all of the project areas to include in the lifecycle project and click Save.

2.4.1 Adding Project areas to an Existing Project

Project areas can be added to lifecycle projects so that they can be managed from a central location.

You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

After you add existing project areas to a lifecycle project, you can add members to all of those project areas and assign roles to those members. When you add existing project areas to a lifecycle project, associations are not added to those project areas. If the existing project areas already have associations, those associations remain in place.

Procedure

1. On the Projects page of the LPA user interface, click a lifecycle project.

2. In the Additional Artifact Containers section, click Add.

3. Select the application that contains the project area that you want to add to the lifecycle project.

4. Select the project area that you want to add.

5. Click Add Artifact Container.

6. Click Save to save the project area.

2.4.2 Replacing or removing project areas from lifecycle projects

Project areas can be removed from lifecycle projects or replaced with other project areas.

You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

Procedure

1. On the Projects page of the Lifecycle Project Administration user interface, click a lifecycle project.

2. In the Configured Artifact Containers section, perform one of the following tasks:

3. To remove a project area from the lifecycle project, click Remove Link to this Artifact Container icon, the Remove Link to this Artifact Container icon for the project area that you want to remove.

4. To replace a project area in the lifecycle project with another project area, click Change Container icon, the Change Container link icon, for the project area that you want to replace.

5. Select the application that contains the project area with which you want to replace the current project area in the lifecycle project.

6. Select the project area.

7. Click Add Artifact Container.

8. Click Save to save the project area.

When you remove a project area from a lifecycle project, you can no longer manage that project area from the lifecycle project. However, removing a project area from a lifecycle project does not change the associations for that project area or the other project areas in the lifecycle project. Likewise, replacing a project area in a lifecycle project does not change any project area associations. To enable artifact linking between the replacement project area and other project areas in the lifecycle project, you must add associations to the replacement project area.

2.5 Adding Users and Roles

The LPA user interface is used to add users as members to all of the project areas that belong to a lifecycle project.

You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running. The users that you add must exist in the Jazz Team Server repository.

In the Lifecycle Project Administration user interface, you can add members to projects more efficiently than by adding them to each project area in separate operations. When you add a user to a lifecycle project, the user is added to each project area in the lifecycle project. The user is automatically assigned to the default process role in each project area. The user interface lets you assign additional roles to users.

Procedure

1. In the user interface, click the Members page.

2. Click Add Member. Enter the name of a user, or click Show All to see all users in the repository. Select the user from the Matching users list and click Add or Add & Close Click Save. An entry for the user appears in the Member Preview section. The entry indicates which project areas the user can be added to. For example, in the figure below, the user named tammy is to be added to project areas in the Change and Configuration Management, Quality Management, and Requirements Management applications.

Lifecycle Project Members ⑦

The members page provides an easy way to manage the members of a Lifecycle Project. From this page, you can add or remove members and mana

Select Project: Demo 1 ⌄

Member Preview

Name	User ID	CCM	QM	RM	Status
Tammy	tammy	✓	✓	✓	Ok

Number of Items Per Page: 50 ⌄   ◄ Previous | **1 - 1 of 1** | Next ►

Name	User ID	CCM	QM	RM	Status
protech	protech			✓	Ok

2. The image is a screen capture of the Member Preview section of the user interface. The Member Preview section is a table that includes Name, User ID, CCM, QM, RM, and Status column headings. The CCM, QM, and RM cells contain check marks, which indicate that the user is to be added to project areas in all three applications.

3. Click Save to save the changes to both the lifecycle project and the project areas.

After you add a user to the lifecycle project, you must assign process roles to the user in each of the project areas so that the user has the permissions to perform operations.

2.5.1 Assigning Roles to Users

In the LPA user interface, you can view and modify the process roles assigned to users in each project area that belongs to the lifecycle project. You must have JazzProjectAdmins or JazzAdmins repository group permissions, and the Jazz Team Server must be running.

When you add users to lifecycle projects, each user is assigned the default process role in each project area that belongs to that lifecycle project. The default role allows the user to perform only minimal operations. To enable the user to perform additional operations in each project area, you must assign appropriate process roles.

Procedure

1. In the user interface, click the Members page.

2. In the list next to Select Project, select the lifecycle project that contains the project area or areas that you want to modify. All users who are members of at least one of the project areas included in the lifecycle project are listed.

3. In the Actions column, hover in the cell for a user to display This image is a screen capture of the Show Member Details icon., the Show Member Details icon; then click the icon. For each project area that belongs to the lifecycle project, the Member Details section indicates whether the user is a member; whether the user has read access to the project area; and which roles are assigned to the user.

   Each project area contains an access control setting where project administrators can restrict read access to certain users. In the following figure, the user named al is a member of project areas in the CCM, RM, and QM applications; has read access to all three project areas; and has the default role in each project area as well as the author role in RM and contributor role in QM.

   This image is a screen capture of the Member Details section of the Lifecycle Project Administration interface. The Member Details section is a table that lists the project areas, applications, membership, access control, and process roles for the user.

| Select Project: | Money that Matters Sample | | | | |

Number of Items Per Page: 50   ⏮ Previous | **1 - 13 of 13** | Next ⏭   Search...

Name	User ID	CCM	QM	RM	Status
AI	al	✓	✓	✓	Ok

al Member Details

To edit a member's process roles, click the process roles icon in the "Actions" column. For more advanced changes, click on the artifact container link or use the "Edit Artifact Container" action icon und "Actions" column to open the full artifact container editor.

Artifact Container	Application	Membership	Read Access	Process Roles	
JKE Banking (Change Management)	Change and Configuration Management	✓	✓	Team Member	
JKE Banking (Quality Management)	Quality Management	✓	✓	Test Team Contributor	
JKE Banking (Requirements Management)	Requirements Management	✓	✓	Author	

4   In the Actions column of the Member Details section, click Process Roles icon, the Edit the user's process roles icon, in the row for the project area where you want to assign one or more roles to the user. In the Process Roles window, select the role or roles to assign to the user. Click OK. The Show Member details section displays the new role assignments for the user.

2.6 Deleting Lifecycle Projects

When a lifecycle project is deleted, the project areas that belong to the lifecycle project are not deleted.

You must have JazzAdmins repository group permissions and the Lifecycle Project Administration user interface must be open. You cannot restore a lifecycle project that you have deleted. You can create a new lifecycle project and add the project areas that belonged to the deleted lifecycle project to that new lifecycle project.

Procedure

1. On the Projects page of the user interface, click the Delete Lifecycle Project icon Delete Lifecycle Project icon in the row of the lifecycle project that you want to delete. The Delete Lifecycle Project icon is replaced with the Undo icon. To undo the deletion, click the Undo icon.

2. Click Save to save your changes. After you click Save, you cannot restore the deleted lifecycle project.

Once the lifecycle project has been deleted, a new lifecycle project can be created that reuses the project areas from the deleted project.